

The International Consortium on Governmental Financial Management

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FINANCIAL MANAGEMENT CONFERENCE**

***INTEGRATED
FINANCIAL
MANAGEMENT
SYSTEMS***

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International Consortium on Government Financial Management

School of Accounting, Florida International University

America's Accountability/Anti-Corruption Project (USAID)

The World Bank

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Opening Remarks

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Jim Durnil, President, ICGFM
President, National Rural Electric Cooperative Association

Jim Wesberry, Director, Director, ICGFM
Director, America's Accountability/Anti-Corruption Project, Casals & Associates

I am pleased to welcome you to the Fourteenth Annual International Conference on New Developments in Governmental Financial Management.

On my left, the young colleague closest to me, to my knowledge, is the only living person who has attended 14 consecutive conferences. He is Mort Dittenhofer, the director of the School of Accounting, Florida International University, and the director of this conference. I am going to ask Mort to introduce a representative of Florida International University who will welcome you to this Fourteenth Conference.

Mortimer Dittenhofer, Professor, Florida International University

Thank you, Jim. I just want to say a personal greeting to you all. We hope you're going to have a good time here. I think that Jim Wesberry has arranged a fine program.

It gives me a great deal of pleasure to introduce a representative of the College of Business, one of the sponsors of this conference, Dean Dana Farrow. Dean Farrow at one time was the director of the Department of Management at Florida International University. He is a graduate of the University of Rochester. He has a degree in industrial psychology, and he uses that on us periodically in his capacity as associate dean.

Will you please greet Dean Farrow?

Dana Farrow, Associate Dean, College of Business Administration

Florida International University

Thank you, Mort. Good morning. I bring you greetings from my dean, Joyce Elam. She regrets she is not able to attend. She has welcomed this conference the past two years. Regrettably, she was called out of town earlier this week—unfortunately for her; fortunately for me. I have heard a lot about this conference. My being here and being able to greet you gives me a chance to see more of the conference. Thank you very much, Mort.

Some of you may not know that our School of Accounting has sponsored this event for the past 14 years. We are very proud of that, and we are very proud of our School of Accounting.

As you know, we are Florida International University. This is one of the outstanding events that we sponsor every year. I understand that this year's conference has more than 400 participants from more than 50 countries. We are very proud to be a part of this event.

A word about Florida International University. We are the third largest of the state university units. We are about 28 years old, a relative newcomer in the system. We have more than 31,000 students and more than 1,000 faculty. The College of Business is the second-largest unit, following Arts and Sciences, within the university. We have about 4,500 students. The School of Accounting, which is a separately accredited part of the College of Business, has about 1,500 undergraduate and graduate students, and about 25 faculty.

You may wonder why we're called Florida International University. We wondered how we got our name, too. No one seems to be quite sure. It seems that when the board of regents got around to naming us, they found out that they had already used all the geographical locations, like North Florida, Central Florida, South Florida, so they used the word "international" for us. That has become a self-fulfilling prophecy. Right now our School of Accounting is setting up master-of-accounting degrees for universities in both Argentina and Chile, and the College of Business itself, even as we speak, is running master-of-business-administration (MBA) programs in both Germany and Jamaica.

We see this conference as one of the high points in our international programs. We are delighted to be a part of it. Again, I bring you greetings from my dean. You have a very interesting program. Please enjoy.

Thank you very much.

Jim Wesberry, Director, ICGFM
Director, America's Accountability/Anti-Corruption Project, Casals & Associates

Mort Dittenhofer started this conference here 14 years ago. At the first conference we had about 40 people. It has become an internationally recognized conference. Today we are expecting more than 350 people. That is just the participants, not counting about 25 or 30 speakers, workers and others who are outside working on the conference. We believe we're going to have more than 50 countries represented.

What has been very astounding—and you might pass this on to the dean—is the degree of participation outside of the Western Hemisphere, which is the greatest we have ever had at one of these conferences. This conference originally was intended to be only for Latin America and the Caribbean. But we had people who started coming from other countries, and now it has become truly an international conference, linking Florida International University and the International Consortium on Government Financial Management to the world.

Now it is my pleasure to introduce the president of the International Consortium on Government Financial Management, James B. Durnil.

Jim Durnil, President, ICGFM
President, National Rural Electric Cooperative Association

Thank you very much, Jim. Before I welcome you officially, I will add a few comments to Jim's introduction. I did retire from USAID and went to work for then-Coopers & Lybrand to troubleshoot their international grants and contracts. I learned quite a bit from Coopers & Lybrand that I didn't learn in the government. Like most CPA firms, you kind of shop around, and one of your clients will eventually pick you up or at least make you a good job offer. Indeed, one of our clients did make me a good offer. That was the National Rural Electric Cooperative. Basically, what my company does is put electricity in small cities and villages overseas, and has been doing so for some 30 years.

I learned quite a bit about fraud, waste, and abuse when I worked with USAID. Then I learned a little bit more about auditing and financial management when I was with Coopers & Lybrand, now PricewaterhouseCoopers.

But, Jim, I have to admit, I have learned more about fraud, waste and abuse in the last three years running a company doing business overseas than I did in my 32 years with the federal government. We have a long way to go.

On behalf of the International Consortium on Government Financial Management, I too would like to welcome you to Miami and to our Year 2000 and to our Fourteenth Annual Conference on New Developments in Government Financial Management.

In the past and today, the Consortium is indeed pleased to partner with several organizations in presenting this conference, especially Florida International University. We hope that we can spread the word about FIU, as you all take it back home to your countries.

We are also proud to associate ourselves with the World Bank and with USAID in supporting many of the attendees here today.

We also are partnering with PricewaterhouseCoopers. I do not know if Ron Points is here, but if he is—Ron, stand up. If any of you get a chance to see Ron while you are here this week, you might want to extend him a bit of thanks. They are sponsoring our banquet on Thursday evening.

We also would like to thank Casals & Associates, and especially Jim Wesberry, not only for their support at the front desk, but for contributing to the financial support of the conference.

Our conference is five days. It used to be three days, but we have changed the agenda a bit. We will have five days, with case studies on Tuesday afternoon and Thursday afternoon. We hope you will be able to attend these case studies.

We are also very pleased to have such a fine cadre of speakers. We have speakers from Tanzania, the United Kingdom, Sweden, Bolivia, Dominican Republic, Chile, and also from the development banks and the World Bank.

I would like to remind you that the Consortium is keeping up with the technology revolution. We have a good Web site. The address is in the little blue book. The Web page is updated routinely. You can also get numerous publications. I am pleased to say that many of the publications are in Spanish as well as English. So jump on our Web site, wherever you may be, and just key in "ICGFM." We have been registered with Yahoo and many of the other organizations, so you'll go directly to our Web site.

Again, we have an excellent agenda. I encourage you to attend our social functions as well. Tonight there is a welcoming reception sponsored by the Radisson Hotel. Again on Thursday night, we have our banquet that is sponsored by PricewaterhouseCoopers.

I would be remiss if I did not really express thanks to several other people, and especially to Mort Dittenhofer. Mort, as director of the meeting this week, you have done a fine job. I know you worry a lot, but you pulled it off. I know Jim has helped you quite a bit, too. Mort, thank you, and a thank you to FIU for giving you the support to do it.

We would like to thank our support staff outside. Ana Estevill has been very good in organizing and managing the registration process. I know Jim and I have put staff here to support it. Please stop by and thank our support staff.

With that, Jim, I will let you take charge. Again, I welcome you all. We will see you later on in the week.

Keynote: The New Approach to Financing from International Financial Institutions

Bert T. Edwards, Chief Financial Officer, U.S. Department of State

I certainly want to add to Jim Durnil's comments. This is truly an outstanding conference in terms of the speakers and the topics. I am going to try to sow some seeds here this morning, challenge us collectively to see what some of these issues are, and see if we can invigorate each and every one of you to go back to your 50 countries to get the ball rolling. Hopefully, I will give you some thoughts on why you should do that.

I ought to say at the outset that the topic of this presentation deals with the international financial institutions. I should say I have not cleared this with the World Bank or IMF or the Inter-American Development Bank and others. These are my personal views. These do not carry the imprimatur of any of the international financial institutions. Perhaps their representatives, as we go through this, can join in my thoughts, add to them, or whatever.

If you look at history, if you go back to the 1600s and the 1700s, I think it is fair to say that was the age of the Europeans; the 1800s, perhaps, the age of the British Empire; the 1900s is frequently referred to by historians of all types as the American century; the millennium of 2000 is undoubtedly going to be the century of change. I just got back Wednesday morning from a trip to Thailand, Cambodia and Vietnam. I just am stunned by the pace of change in those countries. I had been to Vietnam in 1997 and 1998. I had been to Thailand just last year. The national flower in all three of those countries seems to be the construction crane.

Interestingly, in the 10 days I was in Southeast Asia, the second- and third-largest banks in the world were formed. The two German banks, Deutschebank and Dresdner Bank, will be the second-largest bank when that merger is completed later this year. The three banks in Japan will become the third-largest bank in the world.

Also in those 10 days that I was in Southeast Asia, General Motors and Fiat combined a number of their operations. So you see the globalization that is going on in the private sector. That follows the Daimler-Chrysler merger of a year or so ago and several of the other major business combinations that are global. When I started my career, it was the Big Eight; now it is down to the Big Five. The year I retired from Arthur Andersen was the year in which the number of non-American partners outnumbered the American partners. What we used to refer to as the overseas partners got reversed. The Americans became the overseas, and the overseas became the incumbents. Today, an ethnic Indian of U.K. citizenship is the managing partner of Arthur Andersen.

It goes to show that this globalization is rapidly accelerating, and the change is here, and governments are going to be part of that—e-commerce, in particular. In my state of Maryland, you can file your tax return electronically and have your refund in 24 hours electronically sent to your bank. I think that is a pretty unbelievable turnaround for the state of Maryland, which as an economic entity probably is as large as a third of the members of the United Nations in terms of gross domestic product. The electronic age is certainly here, and many of the speakers are going to talk about that.

I am also pleased to join many of my old colleagues here who have toiled in the vineyards of governmental financial reporting and auditing. Right up front I'm going to offer a challenge for all of us to think about. Some years ago, President Kennedy challenged the United States to put a person on the moon. Sadly, he did not live to see that happen. But I am here to tell you that auditing a national government or a major part of a national government, state, or city, or the rail authority or whatever, is nowhere near as complicated as putting a person on the moon 10 feet from where that spaceship is supposed to come down. I encourage you all to look at it that way and take those very, very

difficult first steps. As we go through a little case study here this morning, you will see that once you take those steps, it starts to accelerate, and progress is very real.

Taking a look at the past, sadly, in many of the countries of the world that I am familiar with at the State Department, annual and accumulating deficits are almost an endemic disease. Unrecorded, unrecognized, unacknowledged deficits are always going to lead to unanticipated consequences. This arises from cash accounting or other unrealistic practices. For years I used to call those cash and unrealistic practices "creative regulatory accounting principles," of which in English the acronym is "CRAP." And that's exactly what we got. You had non-understandable budgeting practices based on optimistic revenue projections and underestimated expenditures. Of course, that created an annual deficit and, sadly, added to the accumulated deficit.

Failure to adopt international standards, using the explanation, "Well, we're culturally different. We have a historical factor of doing it a certain way. We have obsolete laws and local customs," no longer, in this information age of the new millennium, is going to be acceptable. We used to have a saying at Arthur Andersen that if you don't know where you're going, any road gets you there. And that is really the outcome of these past practices.

Focusing on cash outlays and revenues fails to recognize costs of pensions, deferred and defaulted liabilities, pending domestic and international litigation, environmental concerns, social and medical insurance programs, et cetera. These costs are incurred today—in many cases, yesterday or last year or many years ago—and are paid many, many years afterwards. This is what causes these persistent operating and accumulating deficits, because you had bad accounting right from the very start. That places many, many governments in a difficult situation.

Moving on to the present, international accounting standards have been developed and are evolving, actually, as we are here today. Major considerations are going on toward, again, refining the international accounting standards. So we do have reasonably well-developed generally accepted accounting principles, which is how you prepare financial statements, and reasonably developed generally accepted auditing standards, which is how the auditor goes about doing his or her audit of those financial statements.

So great progress has been made, both domestically, in many countries, and internationally. I was interested in reading in the newspaper on the way down to this meeting yesterday that one of the new members of the United States Financial Accounting Standards Board is an expert in international accounting standards and was put on the FASB here in the United States because of that substantial, in-depth international experience that he had acquired from the accounting firm from which he recently retired.

It seems as if everybody who retires finds a second or third job. But again, I might say, that is another sign of the new millennium. I think all of us in this room who are under the age of 40 are probably going to replot ourselves three, maybe four times in the course of our careers. That is a new phenomenon also that we are beginning to witness in the labor markets in the United States and other countries.

Today many countries are preparing audited GAAP-based financial statements. This has been done for a number of years in Canada, and in the United States. I have chatted with Professor Dittenhofer. Perhaps towards the end of this conference, on March 31st, if the fiscal year 1999 financial statements of the U.S. are posted on the Internet, copies can be made for you before you leave here Friday. If not, I will work with Mort and Jim Durnil and others to get those mailed to you. They are very, very interesting.

I am holding the 1997 audit of the United States and the 1998 audit of the United States. If you read either of these, or both of them, sadly, you will know more about the United States than probably many of the members of our own U.S. Congress, which is our board of directors. They have young gatekeepers in the front office, and when they see something headed up "Annual Financial Report," the next sound you hear is the thud as it goes in the wastebasket. The people who need to read that never get a chance to, even though it takes only about one hour to read. Quite frankly, it is pretty scary. It should definitely be read. The hearings in the United States are going to be Friday morning of this week. At that time they will release the most recent 1999 financial statements.

Importantly, the countries that are issuing these statements are doing so because there is a deep-seated belief that an informed citizenry is a basic necessity for a well-functioning democracy. When people know what they are facing, they meet the challenges. I was watching the biography of General Douglas MacArthur last night on Public

Television. It is very interesting to see how the United States changed from a country recovering from the Depression in 1941 to face one of the greatest dangers Western civilization has ever had and resolving that in a matter of four years. When people know what they are up against, they will make the right decisions. If you keep them in the dark, then they are on that same path of not knowing where they are going, so any road gets them there.

The countries that have these statements are publishing them, and widely distributing them. In the United States, a number of bills have been introduced to distribute the audited statements with the annual income tax forms, so you know what the government did with your money at the time it is extracting it from you for the following year. Maybe one of these days, that bill will pass, and you will have 90 million people getting a copy of this report. Everybody will know what the country is doing.

Transparency, obviously, is critical. The role of the financial executive is to tell the truth without regard to politics or economic situations. The accountant and financial manager have to put the basic information in front of the policy leaders, and the citizens and their elected representatives. So transparency is critical.

Later, I will talk about the role of the independent audit, which gives credibility to these statements.

One of the things that I have noticed in the last 10 years or so is how many international agreements are made between various countries and are mandated by national legislation where GAAP and GAAS are the common language of those agreements with respect to financial matters. What is happening is that many, many people now understand GAAP. I suspect there is not a governor in the United States that does not know what that term means. Twenty years ago, if one in 50 knew, I would be surprised. GAAP and GAAS are the level playing field now for commercial bilateral, multilateral and international business, and, I think it is fair to predict, for international governmental transactions as well.

What I would like to do now is walk you through what happened in my country, in the United States. I am very proud of this because in many cases I was out in the snowstorm advocating some of these when people were pooh-poohing it. As of Friday of this week, it is fair to say I won and they lost, in terms of where the largest economic entity ever on this globe has gotten. Back in 1982, among many, many skeptics, the Federal Managers' Financial Integrity Act was passed, which required each U.S. Government agency head to report on his or her assessment of the internal controls to the President of the United States and to the United States Congress. When I joined the State Department, I got the very first Federal Managers' Financial Integrity Act of the U.S. State Department, and the significant weakness that then-Secretary of State George Shultz pointed out was security of American embassies. Less than a year after he gave that report to the President and to the Congress, we had a situation where secret agents of the then-Soviet government penetrated the American embassy in Moscow. They subverted a Marine guard, who was 8,000 miles from home and lonely, with a female agent. She ended up inside the American embassy in a number of tours and obviously contravened security in that manner.

The second thing that happened was the attack on the embassy in Tehran, where, as you will recall, the embassy was overrun and a number of Americans were held as hostages for a fairly long period of time. I would have to say that George Shultz was pretty clairvoyant in that report. Every year each agency head prepares one of these reports. It is publicly available. You have an opportunity to fairly assess where you stand.

So this was the very first crack in the iceberg of cash-basis accounting and keeping people relatively informed in the U.S. Government.

In 1985, three years later, as the federal government's tax collection abilities became paramount and monies were being passed down to state governments and subdivisions of state governments in the United States—there are 82,000 units of government, in total, in the United States—Congress passed the Single Audit Act, which required each government below the federal level that received federal financial assistance, in cash or in kind, to have an audit. Most of the largest governments that were subject to this law—35,000 governments or so—said, "We've never had an audit. It can't be done." But there's nothing like a law to force you to do things.

In 1985, I would say 40 of the 50 states in the United States had chronic deficit positions, again unknown to the general public, unknown to the governors, unknown to the state legislatures, because there had been no accurate reporting. Today probably only one or two governments at the state level in the United States have this problem. So

the dramatic impact of this Single Audit Act on state and local governments within the United States was that the citizens had access to where their government stood, because the law also made those reports available to the public. The press, and the television and the radio news reporting focused management's attention on the fact that, if you spent more than you took in, eventually you had to do something about it.

The 1985 date is significant. You may recall that New York City, the largest city in the United States, whose population probably exceeds a good 25 percent of all the nations in the UN, actually did go bankrupt. We had, suffice it to say, a major problem on our hands. But this law, which is now 15 years old—and it got refined a couple of years ago—has actually turned around state and local government finance in the United States dramatically. If management does not like where the government has been or is heading in those state and local governments, you can turn the ship before you hit the iceberg. So there was a very major impact from that legislation in 1985, and it continues today.

In 1990, the next major breakthrough occurred. The Chief Financial Officers Act was passed. I might say, this was passed unanimously by the United States Congress. This had four major aspects to it. The first was that 24 large agencies, including the State Department, had to undergo agency-level audits under generally accepted auditing standards on GAAP-based financial statements. As Jim Wesberry has pointed out, there are many copies of the current State Department report on the table here. I encourage you to take as many copies as you want back to your homes, to see how the State Department has reacted to this audit requirement.

The second aspect was that CFOs were mandated for the 24 largest agencies. They are presidential appointees and confirmed by the United States Senate. The law requires very specific experience requirements for these appointees. They cannot be what we refer to as "party hacks" or defeated politicians needing a job. Actually, the requirements for me to hold the position that I hold are greater than the requirements for the President of the United States. In our Constitution, the President of the United States needs to be 35 years old, born in the United States, and receive a majority of electoral votes. That would not hack it for these 24 CFOs, because the requirements spell out mandatory financial management experience. So these 24 appointed individuals, who would come from the private sector or from state government, or even occasionally from within the federal government, would have the credentials and experience of running the financial management of these agencies.

Many of you may not realize that, of these 24 agencies, the State Department is actually the smallest. But if the State Department was on the Fortune 500 largest international public companies, we would be 234th in that list of 500. The Department of Defense, the Department of Health and Human Services, as economic entities, are significantly larger than the number one corporation, which I believe is Exxon Corporation. These are gigantic economic entities, these 24 CFO agencies.

The third major aspect of the CFO Act is that a senior civil servant in each of the agencies would be a deputy CFO to provide the transition when there were vacancies at the CFO position. They have to have the same criteria in terms of competence and experience that the appointed CFOs have.

Fourthly, for the first time in the history of the United States—over 200 years of existence—an overall CFO was designated in that Act, who is the Deputy Director Management in the Office of Management and Budget. This was a very, very major piece of legislation that set in motion, literally, where we are today.

A couple of years later, the Government Performance and Results Act was passed. This required agencies to use performance standards in preparing budgets and in financial reporting. They were required for budgets in 1998 and 1999, and the reporting on this starts next year, fiscal 2000. So when each of the agencies asks for the money to run its operations, it has to specify what is going to be accomplished. This has to be in words generally understood by the appropriators and authorizers in Congress and by the Office of Management and Budget, in preparing the president's submission to Congress.

The Government Performance and Results Act is not looking for inputs; they are seeking outcomes. Outcomes would be what percentage of criminals who are arrested are eventually convicted, which would show the quality of the police work and the functioning of the court system; the time in response to emergencies; the percentage of five-year-olds who graduate from high school 13 years later, which would measure the effectiveness of the education system. Outcomes are these types of factors, as well as others that are more widely known, such as the infant mortality rate, which is the standard of what percent of newborns die within one year of their birth. That measures a lot of things—

education of the mother, health care available to the mother and the child, nutritional standards, et cetera. So there are many, many different factors, and each agency is using its own.

We have a major challenge in the State Department in this because many of our outcome measures are to have things not happen, such as war not breaking out. So we are struggling to come up with some understandable performance measures. We are very close to issuing our first performance report, in which we will publish many of those. Many people do not realize that the State Department is involved in de-mining. We actually have contractors already in Mozambique locating land mines that, in the massive floods that they have recently undergone, have moved 20 or 30 miles in mudslides from where they started. Obviously, what is going to happen is that a farmer or a youngster is going to go out into the area where mud accumulated and step on one of these and lose his or her life or limbs.

The interdiction of drugs on the high seas, in air transit, and motor transit is another issue in which the State Department is involved.

In 1994, just a year later, the Government Management Reform Act was passed. Again, it was unanimously passed by the members of Congress. This is the one where everybody thought Congress was crazy. You were to have an audit of the entire United States Government done by March 31st, or six months after the September 30 year-end, beginning in 1997. In 1997 and 1998, that six-month requirement was met. We will see at the end of this week whether the fiscal 1999 requirement was met. When I left town over the weekend, I talked to the people working on that, and they intend to issue the report. So I think, for the third year in a row, this will be done.

Again, I would caution you—and I don't use this to demonstrate American hegemony by any stretch of the imagination—if the largest government can do it, it is probably not going to be a very good excuse to say you are different, you are too complex, and so forth, to get a report like this put together.

Moving on, in 1996, the Federal Financial Management Improvement Act required all agencies to use a standard general ledger. You say, why would you do this? What this did was permit electronic transmission of each of the agencies into the Treasury, which puts together the financial statements. If everybody has a common general ledger, it is easy to transmit the information and to accumulate that electronically. There are 2,000 reporting entities that report electronically. You can imagine, if you had to lay that out in a working paper, it would go all the way out into the next building in the old pen-and-paper way of doing it. If you have an electronic transmission, it all gets consolidated and combined on an automatic basis.

Secondly, agencies had to comply with prescribed financial systems requirements. Jim Wesberry mentioned that in his comments. Many of the speakers will talk about this. What this did was to improve the quality of those 2,000 reporting units so that there was an acceptable quality of the data that were being reported electronically.

The third thing in this law is that agencies have to comply with GAAP standards, as well as the financial systems requirements and the standard general ledger. The independent auditor was specifically charged with reporting in his or her report if the agency did not comply with those three standards. So here was a major elevation of the role of the independent auditor in this process.

Just last fall, the American Institute of Certified Public Accountants, which is the private body in the United States that recognizes standard-setters, recognized the Federal Accounting Standards Advisory Board as the GAAP standard-setter for the federal government. So in the United States we now have three boards. The oldest is the FASB—many of you are familiar with that—the Financial Accounting Standards Board, which covers the private sector and the not-for-profit sector. The Governmental Accounting Standards Board covers those 82,000 units of state and local government. Now the Federal Accounting Standards Advisory Board covers the federal government. All three of those have recognized standard-setting authority so that a CPA under the ethics standards of the American profession must report an entity that does not follow whichever one of those three standards-setting bodies is the appropriate one.

So, basically, we are going full-circle in terms of instituting and institutionalizing GAAP in the federal sector of the United States economy.

What is the bottom line here? Beginning in 1997, an annual financial report has been issued. As I have indicated, the 1999 one is due out later this week. Although the auditor's report—not unexpectedly, I might say—was disclaimed in 1997 and 1998, the remarkable improvement that has been achieved in the quality, government-wide, was unpredictably good. Right now over 50 percent of the large federal agencies, individually, have clean opinions. I am happy to note that the opinion you will see in the State Accountability Report is a clean opinion. When we are dealing with the public sector, we never deal with "unqualified" and "qualified," because that is a technical term. If you deal with "clean" and "dirty," you communicate to your public. Obviously, no one likes something that is not clean. So the normal chitchat among cabinet officers when they talk to each other about financial reports is whether they got a clean opinion.

Back in 1997, there were probably four, maybe five clean opinions. State, again, was one of those. In 1998, there were maybe nine or ten. Now we are up to 12, and over the next three years, the plan is that every one of the large agencies, those 24 CFO agencies, will have clean opinions. That is probably, collectively, 96 percent of the total federal government. The GAO may be able to issue an unqualified, or clean, opinion during the next year or two, and everything contemplated in financial reform will have been accomplished.

If you go back to the 1982 law, that is 18 years to get from what I call "CRAP" to GAAP. It seems like a long time, but if you do not take those first steps, you never get there.

I mentioned that one of the things that happens when you have no financial reporting or bad financial reporting is that you get accumulated deficits. As of September 30, 1999, the U.S. deficit is in the \$6 trillion range. That is a number so big that you cannot even imagine it. What I try to do when I explain that to people is say that all private wealth in the United States, the last time I looked, was about \$24 trillion. If you wanted to eliminate the deficit of the federal government, somebody would have to propose a 25 percent wealth tax on individuals, corporations and nonprofits, and whoever proposed that would probably never get elected to anything—\$6 trillion is an enormous number.

But interestingly, if you look at the history of deficits in the United States, 90 percent of that was incurred in the 25 years of 1974 to 1999. I think all of you would agree that that has to be 25 years of the most unprecedented prosperity any nation on earth has ever had. Yet we incurred about \$5.5 trillion of deficits. That is exactly what happens when you do not know where you are going.

It reminds me of the captain of the Exxon Valdez, which was the gigantic crude oil carrier coming out of Valdez, Alaska. He was sleeping in his quarters, as you recall, several years ago, and the crew came in excitedly and woke him up. He went out on deck and he said, "Abandon ship." They said, "The rocks are six miles downstream." He said, "I can't turn the ship in six miles. No matter which way I turn it, I'm going to hit the rocks." That ended up as one of the greatest crude oil catastrophes we have ever had. It has cost Exxon and lots of other people a great deal of money to clean up. But that is a good example of the fact that it does take time to turn that wheel. I think, when you look at 18 years in the history of the U.S., we probably did reasonably well.

Certainly, decision making and accountability are part of the reporting. Very important for many of you—I was very pleased to see the number of representatives of national auditor-general organizations or inspector-general organizations in attendance at this conference. The role of the independent auditor is crucial in this process, because it is the auditor who has to put nonfeasance and malfeasance on report so that it gets to the attention of management and problems can be addressed. Sadly, by not reporting, the auditor becomes part of the problem instead of an important ingredient to the solution. So I would encourage the auditors who are here, stick to your guns, and do not feel that you are doing a disservice if you have to report something that is not pleasant. It always gets worse rather than better when it is unknown, undetected and unreported.

Now let's take a look at the future. These are my own personal projections. I think that commercial agreements—bilateral, multilateral and international agreements—are going to increasingly require GAAP and GAAS as the level playing field to understand what people are doing with the money that is made available to them. Transparency and accountability will become required. Those unable or unwilling to comply will simply be bypassed in a time of diminished resources and sophisticated resource providers.

In my own case, at the State Department, we had several hundred million dollars of cash deposited in banks at the 260 posts, in 130 countries. As Y2K was approaching, if we could not get certification from those banks and those countries, we drew the money down to \$500, and repatriated it back to the United States, because we were not the least bit interested in some bank's failure while the State Department was a depositor.

I might say also, international investment firms did the same thing. What that obviously did in certain countries was exacerbate the Y2K problem, because you had massive flight of capital to safety. It looks as if—knock on wood—we have recovered from Y2K on a worldwide basis, both the December 31 rollover and the February 29 rollover. But I can tell you, a lot of organizations moved cash balances and other liquid assets out of countries that were unable or unwilling to step up to the bar and address their Y2K problems. This is a very good recent example of what happens when you are unable or unwilling to comply with what I would call the new millennium standards of conduct in financial management.

I think there is a good chance that a lot of international aid is going to shift from outright grants to loans, debt-for-asset swaps and similar types of transactions. These are going to clearly require both GAAP reporting and GAAS auditing to have the proper oversight. Grants are going to have more oversight, again with GAAP and GAAS requiring recipient accountability.

I personally go up on the Hill with the State Department budget, and you do not know how skeptical members of Congress are, reacting to their constituents. Why should we give money for international programs? This is in the face of the fact that the U.S. has now, probably, one of the lowest percentages of its budget involved in international aid of any major developed nation. Actually, the State Department budget is 3/10ths of 1 percent of the total federal budget! We are lost in the roundings in the financial statements. If you add foreign affairs, which would be USAID, Export-Import Bank, and Foreign Agriculture Service, Foreign Commercial Service, the total foreign affairs budget is slightly over 1 percent of the entire U.S. budget. And still, with that small percentage of the national budget going into foreign affairs, the skepticism on the part of the Congress, which is our board of directors, is enormous. Whether it is direct aid or grants, you had better believe there will be accountability and transparency demanded.

Another projection that I am going to make—and I know Jim Wesberry is very involved in anticorruption—is that corruption may well diminish, if for no other reason than nobody is going to deal with the pariahs. We do not have enough, collectively, in the developed world to help out everywhere, so if you are not willing to play by the rules, you just do not get anything. Whether you are corrupt or not will determine whether you are not going to be able to receive aid from the nations that are watching very closely what happens to it.

Just as in our Government Performance and Results Act, you are going to see performance measurements coming into financial statements internationally, so people can see what they are getting. That would not only be aid providers, but, more importantly, the citizens of the respective countries.

Reduced timeframe for production of an audit—I already hear talk in the United States of that six-month period moving up to four months, and quarterly financial reporting—will occur. For example, the Securities and Exchange Commission in the United States, for every publicly held company, requires quarterly reporting in 45 days. If you cannot do that, trading is stopped in your stock, which means you have zero market value. So the SEC has a death sentence, essentially, for companies which cannot report their annual information in 90 days or their quarterly information in 45 days. You have to remember, many of these multinational corporations are significantly larger than the gross domestic product of many nations. So again, it can be done. It is a matter of the willpower and commitment of top management to get it done.

Another thing is the reliability of performance data. If you are reporting annual information on, let's say, infant mortality rate and you want to bring that down—which would be the goal, I would suspect, of most nations—and you have a sudden increase, there should be an explanation of why that happened, just like variations in the financial statements.

Timeliness will become critical. Many people are now talking in the corporate world of real-time financial statements. That means that at 9 o'clock the day after the end of the month or the quarter the information is on the Internet. This is possible because the technology is here. We just need to have some simplification, probably, of accounting principles to be able to do this.

The bottom line in the future, as I see it, is that governmental financial management increasingly will mirror the private sector, and that citizens in the various countries—developed, developing, and under-developed—are going to demand value for money from their respective governments.

One of the great quotations that I have run across in studying governmental financial affairs is the statement of Thomas Jefferson, who was the third president of the United States. Many people regard him as probably the wisest person ever born in the United States. Maybe an indication of that was the tribute paid by President Kennedy when he had a dinner in the White House for all the living American Nobel Prize winners—literature, physics, chemistry, medicine, economics, et cetera. He said, in opening his remarks to that distinguished group of intellectual leaders, "Never in the history of this nation has there been so much brain power in the White House dining room save when Thomas Jefferson dined alone." That is a tremendous tribute to his intellect.

This is an actual quote from a letter that Jefferson wrote to a friend in April of 1802. He said, "I think it an object of great importance to simplify our system of finance and bring it within the comprehension of every member of Congress. The whole system has been involved in impenetrable fog"—wonderful word. "There is a point on which I should wish to keep my eye, a simplification of the form of accounts so as to bring everything to a single center. We might hope to see the finances of the Union as clear and as intelligible as a merchant's books, so that every member of Congress and every man of any mind in the Union should be able to comprehend them, to investigate abuses, and consequently to control them."

That was in 1802. One of the interesting things is that 200 years later, we may have achieved Jefferson's vision, at least in the United States.

So my challenge to you for this week is that in this room, collectively, is the brainpower that can put together audited financial statements of every nation on this globe. If you develop that vision as you go through this week, I think this will be a very, very rewarding conference, not only for you individually in your own professional growth, but for democratic traditions throughout the world.

One of the questions that I am going to leave you with is, will the national government financial and information systems receive the necessary top-level commitment to permit compliance with GAAP and GAAS? You cannot do this on the cheap. It is expensive. You are going to have to get a commitment.

Will the national government financial and information system revisions accommodate e-commerce and e-government while ensuring the security of citizens from those who would abuse privacy of that information?

Finally, can the 20th century concept of accounting transform in the new millennium to the 21st century expectation of accountability? There is a world of difference between those two words. I think we have in place the ability to do the accounting. Now are we going to put in the accountability? After 200 years, as I said at the outset of this wrap-up, can the collective talent here in this conference—financial management, information technology, auditing, et cetera—achieve Jefferson's vision on a worldwide basis?

With that, I will open it up to questions.

JIM WESBERRY (United States): While somebody is coming to the microphone, I was remembering, Bert, back when we did that U.S. and Canadian study with GAO and the Office of the Auditor General. When you were talking about legislators not being able to read financial statements, one of the startling findings of that was that the legislators both in the United States and in Canada said their principal source of financial information was the press. Do we need to have an educational program for the press?

BERT EDWARDS (United States): Jim, that is a good question. One of the things that always amazes me is, when the hearing is going to be held this Friday on Capitol Hill before the Senate and the House Finance Committees and others, the press that is there is going to be the political press, not the business editors of the major newspapers and the reporters of the *Wall Street Journal* who understand financial affairs. It will be people who are looking at political issues as opposed to financial reporting issues. So I think, yes, in the United States, we need to do some education, and

I think similarly throughout the world. In every one of the 50 countries that are represented here, your government is the largest economic entity in your country. It ought to have the people who understand financial affairs present when those presentations are made so that it can be properly interpreted and reported.

JIM WESBERRY (United States): Bert, you talked about the Single Audit Act in the United States. When can we expect to have a single audit for international development projects? Many of the auditors from supreme audit institutions across the world and the auditees are concerned because they have floods of auditors coming in from different international organizations auditing the funds that come from those organizations.

BERT EDWARDS (United States): Jim, that is again a very interesting question. The way the Single Audit Act works in the United States is that a recipient of federal government funds has a basic audit of the financial statements performed and then, on the basis of materiality that is spelled out in regulations, has an audit of individual grants. Every federal agency, large or small, that provides assistance to that state or local government is obliged to accept the result of that audit. They can come in and do additional auditing on top of that. But you do not have six or eight or ten different audit requirements, with different financial reporting requirements, and so forth. All of the audits are GAAS audits, the financials that they are auditing are GAAP-based financials, and no federal grantor can change that.

I think this would be a wonderful piece of legislation to start circulating through the world in terms of those countries where you have local governments—and I think that is probably going to be most of them—so that you have the basic underlying audit of the entity. Why audit a grant if the payroll system is not working? Why audit a grant if the vendor cash disbursement system is not working? You want to have an understanding of the entity to start with, and then add to it the specific requirements of that particular grant. That is a good model to follow. It has been very successful in the United States.

RONALD MYERS (United States): Thank you very much. I enjoyed your comments and support very much the idea of pushing financial management reform in many of the countries with which we work in the World Bank, because I think it is a real backbone for state reform. Without it, you really cannot develop the rule of law, develop governance, develop democracy as we know it or create favorable conditions for investors.

But my question to you is, what would you have the international financial institutions do? You are in a position to affect this because you represent one of the governments.

BERT EDWARDS (United States): Certainly, the United States is a funder of the "IFIs," the international financial institutions. Over the last couple of years, there have been a number of presentations I have attended in Washington where there has been a reluctance to put strings on aid or loans that require GAAS audits on GAAP-based financial statements. I think that has become the byword in the United States, in England, many of the Western European nations, and so forth. I think, to the extent that you can build in a requirement of an audit that would also involve creating an indigenous competent financial management and auditing profession in the countries that you are aiding, it would be a very, very major contribution.

One of the things that I have found in my life is that one of the worst sins anybody can commit is to lie. When you do not tell the truth, then everybody else is totally misled as to what is going to happen. A good illustration in the United States is the only president who has ever left office, left not because of any crime that was committed, it was just untruthfulness. I think somehow or another this concept of transparency, backed by financial statements prepared on a timely basis, is going to be the necessary mechanism to keep the international financial institutions functioning in an efficient and effective manner.

VIRGINIA ROBINSON (United States): Bert, you mentioned that the financial statements are one of our most important products. What would you suggest as next steps for us, as individuals or as a professional association, for getting the attention of our board of directors, the Congress, to focus on the statements?

BERT EDWARDS (United States): I think what we have to do is continue to toil in the vineyard to overcome the naysayers, the people who used to tell me, "We don't need audits. We've been around for 200 years, and we never had an audit, and we never had any financial reporting. And look where we are." I say, yes, look where we are: Ninety percent of our deficit was created in the 25 years of our greatest prosperity.

So I think what we have to do is address the naysayers effectively and efficiently, through professional organizations, through dealing with the financial press in the United States, as Jim has suggested. And worldwide, we need to get people to understand that you do not have to be very complicated—as a matter of fact, the balance sheet of the United States in these two reports I have here, in the last two years, has about eight or nine assets and eight or nine liabilities. It is a very simple balance sheet, simpler even than most of our individual balance sheets. It is not hard to understand when you get down to the bottom line and you see a \$6 trillion deficit. So I would say we have to continue to carry the torch of doing it right. Sometimes it is going to be a long time. But in 10, 15 or 20 years, major changes are going to occur, or countries that resist are just going to be bypassed and become backwaters.

LIONEL BERNARD (Haiti): I am a member of the supreme audit of Haiti. My question is this. What are the mechanisms that you can put in place, besides GAAP and GAAS, when aid is not given directly to the government, when it is given directly to other agencies, such as NGOs? What mechanisms besides GAAP and GAAS can be put in place to control the aid?

BERT EDWARDS (United States): I think what you are speaking of is, in some cases, if the government does not have the control mechanisms in place, the aid comes into non-governmental entities, either indigenous to the country or operating within the country on an international basis. I think that is a direct manifestation of what happens when the aid providers lose confidence in the government itself to administer it. But, certainly, the non-governmental aid recipients ought to be under the same reporting standards as a governmental or national recipient.

ELATU KALEB (Lesotho): The importance of computer-based systems has up to now been highlighted. My question is, what is your opinion on the security in IT-based systems? In particular, I think you indicated the state of Maryland is able to produce tax refunds within 24 hours, which is a sterling example. This issue of security on a computer-based system is certainly something that worries me personally.

BERT EDWARDS (United States): That is an excellent question. That is why I put that up as one of the challenges that we face. Actually, I would think, if I was running the taxation system in a country and I had a room as big as this filled up with paper, I would probably need a bigger security system than if I had it all on a couple of computer disks, for any number of reasons. I think you are raising a point on basic internal control structure. Certainly, if the international banks, such as Citicorp and National Westminster, and the international investment firms, such as Salomon Brothers, and the international insurance firms, such as Axa, which is a French firm that has a major stake in the U.S. insurance market—if those companies can transfer billions of dollars daily, obviously we have the ability to have security. To the extent that you do not have your own people, I think you are going to have to bring in experts on computer IT internal security, just like you would, perhaps, on non-sophisticated security issues.

I had my basic training in the U.S. Army at Fort Knox, where all the gold is. Let me tell you, you cannot get close to Fort Knox. Notwithstanding movies, where there have been some break-ins to Fort Knox, it is not going to happen.

There is no real difference between security over physical assets and security over intellectual property, such as computer data files. We can do it. We have the technology. Again, it is going to cost time, effort and money to be sure that those data are secure, government to government and citizen to government, from outside intrusion.

Auditing Information Technology Systems

Charles Le Grand, Director of Technology, Institute of Internal Auditors

First, let me say it is an honor and privilege to be here to speak with you. I had the honor of addressing this conference last year. Last year I talked a lot about electronic commerce and emerging technologies, and a little bit about the year 2000 issues that we were facing at that time. It looks as if everybody survived the year 2000.

Second, let me say that I am not quite as hyperactive as my description makes me sound. I have been working at this stuff for a long time. That is how I have been able to be in so many different positions. I have enjoyed being on the side of both management and auditing of information systems. Frankly, I think the management is a lot more fun, and I believe that the auditing is a lot more challenging.

What I want to talk to you about today, primarily, is information security, because this is the area where auditing professionals today must concentrate their attentions. This is the service that we can provide to our management, our senior executives, our governance bodies, our corporate boards of directors and our other governance entities that have a role and a responsibility for guiding our organizations into the electronic age, the age of global electronic communications, the world of doing business with other business partners that you may have never met, where you are relying on electronic confirmation that you are dealing with a valid entity. This is a significant challenge. Many of you are aware of the denial-of-service attacks that have taken place against organizations, primarily in the United States, where they were denied the opportunity to do business because of security breaches in this infrastructure that we call the Internet. The Internet allows people to get into and take control of significant resources and harm, potentially, not only the resources where they set up their invasive programs, but also any other resource that tries to use the Internet as a communication medium.

So I believe that this is an area where we should focus most directly. I have lots of other areas identified in my handout and in my presentation. I am going to skip quickly over those areas so that I can spend more time on information security. I have a little less than an hour. I cannot possibly tell you everything I would like to tell you today in an hour. I probably couldn't tell you everything I would like to tell you in a week. But I don't have a week; I have less than an hour. So I will tell you that there are brochures outside not only describing our international conference, but also describing a Web site for which I am responsible.

This Web site is called *itaudit.org*. On this site, we try to bring for the auditing and accounting profession a concentrated set of information relevant to the profession. You don't have to search through two million entries when you ask a simple question. On this site, we only provide those

answers that are most relevant to the profession that we know we are serving. So I recommend this site to you. If there are areas that you see in my outline where you would like more information, this will be a good place to start. I will not tell you that all the information is on that site. What I will tell you is that what we have on the site are the links to the other sites available on the Internet where this information resides. We have about a year-and-a-half's worth of articles. We publish eight new articles every month. Then we have a large reference library and an on-site search engine where you can get greater details on the subjects that I am going to discuss.

I will start with the roles and responsibilities of auditors. Everyone expects the auditors to provide a service that is an independent and objective view of the organization and its activities. They expect that auditors will employ sufficient, competent and relevant resources. Today this means resources that are immensely capable of dealing with some very highly technical subjects, but also able to speak to management and to their clients at all levels of an organization. We must communicate directly with the people who are actually building and modifying and managing a technology that is moving along at a blinding rate of speed. We must also be able to talk about some highly technical issues to senior executives and boards of directors, who have not much experience in dealing with highly technical information technology issues, and in many cases, frankly, would rather not hear about it, but would rather hear that everything is being handled well.

Well, it is not sufficient these days to just say that everything is being handled well. We have to be able to discuss with executives and with our governance bodies the scope and the depth to which we have gotten into these issues. We have to talk to them about key decisions that must be made in assuring information reliability and the reliability of all of the resources that share the Internet and other communications infrastructures. We have to talk with them about their roles, the leadership roles and their liabilities, in being involved in an organization, in a governance position, when that organization is of necessity doing business on the Internet.

We have to then be able to provide recommendations based on our specialized knowledge. We are specialized in understanding threats and risks and the controls and the safeguards that must be in place. Like all of our other peers in the business and government and educational worlds today, we have to be able to shift our attention, our knowledge base, and our direction to deal with those issues that are most timely and that offer the most threats to our organizations, such that we can make meaningful recommendations to management and governance at all levels.

In terms of information resources, we find that there are huge numbers of technology specialists in the auditing profession today. There is resource management, how we acquire and deploy our technology resources, how we keep effective and efficient use of this technology. There are auditors who will deal with the specific internals of operating systems and system software, because it is important to know not only how these systems operate, but how they interact with other operating systems and communications environments in order to be able to assess the level of security of these systems and these networks.

There are auditors who specialize in systems development and maintenance, those who specialize in particular applications. There are auditors in great demand that specialize in the currently popular enterprise resource planning packages—the SAP, Oracle, Baan, PeopleSoft.

They are in great demand because it requires a specialization to know how to operate these packages and know what can go wrong when they are implemented in different environments.

We have auditors who focus on the distributed systems, the distribution of processors, the distribution of information, and how control is distributed or centralized in these networks. Telecommunications is another esoteric subject in and of itself.

Security management, though, is a subject that is very pervasive. If there is one thing that auditors have to look at in all of these other technology areas, we have to understand and be able to explain to all levels the management of information security. Of course, we have to look at our ability to recover from disruptions, and we have to constantly be vigilant of emerging and advanced technologies.

In our information technology audits, we will assess the effectiveness of control and security measures. We must look at preventive and detective and corrective, or mitigative, measures. As auditors, we must naturally focus more on the detective controls, those things that alert us to things that can go wrong. But as business people, we must also recognize the role that preventive controls play in keeping things from going wrong—then, when we find flaws in our systems, not just relying on a few in-place corrective controls, but ensuring that we have an organization set up to facilitate the types of changes necessary to deal with new sets of problems that are emerging daily. If we are going to provide a valuable service, as an auditing profession, we have to be able to provide some meaningful assurance that if we say you can rely on the information that is being used, then that assurance means something. It means that we know what we are talking about. It means that not only have we looked at the information and said it is good information, but we have looked also at the supporting infrastructure and the organization and the management structure to keep our information meaningful, relevant, timely and reliable. It means that we understand that we will be able to recover from harm because, as we look at the value of the organizations that we represent, and as we look at the value of information to those organizations, we realize there is a direct correlation. If we lose the valuable assets of our information and our information technology, then we rapidly lose the value of the organization. We can be out of business.

As auditors looking at areas where there is tremendous change, we will constantly find things that are wrong. Our challenge is to focus on areas where change is needed, where this change will have maximum beneficial impact on the organization, or those areas where we seek to avoid the problems that could be the most detrimental to the organization. We must be challenged to put away some of our practices of the past, some of our practices that have been extremely detail-oriented in terms of compliance with policies and procedures and objectives. We have to make sure that management has procedures in place that will deal directly with compliance, because the challenge facing the auditing profession today is much too great for us to continue to focus on minor compliance issues. We have to focus on the strategic issues and those areas where changes are bringing about changes in the profession, in our organizations and the ways that we are doing business.

This means that we have to become expert in understanding the risks and the threats. We are seeing a change taking place in our profession. If you look at the Web site for the Institute of Internal Auditors, *theiia.org*, you will see that we have a new definition approved in June of last

year that gives the internal auditor a significant role to play in risk analysis and risk management for an organization. We see that many of our chief audit executives in major corporations and government and education are working directly with those elements of management that are responsible for risk analysis and risk management, seeking to make sure that our practice changes in step with the changes to the organization. As we deal with connecting to the Internet, making valuable information available where it is needed, we add value to the organization, but at the same time we incur new risks for the organization, because to be connected to the Internet is, itself, a risk. To make our information available to those who need it is to put it at risk of being also available to those who should not have it, and those who might use our advantage to harm us. So we have to understand the issues related to connectivity.

We have to also understand the rules that govern this body that we call the Internet and other open networks. We have to understand how something that you might do innocently in managing your own network could be a problem to your network or could make your network—your computers, your operating environments—serve as a platform that others might use to launch attacks against your business partners, against others who rely on you to have integrity, to provide only a secure and controlled environment. This puts your organization, your management, your board of directors all at risk of personal liability if it can be found that they failed to ask the right kinds of questions to ensure that the right controls were in place in connecting to this global infrastructure, that you had appropriate security, that your risk management is changing as fast as the risks are changing and that the tools and the approaches used by auditors are also changing just as fast.

So what has changed? Networks are everywhere. They get into everything that we do. They become essential components of every product and service that our organizations use or offer. To be connected electronically to other businesses and to customers is the very nature of commerce today. Many of the controls that we learned to rely on in the past 50 years have virtually collapsed. Traditional control elements, even control objectives, practices, techniques, are no longer effective today because the cost of computing power has gone so low that for less than the price of a cheap used car, anyone can buy the equipment and the services that he needs to launch highly sophisticated attacks against your systems and potentially use your systems to launch attacks against your business partners.

I am going to read this statement to you. It will be published in a report that the IIA will release for the first time on April 18, at a conference that we are hosting at the White House in Washington, D.C. We are working with the National Association of Corporate Directors, the U.S. Office of Critical Infrastructure Protection, the American Institute of Certified Public Accountants, and the Information Systems Audit and Control Association to produce the report that will also be available on April 18th.

"What we have found in the research for this project and in writing this report is that the information technology and communications infrastructure has been cobbled together in the most accelerated technological improvisation ever experienced in human history. It is not built to or operated by the kinds of overarching guidance and standards applied to any other infrastructure. Yet this novel and fragile infrastructure is being used to operate and coordinate all other critical

infrastructure sectors and individual organizations. It is easily turned on itself to abuse and misuse information, and deny essential services."

This is a rather frightening paragraph when you realize what it means to your organization. You have to be able to use the technology in order to remain a viable entity. But the risks that you are accepting are based on an infrastructure that has grown wildly out of control. In a competitive environment, where to come to market fastest with a product is immensely more important than providing a product or a service with an effective set of controls, we tend to look back at controls after our integrity has been compromised.

The Internet says that today we will be doing business on the World Wide Web. We will be doing business electronically with our customers and our partners, and this offers both opportunities and threats, and it provides reliabilities and responsibilities.

I talked a lot about electronic commerce last year. So these issues should be pretty much old-hat by now. We have dealt with electronic data interchange for nearly 30 years, as long as we have had networks. We have been dealing with electronic funds transfer for a long time. There are still weaknesses in the controls for these applications of technology. The legal issues, the impacts on our global economics continue to change, as electronic commerce becomes more and more the nature of all commerce. The impacts on our professions—accounting and auditing—are also accelerating dramatically.

There are a lot of people, possibly some in this room, who hoped that they would retire long before this pace of change became imperative. There are many people today who are exhausted trying to keep up with this change. We have to find ways to share our strengths and our weaknesses, our knowledge and our capability to deal with change, and to share this as professional bodies and as bodies that are sharing a common experience of this rapid technological growth. If we all try to manage it individually, then we will all fail individually.

Electronic commerce means that we realign the very ways that we do business. We automate our interfaces with our business partners. Nobody relies on the postal service and paper transactions today. In an environment that has to remain competitive, if you don't offer, your competitors will. Control models are no longer local. They are no longer based on dealing with a small set of partners or customers. Today the normal operation is to go global as quickly as possible, to provide services to anyone, anywhere in the world.

We rely on models of trust that few of us understand. This is another area of immense specialization, understanding control models, assurance models, certification authority, so that if someone represents himself as a particular business or individual, you can be assured that he is indeed that business or individual. There is a control in place so that if you, in good faith, enter into a business transaction, there is built-in non-repudiation, so that the other party or parties with whom you entered into the transaction cannot later deny their role or responsibility. These things are taking place electronically. We are losing our historical elements of paper and ink on which we have relied throughout recorded history. This is becoming no longer an effective control structure. Paper and ink do not manage our business or our transactions anymore.

We rely on global control models. We rely on transactions in potentially huge quantities, transactions that could compromise the entire value of our organizations in a relatively short business cycle.

So, as I said, there have been changes to the organization structure. The location of where we do business makes a difference, because where we do business electronically may be very different from where we do business physically. Our channels of distribution may no longer be our own channels. They may be channels that we are communicating with electronically to serve those parts of the globe where we are not physically present.

Our means of conducting business, our ways of booking and conducting sales, our relationships with our business partners—all of these things, down to, to whom do we pay taxes, from whom do we collect taxes, and who is the authority that says what taxes will be collected and paid, based on where we exist physically, electronically, and where our customers exist—all these rules are changing.

Information resources management says that we have to be able to accumulate and manage data from diverse resources. We have to become familiar with and use the technologies for warehousing the information that we need, mining continually for new information that we need. We must continually apply new knowledge. We must continually manage new relationships with our software vendors, those who provide the hardware and software technologies to us.

We have to find new controls, new techniques. We have to rely on specialists, people who specialize in subjects that did not exist a year ago—the whole area of digital signatures, of information exchange protocols, of securing a transaction over an insecure medium, of knowing that there is something about the set of controls that our organization is using and our business trading partners are using that says that we can rely on those transactions. When we as the business people—the executives, the boards, the process managers—do not understand those controls, then we have to rely on experts, our information technology experts and our professional auditing experts, to give us the assurance that we need that those controls are appropriate and reliable and will continue to be so.

These are new roles for the auditing profession. These are not places where we can look and see how it was done last year. These are things that are changing while we are sitting here at this conference.

There are people who specialize just in encryption technologies. Encryption is subject to various laws. It is subject to various technologies. It is subject to network protocols. It is subject to any number of different things that will cause it to be appropriate or inappropriate in a given environment.

We see that there are infrastructures being set up to manage this trust—public and private keys, a secret piece of information that you have that will allow other people to rely on you, just as you rely on other people—token transactions, smart cards, electronic cash, any number of new areas. As soon as we learn a new technology for managing this area, that technology becomes obsolete, and we have to learn the next one.

As we are cataloguing the threats to our information security and control, we are familiar with the natural disasters, except that now a natural disaster somewhere else in the world, which would not otherwise have affected us, may very well affect us. If our information is being switched through Chicago and they have a fire, or San Francisco and they have an earthquake, it can affect our own business. I have to say that I think the world did an excellent job of managing all of the changes that were necessary to our power suppliers and our power grids. We learned a lot in getting ready for year 2000, making all of our systems capable of dealing with the new century. But we also amassed a lot of information where, if this information falls into the wrong hands, someone could disrupt our business, our governments, our commerce, just by what they know about our electrical power grids and how to take them down strategically so that they can impact our most sensitive industries.

We have to know about and we have to manage technical conditions, the hardware and the software failures. We have to be able to deal with human factors—ignorance, apathy, accidents, errors and omissions. We have to also be able to deal with and counter deliberate attacks—hackers and sabotage.

We start with some pretty fundamental concepts. We want our information available and usable when and where it is required. We want to be assured that our information is reliable and protected against unauthorized modification. We want to maintain confidentiality, know that our information is disclosed only to those who have the right to know it.

In accomplishing this, there are nine pervasive principles of information security. These have been documented. When you get the handout, you will see a list of a number of organizations that have documented information security principles. You do not have to memorize the list, but you do need to know where you can get this list. You do need to know the types of questions that you, as management, should be able to answer, that you, as governance bodies (boards of directors, senior executives), should know how to ask and how to evaluate the answers that you get, and that you, as accounting and auditing professionals, should know exactly how to answer—what the right answers are, what the wrong answers are, which are the correct answers for your organization, and how we are fixing the ones that represent the greatest threats to our organizations today.

I am going to run quickly through these. When we talk about accountability, accountability and responsibility must be clearly defined and acknowledged. When you sign a non-disclosure agreement, when you sign the conditions of your continued employment with your organization, you should be acknowledging your awareness of accountability for information security. A key question that your board of directors, your governance body, should be asking of management and auditors is, what systems do we have? What have we established to assure effective assignment of accountability for the security of our information and supporting technology resources?

Awareness: People must be kept aware, and they must be informed when there are changes. Knowing the right way to do things—how do we manage our passwords? How do we not manage our passwords, our other access-control mechanisms? What has management done to ensure that everybody knows and understands and accepts the importance of adhering to sound information security? What about the ethics of managing information that belongs to our organization, that

belongs to others? Some of it is personal. Some of it is private. It must be used and administered only in an ethical manner. So what have we done to even consider whether we are using our information only in an ethical manner?

We find that the controls over these systems must be multidisciplinary. We must have inventions and mechanisms in place that transcend the viewpoints of different individuals, different environments, different needs of everyone involved with our commerce. So what has management done to ensure that the perspectives and considerations of all the interested and affected parties are considered and balanced in developing our information security policy?

How effectively does management share appropriate information with our peer organizations and appropriate governmental entities? Pardon me for bringing this up, but this is a very new concept, and it is very foreign to lots and lots of individuals and lots and lots of organizations. What? Share information about our threats, our weaknesses, our strengths, our control structures with, potentially, our competitors, potentially with the regulatory bodies that might use this information to come and apply sanctions to our organizations? Yes, we are finding that that is necessary, because a failure of a key player in one of our critical industries—information technology and communications, electrical power, banking and finance, transportation, oil and gas supply, water, government emergency services—could spell disaster. We are dependent on all of these infrastructure industries. We are in this together. If we do not find ways to share our knowledge of the things that can go wrong and the things that we can do individually and collectively to prevent, detect and mitigate these problems, as I said before, we are all going to suffer, individually and collectively.

There are some major projects being undertaken today by the U.S. Department of Commerce and by related industry groups that deal specifically with the legalities, the need for regulation and legislation, the building of infrastructure components that will allow us to share information about how to provide a more secure infrastructure.

Proportionality: We don't want to spend a dollar when a dime will do. We want to apply cost-benefit analyses and make sure that we are dealing with our most significant risks, that that is where we are applying our most effective controls. We want information security integrated into everything that we do—our principles, our standards, our rules, conventions, our practices, our operating procedures. All of these are coordinated so that one doesn't become the weak link in an otherwise strong chain of information security management.

So how has management coordinated and integrated information security with all of our overall policies and procedures to create and maintain a secured environment throughout all of our information systems and networks?

Timeliness: All of our accountable parties must act in a timely, coordinated manner to prevent or respond to breaches and threats to the security of our systems and our networks. The important question is, what capabilities do we have to assure that when there are failures involving information technology or its management, they do not endanger the organization, that we will not endanger our business units, our business trading partners, our customers, our Internet neighbors, if you will, or their information assets, and will not impair anybody's ability to operate. This is a tall

challenge. People who are relying on the dotcoms, the electronic commercial entities for providing communications services, for providing other needed information processes can all suffer collectively because of breaches in the security environment.

Assessment: This is a big one for auditors. How often do we assess and reassess the security of our information systems? What capabilities do we have to know that the risks associated with our information and supporting technologies are effectively assessed on an appropriate periodic basis? How often is "appropriate," given the rate of change that we are experiencing today? I submit to you that "appropriate" is constant, that we, as an auditing profession, are finding the ways to be constantly aware of and vigilant of the changes that are taking place so that we learn the very patterns of the information that we manage, the transactions that we process, and we can spot changes in the patterns of our transactions without necessarily knowing what the nature of the change is. When we spot these anomalies, these changes, these things that we have not experienced before, we would immediately dispatch an intelligent agent—a human—to figure out what these anomalies are, to know whether we need a new rule base in our continuous monitoring systems or whether we have a genuine problem, to figure out that somebody is attacking our systems from within or from outside the organization.

Equity: We must respect the rights and the dignity of individuals. You can cause a lot of harm to individuals. You can impair an individual's ability to do his job and to provide information security by applying measures that are unfair or not legal, that do not respect individual privacy or rights to this information.

If we are going to apply this set of principles, if we are going to be prepared to answer that set of questions, we are finding that auditors are using a huge array of specialized tools and approaches to auditing. We are focusing heavily on risk analysis. We are inventorying the entire universe of entities subject to auditing, and we are planning and scheduling our audits based on those areas of greatest risk. We are utilizing project management, audit tracking systems that allow us to direct the scarce resources that we have in auditing—there will never be enough auditors to go around. It just would not be cost-effective to spend that much money on reviewing when we could be spending the money on doing. This is not going to change.

We prepare a database of the skills that we need and an inventory of the skills that we have. We integrate that with our reference library, with our education and training programs, with the professional development of our auditors. We integrate that with our means of communicating with an audit staff that may operate anywhere in the world, from anywhere in the world. It is not uncommon today to audit a network, database or operating environment in South Africa from an office in New York City—not at all.

How we present our information: How many of you have experienced an organization where management, senior executives and the board of directors looked forward with eager anticipation to a negative audit report?

As we present our findings and our recommendations to our organization, we have to have a means of tracking how these are resolved and knowing whether we should devote more attention or less attention to each of these areas. We have to use the most powerful available tools. We will

find that electronic work papers are becoming indispensable. Electronic retrieval and analysis of information, as I said before, is becoming not only essential, but continuous. Audit reporting, our database of history, our computer-based training—all of these are becoming highly mechanized and highly managed in our audit shops today.

We see that the trends in information retrieval and analysis are trending towards greater intelligence. I saw an advertisement in a CIO magazine that I was looking at this morning. Computer Associates has taken the system that they use to manage their networks and to monitor and predict potential failure in these networks—and it has a very excellent graphical interface so they can zero in on the potential device that is about to fail under a load and dispatch someone to fix it before it fails—what a concept—and they are applying this same technology to formula-one racecars. They are monitoring the temperature of brake pads and the pressure against the supporting structure of the vehicle. They are also modeling this three-dimensionally and relaying information back to the driver. That gives the driver the winning edge.

If we are using this technology in racecars, it won't be long before we are applying this technology to business control models and business opportunity models. Hopefully in our lifetimes, we will see this applied to audit intelligence models as well.

The capture and archiving of sensitive information at points of entry will shift our emphasis to the greatest risk. We appraise information integrity based on models of complex data analysis. This is where our profession is taking us. We are automatically linking between the work that we perform and the reports that we generate, so that something that appears inconsequential to one person is automatically reported to someone else who might consider it a serious consequence.

We will build intelligent work papers, so that as we note situations that, to an inexperienced eye, may not seem to be serious, they will automatically be elevated because of the features built into the electronic tools that the auditors are using to bring the right information to the attention of those who can do something about it.

Audit reporting will become automatic and continuous. We will link to prior reports, share information across our entire audit teams, distribute our information and our audit findings electronically and deal with complex legal libraries in industries and organizations where that is appropriate.

It is my belief, and I have come here today to tell you, that information security is today's new frontier. We must focus on information security, and we must continuously acquire new knowledge and skills to deal with our need to manage information security and information technology security. The use of technology tools is critical to our success.

The technology is going to continue to change, and to continue to change the ways we do business. To understand this technology and to focus on the objectives—why we are doing business—and to understand not just the threats, but the opportunities that we have, and to be able to provide a positive influence to the organization by reporting both opportunities and threats, and risks and solutions—this is where the auditing profession is going. And I think it is going to be a great time.

The only thing left to discuss is a list of a number of documents that I used in developing this presentation. There are six or seven of them. British Standard 7799, I think, is an excellent document, for those of you who have not seen it. It begins to get into what they hope will become an international standard for how to assure the integrity of an information processing environment and for those professionals who are working in that environment. We are seeing commercial applications. AICPA and the Canadian Institute of Chartered Accountants now have a commercial application out where they are shifting their emphasis on the ability to trust a networked environment.

That is pretty much what I came to talk to you about today.

LUIS UMEZAWA (Peru): I have a question which is connected to the area of auditing systems. Does the auditing of information systems affect only the security and protection of the programs that are used? Is it worth the investment in information technology the government makes in order to make people believe that they have sufficient protection of the data?

CHARLES LE GRAND (United States): The auditor, in looking at the information technology and the information resources, must look not only at the value of the information being managed, but at the entire supporting structure—the cost of the systems, the cost of the services, the software, the hardware, the way that they are connected, and, I think probably more important, the dependency on these systems. What impact will result from harm to either the data or the systems or networks that process and communicate the data, what liabilities will be accepted by the organizations or individuals responsible for providing, making available, that information and the supporting technologies and resources for processing and communicating that information?

LUIS UMEZAWA (Peru): My question is not directed toward the political decision in terms of investment in information technology. Now I understand that there is a new concept of redistribution of the state resources. Until a few decades ago, the redistribution of income by the state toward the citizenship was connected strictly to the use of public goods—highways, water systems, transportation, electricity services—services in general. But now in the last few decades, the public can also receive in a different way this redistribution of the state income. This redistribution of income can be measured in terms of the investments made in information technology, the systems that permit more active participation on the part of the public with the government. The public has access to information systems that provide information about what the government is doing, how the authorities invest their money, how the authorities are making available to the public the laws that Congress approves, the behavior of Congressmen in my case. So the auditor can also collaborate in the amount that governments should invest in information technology in order not to deprive the citizenry. It is not only the audit of the investment, or the audit of the software or the hardware, or if they're using it right, if they're buying the necessary equipment, but collaboration in the preparation of future budgets. Investments in the security of information systems should be a serious consideration.

CHARLES LE GRAND (United States): Thank you. I think that is actually a very powerful statement of how auditors can work closely with government. I think an example of where you can

see this happening in the United States is, of course, the offices of our inspectors general. But more importantly, there was a major study done by a presidential commission in a report issued in November of 1997, called *Critical Foundations*. This report talked about the opportunities and focused heavily on the threats to information security.

But a major result from this was our Presidential Decision Directive 63, which was issued in May of 1998, that set up an office called the Critical Infrastructure Assurance Office. This is a cooperative venture between the public and private sectors to deal directly with the issue of sharing the kind of information that you are talking about, so that we are making the right decisions, so that we are applying the technology, and so that we are dealing most effectively with those threats that could deprive us of the opportunity to use that information and technology.

We have a lot of wrinkles to iron out. We have a lot of bright people working in groups today trying to set up information-sharing and advisory councils. We are seeing some good success in that. Banking and finance set up a new sharing council in November of 1999. The energy producers, electrical power suppliers, are also setting up a council. We have the National Security Telecommunications Advisory Council which is taking an active role in this.

So exactly what you are talking about—I believe you are correct, that that is essential to properly managing the control and distribution of our information resources.

Thank you. That was a good question.

EDGAR MARÍN AGUILAR (Costa Rica): You said that transactions on the network will eliminate the need for ink and paper. From the point of view of auditing, how can we settle this dilemma where our work is on paper and the paper is also the support for reports? It is the backup material. How can we service if there is no more paper?

CHARLES LE GRAND (United States): More and more, we are finding that auditors are making the transition to paperless auditing. We are embedding monitors in our networks and programs and our computers. We are looking for unusual situations, and we are distributing our findings and our recommendations electronically as well. We are finding that the transactions are becoming electronic, and that there is a need as well for the auditing to become electronic.

Accountability and Performance Measurement in Government

Anthony Bennett, Consultant, The World Bank

It is a great honor to be addressing such a prestigious assembly. It is also a great pleasure to meet some old friends here, and so I thank the organizers.

I will be talking mainly about the technical aspects of performance measurement and performance management, not so much the political aspects, because you heard from Jim that I am by background an accountant, and I have been working in things like program and performance budgeting for far too long. In fact, I am reminded that my very first technical assistance assignment was in Sri Lanka. (It was then called Ceylon.) I was training government accountants there, and government auditors. One of my first jobs was to prepare a paper for the public accounts committee of the government of Ceylon on program and performance budgeting the buzzword of that time. That was in 1967. Thirty-three years later this is still a hot topic. This is still very much the focus of reforms in government financial management.

Let's look first at the driving forces behind this renewed interest in performance measurement. The domestic demand for better performance and for performance accountability, I think, is one of the aspects of the great improvements in democracy around the world. I don't know if you know the numbers, but there are far more democratic countries now in the year 2000 than there were 10 years ago. There is also much greater development of pluralistic political parties. All of this is driving this concern. Citizens are beginning to ask their governments, very often for the first time, not only how much money they have spent, but what they have done with it. This is a very relevant question for taxpayers and citizens and, of course, for donors.

Official development assistance is drying up. Foreign aid is being phased out. There is a much greater donor focus now on what is happening to their aid not only that the money is being used for eligible expenditures, but also that it is being used productively and developmentally. I know of some countries, for instance, where the method of disbursing aid has switched from an expenditure basis to an outcome basis. I can mention, for instance, that in Burkina Faso, the European Union is leading a coalition of donors whose programs are based on indicators like vaccinations given in rural health centers. Disbursements from the donors are based upon the number of vaccinations given. It was difficult to achieve agreement, and it took considerable discussion on the exact framework within which this aid would be released. But it is being done.

Another case is Pakistan, where there is a social action project which has a number of sub-programs. If the sub-program does not achieve certain reasonable progress in its performance outputs and outcomes in a given year, then it is debarred from disbursements in the following year. So in that case, in Pakistan, disbursements are based on both expenditure and on previous-year progress in outputs and outcomes. This seems to me to solve a lot of the problems that donors have

in managing their aid programs. The focus should not be taken entirely off inputs. After all, it is the inputs that get stolen, not the outputs. But it does, in fact, simplify a lot of the fiduciary concern of donors and their legislatures.

The output focus of poverty eradication initiatives and the new concern about governance and anti-corruption in the last 10 years are two very important additional factors that are driving this concern for performance.

Decentralization: Again, decentralization tends to mean that you have more programs and more activities at levels at which you can measure performance. So again, there is a facilitation of performance measurement.

Lastly, the new public management, which every public administration conference seems to emphasize, is essentially a reorientation towards results in government. It is mainly the OECD countries that have pioneered this in the last 10 or 20 years, particularly the Anglo-Saxon countries. My own country, for instance, U.K., has the Next Steps project, which is very much in the line of new public management.

All of this is predicated on the demand for better information on performance and comparing that with standards and targets. In fact, Bert Edwards, in a previous talk, discussed the development in the United States federal government, of the Government Performance and Results Act. So, after 50 years of attempts in the U.S. government, dating back to the Hoover Commission report of 1949, they are now seeing some real results in getting agencies to prepare their strategic plans, prepare their indicators of performance, measure performance, and maintain a feedback loop for improvements.

Let's move on, then. What are the general objectives we should be seeking?

Of course, the main objective is to make governments accountable, to make different levels of management accountable. This is essentially a political and administrative objective. The economic objective is to increase value for money, to ensure that public funds are used to the maximum advantage and that the public benefit, the welfare, is maximized while reducing corruption, reducing waste.

We should motivate managers, for instance, by ensuring recognition of outstanding performance, providing sanctions for poor performance, or even in some cases, where the systems are working well, provide performance-linked pay, where public officers' pay depends upon their performance. Of course all of these require good performance information.

My next two questions: First, who is accountable, and to whom? It is difficult to divide those who are purchasing government services from those who are providing them in this new environment in which there is alternative delivery or alternative providers of services. Purchasers are typically ministries who are responsible to the cabinet and to the political directorate and to parliament for ensuring that programs are designed in such a way that they can be contracted out to providers. These providers may be within their own departments or contracted out to the private sector. That is a very difficult type of accountability. I am more concerned with the accountability

of the providers, those agencies or outside firms that are actually providing services, in terms of specifications that say how they should be providing them, up to what standards, and according to what price.

Accountability is not only vertical from one level of government to the next, from parliament to the people. There is also a new concept coming out called horizontal accountability. Horizontal accountability is accountability that supplements vertical accountability and is direct to the beneficiaries of the government services and programs. I don't know if this concept is new to you. In fact, I have not found any good research papers on this. It is something I see coming up again and again in actual government programs, particularly those that have been funded by the donors for whom I have worked recently.

For instance, the World Bank in Uganda was providing large amounts of money to the education sector, intended for primary education. But when they did a survey of what was actually being received in the school districts, they found that only 30 percent of the money that had gone into the pipeline at the Ministry of Finance actually reached the schools. In fact, this is a success story. Even though it started bad, the government recognized this, and now they have a form of lateral accountability, or horizontal accountability, whereby the amounts that are released to the districts for primary education, non-salary expenditures in fact, are published in the newspapers. The amounts are made available at different places, so that those who are interested can see how much the schools should be getting. The parent organizations, the NGOs that are interested in this, also have access to this information. They are given a role in monitoring and ensuring that government funds for this purpose actually reach the required agencies and are used efficiently and effectively.

Our next problem, then, is accountability for what? We have a choice of accountability for outputs, or accountability for outcomes. We start, of course, with policy goals, and from that we define what the public needs are in each particular program area. We plan what the impacts or outcomes should be. From that we determine what activities are required according to our preferred strategies. The outputs of those activities will require certain inputs. For instance, child health services will need so many doctors, so many nurses, so much equipment, and so on, in order to provide outputs such as vaccinations for children against common childhood diseases. And that will reduce the infant death rate or the death rate of children up to the age of five. It will also reduce the morbidity rates of childhood diseases. The death and morbidity rates are the outcomes of that program.

Then, of course, we come to the actual measures, the actual inputs, the actual outputs, actual outcomes. The difference between outcomes and impacts, in my terminology, is that there are various factors which affect actual outcomes which are not, as it were, under the control of the program. In this case, for instance, suppose there was a big increase in poverty in certain provinces of a country where they are running child health. Then you would expect that that would have an adverse impact, and the outcome would be less than you would expect. So you can take out the impact of exogenous factors, as I have called them here, and ask, what were the actual impacts of the program itself? That is a concept or distinction that is useful in program evaluation.

For program monitoring, of course, you would not be looking so much at ultimate impacts. You would be looking at something that you can measure conveniently, quickly, on a routine basis, maybe every month, maybe every quarter, and feed that back to the responsible manager. These should be measures that are under their control.

So the essential difference between outputs and outcomes is the controllability at the operating level. Something that is way beyond the control of the managers should not be part of the monitoring system that is used to assess and manage the performance of those managers.

Let us look at some of the commonly used terminology here. Economy, efficiency, and effectiveness are the three "Es" that you see in the literature I have provided.

Economy is, if you like, the extent to which inputs are acquired in the least-cost manner, and the extent to which programs are carried out without obvious waste. It is, of course, quite independent of outputs. It is relevant only where outputs are either fixed or you cannot measure them anyway. There are quite a lot of activities in any government in which you cannot measure the outputs. I don't know whether everybody would accept that. But back in the 1970s, there was a report to the U.S. Congress, in preparation for PPBS, which estimated that at that time about two-thirds of government activities were usefully measurable. In other words, one-third of federal government activities in the United States was either not measurable at all or not usefully measurable.

What is meant by "usefully?" There are different opinions on this. It would be interesting to see now, in your countries, where you are perhaps working in the audit office or in the ministry of finance, what proportion of the total expenditure programs of your government you think would come into that category of "usefully measurable."

Efficiency, I don't think there is any question, is the relationship between the actual inputs to an activity and the actual outputs. So in the case of our child health service, we can talk about how many children have been inoculated per year or what the cost per vaccination is. These are typical measures of efficiency.

Then effectiveness: this is defined slightly differently in different sources. Sometimes people define this in the same way as they define actual outcomes. Effectiveness sometimes is defined as actual results. But more often it is the relationship between what the planned outcome was and what the actual outcome was. So in the case of our child health program, we can say that the effectiveness of that program depends upon how far the child mortality rate was reduced in a given period, compared with what was planned for that period. It is a comparative ratio.

Notice that cost doesn't come into it anywhere. It is simply a question of outcomes. This obviously leaves a big gap. The cost doesn't come in at that point; it comes into the efficiency measure. Cost-effectiveness is a different measure entirely. It is the relationship between the actual costs of all the inputs, and the actual outputs that were achieved with those resources.

Efficiency and effectiveness, by themselves, are not a sufficient test. The ultimate test, the acid test, of all government spending is cost-effectiveness, or what the auditors would call value for

money. This may sound like common sense, but keep in mind that efficiency and effectiveness don't necessarily point in the same direction.

For example, a child vaccination service is planning to save 40,000 lives. (These are not necessarily sensible figures. This is just an example). So 40,000 lives saved is to be the outcome. They are going to do this by providing 600,000 immunizations. The budgeted cost is 66 million rupees. So the budgeted efficiency is 110 rupees per child inoculated.

At the end of the year, the actual cost is 70 million; output is 667,000 immunizations, so the unit cost is only 105 against 110. Efficiency is better than budget. But the actual lives saved are 42,000. What has happened to effectiveness? We expected 40,000 saved; now it is 42,000. That is good 105 percent effective, if you like. However, the cost-effectiveness ratio has worsened. Perhaps this is not very significant in terms of this country; I don't know. It may be that everything else is of more concern to them. Ultimately, it is the cost-effectiveness test that counts. In this case, cost-effectiveness has gone down from 606 lives saved per million rupees to 600.

Let's look, then, at the types of indicators that are in common use. The quantity of output is something that is not always available, not always usefully available, not always the best thing to use for performance measurement systems. If the output is something that is small, is produced in large numbers, is relatively homogeneous, you can count them over a period and compare them with a budget or compare them with the previous year or compare them with some benchmark from some other organization. However, if the output is not homogeneous, if every single output is different, as in a research and development type of activity, then you would not be using an output measure.

It is not necessary for the outputs to be standardized. You don't have to have every one of those outputs exactly the same. In fact, not every vaccination is the same. Not every passport application requires the same amount of time or has the same, let's say, political value. It is only essential that the numbers are large enough to allow for any inherent heterogeneity, or lack of homogeneity, in those outputs. That is the essential test. It may be that only a minority of departments, a minority of agencies, providing the government services are able to have suitable output measures in this numerical way.

So we come back to milestones which is a much more general type of indicator. This is the sort of thing where a project is being set up, and you have done a work plan and you have a number of different activities. Some of them are in succession; some are in parallel. But you can say that certain activities should be completed by a given time. There is, in fact, a schedule date for the completion of each activity. The completion of activities represents milestones which are very good, objective, quantitative indicators. They are quantitative not because they are being aggregated, but because you can say, definitely, something has been either achieved by a given date or not achieved by a given date.

Efficiency and productivity indicators, of course, are those that combine both measures of input and measures of output. There are various kinds of productivity indicators, which are all subcategories of efficiency. You can concentrate on the labor resource going into an activity and compare that with the output. That gives you a labor productivity indicator. Or, let's say, in an

agricultural activity, you can look at the number of hectares of land that is going into a particular program and compare your yield per hectare. That is another productivity measure. All of these productivity ratios are partial, in the sense that they don't capture everything that is going into the program, so you have to use them with care.

I am not going to go into some of the economic measures of total factor productivity and so on, because they are not normally used in monitoring programs.

Financial measures are those which incorporate currency measures. For instance, in commercial activities, the bottom line is either profit (that is something that is financially measurable) or it is a limited kind of financial measure, such as what proportion of the total costs of an activity should be recovered from the users of the activity. It may be that in a meteorological office, there are certain weather forecasts which are being provided free while other things are being provided for particular types of users for a fee, like offshore shipping. So for some things there may be a user fee; for some things, no fee. The proportion of user fees against the total cost might be a useful indicator.

When this subject first came up, a long time ago, in the 1960s and 1970s, there was a lot of criticism by people who said, "Well, you can measure how much has been achieved, but you can't measure its quality." In fact, quality of government services is very often the easiest thing to measure. If you have very clear, objective standards, then you can say how much of the service met that standard and how much did not.

Let's discuss some of the typical quality measures used in performance indicators. Timeliness, of course, is one the turnaround time for services which are based on giving some services directly to the public. For instance, in Australia, the goal is to pay 80 percent of claims within two days of the claimant lodging an income statement. Maybe that sounds good, but it is not as good as it could be, because if only 80 percent are getting this service within two days, what happens to the other 20 percent? The standard should say that 80 percent should be paid within two days and the other 20 percent within five days, let's say, of satisfactory documentation.

You can have accuracy standards. For instance, a taxpayer information service is using a standard that says a technically correct answer is being given to taxpayers, in an understandable form, in 90 percent of cases. Of course, you need somebody to determine if the form is understandable. It may be that somebody in the tax department might have an answer that differs from the answer of a typical member of the public. But you can see the sorts of ways in which accuracy can be built into standards.

Availability or access to the service, again, is a very important feature of many government services. So the percent of the target group that is able to access or use the service may be a very relevant measure.

Lastly, don't neglect overall perception measures. These are increasingly used in some of the OECD countries that I mentioned—the U.K., Australia, New Zealand and the United States. Here, you are asking the beneficiaries of a particular government service, are you satisfied with that

service? Then you classify the answers: very satisfied, satisfied, not satisfied, very dissatisfied. You can see whether you are achieving certain target percentages in the satisfaction of your clients.

Let us look at the features, the characteristics, of a good performance indicator. I have classified this under four "Rs". A good indicator should be *relevant* to program objectives, it should be *responsive* to management effort; it should be at a *reasonable* cost and it should be *robust*. I am going to deal with each of these in turn.

Relevant to program objectives usually means that it is going to be relevant to national developmental goals, within which programs have been defined; relevant to poverty eradication, which is now the leading goal of not only UNDP, but also the World Bank; relevant to sustainable human development (the UNDP term). I am reminded of a particular case in a Caribbean country, where tax administrators were given a training program that was intended to improve revenue yields in that country. In fact, they trained people very well. There was complete attendance throughout the training of one year, and 20 people, I think, graduated at the end. But within two years, all of them were working in the private sector as tax consultants. The result was that revenue yields were lower than intended! The program was very efficient, but not very effective. So you must ensure that your indicators are relevant to program objectives.

Let us look at responsiveness to management effort more closely. I believe that performance indicators should be defined by the managers whose performance is being assessed and analyzed. If not defined by them, at least they should have a major role in defining. One reason is that this produces much more realism in the choice of performance indicators. Secondly, the managers will own it themselves and they will internalize these things; they will think, "Ah, this is what is important." If they internalize performance indicators and performance targets, then you can be pretty sure that they are going to have an impact. But if these indicators or targets are set externally by, let's say, the ministry of finance or the line ministry, then why should the manager pay a lot of attention? You have to do this with careful consideration of motivation and the way that things work in the particular country.

Performance indicators should be clear and intuitively comprehensible. They should not be in some technocratic language that the managers do not use themselves. Managers should be able to look at a measure and say, "Ah, yes, I think I know what to do to achieve improvement." If it is something that is airy-fairy, like "Upgrade the efforts in area XYZ," then it is not going to have any kind of motivating effect, because it is not something where they can see immediately what they need to do.

It should be current, and not lagged. Many outcome measures are lagged. That is to say, they happen in the year after the year we are assessing. For a measure to be responsive to management effort, it should be something that is changing all the time. We should be able to pick it up every month or every quarter and report back to managers.

Of course, it should be perceived as fair.

Reasonable cost: It must be feasible and workable, of course. In some cases, you can use pre-existing data. There may be management information systems, for instance. In the health sector,

where data are being collected on various health indicators, these are generally better than in other sectors. In the education sector, sometimes there are good figures on school enrollment rates, pass rates at different levels of education, and so on.

There should not be too many indicators in any particular agency or for any particular program. There is a tendency, of course, for managers to try to say, "We will increase the number of indicators, because then it will sort of diffuse the focus on any one particular one." It makes the system much less workable, and it messes up the control.

I have an example. The average U.K. executive agency in 1993 had eight performance indicators. Eight seems to me a manageable number. But in the United States, the Department of Energy last year had 211. I actually logged onto the Web site and saw their performance agreement, and they had a total of 211. I don't know how they can manage that.

There is also a question, of course, of integrating performance indicators, because, ultimately, if you praise your managers on good performance or criticize them on bad performance, you also have to be able to aggregate or integrate your various performances. Some may be better; some may be worse. But what is it overall? This is, I think, a rather neglected area. As far as I can see, based on the experience of performance contracting and public enterprises, there is no systematic or, let's say, automatic way of doing this. Generally speaking, you would have to combine your indicators by giving a weight to each one, a weight which the stakeholders in the system would agree was reasonable. So, essentially subjective weights are placed on different indicators as a way of integrating them into an overall performance measure.

Lastly, performance measures should be robust. They should not be easily manipulated. Of course, that becomes very relevant if you have performance-linked pay, if managers know that their pay depends upon these reported figures. These figures, remember, are not normally audited. They are not subject to independent and expert audit, or at least not within the year, perhaps two or three years down the line. Then there is a lot of pressure on the system. So the system of performance measurement should be robust in the sense that it will stand up to efforts to subvert it by managers who have their own interests. It should not be upset by minor changes in the system. As far as possible, it should be objectively measurable, not necessarily quantitative. Stakeholders should be able to reasonably agree on what the level of achievement is at the end of the day.

I am now going to finish with a short summary of how one would set up a performance monitoring and measurement system. There are four first steps. The first is to review the issues and problems and decide which performance is going to be measured. I don't think that you can start with performance indicators straight off. You have to say what the goals of the agency are, what the goals of the program are, and actually break this down and articulate a set of performance indicators based on those goals.

The second step would be to review the existing data to see what is currently being produced and establish base-line data.

Thirdly, if this is being done in a good participative fashion, then you would establish a consensus among the stakeholders in the system on what indicators will be used and what the

targets should be. Indicator is one thing number of vaccinations. Target is another thing 15,000 in the year 2000. Indicators and targets can be separately addressed. It is probably better to choose your indicator and get consensus on that first, and then determine your target for next year. You break up the problem into separate parts.

The next step is to design a monitoring system which is transparent and which will give the actual measures of various indicators as they are collected and as they are processed and reported to the stakeholders.

After you've completed the first four steps, plan to reach agreement on how the system will work and how the information will be used. Remember horizontal accountability. Are there NGOs or beneficiary groups or particular people who should be giving their input into the design of the system and how it will work? How will they, in fact, be using it? All this needs to be thought out beforehand. Of course, the system should be provided with an adequate budget. Sometimes monitoring and supervision is not provided with an adequate budget, so I emphasize this. The last step, of course, is to review and adjust the system as it is needed.

I have not, in fact, recommended performance measurement as something that every developing country should immediately take up. In my judgment, most developing countries have problems which are of a higher priority than introducing elaborate performance monitoring. If it is introduced, it should be done very gradually using agencies where there is more of a performance culture. A lot of the experiments that went on in the 1960s, 1970s and persisted into the 1980s were not successful because they were too ambitious. So go step by step.

I hope this talk sparks a renewed interest in an old subject. Thank you very much.

GERARDO DOMINGUEZ (Columbia): I am the Controller General from the municipality of Medellin in Columbia. We have been working for the last three years with your program of performance indicators. We wish that you could have given us more time on this subject because as you said, the government has an obligation to evaluate what is being done with the money. And we cannot honestly make the case that the money was well spent. We believe it is necessary that the government should evaluate the real value of the money and how effective it is toward society. There is very little literature concerning this subject. That is why I would like you to expand on how we can better measure the efficiency, how we can measure the efficacy and how we can measure the effectiveness. Because even though it is true there are good accounting systems for financial management, we do not have good systems for results-based accounting that will allow us to improve government. Thank you so much and I congratulate you for a wonderful, extraordinary presentation.

ANTHONY BENNETT (United Kingdom): Thank you very much, Mr. Dominguez. I congratulate your government on its three-year program in performance indicators.

It is a bit difficult for me to make any useful comments in relation to your particular program, because I don't know anything about it. But you are saying that governments have responsibility to evaluate the use of funds given to the different agencies and to the different levels of

government. I absolutely agree with this. This is an implicit responsibility in all governments. This orientation to results is something that is sweeping the world now.

On the machinery by which it is done, I think this is something that has to be judged country by country, government by government, agency by agency. I could give you a long list of references. In fact, I have in front of me something that is produced by the U.K. government, called *Executive Agencies: A Guide to Setting Targets and Measuring Performance*, which was published about eight or nine years ago. I have something from the United States General Accounting Office, which is a summary of experiences in U.K., Canada, Australia, and New Zealand. It is called *Managing for Results: Experiences Abroad Suggest Insights for Federal Management Reforms*. This, I think, is very good, and I would recommend that you read it to see what insights from those four countries might apply in your country.

But I would strongly warn against any automatic transfer of the experience of one country to another. What I have found is that all successful reforms are home-grown. They have to be owned by the national authorities. They have to be informed by the circumstances, the culture, the institutions, the way things work in that country. So only on that basis could you really have something that is likely to result in a successful performance measurement system.

MICHAEL PARRY (United Kingdom): A very specific question: Do you know of any experience of developing performance measures for financial management improvement programs?

ANTHONY BENNETT (United Kingdom): When one thinks about performance indicators in financial management, again one has to break it down into various kinds of activity. One can have things like the proportion of bank accounts which have been reconciled within, let's say, a given period, the proportion that are properly reconciled. I think that is a relevant measure in a lot of developing countries, where even a simple thing like bank reconciliation can get very much in arrears.

On financial reporting, for instance, you could have a timeliness measure. Or if you have a program which involves the reporting of measures from different agencies to the central treasury, the proportion of error-free reports that do not have to be sent back may be a useful indicator.

So, generally, in financial management, we are talking about the provision of information for decision makers. Generally speaking, the performance indicators are going to be relevant to information: Is it up-to-date? Is it relevant? Is it correct? Again, you have to look at particular activities and determine the most useful measures.

LIONEL BERNARD (Haiti): How can you measure indicators of performance when revenues are down and expenditures are up, and the aid promised by other countries is not in? How could you measure the performance of such a country?

ANTHONY BENNETT (United Kingdom): This is a question about the evaluation of the whole of a country's performance, which is a very different thing from evaluation of particular programs and activities. It is, of course, much more difficult when you don't have stable flows of

resources. You are really saying, in effect, that your plans have been messed up by failures of donors to meet their commitments, and therefore the programs that they were supposed to be supporting have not been supported. Naturally, the performance is less.

CYRIL RAMOS (Philippines): In the determination of outcomes, our speaker has stated that exogenous factors must necessarily be identified. This is really one of the problems, I think, with respect to developing countries. In the determination of what would be the outcomes or the outputs that every government must have, there are certain external factors that come into the picture, especially those coming from the donor countries or from financial institutions like the World Bank.

The question is, are there accountability measures that are being observed by these donor countries, as well as these financial institutions, that would more or less result as exogenous factors in determining how really effective a particular government is? Let me give you a very specific example. For example, the economic growth rate of the Philippines is more or less expected to reach 5.5 in the year 2000. But one of the conditions is that we have to open our market in accordance with the World Trade Organization agreement. This is an exogenous factor. While we will be admitting foreign goods from different countries in accordance with this WTO agreement, there will be some industries that will be affected domestically. What would be the appropriate measures in order to determine the impact of this exogenous factor with respect to the outcome that has been expected by the Philippine government?

ANTHONY BENNETT (United Kingdom): Thank you for your very interesting question. Of course, these international agreements and other factors which are quite outside the responsibility or control of any individual agency have a very big impact on their programs. The only answer I can give to this is the technocratic answer and that is that these things are generally "plannable." Let's say that you are entering into a World Trade Organization agreement, and that you know that certain industries in your country are going to be affected. It should be possible to make some prediction as to the impact of that on, for instance, government revenues. You should have a revenue forecasting system that takes into account different levels of flows of imports and exports.

Again, this is the technocratic answer. I realize you have a difficult problem with many factors to consider.

Assessing the Risks Before Auditing the Controls

David Crawford, Audit Manager, University of Texas

Thank you, Jim. I appreciate that. I do have the privilege and honor of going everywhere with my wife. We go as a team. I must tell you a little story before we start. My wife was the auditee and I was the auditor. One of my auditors got a little bit excited and wrote her up for a very minute problem, which she complained about, and I asked her to marry me. So we got rid of the auditing problem, and now I have a wife who prepares all of my presentations. I just stand up here and talk to you, actually. So auditing can bring you the happy things of life.

What I am going to talk about this afternoon is of equal importance to those of you who are financial managers and those of you who are auditors. What I am going to talk about is an approach to auditing—specifically, internal auditing. It works with external auditing to some degree, but I am talking about the auditors within the governmental agency. I am going to talk about an approach which has some distinct advantages for you as financial managers, from the standpoint of the value you get from that audit, and for you as auditors, from the standpoint of your stature in the organization in which you are working.

This morning, Bert Edwards, our lead-off speaker, wound up with a question: Can the 20th century concept of accounting, which is where our internal auditing was in the last century, be transformed to the 21st century concept or expectation of accountability? That is what we are talking about with the internal auditing model which says that you do work based upon risk assessment rather than based upon controls that you think should exist. We will talk through that today, from a theory standpoint first, but as we get toward the end of my presentation, I want to give you a factual, exact example of how we apply that theory.

I want you to recognize that the University of Texas is not a small operation. There are 75,000 employees, which is probably as big as most of your governmental entities. We have a \$20 billion pool of resources, basically investments in cash, and a \$5 billion annual budget. We run a construction company. We run all the things that governments run. We are not just a university. So what I say today will apply to you no matter what kind of governmental entity you are from. I have been involved in city governments. I have been involved in state governments and the federal government. I happen to know that this concept works in all governmental situations.

I also want to refer just a minute to what Charles Le Grand said in his IT section this morning. He said you should concentrate on those things which are important. That is what I am going to be talking to you about this afternoon, how to concentrate on the things that are important to your organization rather than the things that are important to the audit department.

Also, as we talked through performance measures, I could not help but think that for many of you, no matter what country you are from, one of the most important things that your governmental entity does is provide a service or a product to somebody. You provide utilities or you provide health service or maybe you finance the construction of schools. You measure how well you do that, and yet your internal audit assurance apparatus may not ever look at that. That may be the most important thing you do.

So what we are talking about now does tie to the rest of this conference, even though it seems to be specific to the internal auditing part of your organization.

Assessing risk before auditing controls: One of the problems—and I am not really sure about the rest of the world, except for the people I know in South Africa that I have taught and the people in Canada; hopefully, the people I am going to teach in Mexico this summer—is that in the United States, auditing means looking at controls that the auditor thinks should be in place. Consequently, that means that many times we audit things that are not important to anybody but the auditor, and therefore provide no value to the agency or the city or the state being audited. I want to talk to you about how we can do assurance work—I no longer call it auditing, and neither does the Institute of Internal Auditors—and how we can make a difference as auditors with the management of the agencies and institutions that we audit.

Just briefly, we are going to look at a new assurance paradigm for auditors, and then we are going to get out of the auditing mode altogether and look at what you as managers do in an organization, the kinds of risks you face, and how those risks link to the new audit world. As we make that link, we are going to transfer the knowledge from an agency's strategic planning function to our audit universe, because they should be the same. We are going to take an agency's annual operating plan and make it our annual audit plan. We are going to take a process and see how management wants the process to run. Whether that process is to deliver wastewater, to account for expenditures, to pay staff, it does not matter. We are going to look at how management designs a process and how that relates to how we do an individual audit.

The purpose of this session is to show both financial manager and auditor that they must work together in this assurance process to give your governance body—whether that governance body is an elected body, an appointed body, or whether it is the people of your city or country as a whole—the assurance that you are going to do what you said you were going to do with the resources that they put at your disposal.

But I want to start at the beginning here. Charles Le Grand this morning alluded to the fact that the Institute of Internal Auditors has changed greatly in the last few years. Up until about five years ago, the majority of the people who were members of the Institute of Internal Auditors lived in North America. The Institute of Internal Auditors was geared to North America. I don't say the United States because Canada was a part of that. In the last three to five years, the majority of the membership in the Institute of Internal Auditors lives in the rest of the world, not in North America. The Institute of Internal Auditors, several years ago, began several projects to define what internal auditing means in the world, not North America.

As a result of those projects, we have a new definition for internal auditing, which is driven more by the world's view of internal auditing than what it is in North America. We have a new set of skills which we believe an auditor should have. The most important of those is not auditing skills, as you might have suspected in the past; the most important of those is to know the business you are in. So for us in this room, we are talking about knowing the governmental financial business, knowing the business you are in, and then knowing how to think. Way down the scale there is knowing how to be an auditor.

Out of all the work they did, they came up with a new definition for internal auditing. Let me share some of that definition with you. It still has words in it like "independence" and "objectivity," even though we almost lost "independence." That was almost left out of the definition. Then it has something called "assurance" and "consulting." The definition is intended to provide assurance to the governance function that things are going to go as they plan for them to go and consulting services will help them be sure they are planning right. Never before did we have "consulting" in there. Previously, we had the word "auditing" rather than "assurance." There is a large difference, as we will see.

They are going to change the definition and add the word "fraud" pretty soon now, so that there will be three types of service provided: assurance, consulting and fraud-prevention services.

The last part of the definition, which is somewhat new, is that we are going to do all this so that we add value to the organization and help improve the organization. The purpose is not to report on somebody, but to add value.

We do all of this to evaluate and improve the effectiveness of the risk management of the organization, the controls of the organization that manage the risks, and the governance process. Two of those areas were never in the definition of what internal auditors did before, the first one, risk management, and the last one, the governance function. So we changed the whole concept of what the internal auditor is there to do. Under this new definition, the internal auditor is there to help management achieve the objectives set down for the organization. Whatever your organization is and whatever country you are in, your purpose as an internal auditor is to help that organization achieve the objectives for which it was established.

So we are going to talk about how we help our organization achieve its objectives. Very many times in this country, I face the question, how do we do our job of making sure that people don't run off with money, don't steal the asset, eliminate fraud and still do this new job? I am going to show you how they are one and the same. It is just the way you do the job that affects whether it is a risk-based or a control-based process.

Let me talk just a second about assurance. Assurance means that we are going to provide somebody with input that says, to the best of our knowledge, we believe that something is correct, is substantially right. We have divided assurance into two things: the first, reliability, is a control-based concept that deals with the correctness of the information being presented. Auditors are very good at that. They do tremendous work on any piece of information and can tell you whether it has integrity, whether it is reliable, whether it was created properly, whether you can use it for its intended purpose. But the other side of assurance is relevance. It does no good for the head of a

financial ministry to know that this piece of information is absolutely correct when that piece of information is not important to the achievement of the goals of that ministry. Many times as auditors, we have found ourselves doing work—very good work—on things that were not important, in the final analysis, to the people for whom we did the work.

So the relevant part of this equation has to do with the risk. Relevancy is a risk-based form of providing assurance.

There is a professor at the University of Texas in Austin who has written several books on internal auditing. He has a theory that with the modern-day technology that we now have, we can do 90 percent of the integrity or reliability auditing using the computer—not using people, using the computer. Save our people resources to work on those things which are risk-based, which are relevant to the success of the organization. That is what we are going to look at today.

This is a new paradigm. We are going to stop talking about assurance in the terms of the auditor and talk about assurance in the terms of the manager. All of this is important to the people who run the business, whether it is the oversight board—that could either be a board or an elected body—whether it is senior management, whether it is operating management or staff. We want to look at things as they look at them, not as auditors.

So the focus of the new internal auditor is a focus on what management does in dealing with the risks they face to produce the results that they want to produce. "Risk" is the language of management. It is amazing; especially if you talk to doctors or to college professors, they don't want to talk about control. And they won't. But if you talk to them about risk, they will listen to everything you have to say about control. Because you changed the word from "control" to "risk," they will listen to you.

So the proposition that we are putting forth in risk-based auditing is that the only control that is really important is a control related to a risk that is important. Let me give you a good example. We all deal with cash. We all manage cash. We all have auditors look at cash. Auditors traditionally look at all cash the same way. Every unit has to have the same kind of internal control system for cash, whether they take in \$10.00 worth of cash over a week or \$10,000 worth or \$100,000 worth.

The new concept does not say the control of cash is unimportant. It says, for the unit you are auditing, if it is not important, don't do it. We wasted so much of our audit time in the past by looking at things which were not important.

So our new paradigm says that we are going to use the language of management, and we are only going to look at those controls that are important to the risks that management feels are important.

The way we look at how we decide what is important has changed. Over time we have looked at risk factors: How long has it been since the last audit? How many dollars do we have at risk? What kind of asset pool do we put in jeopardy? Has there been a change in management? How good is management?

In the risk-based model, we use something called scenario building. You know what I mean if any of you has ever tried to prepare for a natural disaster—and the people who live in the Caribbean, you do that all the time for hurricanes. We do that in Galveston, Texas too. We do not prepare for a natural disaster by putting up a set of risk factors. We build a scenario of what could happen. What are the risks if a hurricane hits us? We run out of water, we run out of electricity—whatever the risks, we build a scenario. In risk-based auditing, the way you decide what is important is you build scenarios. Management understands that much better than they understand the risk factors.

The other thing that is important is that in the control-based paradigm we looked at how well we tested the detailed control structure. In the risk-based paradigm we look at how well we cover the business risks. Did we cover all those risks that were significant for this business to achieve its objective, whether it is health service or police service you are providing? It does not matter.

Let's look at the levels of risk in an organization for just a minute, because this impacts pretty heavily upon how we develop our audit plans if we use a risk-based model. I am using four levels of risk that were developed by a group in South Africa called Growth Consulting Company. There are four sets of risks that a business faces. They classify them as organizational or cultural risks. How many of you are familiar with the United States control model called the COSO model? The COSO model is a pyramid of five different things. The base of that pyramid is the organizational and structural exposure. It is the integrity of your particular organization. What is their method of operation? What is their operating philosophy? How do they view themselves with all of the people with whom they interact? It is the same basis here.

I say that it is the value risk of doing business. Whether you are a nonprofit, a government, or a commercial enterprise, you have a value risk. That risk can be good or bad.

Then you have a strategic risk, which is your direction risk. Where are you going? Where is your agency going? Sometimes it is established for you by law and what the legislative body intended when they made the law. Other times it is by rules and regulations or by fiat. Every organization from your agency down to the smallest work group should have some sort of direction or strategic plan.

Then there are the operating risks. The operating risks are, how do we take the people and the materials and the dollars and everything we have, and produce the results that we want to produce? I call that a performance risk.

Finally, there is something that I call a process risk. It is really compliance. It is the departmental things—the risks that happen in the payroll process, the risks that happen in the road-building process, in an educational institution, the risks that happen in the instruction process. Those are compliance risks because every process is built around a set of policies and procedures that says how the process works. It works well or badly depending on how well people follow those procedures.

So there are really four risks that we have to handle if we are going to do risk-based work in an organization to provide assurance.

I'd like to say something about this organizational risk or this value risk. What I am talking about today has no relevance to you if you do not have a value system that will allow you to do it. I have been in organizations in this country and in my state, Texas, where the culture of the organization, the value risk they had, would not allow for risk-based auditing. In fact, it barely allowed for any kind of auditing. Their method of operation did not put emphasis on controlling risk. If you are in that kind of environment, it is hard for you to do what we talk about today. You can only drop water on the rock and in 1,000 years it will melt it. You can always try these concepts in some small area where you have somebody who is amenable to trying these concepts, and they will grow as people see the advantage of them.

But I will tell you, if your organizational structure is such that controls and risk management are not important, then you will have trouble implementing the concepts that we are talking about today.

There is a tie between what business people do and what auditors do. Our organizational or value risks tie directly to what we auditors in the United States call a control environment assessment. In other words, do we have a culture which is control-oriented, which is risk-management conscious, or don't we? That is, do managers make their people follow the rules, or do they override? When a rule is broken do they say, "Oh, that's okay. That's a friend of mine," or "That person is important so we will let that pass"? It has a connection between the business perspective and the auditor perspective, and it is primary to all three of the levels of risk. Risk can be short-term, medium-term, or long-term. This control structure affects all of them.

Strategic risks in the audit universe are usually long-term risks. Have we taken into account everything that we need to when we say, this is what we want to do for the next seven years? Have we looked at what we need to do for our constituents? Have we looked at the funds that have been provided? Have we looked at what the law requires? Do we know what our strategic plan is? Whatever that strategic plan is, it is going to be translated into our audit universe as auditors.

In the operating area, it is the operating plan that relates to our annual audit plan, those things that we are going to do in a certain period of time.

Then those things that deal with the smallest units of our organization I have broken down into two areas, process risks and departmental risks, for this reason only. In the past, auditors have made a mistake by going out and auditing functional units to see if they comply with the rules and regulations that govern their activities—to purchase things, to hire and pay people, any number of things they do—with no attempt made to determine whether the process for paying people is correct. I can say that function X complies with all the rules of paying people, and that says nothing if the rules for paying people don't accomplish their intended purpose which is to pay only those people who are really employed the amount they are really due.

So I break this down into two areas. We need to look at the process to be sure the process is right. That is the first thing we should do. I call those design audits or design risks. Then we need

to look at the departments or functional units to see if the departments or functional units comply with the rules and regulations of those processes which now work right. So we have really added a little step in there.

I categorize risk in three time frames. The short-term risks, which are the things we normally deal with in auditing and always have, are the things we can correct right now. We can stop fraud right now. We can find errors and omissions, correct them, and redo the policy if necessary. Noncompliance, bad publicity, theft—those are short-term things that can be corrected right now. We put most of our effort, as auditors, on telling management where they can improve on short-term risks.

We have two other areas, though. We have mid-term risks, which are uncertainties, where we ought to be able to help. They include estimates and regulatory issues and where competition is and—that thing we talked about this morning—technology.

Finally, there are the long-term risks: Have we thought about the innovations that should drive our strategic plan? How do we know what our constituents need seven years from now? What sort of research do we do? Do we outsource our governmental functions to somebody who does it all the time so that we get a better return, or do we not? Do we partner with other people?

So there are three different levels of risk in an organization. There are those things that happen right now, and that we can correct now. There are those things that take a little time to effect. Usually, they are uncertainties. They are things we don't completely know about. Then there are, finally, those opportunities out at the far end in the long-range plan.

We have a technique we use, which I submit to you to use as you go along, which we call a risk roadmap. This risk roadmap says that you have to start somewhere. As a matter of fact, where I am, we don't audit unless you have a set of goals and objectives for your organization. If we go to audit an organization and there is no set of goals and objectives, we back off and help them write goals and objectives. If we do not know where they are going, we cannot say what the risks are to get there. And if we do not know what the risks are, how can we audit controls that are important? So we insist on both the overall agency or organization and the operating units under it having a set of goals and objectives.

Then we look at three areas where things can go wrong: the external environments, which usually deal with our strategic planning; the processes, which deal with our operating plans; and, of course, always as auditors do, we look at the type of asset with which we are dealing and what effect it has upon achievement of goals. This morning's talk about information technology auditing is one of those issues. Twenty years ago, information technology would not have been a high-risk item in anybody's audit universe, no matter how they picked it. Ten years ago, it might not have been for 50 percent of the governmental entities out there. Today it is probably a high-risk item for all but 4 or 5 percent. The risk changes over time as this roadmap universe changes.

What we actually do in trying to decide what we audit in our environment is talk to management. At the very highest level, which for us is a board of directors appointed by the legislative body, we say to them, "What do you want this organization to achieve over the next five

to seven years?" They tell us, "We want our students to be hired by companies. We want to be able to pass all the professional exams with an acceptable pass rate, maybe 95 percent. We want to help students in the grade schools be prepared for college." There may be a number of issues that are really important to them. Based upon the information they give us, by interview, by written documents, by looking at their speeches, by looking at their directives to others, we come up with an audit universe which reflects those things that are important to the governance body. Our job is to satisfy that governance body that they are going to get there, that there are mechanisms in place in their organization that will get them there with the least amount of negative impact.

We do not want to include in our audit universe anything that is not important to them, except those things required by law. We have some things we must do because we have to be in compliance with certain laws. Compliance is always a part of our audit universes.

Technology, information technology, is one part of our audit universe. If we take Tony Bennett's information from this morning and say that for our governmental entity, it is important for us to know where we are in meeting the outputs or the outcomes that we have decided we are going to try to achieve, then performance measures may be one of our audit universe items. If we are also concerned about what the donor agencies feel about our financial integrity, then our financial system may be one of the items in our audit universe.

One of the speakers this morning talked about keeping the audit universe down to about eight or nine things instead of the 200 that one of the U.S. departments had. I concur with that. When I first arrived at one of my universities, they had 1,270 things that were important to them. They cannot manage 1,270. When we looked at this with the senior governance people in that organization, there were only 27 that were important to them—27 issues that were important. Each one of those 27 had a group of things that were important within them. But this is a layered thing.

For the governance body, we took those 27 and they became our audit universe. If one of those happened to be instruction, when we pulled out instruction to audit it, we would say instruction has 20 items in it. How do they rank in importance? We kept getting more detailed and more detailed. You will hear Michael Granof tomorrow talk about data warehousing and how you drill down into the data, getting more detailed all the time, depending on what your audience wants.

With the assurance function, we keep drilling down and we finally get down to the annual audit plan, which may be just a small segment of the instruction and a small segment of IT, but it is the most important one. Do not work on anything that is not important to you.

When we talk about an annual audit plan, we talk about some new tools which you will hear about tomorrow afternoon if you come to the control self-assessment seminar. CCSA is certification in control self-assessment. It is a brand new certification that the IIA has. We have, in fact, had only one test that has been completed. I was in that first group. They are now doing it as an ongoing thing. It is a certification for people who know this new technique called self-assessment. That is important for you to know as managers and you to know as auditors, because in the new world of assurance, we rely more and more on self-assessment as one of the tools for getting assurance.

When we talk about doing an audit plan, people say to us, "But you don't cover everything." We don't cover everything with traditional audits. If it is a high-risk item—in other words, really important to achieving the objectives of your particular agency—then you do an audit on it, a traditional audit. If it is an item that is well controlled—let's say you have always done cash; you take in lots of cash, and you know everything there is to know about the cash control system—you might be able to do some spotty auditing if the self-assessment indicates that is needed.

What I am trying to suggest here is that the higher the risk, the more work you do; the lower the risk, the more you rely on these new tools that we have for assurance.

We talk about something called 100 percent monitoring. We don't look at transactions anymore. Every disbursement made in our system passes through a filter to see if it meets a set of criteria. If it does not meet that set of criteria, it becomes an exception, and we look at it. If the exceptions go beyond a certain threshold, then we will go do an audit of it.

The technology we have now frees you from having to look at every detailed transaction and allows you to do a 100 percent audit on transactions to see whether they are in conformance with rules, policies, laws, whatever.

So if you take this risk-based approach to the ultimate, what you do is you use your people where they do the most good, and you use your technical resources where you don't need people. Then you use management where management can provide you with the best assurance you can get, and you test that. What it allows you to do is cover the waterfront. You can give a concentrated, comprehensive assurance statement to your governing body, to your governance function, if you use these techniques. If you try to do just traditional auditing, you will never cover enough of the segments of the enterprise to be able to make a statement about the whole enterprise.

David McNamee, who is probably the leading risk-based audit proponent in the internal auditing profession, developed a little template two or three years ago for deciding what to audit. We have taken this little template a little further. This template starts out saying, what are the objectives of either your agency or of the unit in your agency you are reviewing? Right now I am going to do an audit of the IT function, the information technology function. I want to know what its objectives are, what its activities are. Once I know that, I can determine what the risks are.

I could not look at the entire information technology area if I had 130 auditors to work all year on it. So I have to determine the most important thing to examine. The first thing I have to have is this inventory of activities and risks.

What we do is we fill this template out all the way across. It becomes our knowledge base in internal auditing about our organization. It tells us what they do, what their risks are, what their controls are, what the evidence of that control would be if we were to audit it, and what our audit step would be. So when we build an audit program at the end, every step in that audit program has to tie to a risk on this template, or we don't do the audit step. We won't do cash if there is not a risk high enough to be audited. Our attempt is to audit only what we need to audit and to audit only those things that will give management information that will help them meet their objectives.

As you look through the detail in this process, you will see how we have tied in what the management people told us they did down to our audit steps, so that everything is in agreement based on the original risks.

We have an advantage in my organization. Every manager in every unit must do a risk assessment of his unit every year. So we have their work with which to start. We have to help them many times. After the second or third time, they can do their own. In my organization, auditors are teachers. We teach risk management. We teach controls. We teach how to decide whether you are going to accept a risk or avoid it. The result is that when we get down to auditing, we have the information that we need to audit only those things that are important to management.

One last thing. When we write an audit report, it is written by management and by us together. We don't have a set of findings. We have an action plan, which means that we don't fight about what is to be done.

You will find that enterprise risk management, risk-based auditing, is the wave of the future. We have seen it in South Africa. We have seen it in Canada. We have seen it in the United States. We expect soon to see it in the rest of the world.

JIM WESBERRY (United States): Thank you so much, David. What are the other requirements for taking that examination?

DAVID CRAWFORD (United States): That is an examination that is given through Sylvan Learning Centers. You don't have to wait for a test time. You can take it anytime, walk in the center, get your score right then. You don't have to wait two months for the score.

JIM WESBERRY (United States): In what countries?

DAVID CRAWFORD (United States): There are a number of countries outside the United States where it is available right now. I don't know the names of all of them. It costs you \$200.00. You have to have two years' experience in doing facilitated self-assessments.

JIM WESBERRY (United States): So you would have to have the two years' experience prior to taking the exam?

DAVID CRAWFORD (United States): You have to have the experience before you get credit for it.

JIM WESBERRY (United States): And it is authorized by the Institute of Internal Auditors.

DAVID CRAWFORD (United States): It is their first specific certification after they set up the IIA.

International Accounting Standards for the Public Sector

Ronald Points, Managing Director, PricewaterhouseCoopers

As Jim Wesberry indicated, I have been involved with standards setting for quite a few years at the various levels of government. For the past three years I have been the U.S. representative of the IFAC Public Sector Committee. We have really taken on a major project to issue accounting standards for the public sector for the first time in history.

In case you are not familiar with IFAC, I will cover a little bit about the International Federation of Accountants. Then I will talk about the standards project. I will conclude by highlighting the new accounting standards structure that will be put in place for the International Accounting Standards Committee, and the proposed reorganization of IFAC to make it the world's leading audit body. I think those two things will be important for you to understand, because they will have an impact on us as a profession, whether you are in government or in the private sector.

A little bit about IFAC. IFAC is made up of 143 accounting bodies from 104 countries. Accounting bodies are the professional organizations in your country that are eligible to apply for membership to the International Federation of Accountants, which is located in New York City. Over the years, governments' professional bodies have applied to become members to tap into the international professional organization. The mission of IFAC has been to develop standards and guidance. They have issued a variety of standards. The international auditing standards, for example, come from IFAC. The code of ethics comes from IFAC. They issue management accounting pronouncements. They issue pronouncements, studies, and guidelines involving information technology. They get involved in education.

They try to provide some leadership in the international community on emerging issues. They look across the board, whether it is in information technology, accounting, auditing or ethics. Underlying it all is their objective to foster the advancement of stronger professional accountancy bodies around the world.

When you look at our committee within IFAC, the Public Sector Committee, our basic mission is to contribute to enhancing the performance of the public sector by encouraging better decision making, financial management and accountability of governments. So far today you have heard presentations on information technology. You heard the previous speaker talk about risk assessments and audit. You had a gentleman talk about performance measurement. This all comes together under encouragement for better financial accountability and performance in the public sector.

The current membership on our committee is made up of 12 countries. The current chair is Ian Ball, from New Zealand. His tenure is up in June. Our committee will change in June. In May,

they will announce the new countries that will make up the committee. In addition to the current 12 countries, we have observers that come to our meetings. They are very important. They are the Asian Development Bank, INTOSAI, the International Accounting Standards Committee, the IMF, the UNDP and the World Bank. They are very active observers that come to our meetings, and they provide a lot of input.

By way of background, the IMF, World Bank, the Asian Development Bank, and the Inter-American Development Bank, to some extent, have been big financial supporters of our project. Part of the reason that the World Bank and IMF, the Asian Development Bank, and the Inter-American Development Bank have been backing our project is that they are very concerned about the lack of public sector accounting standards in the preparation of financial statements around the world. As various financial crises occurred, whether in Asia or Latin America, Eastern Europe, Russia, the concern grew that there was not a common body of accounting standards for the public sector. And when you went in to deal with the various individual governments, it was very difficult to understand the financial condition of that government because of the lack of credible accounting standards. So they really supported our project, put up the money. Our game plan is to have the first set of 30-some standards issued by the year 2001, by the end of next year.

The question is asked, are these standards for national governments? The answer is no; they are for all levels of government, whether it is national, regional, local, districts—whatever the level of government, these standards would be applicable.

We start with the premise that these standards are based on the international accounting standards. This is so we did not have to go out and reinvent the wheel. I will comment on this later. Also, based upon exposure drafts that we had out, we finally ended up recognizing only two bases of accounting that governments can only account on the cash basis or the full accrual basis.

When we initiated our project, we had four bases of accounting. We had the cash, modified cash, modified accrual and accrual. Based upon the comments we got back from our exposure drafts, it became apparent that the two modified bases really did not have great support around the world. A few countries fought for some of the bases, but, in general, 90 percent of the responses that we received recommended that we do away with those two bases. Therefore, we will only recognize cash or the full accrual basis.

As I mentioned, we use the international accounting standards, and then we modify them to fit into the public sector. As we go forward, we identify gaps in the current accounting guidance that is out there. For example, the international accounting standards do not have a standard on budgeting. Of course, in government, budgeting is a very critical area, and we will be issuing a standard on budgeting at a later date.

The reason we can go with the international accounting standards, and not come up with a whole different set of accounting standards for the public sector, is that we view accounting as sector-neutral. By that we mean that in the private sector you have various sectors. You have the banking sector. You have the agricultural sector. You have oil and gas. But they do not have their own accounting standard board or their own set of accounting standards. There is a core set of accounting standards that all those sectors follow, with some additional accounting standards for

that specific sector. That is the same concept we use for the public sector: That the core general standards are applicable, whether it is government or the private sector, and that we will just issue the additional standards that are unique to the government environment.

The international public sector accounting standards are not mandatory for governments. However, we have had indications from the World Bank and IMF, ADB that in their loan and grant agreements they will put the adoption of these standards as a condition, in order to encourage governments to move forward with adoption.

Once governments move to adopt the international standards, in order to say in your financial statements that you are following the international public sector accounting standards, you must adopt all the accounting standards. In the private sector, many companies claim they are following the international accounting standards, when they are not. They cherry-pick the standards they would like to follow, and skip over the hard ones. In our standards, we have made a statement right up front that for you to claim that you are following our standards, you must adopt the entire set of standards. This is to give some assurance that the best practices have been adopted.

The benefits we have identified for governments to adopt these standards include access to more reliable and comparable information. We think that is very critical as you move forward, whether you are working with the regional banks, the World Bank, IMF, or in the private sector. As many private sector banks get involved with lending to governments, they are becoming more and more concerned and interested in our project, because of this emphasis on more reliable and comparable information.

We see greater stability coming into play. With an international set of accounting standards there would be less political pressure within each country. Having been involved with the accounting standard process for all these years, I understand the tremendous political pressure that can come to bear on modifying the accounting standards for political reasons. Even in the United States, in my involvement with the Financial Accounting Standards Board and the state and local boards, there was tremendous political pressure to modify or not to issue a standard.

The other thing is, because governments are such big borrowers of money, if they adopt the international standards, it will improve their credit rating with S&P and Moodys.

We see an enhanced accountability to the electorate. The previous speakers talked about accountability. We believe that by adopting a good set of accounting standards, it will enhance the accountability of the financial information. Hopefully, downstream, the effects for individuals would be in lower taxes and better-quality public spending and decision making.

In January, down in Mexico, we made history with the adoption and approval of the first eight public sector accounting standards. This has been in the works for the past three years. We drafted the standards actually modifying them from the international accounting standards put them out for comment exposure draft for a minimum of four months, receiving comments back from various governments around the world. We were very pleased with the number of comments we received. We received, on average, about 150 comments per exposure draft, which is pretty good, because a lot of the comments came from organizations. For example, INTOSAI would issue us

one letter, and the individual countries would issue one for their professional associations which would represent a group of members.

We had comments from all regions of the world. We were very interested in ensuring that we did not get comments back from just certain sectors of the world. We were very concerned and very sensitive to the issue—if you remember the makeup of our committee, there is an influence of the Anglo-Saxon model out there. Therefore, we were very concerned and really encouraged comments from the other regions of the world. I have been pleased to date. We have received quite a few comments from various countries in Latin America. I think that was through the encouragement of INTOSAI. I would encourage more governments in Latin America to respond to our future exposure drafts. We received quite a few comments from South Asia, Southeast Asia. From Europe, Western Europe especially, we received many comments. Amazingly enough, we received very few comments from the United States. If we received one comment per exposure draft, that was a lot. We really paid attention to the comments coming in and made quite a few changes to the exposure drafts to arrive at the final statements.

Just a quick run through of the eight statements that we issued:

The first statement is the presentation of financial statements. What that does is set forth, number one, that the statements have to be prepared on the accrual basis, and it sets forth, as a minimum, the financial statements that must be prepared: the balance sheet, income statement and the cash-flow statement. The statement of financial position, as we would call it, statement of performance and the cash-flow statement are the three statements that are required.

We also state that additional statements can be prepared, such as a budget-to-actual. We would encourage governments to prepare a budget-to-actual and include it as part of the base statements. But we caution that to do that, the budgeting numbers and the accounting numbers must be on the same basis of accounting. Otherwise, you would be comparing apples and oranges in a report.

The second standard we talked about was the cash-flow statement. That standard went into how to prepare and what was required in a cash-flow statement. It is very similar to what the international accounting standard required.

What we did with these standards was delete considerable private sector wording and put in public sector wording to make it more, let's say, government-friendly when you read the document. It did not have so many of the commercial, private sector terms in the standards. But the basic concepts really did not change.

The third standard we issued deals with the concept of net surplus or deficit for the period, and errors and changes in accounting policy. We discuss how to set up your operating statement, what the categories are and how to arrive at a net surplus or deficit for the reporting period.

I failed to mention that we have a qualification in our standards. If you are dealing with a government business enterprise, it is not covered by our standards. We have a statement in there that any business enterprise will follow the international accounting standards, not the international

public sector standards. So if you are dealing with any government corporations, government enterprises, they would be required to follow the international accounting standards. The reason for that is so you can get comparability among those sectors, whether you are in telecom, utilities, transportation, insurance. We wanted to make sure that, regardless of whether it is owned by government, it is comparable to the private sector. So any of those business enterprises follow the international accounting standards. The budgetary-type activities within a government would follow the public sector accounting standards.

The fourth standard we issued was the effects of changes in the foreign exchange rate. The fifth one was borrowing costs, how to deal with borrowing costs. Borrowing costs got into the area of the capitalization of interest during construction, that issue, whether you should expense it or capitalize it. Basically, we allow either method to be used. That was not a change we made. But we set forth the criteria of borrowing costs and when they should be recognized.

Out of these eight standards that we have issued, statement six is going to be the challenge for governments, for two reasons. It deals with a consolidated statement for the government. The very first issue you have to deal with is what is the reporting entity of that government? Stop and think of your government, whatever country you are from. If someone said, "Tell me, what are all the units in your government that will go into making up the financial statement of your country, an overall financial statement for the government of X? What are all the component pieces that will go in there?" You may say, "Well, that is simple enough. I will just run to the budget and look at that." What you will find is that it is not that simple. You have all kinds of different units that have sprung up in your government over the years, and you have to go back and determine whether that unit should be included in your entity or whether it is outside your entity.

So to help you identify whether organizations should be included or excluded in your reporting entity, we put criteria within statement six saying, if you follow this criterion, you should be able to identify whether an organization should be in or should be out of your reporting entity. Then, in your note to the financial statements, you will tell the reader what is in and what is out, so he can have an understanding. It is very important. You cannot just prepare a financial statement and hand it to someone without his understanding the pieces that went into the make-up of those numbers.

I will give you an example here in the United States. I do not know if Bert Edwards got into it or not in some of his comments. The consolidated financial statements of the U.S. federal government do not include the central bank, or, as we call it, the Federal Reserve. How many people made the assumption that the central bank would be part of the consolidated statements of the U.S. government? As I travel around the world, in a lot of countries the central bank would be part of the reporting entity. In some other countries it would not be. In the United States, the Federal Reserve Bank, the central bank, is not part of the U.S. government reporting entity. It is very important to know that because it has a big impact on the financial numbers that you see in that financial statement of the U.S. government.

I am dealing with an organization right now it is a well known, international organization and they say they are ready to prepare a set of consolidated statements for their organization. We said, "You are going to follow statement 6. You are going to put together

consolidated statements. What are the component units in here?" We sat around for almost two days debating what would be in or out, and we broke up saying we were going to have to have a couple of people go out and do research for the next couple of months to determine that. So it is not an easy task.

The second challenge for a government in implementing statement 6 is the elimination of intragovernmental transactions. Stop and think about your own accounting systems out there. Is your current accounting system equipped to eliminate your intragovernmental transactions? Can you identify them and eliminate them when you come together for a consolidated statement? In most governments, including the U.S. government, they cannot. They are working on it. Many governments are working on it. When they set up their systems in the past, it was never a requirement. If they prepared an entity financial statement, it was a combined statement. A combined statement does not mean I have to eliminate—only in consolidation. So if I do not eliminate, and all I do is add up and aggregate my numbers, that is a combined statement. People get confused between combining and consolidating. If you are going to go forward and issue consolidated statements, you must eliminate your intragovernmental transactions.

So those are the two challenges for governments in implementing statement six: one, identifying your reporting entity, which has to be done first; then second, going forward and looking at the elimination of those intragovernmental transactions.

For these other statements that I covered, the effective date would be immediate, as we go forward into 2001, next summer. For statement six we built in a three-year time period, to give governments three years to address those issues.

Number seven ties in with number six. It is accounting for investments and controlled entities. People are saying, what in the world is that? Let's say you sell off 40 percent of your telecom or utilities. You have an investment in that entity. You may have an investment in other entities that the government has set up to carry out certain activities. You do not have 100 percent ownership or control of that organization. You are sharing it with someone else. It could be with another government. It could be with the private sector. So number seven tells you how to account for your investment in those controlled entities.

New Zealand is trying to sell off their airline, Air New Zealand. Singapore Air is buying it. The big controversy there is percentage of ownership. The government in New Zealand says, "We will keep majority ownership." What Singapore Air wants is majority ownership.

So you can see, as you get into a lot of these government-operated organizations, that number seven comes into play. If you have a controlled entity, it will become part of your consolidated statements because it becomes part of your reporting entity.

The final statement we issued was reporting on joint ventures. We list three different ways you can enter into a joint venture. You have to go through the criteria and look around your government and say, do we have joint ventures? It would be a safe bet to say yes. You probably have quite a few joint ventures floating around your governments. You just do not recognize them or call them joint ventures. So, as you go forward, you will have to identify these joint ventures,

your share of the joint ventures, because, again, in order to do statement six, you will have to bring that piece up into your consolidated statements.

So six, seven and eight kind of go hand in hand. As you go forward in identifying entities, you also have to find out what you have invested in, and also you have to identify any joint ventures in which you have become involved. Think of one famous one in government with which you are all familiar. It is in the aircraft industry, Airbus, with those different governments coming together to form the company for Airbus. That is a joint venture. Each of the governments that participate in that will have to pick up its share of that venture. That is an example of a joint venture that has a high profile out there.

Our next meeting is in April, in Paris—a perfect time to visit Paris. We will be issuing exposure drafts after our meeting in April. We are getting into some meaty subjects—inventories. In government, you get into some very unique inventories. You have currencies; you have postage stamps; you probably have strategic reserves, such as oil, metals. We will talk about accounting for those types of inventory.

We talk about leases, whether you have operating leases or capital leases. We are working on impairment of assets. Hopefully, we will get it voted out. If you are on the accrual basis, we require you to record your fixed assets, including infrastructure. That is a requirement of our standards. Once I require you to record fixed assets and infrastructure, I also need a standard, then, on impairment of assets. The one on impairment of assets has taken us a little bit longer, because we cannot follow the international accounting standard exactly. In the government sector, we do have some assets that generate cash flow, but a lot of our assets in government are used for service, delivery of services or service-potential assets. Therefore, when you look at the private sector standards, their concept of measuring whether an asset has been impaired is based on a cash-flow concept. Therefore, we would only have covered a small portion of public sector assets. We had to go beyond that and come up with criteria for when there is an impairment of an asset that is for the delivery of services, rather than generating cash flow. Therefore, we had to add additional paragraphs and modifications to make that standard fit into the public sector.

We will be very much interested in getting comments back to see how well we have performed. We have been struggling with it. To be truthful with you, it has not been easy. We have looked at probably 20 different countries, their standards on impairment of assets. We have yet to find one that would be the perfect one to follow. We can find good features in each of them, whether we looked in Europe at some of the standards, in the U.S., the U.K., Australia, New Zealand. No one had a perfect standard. So that one has been a hard one.

Another exposure draft we are coming out with is recognizing revenue from exchange transactions. Later on we will issue an exposure draft on recognizing revenue from non-exchange transactions. The difference is, exchange transactions are when we sell goods or services, and the non-exchange transactions would be recognizing your revenue from taxes, fines, that type of revenue. The reason that is coming later is because the international accounting standards do not have a standard for non-exchange revenue. They only have one for exchange revenue.

Another exposure draft will be property, plant and equipment, which says that you must record your fixed assets on the financial statements. It will be pretty straightforward. We could get into the argument of whether you should record fixed assets in a governmental enterprise or not. Yes, we will require depreciation.

But let me just back up. Our committee does not feel that that is the best answer, but it is the only answer at this time. We have commissioned a research project among various countries to look into how we should value capital assets and how we should recognize—to move away from depreciation. We recognize that depreciation is not a meaningful measure of the use of that asset. We are looking into the maintenance concept of assets and some things like that, moving to one of the current-value methods. Hopefully, within the next three years, we will come up with a replacement to this standard. But as of right now, the best we can do is the historical cost basis with depreciation. But we do recognize that it is not the best answer. We are looking for anyone who has any answers along this line.

The other item in there that will generate comments—we include military hardware as part of the property, plant and equipment. The reason I bring that up is in the good old U.S.A. here—that is one of the big issues. They do not recognize military hardware right now in their financial statements. In going out and talking to various countries, we feel that the recording of military hardware should be a requirement.

Construction contracts are pretty straightforward. Governments get into some major construction projects out there. This provides some guidance on construction contracts, the typical guidance for a government to follow when you get into some of these big contracts.

Finally, the hyperinflation standard: We were hoping we would not have to open up that can of worms in IAS 29, but there have been some governments recently that reentered this arena of hyperinflation, and we have to pick up on it.

There are two documents we are currently drafting, financial reporting under the cash basis of accounting—I said there are only two bases we will recognize. All our accounting standards are based on the accrual concept. We will issue one standard that will be on the cash basis. If I took a survey of this audience, I would come up with a long list of different definitions of what is meant by cash accounting. Therefore, in order to standardize it, we are coming up with a definition of what we mean by cash accounting and what is involved for a government to claim that it is following cash accounting. So we will issue a standard so that the auditors will be able to have a reference document.

The other document we are working on is transitional guidance. We know these are new standards coming out. I talked about some of the issues involving statement 6. We will be issuing transitional guidance to help governments move from where they are now to the adoption of our accrual standards. We will be providing some benchmarks to help a government go forward through that process.

A big partner in that one will be INTOSAI which has volunteered to help us. They have a vested interest in this. We are looking forward to working with INTOSAI in developing this transitional guidance, to get it out to governments.

Finally, as I stated, we will go forward developing various EDs on the public sector standards that would cover all the international accounting standards. We release them in batches. They will be out there for four-month comment periods. We do look at the comments received, and we do have a lot of discussion on the comments when they are received.

To finish up my presentation, I just want to talk about two other matters. Just in case you are not familiar with what's happening to the International Accounting Standards Committee, they are in the process of reorganizing. There is a nominating committee of highly recognized individuals around the world. On that nominating committee is Wolfensohn from the World Bank. He is one of the members. Another member is Levitt, from the USSEC, who has been very critical of the process. In fact, he is chairing that nominating committee.

That nominating committee's charge is to find 19 individuals in the world to serve as trustees. Those trustees, then, will nominate 14 board members from around the world. The trustees will also set up a standards advisory council, and also assist in the staffing.

There are six trustees from North America. They are based on regional allocation—six from North America, North America being defined as Canada, the U.S., and Mexico; six from Europe; three from Asia; and the others are from the rest of the world.

When I move down to the standards board committee, there are 14 of them. Twelve of them are full-time members, and two will be part-time members. They will not be appointed by regions of the world. They will be appointed by background. So many of them have to be auditors, so many have to be preparers, so many have to be users, and so many have to be from the academic world. It is by background that they will be appointed.

The advisory council will be countries interested in providing advice to the trustees and to the standards board members.

Why is this important? The current accounting standards committee, setting the standards right now, is 80 members. We are going from a standards committee of 80 voting members down to 14—big change.

On IASC, that change will become effective January 1, 2001. At a meeting in May, the nominating committee is supposed to present the list of trustees for acceptance. By September, the trustees should present the board members. By January 1, they should be up and operating. Currently they are located in London, England, but the safe bet is that they will be in some other city in Europe. We do not know where. They are going to open up the bidding to governments to submit an invitation for the committee, for the standards-setting board, to come to their countries. It is going to be opened up to see which country would like to have that group move into their country.

That takes care of the accounting side. I am going to set this up for our next speaker, talking about audit and INTOSAI. At the January council meeting of IFAC, this was voted on and accepted in concept. At the May meeting in Edinburgh of IFAC, they will take the next step to finalize a little bit more this picture. Hopefully, within the next year or so, IFAC will also be reorganized along these lines.

Basically, it is going to really make IFAC an auditing organization. Our committee, the public sector accounting committee, within the next few years, will get transferred to the international accounting standards board. Some of the organizations that are on the fringes right now would be called "Non-Audit Activities." We would be in that box. Information technology and some of those things are out in that box. There is a good chance that we will probably be spun loose.

The important thing in this picture is that there are two new boxes, the public oversight body, which will be made up of worldwide, well-known individuals dealing in financial matters—they do not have to be accountants or auditors. They will be people of prominence throughout the world that will be providing oversight to IFAC, looking at the international auditing process, making comments. It will even extend into looking at the international accounting standards, the acceptance of those standards. So this public oversight body will be a very powerful review body to feed back to the national bodies, the general assembly and the council.

The other important new box is called the transnational auditing committee. Right now it is going to be made up of the big seven accounting firms in the world—that is, the big five accounting firms, plus Grant Thornton and BDO Seidman. They will make the big seven initially. Any auditing firm in the world could join that, as long as they do cross-border audits, or transnational audits, as they refer to them.

To belong to IFAC, it is a matter of your professional organization sending in an application, paying your dues, and you are a member of IFAC. You do not have to follow any of their standards; many governments do not. In the future, if you are going to be a member of IFAC, not only do you have to pay your dues, but every year you will pledge and confirm that you are following all their standards—the ethics standards, the audit standards, the international accounting standards and the public sector accounting standards. No longer will it be what we call the country club membership environment. If you are going to belong to IFAC, you will have to be committed to adopting their standards.

In conclusion, the onus on governments of developed countries is to be involved in this process, to help developing countries. The major accounting firms have to be involved also, to provide some of their expertise. Finally, I appeal to everyone out in the audience. We would love to have your participation in our project also. If you are interested in receiving the exposure drafts and any of our material that is issued, you can either give me your business card or write your name and e-mail address on a piece of paper and give it to me. I will get it to IFAC in New York to get you added to the mailing list. We encourage you to be responsive to our exposure drafts. Also we are looking for organizations that are willing to step up and do some translation of our standards. We do not have any budget for that right now. But we will provide all the assistance we can to any organization that would like to translate our standards, whether it is into Spanish or

French, Chinese, or whatever language. We would be very cooperative, and copyright issues are not involved for the translation.

We also would encourage you to keep practicing good financial management. It is conferences like this that can make a difference as we move forward.

JOHN APT (Canada): I was interested to hear you suggest there are only two bases of accounting that will be accepted, full accrual and cash basis. My question is whether or not, by going full accrual, you expect compliance for, say, the accrual of tax revenues, income tax revenues, and whether that created any discussion. Do you anticipate any problems in that respect?

RONALD POINTS (United States): We did talk about it somewhat. That will be coming out in the other standard, the non-exchange revenue one, where we will get into the details. We do recognize that there would be accrual of income taxes—but not down to the model of saying that as people earn income, the government recognizes an accrual. There is a model out there that kind of flows that way, on a month-to-month basis. At this point, our view is not to go into that much detail. But it would be a higher level of accrual of tax revenues out there. There are a lot of tax revenues or fines or penalties where cash basis and accrual basis are almost identical. Remember that in our standards materiality comes into play. We are saying that if there is really a very small difference between whether you record it on a cash basis or an accrual basis, it really does not matter. For all intents and purposes, you can call it accrual.

Canada was one country that had a lot of heartburn when we went to the two bases because that meant they had to give up their modified accrual basis. We will have a standard coming out, an exposure draft, probably in another year or year-and-a-half on that.

The representative from Canada for next year will be from the auditor general's office. Right now the representative is the auditor general of Ontario. The assistant auditor general is the technical adviser, David Racktree.

PHYLLIS ANDERSON (United States): I am from the General Accounting Office in the U.S. I have two questions for you. Can you discuss the overall degree of similarity between the accounting standards set up by FASAB and those that you were talking about setting up for the public sector?

The second question deals with the International Monetary Fund. Right now they use a set of generally accepted accounting principles which really are not U.S. or international accounting standards. Can you give us your views on that?

RONALD POINTS (United States): I will take that one first, on the IMF. As I said, they have been supportive of our project. In fact, they have put up considerable money to support our project. I can only go by what their representatives state. Their commitment is that when we do have a set of accounting standards, the IMF will adopt these as the recognized accounting standards. What we are trying to do is, within our standards and our disclosures, work in a lot of the issues and important pieces of information that IMF is trying to get into. We are trying to get

away from having the system of national accounts and generally accepted accounting principles out there. Right now we have a variety of different requirements, and we are trying to bring those together and see to what extent we can service the different markets. That is why the World Bank, IMF, and all of them are participating. OECD is also participating in this. But our representative from IMF states that they will adopt these and issue them as the accounting standards that governments should follow also.

Regarding your first question, the comparison to the U.S. federal standards—I have been in discussions with various board members as well as the executive director, Wendy Comes. We do have a few differences. But I think the views of the new board that has come on this past year are much more consistent with the direction we are going than the former board. The former board went in one direction; we had a large gap. With the current board, if you look at their revised statements and where they are going, it is coming back. The conversions are going to be there. I know some of the board members have stated that they are hoping, downstream, within a couple of years, to be able to say that the U.S. federal standards are in compliance with the international standards. That is an objective they have set forth.

But they have to get over some hurdles, such as capital assets, military hardware. There are still a few issues. But I am encouraged. I think they are headed in the same direction we are.

EVARIST MWESIGYE (Uganda): We would like to commend IFAC for the efforts made to introduce accounting standards in the public sector. You mentioned that you did not want to reinvent the wheel, so you adopted international accounting standards. We believe that is understandable. However, from the part of the world where I come from, we are a bit worried, or possibly confused. We understand that the international accounting standards have received lukewarm support from the U.S. accountancy body, FASB. We do not understand what the future of international accounting standards is if they do not have the full support of the FASB. Since the work of IFAC depends on the international accounting standards committee, if they are not supported by the FASB, what future is there for them and for your work?

RONALD POINTS (United States): Good question. I am glad you raised that. In the past, in the U.S., the Financial Accounting Standards Board has really not participated in the process. However, the trustees of the Financial Accounting Standards Board last year mandated that the FASB had to get involved with international accounting standards. In fact, there are two board members who are involved in going forward. There is a good possibility that two of the FASB board members will be on the international accounting standards board. That is a conjecture that is out there. They are working very closely. Over the past year, that whole issue has been changing.

On our public sector committee, the same issue came up with the GASB. I am pleased to announce that, starting in April, David Bean, who is the executive director of GASB, the Government Accounting Standards Board, in the U.S., will become my technical adviser. Again, the trustees told GASB they had to get involved with the international accounting standards.

So the trustees of the U.S. accounting standards organization have mandated to the two boards that they cannot sit back and just ignore the international, that they have to become involved with that process. I think we are over that hurdle now, where the U.S. was rejecting it. Also an

encouraging sign is that Art Levitt is chairing the nominating committee of the international committee. So you are bringing the chief critic into the process, as well as bringing FASB, which was a critic, into the process. I think over the next decade you will see many changes in the accounting standards.

CYRIL RAMOS (Philippines): One thing that caught my attention during your lecture was on the consolidation of financial statements. You mentioned that one of the requirements would be to remove all intergovernmental transactions. Did I get it right?

RONALD POINTS (United States): Yes.

CYRIL RAMOS (Philippines): It would seem to me that this particular requirement might be very tedious on the part of various government agencies, looking at the entire bureaucracy. The reality is that several government agencies would have as clients both the private sector and the public sector—for example, the registration of motor vehicles. So many government agencies would be clients of the particular government agency. Does it mean that every government agency that would be benefited by the services of that national registration agency would have to monitor the details of every transaction so that when it is consolidated it will be removed from the financial statements?

My concern is that, while this may give us a very accurate net value of the entire government transaction, it would be very costly on the part of the government to monitor all the details of this requirement to remove these interagency transactions.

RONALD POINTS (United States): I agree with you. That is why I highlighted it. The implementation of statement 6 will be a challenge for many governments. But I am encouraged that many governments are in the process of putting in new integrated financial management systems, thanks to the World Bank and ADB. They are financing a lot of governments in their projects to improve their financial management systems. If these standards are out there, I can address that issue up front as part of my requirements. To address your example, I can put a vendor code in there, and through that vendor code, I can identify government vendors, and then when I run a report, I can capture that information and eliminate it. So as I build new systems, I can address that a lot more easily.

With old systems, it becomes a major problem. Yes, it will be very costly for governments to try to modify old systems. In fact, I would say that if a government is going to implement a new system, I do not see it adopting a lot of our standards in the near future because of the cost involved in trying to conform and gather the information. Statement six is a major administrative task if you have not put in a new modern integrated financial management system that would do it for you. I agree; it is costly.

So we have to look to you, as the profession out there, to pick these standards up and go forward to your governments and try to sell them and define the benefits of adopting these standards.

INTOSAI Audit Standards—A Recommended Approach

Göran Steen, Audit Director, Swedish National Audit Office

First of all I would like to thank you for your kind invitation to participate in this conference and for the honour of addressing this distinguished gathering of researchers, experts and practitioners in the field of Government Financial Management. I am here as the representative of the Chair of INTOSAI's Auditing Standards Committee. My Auditor General has been chairman of the committee since 1995 and my role has been to coordinate this work at the Swedish National Audit Office.

The title of my address looked a bit different in early versions of the programme. Then it read "IFAC and INTOSAI Audit Standards: A Cooperative Approach." I was not aware, until I arrived last night, that it had changed. But that is good because my contribution will deal much more with INTOSAI's Auditing Standards than with IFAC's International Standards of Auditing. I feel that it would be presumptuous of me to interpret and explain IFAC's standards and the intentions behind them, or to describe how they are implemented or are intended to be implemented. This is best done by a representative of IFAC. However, I will comment to some extent on relations between the standards from our perspective.

The INTOSAI Auditing Standards Committee (which I shall refer to merely as the *Committee*) was established in 1984 to present plans and recommendations for an INTOSAI auditing standards project. Initially the Committee had 11 members and was led by Saudi Arabia. From 1989 to 1995 the Committee was led by Australia and from 1995 onwards it has been led by Sweden. As in all INTOSAI committees there is the ambition that the members of the Committee shall reflect, as far as possible, the diversity of the organization, that is to say the different countries and the different methods of organizing the audit, in order to encompass the wealth of experience which INTOSAI represents.

Over the years the composition of the Committee has changed somewhat—but in a way which guarantees both renewal and continuity. Certain SAIs have been members of the Committee since it started its work, and there are others that participated in their first Committee meeting in January this year. The Committee now has members from all parts of the world and from regional organizations which are associated with INTOSAI. As I have already mentioned, the SAI of Sweden is chairman of the Committee. The other members are: Austria, Australia, Argentina, Brazil, Costa Rica, Denmark, Japan, Namibia, Norway, the Philippines, Portugal, Saudi Arabia, Slovakia, the United Kingdom and the United States.

The Governing Board approved the Committee's working plan at a meeting in Sydney in 1985. The Committee formed four study groups whose tasks were to focus on: General Postulates in Government Auditing, General Standards in Government Auditing, Field Standards in Government Auditing, and Reporting Standards in Government Auditing. This focus and division of responsibilities is also directly reflected in the structure of the Auditing Standards.

The four groups wrote, discussed and revised texts which finally became a final exposure draft which was then circulated to all INTOSAI members for their comments. This demonstrates the great effort which was made to obtain support for the proposal and the willingness to make adjustments in order to obtain global acceptance. The Committee

made the necessary changes to the document as a result of comments received from INTOSAI members and the Auditing Standards were approved at the Congress in Berlin in 1989.

In 1989 the Governing Board gave the Auditing Standards Committee the mandate to revise the Standards in order to recognize the particular needs of countries whose SAIs are constituted as Courts of Accounts. The Committee presented the new version at the INTOSAI Congress in Washington in 1992. The document was slightly amended again in 1995 in order to make it more explicit, and the version we have today is that which was presented at the INTOSAI Congress in Cairo in 1995.

At the Congress in Cairo in 1995 the Committee was given the task of drawing up a Code of Ethics for INTOSAI. All the members of the Committee participated actively in this work and contributions were also received from many other members of INTOSAI. In 1998 the Auditing Standards Committee submitted a proposal for an INTOSAI Code of Ethics, which was approved by the INTOSAI Congress in Montevideo.

At the same time, the Committee was given the task of restructuring the Standards in order to improve clarity and facilitate future changes.

Although the term “standards” was used throughout the document, it was understood that the term was synonymous with the term “guidelines” which retains the authority for compliance within the domain of each Supreme Audit Institution. While the application of the Standards is not mandatory, they reflect a “best practices” consensus among SAIs.

Both the Governing Board of INTOSAI and the Committee are committed to keeping the Standards as a “living” document. As such the Standards should reflect, as far as possible, current trends, issues and concerns in auditing methods and practice.

I will say a few words about the relation between INTOSAI auditing standards and IFAC standards. During the development of the INTOSAI Auditing Standards there was no formal cooperation between INTOSAI and IFAC. This is also true today. However, there is obvious interdependence in the professional field. In a number of SAIs, for example my own, there is an inflow and outflow of professional auditors. The inflow can include auditors who have previously worked on audits where IFAC’s standards predominate and whose knowledge and experience stimulate development in the SAIs. It is likewise the case that auditors leaving Government Auditing take with them the experience and knowledge of Government Auditing to the private sector. In the work on methods development which is taking place in many SAIs, this experience is being put to good use and the impulses are also being transmitted to the Committee via the participating SAIs. I can also mention, in particular, that when INTOSAI developed its Code of Ethics, the Code of Ethics developed by IFAC exerted a natural influence, as well as the Codes of Ethics produced by different SAIs around the world.

It is natural that these two professional organizations, INTOSAI and IFAC, have exerted an influence and will exert an influence on each other in their development work. There are also an increasing number of contacts, both formal and informal. This strengthens professional development and the quality of the audit work, and we welcome this type of cooperation.

I think that it is important here to point out that the INTOSAI's Auditing Standards is not a "stand alone" product. It is part of a framework which has emerged over the years. With the INTOSAI Code of Ethics now in place, the INTOSAI has a complete set of standards which promotes the independence of SAIs and their activities. The various documents may be regarded as a comprehensive framework which has the following elements: the Lima Declaration, the Code of Ethics, the Auditing Standards and the Implementing Guidelines (to be developed).

The Lima Declaration of Guidelines on Auditing Precepts, that was adopted by acclamation more than two decades ago at the INTOSAI Congress in Lima in 1977, constitutes the foundation with its comprehensive precepts on auditing in the public sector.

The main purpose of the Lima Declaration was to call for independent government auditing. A Supreme Audit Institution which cannot live up to the requirement in respect to independence does not come up to requisite standards. It is not surprising, therefore, that the issue of the independence of Supreme Audit Institutions continues to be a theme which is repeatedly discussed within the INTOSAI community. However, the demands of the Lima Declaration are not met by a SAI merely achieving independence; this independence must also be enshrined in law. However, this requires the existence of institutions of law and order, and these are only to be found in democracies based on the rule of law.

The rule of law and democracy therefore constitute essential premises for truly independent government auditing and are the pillars on which the Declaration of Lima is founded. The precepts contained in the Declaration represent timeless and essential values which have maintained their topicality since the time when they were first adopted. In the SAI community the Lima Declaration is regarded as the Magna Carta of government auditing.

The Code of Ethics represents the next level with its statement of values and principles which guide the daily work of auditors. With the Lima Declaration as its foundation, the INTOSAI Code of Ethics should be seen as a necessary complement, reinforcing the INTOSAI Auditing Standards. One of the principles outlined in the Code of Ethics is the auditor's obligation to apply generally accepted auditing standards.

The Code of Ethics is a significant step forward in the process of harmonizing ethical concepts within INTOSAI. It comprises the basic postulates of ethics only, since national differences of culture, language and legal and social systems create the need to adapt the postulates to the environment of the specific country. Therefore, this Code should be seen as a foundation for national codes of ethics which shall be developed by each Supreme Audit Institution.

At the next level the Auditing Standards contain the postulates and principles for carrying out the audit work.

At the fourth level, the Guidelines shall provide practical assistance to SAIs for the implementation of the Standards in their own countries. The Guidelines remain to be developed by the INTOSAI Auditing Standards Committee but work is currently in progress and the aim is to present a proposal to the INTOSAI Congress in Seoul next year, 2001.

In this context it is also appropriate to mention that INTOSAI's other committees have produced guidelines that are of a general interest for auditors; on internal controls, illustrative models of financial statements, best practices for the audits of privatization and guidelines for joint audits of environmental issues. There are also certain products from the EDP committee, even if they do not have the character of standards, which contain valuable information for the auditing process.

If we were to describe briefly some of the major differences between INTOSAI Auditing Standards and IFAC's International Standards of Auditing (ISA), we would find the following.

In the first place the entire frame of reference of the INTOSAI Auditing Standards is in government auditing and they clearly reflect the Lima Declaration's strong emphasis on independence and impartiality. They are intended to be used by a Supreme Audit Institution which, regardless of how it is organized, exercises by virtue of law the highest public auditing function of the state. In most countries, public sector auditing has a well-established identity, usually in the form of a SAI, which is affiliated with INTOSAI.

IFAC auditing standards are intended to be used regardless of the nature of the audited entity and should therefore also apply to audits of financial statements of governments and other public sector entities. However, regardless of the general auditing principles contained in ISA, they are mainly intended for auditors who audit private sector enterprises. Although ISAs are intended to apply to all aspects of the audit of financial statements, the standards do not apply in respect to compliance and performance auditing, or in respect to other aspects, for example reports on internal control or other matters which may be in the public interest.

We can therefore conclude that the government environment requires a different approach to auditing in some areas. Examples of areas where government auditing requires different approaches and standards are: experience in how to interpret the different methods used in the management of a government agency; special regulations and/or rules on secrecy and publicity; good judgement acquired through the experience of the government environment; experience in how to interpret signals from the government which are not always documented and could have political implications; special regulations on how to report on audits.

We can also see that auditors working in the private sector must have knowledge in areas which are not usually covered by government auditors, for example taxation, commercial law and civil law.

It is sometimes the case that we (at the Swedish National Audit Office) engage auditors from the private sector for audits in the government sector. After examining their work over a period of several years, we have concluded that their experience differs significantly in certain areas and that every auditor who starts working in public sector auditing must acquire new knowledge and experience. The same naturally applies to an auditor joining a private firm of auditors whose experience has been gained exclusively from auditing the government sector.

The aspect of independence raises different problems for the private sector auditor and the government auditor. The private sector auditor must be aware of the risk of becoming dependent on a client, for example through income from the client or relations with management, which is sometimes heightened by consulting assignments. The government auditor has to be aware of the risk of becoming dependent on his "client," in this case the parliament or government, or of becoming so sensitive to political policies that he compromises his independence.

Where one aspect of independence is concerned, the government auditor can be protected by legislation; for example the auditor cannot be replaced as long as there is an audit institution. It is also the case that the replacement of an Auditor General is very much a public matter with, in most cases, strict procedural rules which are safeguarded in the law. This assistance is not provided for private sector auditors.

But where a government auditor is concerned, there are considerable risks if his independence is not adequately protected in the law or if the government, whose activities he shall audit, does not respect the rules of democracy. Unfortunately there are recent and regrettable examples of this. At the Congress in Montevideo in 1998 the INTOSAI Governing Board decided to appoint a special task force to analyze the issue of the independence of the government audit and to report back and present proposals at the next Congress. Canada's SAI leads this task force.

The issue of the independence of the audit and how it shall be safeguarded in various respects and at various levels is a comprehensive and extremely important issue. It is currently and continually discussed in the INTOSAI community.

The application of the Auditing Standards, as recommended by the INTOSAI Congress, is not mandatory, but they are supposed to be followed by all INTOSAI members. This poses a problem where the development of detailed standards or similar documents is concerned, since the SAIs around the world work under very different conditions. As a consequence, the INTOSAI Auditing Standards have no detailed standards for auditing. Because of the difference in the approach and structure of some SAIs, not all the INTOSAI auditing standards are applicable to all aspects of the SAI's work; for example, the standards applicable to Courts of Account are not applied by an SAI working with performance auditing. The IFAC standards seem to be much more precise and the auditor is expected to adhere closely to the standards. The preface to ISA states that it is only in exceptional circumstances that an auditor may judge it necessary to depart from an ISA in order to achieve the objective of an audit more effectively, and he has to justify his departure from the standard.

The INTOSAI Auditing Standards Committee has begun work on detailed standards for auditing that will result in guidelines for the implementation of the standards and contain examples of how the audit can be performed. It is obvious that the Auditing Standards produced by IFAC can and will be used in the guidelines in areas where they are applicable for government auditing.

In connection with the INTOSAI Congress in Montevideo, the Committee was given a number of new assignments. By describing these assignments I think I can provide a fair picture of the scope of the Committee's work and of INTOSAI's perspective where the breadth of its development work is concerned.

The Congress noted that the wording and content of the Standards remained generally relevant and appropriate. However, when the Auditing Standards were given their present structure in 1989, the INTOSAI Code of Ethics had not been produced as a separate document. Therefore, rules of ethical relevance were intermingled with other rules of a more technical character. Furthermore, the rapid development of auditing in certain areas, for example IT, and consideration of environmental aspects were not fully taken into account at that time. Thus, the Congress noted the need for restructuring the Auditing Standards in order to clarify the linkages between the Code of Ethics and the Auditing Standards and to facilitate updates and additions in order to maintain the Auditing Standards as a relevant and living document.

The Congress decided that guidelines for the implementation on the Auditing Standards would complement the INTOSAI Auditing Standards and form the fourth level of the Framework that I have described. Discussions at the Congress also indicated that the guidelines would assist SAIs in the implementation of the Auditing Standards in their own environments. In the preparation of the guidelines, the Congress noted that it would be important to bear in mind the different circumstances of the various SAIs is respect to culture, language, and legal and social systems.

In other words the Committee has an extensive program which shall be implemented prior to INTOSAI's next congress in Seoul next autumn.

It is clear that all professional development which takes place, whether in INTOSAI or in IFAC, provides great benefits for the entire auditing profession. The mobility between different operational areas, which is highly evident in the profession, also shows that no advantage can be gained by maintaining imaginary borders. There are real differences in responsibilities which also necessitate different knowledge and methods. One possible scenario could be that government auditors and other auditors cooperate more in auditing, and in developing guidelines for auditing, in the areas where the differences are insignificant. The two different professions could then specialize in their specific areas and further develop these special audit methods. It is also desirable that the various arenas available today, such as this congress, are used for communication and the exchange of information.

I would also like to inform you about where you can obtain more information. On INTOSAI's Website <http://www.intosai.org> you will find more information about INTOSAI. There you will also find the INTOSAI products I have mentioned: the Lima Declaration, the Code of Ethics and the Auditing Standards. They are available in five languages: English, German, French, Spanish and Arabic, which are INTOSAI's official languages. However, the Arabic version is not available on the Website but can be ordered from INTOSAI. I would also like to inform you

about INTOSAI's journal, The International Journal on Government Auditing, which is highly readable and which provides regular information about developments in the field in INTOSAI. You can subscribe to the Journal via the GAO in Washington. The President for the Journal is Lin Weeks and the Editor is Don Drach.

And this brings my address to an end. Thank you very much ladies and gentlemen.

JIM WESBERRY (United States): I and many others are greatly concerned about the supreme audit institutions which are becoming politicized, particularly in the Western Hemisphere. Even though supreme audit institutions have been uplifted professionally with the INTOSAI standards, the Declaration of Lima, and things like that, at the same time we see Controllers General or Auditors General becoming more famous and wanting to get into politics. Then we also see people who are in politics wanting to be Controllers General or Auditors General as a platform to run for President.

Has INTOSAI been studying this situation—is it appropriate for an Auditor General to be a candidate for President without resigning from office, or at least taking leave from office?

GÖRAN STEEN (Sweden): I don't know if I can answer that question. There is, as I said before, a special task force under the leadership of the Canadian auditor general looking into the question of the independence of SAIs. I think they will report to the INTOSAI congress in Seoul next year. Some of these questions will come up and, hopefully, be answered.

But we can also say that the Supreme Audit Institution in every country could be organized in a different way. INTOSAI, as an organization, has no mandate to rule over an SAI within its constitutional environment. So it is up to what the constitution and the law in each country will allow.

HUMBERTO HUANCA CALLASACA (Peru): You mentioned something that is very important. One of the very important characteristics of the auditor is independence. However, the auditor is limited in some cases when he has something to do with the higher spheres of government. What is your recommendation when this occurs? I'm talking about findings that have to do with ministers or some high government entity, and the job of the auditor may be at stake if he reports it. And that's what happens in many of our countries.

GÖRAN STEEN (Sweden): Thank you very much. From my own point of view as an auditor—I think I speak for the INTOSAI community as such—adherence to the auditing standards of INTOSAI and adherence to the Lima Declaration is mandatory. In the Lima Declaration and in the code of ethics and in the auditing standards, it is highlighted that you should in all cases remain independent and impartial. Of course, if you find irregularities, you have to report them as a consequence of the auditing standards and the code of ethics.

As to what actually happens, I don't have any cases. But, of course, the environment in a country might be such that the auditor could risk not only his job, but maybe even something more if he is too efficient.

ROSMOND JEAN-PHILLIPPE (Haiti): I work for the Supreme Audit of Haiti. It is not a question; it is a comment that I would like to make. In Haiti, as a CPA, I have related to the Lima Declaration, because, as a country,

we have to base our work on the experience of others. We have not found flaws in this declaration, though it was created more than 20 years ago.

Accounting Utilities—Outsourcing of Financial Management Transactions and Reporting Has Begun

**Richard Willett, Partner (Ret.) Director of Government Relations
Grant Thornton LLP**

Thank you very much, and good morning.

Over the next couple of days, you are going to be talking a lot about integrated financial systems. I am going to suggest some things that might even be a bit heretical. We will talk about the next steps. Some governments may find themselves getting out of the accounting business and perhaps turning over their accounting operations to others. That is the basic theme that you will be hearing about today.

Our agenda today suggests that our accounting world is changing, as is the rest of the world. If you just think back five years ago, there was little chance that we would have had PowerPoint presentations controlled by somebody up here at the podium. We are suggesting that the CFOs, the chief financial officers and their offices, are changing accordingly.

Accounting utilities, which are also called application service providers, are part of the change. We are going to spend some time this morning talking about accounting utilities. We will spend a few minutes on a couple of case studies. Then we will close by talking about the obvious concerns and issues and reservations that might be part of such a substantial change for those government organizations that are considering it.

So what is happening? Organizations are getting out of many businesses that are not their mainline activities. We are seeing that this is happening as much in government as it is in the private sector or commercial sector. Leasing is replacing buying. We are finding as many opportunities as we can to have someone else make the investment, and then we rent from them. As you will see in just a minute, software is beginning to move into service. ASPs, application service providers—that is, outsiders—are becoming all the rage. We are moving away from doing things in-house and asking others to do things that are not our mainline business for us.

Consequently, CFOs are beginning to change their focus in terms of where they buy some of their services, including financial systems.

Outsourcing is beginning to take place big-time in the private sector. Here are a couple of illustrations.

A *Wall Street Journal* article from last November talked about one of the world's major oil companies, BP Amoco, outsourcing its accounting in a deal that was valued at over \$1 billion. So

here we have an oil company that is in the business of exploring, producing, refining, and marketing petroleum products, but that is not in the accounting business, getting out of the accounting business by asking one of the major accounting firms to do its accounting for it.

We have a major American manufacturer—General Motors, a clear international organization again outsourcing some portion of its accounting. A \$250 million deal over a number of years is obviously a very small portion of all of GM's accounting, but the point is, the process has begun. GM is in the business of manufacturing and selling motor vehicles of one sort or another, plus some side businesses like satellites. But, basically, they are in the automobile business. What they are saying is, "Look, we will build motor vehicles and do our other businesses, and, Arthur Anderson, for a price, would you be kind enough to do our accounting?"

By the way, if you have questions as we go along here, it would be my pleasure to respond to questions during the presentation. We have enough time, and it clearly will not break the train of thought at all. I will be pleased to repeat the questions, if you have some, so that others can hear them.

IT, or information technology, outsourcing really is under way much ahead of accounting or financial management outsourcing. Here's a couple of illustrations.

The state of Connecticut went through a major attempt to outsource basically all of their information resource management activities; and it was a failure. I am talking about failures here, not just successes, because there are some lessons learned. In the end, for those of you who watched what happened in Connecticut, the reason that they never made the switch from state-operated information technology to private-sector is that they forgot about a couple of things. One of the main things they forgot about was dealing with their people. They didn't clearly explain the major changes that were going to take place in their workaday lives, and they also did not include the unions, very powerful in northeastern states in the U.S., as part of the process. Even though they had this thing ready to go and they had a contractor all signed up—in this case, EDS, Electronic Data Systems—the deal never got off the ground. I think we will see Connecticut come back again and make a major attempt at outsourcing its information technology processing.

Pennsylvania learned some lessons from Connecticut and is actually now in the process of consolidating a number of its operational IT centers under UNISYS. UNISYS, in addition to being international, is also a Pennsylvania company, and so it probably had a leg up. The point we are making here is that the process, which did not work in Connecticut, has been quite successful in Pennsylvania. The suggestion is that it goes beyond just data centers, and at one point, we will see substantially more privatization in Pennsylvania.

San Diego County in Southern California has now begun the process of moving its information technology to CSC, Computer Sciences Corporation.

You will see two things here: One, the process has begun, and two, a number of major players—UNISYS, CSC, and EDS—are actively involved. The Gartner Group, which is probably the most respected research organization for information technology, says that just three years from now, 80 percent of government organizations—we are talking U.S. now—will increase their

dependence on external service providers. So, again, we see governments getting out of businesses that are not really mainline for them.

Leasing is clearly taking hold, in addition to the outsourcing. For any of you who were at the Association of Government Accountants' annual conference in New Orleans last year, you had the opportunity to hear Dennis Fisher, who is the commissioner of GSA's federal technology service. Dennis is retiring at the end of the month and going to work for Visa. But when he spoke at AGA's PDC last year, and in earlier and subsequent talks, he has made it very clear that his bias, his focus, is that we should not buy; we should lease whatever it is that we want to acquire. He goes even further by suggesting that if we can make it happen, we should never lease for more than two years.

The reason for both of these—that is, leasing first, and leasing for a short period of time—is that technology is moving so quickly that we very quickly end up with dated investments if we buy, and we can end up with dated rented or leased software if we lease for periods longer than two years.

The GFOA, or the Government Finance Organization for Local and State Governments in the U.S., in a recent quarterly, again describes the notion of leasing for government. I think the sole focus of the article was that leasing is here to stay, and governments should quickly change the way they acquire, the way they procure, the way they buy, to begin to make leasing a first choice in many instances.

Another article—a couple of articles—suggests that we do not want you to buy anymore. We are prepared to lease to you. One of the reasons that we really want to lease to you, as providers, manufacturers of software, is that once you are our customer, you will get accustomed to our style of business. You will become familiar with what our software provides for you, and you will continue to lease from us as we update our products rather than going through, if you will, another acquisition, and perhaps choosing a competitor's product.

An article from the *Wall Street Journal* of late last year says, "Why We Don't Want You To Buy our Software." This is actually the CEO, the chief executive officer, of Sun Microsystems, suggesting that they would prefer that we do not buy, but rather we lease, either directly or through one of the application service providers.

The *Outlook*, which is a magazine for CFOs in the U.S., in its January issue, talked about something that is particularly pertinent to this conversation we are having together here today. In addition to getting out of businesses that are not our mainline, the Web, the Internet, is also driving decisions that are being made in the finance department. In this article, it's stated that financial activities are becoming increasingly virtual. Transaction processing is becoming increasingly paperless.

Obviously, this is going to require embedded controls. But it is going to permit direct user inputs. There are going to be real-time links between vendors, or sellers of services, and customers. We will not just send a tape to somebody. We are clearly going to be virtual.

But look at what else they say. Line managers—we are not talking about the finance people now, the accounting people, but line managers—are going to do more self-service analysis. In effect, they are going to have less dependence on us as the finance folks, and they are going to do even more of their financial analytical work for themselves. So in many ways, they are not going to need us as the finance people from day-to-day. As is no surprise, they conclude by suggesting that outsourcing of traditional finance activities will become commonplace.

So what is happening to government CFOs? What is happening to their headsets? Here are our conclusions:

They have less interest in being involved in things that we would consider non-value-add. They are no longer interested in having large numbers of people as parts of their staffs. Typically, in government organizations, there is an interest in having larger staffs because you can have more people at the senior level, you can obviously pay people better and you can build up an organization that has a lot of critical mass. We are seeing CFOs moving away from that.

We are also seeing CFOs having less interest in doing the work of others. I think that also includes data input. They are no longer interested in being involved in everything, at least from an input perspective. But, on the other hand, they have more interest in, among other things, really being part of the management team, which gets them involved in everything, but at a much higher level than just data input. They want to spend their time, and they want their staffs to spend their time, on analysis, as opposed to pushing paper and being responsible for input, and even for paper reports. They see their staffs changing from accounting technicians or clerks to more skilled financial managers and analysts.

So this represents, at least as we are looking at the U.S. government CFO organizations, really a sea change, a major change, in the way they are doing business.

By the way, we define non-value-added activities as things that nobody wants to pay for. They are done simply because we have done them for a long time, or it is part of protecting our turf or protecting some things that have always been considered part and parcel of our organizations.

We at Grant Thornton do a lot of ABC work, activity-based costing, or cost-related work, for government organizations. One of the things that we do in ABC is break down the activities that take place in government operations. In accounting shops—and this is analysis that was done really by the government folks, rather than by our teams—we have found that often as much as 25 to 50 percent of the work that is being done in accounting organizations is non-value-add. It is stuff that people will not pay for if they are given a choice. It is stuff that the finance managers themselves would sure like to get out of the business of doing.

Government operations at least North American government operations are experiencing challenges at this point that are driving them to consider outsourcing all or part of their accounting activities. The first challenge, believe it or not, is cash reconciliation. We have found in the last couple of years a major number of federal government accounting shops that are unclear as to their fund balance with Treasury. If we talk about it from a personal perspective, it is that our checkbook and the bank's records are not the same. So we have been spending a lot of time

helping government organizations reconcile their cash balances with our central organization, the U.S. Treasury. But more importantly, we are helping to establish a process of continuous reconciliation, so that the problem goes away and our books are balanced on a current basis routinely.

We are also finding that the notion of auditing government financial statements is changing the way a lot of CFOs and their customers are looking at their operations. It is clearly building discipline into accounting shops that might have been operating a little looser than they should have been. We are spending time, for example, looking at receivables, determining how old they are, and then beginning the process of reserving and then writing off uncollectables. There are obviously some political implications with this, because it probably requires using appropriated funding to write off receivables that we have been carrying as assets.

Accounting operations want to make sure they are relevant. They want to make sure that what they are doing is appropriate to the business they are supporting. Frankly, we have many that are not up to speed, that are not current. One of the things that is driving this in the U.S. government is GPRA, the Government Performance and Results Act, of recent vintage, which is now requiring our government organizations to get real serious about their businesses. They are required to talk about *outcomes* as opposed to the outputs that they expect from their operations, and to get serious about describing ways that they are going to meet those outcomes, and then put a price on them. So we are moving to cost accounting, as well as moving to describing the outcomes that should come from our activities.

As I am sure is happening in government worldwide, we are trying to do more with less. This obviously affects the finance shops because their head counts are being reduced. It obviously affects anybody engaged in budget because we are still trying to reach, generally, the same outcomes with fewer resources. Of course, this is driving us to change the skill sets of our staffs. It is driving us to do everything we can to have conferences like this to stay current. It has changed our interests.

In another article, a fairly recent one, it says, "The use of paper and expense reports will mostly be eliminated, as hotels will be able to provide folio data electronically." This is just an illustration of what is beginning to happen in accounting activities. The providers themselves are making available to the organizations whose people are traveling, data about the expenses incurred at a hotel. So there is no process, paper or not, that requires the traveler, the person who stayed in the hotel, to be involved in it at all, other than to get the initial approval to take the trip. The airlines, the hotels, other major providers are going to provide cost information directly to the accounting organization. We are a long way away from doing that with taxicabs and some independent organizations, but big organizations like hotels and airlines have already started that process.

That is one reason that Dennis Fisher, whom I mentioned earlier, is leaving the U.S. government and going to Visa. He is very much into the idea of international organizations like Visa, which have all these data resident in their records, making the data available in a much more grandiose way to their customers. So the notion here is that we will move even further into the credit card business with governments and that the credit card companies will provide myriads of

data to government organizations. We can get out of the paper-handling business almost completely in some areas.

What is happening in the CFO systems environment? We are suggesting that government finance organizations are going through three phases, and that these changes are taking place at a different pace in different organizations, but they are clearly under way. Phase I begins with a reduced number of systems. In the Defense Department in the U.S., DFAS, the Defense Finance and Accounting Service, has reduced roughly 350 systems to about 80. Their intention is to get it down to something like a dozen. So they will have gone down about 97 percent in the number of systems that they operate. We are clearly moving towards one-time transaction entry. Regardless of who is responsible for the data input, keyboard or whatever it is, it is only done once. In any cases where we are doing it more than once, we have two problems. One, we have extra work, and two, we have the need for reconciliation when the records at the end do not look alike.

We are moving to credit cards, and we are moving to credit cards in a major way. At the Federal Technology Service in the U.S. government, which I just talked about, not only do they have credit cards for personal expenditures, they have them for small purchases. We do not go through the purchase order process at all. We got all that paperwork out of there.

But they have gone even further. When you look at the front of the card, it looks just like a typical credit card. But when you look at the back, it has a whole lot more data. In the middle of it—and, obviously, visible front and back—is about a half-inch-square data point. On there they have such information as the cardholder's name, address and Social Security number. They have their access codes to their computer systems, so you have to put the card in the computer system, along with a thumbprint, in order to get your computer going in the morning.

They have taken it still further. You cannot get in the door to the building without putting in the card and again using your thumbprint. They have taken it yet another step further—which we travelers like—and that is, when you come to the airport, if you put your card into the dispenser at American Airlines, you get your boarding pass.

This all happens with one card. So you can see that things are really changing in terms of using plastic cards.

In Phase I, we are taking a serious look at electronic commerce. What we are talking about is business-to-business, government-to-business, government-to-government—whatever—so that we are getting paper and everything else out of transactions. One of the most critical things that is happening in the U.S. government is dealing with what we call interagency, or intragovernment, transactions. Gene Dadaro, the number-two man at GAO, who has spoken here before, has said that he thinks, apart from property (from fixed assets), intragovernment transactions are probably going to be the main element keeping the U.S. government from a clean opinion. One of the reasons is that we have the need to push all this paper back and forth, and we have to get it to reconcile on both ends.

We are also seeing more serious interest in imaging, which is going from paper to electronic, without keying. As you might expect, this all leads towards less paper and more analysis.

What happens in the second stage? Agencies are going to be getting out of the paper business completely as we see it. That process has already begun. At my firm, Grant Thornton, for all practical purposes, we are out of the paper business. We do our expense reports; we do our time reports all electronically. We transmit them electronically. If we want a copy for ourselves, that is fine, but we can save them electronically as well. We do all of our internal firm correspondence now over the PC. Our newsletters, any messages that we want to leave with one another we do electronically.

There is a downside to that, too. Some people are inclined to take those tough issues that they do not want to do face-to-face and send you an e-mail. We are working through that how to balance the need for face-to-face and paper transactions with electronic transactions.

But I think, more importantly, others are handling transactions. The traveler completes a travel report electronically. It goes directly to finance. Finance does nothing in terms of data input. The transaction has been handled by the folks involved in initiating it, rather than having some intermediary get between us and the finance system to record the results of our activities. Reports are quickly available online. You know those great big printouts that have an inch of green and then an inch of white, which are probably three inches thick, which purport to show what we did last month? They are all going away. How are we getting reports? We are getting them on our private PCs. Sure, we can print copies if we wish. But the point is, the finance shops are no longer giving their customers paper reports describing the activities of the month or the quarter or the year.

Where is this going? Again, more analysis. We are moving from paper pushing and from data input to really having the luxury of spending time saying, "What does this all mean to us?"

Financial managers are getting out of transaction-related work, not just on a daily basis, but even monthly. Program people—that is, the customers of the finance shops—will work directly with systems of their choice, operated by accounting utilities. Obviously, the finance shop is going to be involved in selecting the utilities that will support the organizations. But the point is, the real liaison now, the real connection, will be between their customers and the service providers. That is a real change in the role of finance shops.

Take it a step further. We are predicting that eventually financial folks will become primary users of the services provided by the utilities. Their roles will change from data inputters, accumulators, and providers to users of financial data that will come from, most likely, a third-party source. Analysis and consulting will really become the role of the people in the finance shop. Obviously, this is going to change the composition of personnel in financial organizations.

Changes in relationships: Some CFOs, as you might expect, are truly going to get out of transaction handling. CFO staffs are going to change incredibly. The Gartner Group has done surveys of finance shops, both government and commercial, all over the world. What they have found is that in most U.S. government organizations, three-quarters—75 to 80 percent—of the folks in those organizations are involved in transaction handling of one sort or another—a polite term for data input. That is going to go away, and we are going to move towards analysis.

We are suggesting that, as always happens, when there is business to be sold, entrepreneurs are going to spring up and start selling it, and we are going to call those service providers “accounting utilities.” CFO organizations can plug into as much of the service provided by these utilities as they want. So they will be able to make choices, and, over time, their customers will be able to do the same.

One interesting sideline of this is that utilities are not going to have all kinds of services available in various different fashions. The notion of having utilities is going to force standardization. Standardization has already begun in government finance. We have a client that just installed some software a year ago, and they installed it exactly as the code was written. They did not make one single change to one line of code. Each time one of her people came to the comptroller and said, “But we’re different, Cindy, and we have to do it this way,” her response was, “That software was good enough for another government organization. It’s going to be good enough for us.” They went from a disclaimer, under 1997 financial statements, to a clean opinion in 1999. Part of the reason was that they got that accounting system up and running quickly. Yes, they had some problems. Yes, they are still dealing with some problems. But it worked.

The resources that the utilities make available will be there for everyone who is willing to pay. It is going to be just like an electric or gas utility. They will, we believe, specialize in a few selected activities—accounting, data handling and reporting. But the services, as we said before, are going to be standard. You are not going to be able to make a lot of changes to them.

The interesting part about it is the service providers may be government, they may be nonprofits or they may be private. They may even be some combination. But the point is, there is going to be this group external to our finance organization that is going to be providing us the service.

How do we define accounting utilities? They are going to be outside of our finance shop. They are going to receive transactions directly from the organizations that they are supporting, and most likely that will be the program people, not just the accounting shop. They will then handle transactions for the accounting shop, not necessarily just record keeping, but perhaps even make payments for us and collect receivables. They will provide a database of transactions. They are going to allow continuous questioning of that database by us as their customers. So we will not have to wait until month-end to find out how things went. We are going to be able to get into that database on a routine basis every day. They are going to provide easy access to a myriad of reports. But, as we see it, these reports are going to be basically standard and it is going to be tough and expensive for folks who feel a need to have their reports look a little different.

They are going to provide services at listed prices. Obviously, everything in this world is negotiable, and bigger customers are probably going to be able to negotiate a little bit better price. But there will be listed prices, just as most utilities have. Customers are going to be able to use all or some of the services provided. In fact, customers may use a number of utilities or a number of service providers. Customers can come and go. You will sign up for a certain period of time, and when that period of time is coming to an end, if you are uncomfortable with the service and want to go somewhere else, you can. There will be a price associated with that, however.

Providers will not be exclusive. We think competition is going to exist.

Here is what has happened in one U.S. government organization. The Bureau of Indian Affairs, for years, has had real difficulty with its accounting operations. Recently, they turned over their entire accounting organization to an organization called the National Business Center—not the National Broadcasting Corporation, NBC, but the National Business Center—which is an organization within the U.S. Department of the Interior where BIA resides. NBC has taken over the entire accounting operation for BIA. BIA has gone from over 100 accounting people out in Albuquerque to a group of three or four accountants who are resident in Washington and who are working with their utility, their service provider, the National Business Center.

Their expectation is that as NBC gets things running more smoothly they will begin to move some of the accounting operations back to BIA. My personal guess? They will probably stay out of the accounting business and permit NBC to continue handling it.

Another U.S. government client, that will remain nameless, has just asked us to go out and look at every single realistic provider of accounting services that we can find, both private-sector and government, because their intention is basically to turn over their accounting systems activities to an outsider, to a utility. What we can see happening is that once that begins, once the ball gets started, they will probably turn more and more over, as BIA has done.

You will hear a lot more from NBC, the National Business Center, because they are offering a particularly good service to government organizations. Their customers are getting up on the podium and saying so. For those who are interested, the software that they have on the accounting side is AMS American Management Systems. They are just about to acquire SAP as their ERP, a much broader software that they are going to make available to their customers.

The Patent and Trademark Office, which is in the U.S. Department of Commerce, an organization that has always been known as being particularly well managed, is going to utilities in a little bit different way. They are leasing software, and occasionally buying it. That permits them to do specific things. They have AMS as their financial systems software provider. They have a number of other programs that they are using in one place or another to help them operate. They are moving very quickly to electronic commerce. They expect to be paperless fairly quickly with most of the things that they do.

Here are the advantages, as we would suggest, in moving to accounting utilities. Someone else does the routine work for you, as you focus on higher value-added work. You can turn over the stuff that is tedious, time-consuming, requires a lot of people to be involved to someone else, and you move your operation from more routine stuff to higher level analysis.

Service reliability becomes someone else's responsibility. That does not mean, when one of your program people says, "Hey, look, our accounting service isn't as good as we'd like it to be," you can just say, "Well, it's the fault of those guys that we signed up last year." You've still got to work together to make sure the service is satisfactory. But the point is the responsibility goes to somebody else.

Critical mass—that is, all the stuff that is being brought together by these utilities—should result in lower per-transaction costs as time goes on. Most likely, lower transaction costs will occur immediately when we make the switch. If we do fully loaded cost of our own operation, we are probably going to be pleasantly surprised by how our cost goes down when we move to a utility. We believe that, overall, competition will lead to even lower pricing. It is incredible what happens in competition. The National Business Center is now the only real service center available to Interior organizations. As soon as another one springs up that is competitive with them, most likely prices are going to start changing. Best of all, if you do not like the service, you can go somewhere else. It is not quite the same when you have a captive finance shop that is your only source of supply.

There are some disadvantages. We have to be realistic about this. Somebody else has some very important intellectual property of yours in their files, on their system. Sure, they are going to be responsible for backing it up, but you do not have it; they have it. There is obvious risk with that, and there is obvious concern with that. For those of us in the accounting business, I think we like to have stuff pretty close. We are going to have some reservations about that.

Service, as these organizations get bigger, could become impersonal. Even when you call, for example, USAir, you have to go through a long litany of things on the call center before you finally get to talk to somebody. But even then, if you go through the proper sequence, you are able to get a lot of your information without ever having a conversation—is today's flight into Miami from Washington on time, and if it is late, what is the expected time of arrival?

The cutover at the outset, when you move to a service provider, is going to be resource-intensive. Any conversion of any sort is tough. There are folks in this room who have gone through conversions of one sort or another lately, and you know it is probably not the most fun time you have ever had. So there is going to be some tedious involvement early on.

Standard service may not meet unique needs. There are probably going to be situations where, in fact, you would prefer something a little different, and the service provider is not able to do it or perhaps refuses to do it.

Another disadvantage is that your FTE, your full-time equivalent count, the number of people on your staff, is going to, most likely, change significantly. It is going to come down. The characteristics of that staffing are going to change substantially. I think the typical average grade for U.S. folks now in a finance shop is about GS-7. We are suspecting that when these cutovers continue, it will probably go up to something like a GS-11 or maybe even 12. What we are probably talking about is going from an average of a senior clerk to an average of a journeyman analyst, in terms of the competency and pay of the staff.

There are some issues. I am sure these issues are worldwide, not just U.S. What happens to the CFO talent pipeline? This is not just a question for government, at least in the U.S., but it is a question for everybody in the accounting business. What we are finding is that at a typical U.S. college the enrollment in accounting programs is down somewhere between 40 and 50 percent. There are not enough kids going into accounting classes, which creates obvious problems for firms

like ours that are looking for 22-year-old auditors. If there are not enough graduating accountants around, we have to figure out a way to get auditors somewhere else.

But in terms of looking at an accounting shop, a lot of the growth that we have had and a lot of the talent that we have had is homegrown. They are people who have come in as technicians, gone to school—perhaps we have paid for their night school, or even sent them away to various schools of one sort or another—and have grown up and become senior accountants and analysts. Since we do not have as many technicians on our staffs as we used to have, and we have this overall shortage of accountants, we are beginning to sense that maybe there are not enough people to go around. This is going to be a major focus of AGA's professional development conferences over the next couple of years: Where do we get our people?

There is obviously a systems integration issue here, particularly if we have some of our data coming from one utility and some of it coming from another. If we have accounting material at one ASP and we have our program material at another ASP—for those of you who are involved with GPRA, the federal people how the heck are we going to get reports done when we have to bring together program material with financial data? So that is a system integration issue with which we have to deal.

Obviously, for those of you who are thinking along the U.S. federal lines, there is also the notion that whatever systems we use need to be certified by the Joint Financial Management Improvement Program, which now is seriously in the business of certifying accounting systems as appropriate for government work. My sense is that a lot of the software that they certify is going to be used worldwide, as AMS, SAP, Peoplesoft get certified and then start to sell worldwide.

I would just like to say one thing in closing. I know it is hard to see from the back of the room, but my tie has cable cars on it. Cable cars are the symbol of San Francisco. This July, specifically from July 3rd to July 7th, the Association of Government Accountants, which is closely allied with the Consortium, is having its annual professional development conference. We are going to work on Monday, July 3rd, and we are going to play on July 4th, Independence Day, and then we are going to go back to work on Wednesday, the 5th, through the 7th. It has been my privilege to chair my second AGA PDC. I do not see Virginia Robinson here, but she says that I am probably not being factual when I say it is my last. We think we have one heck of a conference put together. We invite you all to join us in San Francisco this summer.

It has been a pleasure being back before the Consortium. Thank you very much.

Information Warehouses

Michael H. Granof, Professor, University of Texas

Thank you very much. I should add that there is one salient element that you left out of that very gracious introduction, and that is, I am a tenured professor at the University of Texas. As you know, when you have tenure, you no longer have any responsibility. You no longer have any accountability. Therefore you are free to make whatever outrageous statements you want. I fully intend to take advantage of that this morning. It is up to you to hold me accountable. If I say things that are not only controversial, but indeed outrageous, please feel free to interrupt and comment.

It is a great honor and privilege for me to be here this morning. When Mort Dittenhofer wrote to me and asked me to appear on this program, it was obvious that I could not say no. Getting a call from Mort is, I suspect, the equivalent of a teenager getting a call from Michael Jordan and being asked to play on one of his teams. Mort is indeed one of the great assets that we have in the accounting profession. If there were a hall of fame for government accountants, there is no question that he would be the initial inductee.

I initially titled my remarks for today "Data Warehouses." Once I prepared my talk, I changed the title because "Information Warehouses" clearly better captures the nature of my discussion. I thought afterwards that I should have called it "Financial Reporting for the Future." I personally am not technologically oriented. I am really talking about financial reporting rather than just one means of providing those reports. Then I thought, if I had another opportunity to change, I would call it simply "Reporting for the Future." It seems to me that one of the themes of my talk today is that accounting or financial reporting is changing dramatically and the lines between financial reporting and other types of reporting are becoming blurred.

I might also say that this is one of the relatively few times that I have used PowerPoint to make a presentation. I thought it would, of course, be appropriate for this morning. I think we should take note of the fact that I am doing something totally out of character, certainly out of character for me as a CPA. That is, I have added color to these slides. CPAs only think in black and white.

Within the last several months, the Governmental Accounting Standards Board in the United States, the board that is responsible for establishing accounting standards for state and local governments, established a new accounting model. It issued Statement Number 34, which establishes a new perspective on reporting for state and local governments. This new model was 16 years in the making. The GASB, the Governmental Accounting Standards Board, was working on this new model ever since it was established back in 1984. It is clear that if it took the board 16 years to establish this model, it is intended to last well into the 21st century, well into the first 25 years of the new millennium.

The main contribution of this model—the main difference between this and the existing model—is that this model requires state and local governments to prepare government-wide statements on a full accrual basis. The current model—the previous model, if you will—is directed almost exclusively to funds and has the traditional balance sheet in which you have multiple columns, each one representing a type of fund—the general fund, special revenue funds, capital projects funds, et cetera. The government-wide statements of the new model are on a full accrual basis, and therefore they require recognition on the balance sheet of long-lived assets, including infrastructure.

Of course, it was this feature that was extraordinarily controversial. Currently, under our modified accrual statements, no fixed assets are reported within the funds themselves. And even on schedules, which indicate the long-term assets, we exclude infrastructure assets. The new model also requires that we depreciate our fixed assets, although, for sure, there is an out with respect to infrastructure assets. If infrastructure assets are maintained and preserved at a certain level of condition, they do not have to be depreciated.

This model also changes the way in which funds are presented. Under the current model, funds are presented by type. We have one column for capital-projects funds, another column for debt-service funds, another column for enterprise funds, et cetera. The new model requires that we focus on major funds, those that are important. If, for example, a government has only one capital-projects fund of small amounts, that does not have to be reported on the main combined balance sheet.

Perhaps most significantly, and often ignored, is that this model also requires something called a management discussion and analysis. This would be a written description, an explanation of what has transpired in the last year. It will also be future-oriented. The key point that I want to stress is that this management and discussion analysis recognizes that the basic financial statements alone do not capture the true economic condition or performance of government.

The key theme of my discussion today is that this new GASB model is a significant improvement over the current model. It is one that I certainly support, and I give full credit to the GASB for coming up with this model.

But, still, this model is rooted in the 20th century. It is time now to move on to the 21st century. I talk about the GASB model not necessarily because it is the best model in the world, but mainly because it happens to be the newest, and is therefore, I think, indicative of current practice throughout the world.

The GASB model, while very clever, in fact could have been developed early in the 20th century. I have here something called *The Metz Fund Handbook of City Business*, a handbook of municipal accounting. Those of you in the front will notice that this book is a little bit tattered. It was published in 1913. Herman Metz was the controller of New York City, one considered extremely innovative. When he retired, he left money for a foundation to carry on research in government finance and accounting.

This book sets forth many of the principles which were incorporated into the most recent GASB model. For example, it talks about the importance of the full accrual basis of accounting—something that the GASB thought was quite innovative, quite revolutionary. It says, "If a city is to record the facts which will show how the financial program entered upon at the beginning of the period has worked, it must, under the head of "Expenses," record all the liabilities incurred during the year, regardless of whether they have been paid in cash or whether it still owes for them." So back in 1913, Metz recognized the need for full accrual accounting.

In this book, Metz talks about the need for incorporating into the financial statements fixed assets and long-term liabilities—again, supposedly an innovative feature of the year 2000 GASB model. "It is evident, therefore, that there is a distinct value in incorporating the facts regarding permanent properties owned and bonds outstanding in the central financial statement of the municipality, namely the balance sheet, especially as this form of presentation ensures greater accuracy and uniformity." Again, that was written in 1913.

A critical innovation of the GASB was that we prepare consolidated financial statements. Here in this book, Mr. Metz also sets forth the need for a summary sheet that incorporates all of the funds. Perhaps most interestingly of all, he cites the need for performance information, relating the accomplishments of an organization with the cost of the organization. He gives an example of how important it is to determine the cost per patient per day in a hospital, and compare this with other hospitals and with trends over time. Most notable about this is that the cost of professional care of patients, in this case 22,000 divided by 30,000, gives 74 cents as the cost per patient-day. You know that this is pretty ancient when we talk about 74 cents per day for a stay in a hospital.

The point is, I think, that Metz had it right back in 1913. You wonder, therefore, how much progress we have made in the last century.

The fact of the matter is that financial accounting today, as we know it—and I am not talking just about governmental accounting, although certainly I include governmental accounting in this category—was designed for the industrial era. It has worked very well in the 20th century. It does fine for accounting for the likes of a steel company or a General Motors or a Ford Motor Company. Unfortunately, it does not perform very well when we are talking about new-age technological companies.

Let's face it. What does the accounting model of today do very well? It keeps track of inventory. It keeps track of fixed assets. It keeps track of accounts receivable. Let's just take a modern company, one that is located in my hometown of Austin, Texas, Dell Computer Company. Dell Computer has no inventory to speak of. If you go to the Dell factories, you will see trucks lined up in the parking lot. When a computer has been ordered, when it is placed into production and the parts are needed, that is when Dell Computer takes possession of the inventory. It puts that inventory into production immediately, and then it produces a computer within two or three days, tests it, and it is out the door. So there is virtually no inventory—a couple of days, at best.

It keeps track of fixed assets. Dell really does not have very much in the way of fixed assets. It has, basically, a barn where they assemble computers. This could be located in the United States or this can be a leased plant somewhere overseas.

Financial reporting today keeps track of accounts receivable. Dell Computer does not have very much in the way of accounts receivable. When you order your computer, you do it on the Web. You give your credit card number and you pay before the computer is even placed into production.

The financial statements of today fail to capture intangibles. They say nothing about customer loyalty, brand names, patents—except, of course, those that were developed in-house, and then the only thing we capitalize is the initial cost of the patents. Worse yet, it is completely silent with respect to intellectual property, intellectual assets.

A company like Microsoft is worth \$800 billion not because of any conventional assets. It is worth that because of its intellectual assets. On the books, Microsoft is worth a fraction of its capitalized value. Obviously, everybody—the marketplace—sees value in Microsoft, except the CPAs, except the accountants. We are still valuing the company at a fraction of its apparent worth.

There is no doubt that business financial statements are no longer a prime source of information for anybody. Managers do not use the published financial statements. Investors do not use the published financial statements. They contain little information that is useful. The market bases its information on facts other than what comes out in the financial statements. Needless to say, the financial statements are published months after the end of the year, and modern technology companies operate in virtually real time.

It seems to me that governments are not any better. Indeed, governments are moving towards a business model. In the future, all of the problems inherent in business financial statements will be problems in governments. I think it is fair to say that very few people look at government financial statements. Some of you are no doubt involved in preparing government financial statements. Let me ask you this: When was the last time you were at a cocktail party and somebody came up to you and said, "Wow, I hear that you're the person who prepares financial statements for your government"? When was the last time anybody asked you to autograph the financial statements? The fact of the matter is that government financial statements are not widely used.

Several years ago, a student of mine did a study on who uses government statements. As part of this, he surveyed governments to determine which parties received their financial statements. What he found was that, of local governments—these are large governments, over 100,000 population—60 percent did not even send their financial statements to newspapers. Fifty-eight percent did not send the financial statements to insurance companies. Fifty-seven percent did not send their financial statements to municipal bond dealers, and so on down the line. Nine percent did not even send the financial statements to members of the city council. Like it or not, we have to confess that today's financial statements are not widely used, and the time has come, therefore, to ask, why? Why doesn't anybody care? Maybe it is because we are not providing information that people want.

Let us look at some of these deficiencies. First, the financial statements of today basically mimic the business model. They fail to take into account many of the characteristics of

government. What are some of these characteristics? First of all, in government, unlike private business, virtually all information is in the public domain. So there is no reason to hide anything. Obviously, businesses are going to provide a limited amount of information. In government there is no reason for that. It is all available.

In government, like it or not, reporting is necessarily complex. We use fund accounting for internal purposes, for good and sound reasons. It is designed to make sure that we do not spend money on purposes for which the funds are inappropriate. It is for that reason, of course, that right now the financial statements of most governments are almost as thick as the telephone directories of their jurisdictions.

In governments, the bottom line does not really matter. The excess of revenues over expenses, the equivalent to net income, is not important. From day one in my government accounting course at the University of Texas, I emphasize that governments do not exist to make profit; they are called not-for-profit organizations. Their objective is to provide service. In business we focus on the bottom line, profitability, because it is the objective of the business to earn a profit. In government we have other objectives; we provide service. Therefore, information on performance, on results and accomplishments, is what is critical.

In government constituents want micro information as well as macro information. Most citizens do not really care about how much infrastructure assets cost when they were first created, perhaps 10 or 20 or 50 years ago. They do not even care about the depreciated value of the infrastructure. They perhaps do not even care about how much money we are spending on infrastructure throughout the jurisdiction. What they care about is the condition of the street on which they live. They are concerned about how many potholes are on their street. They are concerned about how much money the city is spending on street repair in their neighborhood as opposed to the neighborhood across town.

Financial statements today, it seems to me, fail to recognize the centrality of the budget in government. Let's face it. We have, ironically, a government accounting standards board that focuses on the year-end financial statements. I teach a course that is primarily dedicated to financial reporting in the year-end financial statements. We have CPA exams that examine students on the year-end financial statements. Let me ask you this: How many of you have ever heard the TV announcer say, "Coming up on the news at 11 o'clock, the city issues its year-end financial statements"? The reality is that when cities issue their year-end financial statements, few people pay attention.

Contrast that, however, with the budget. When the city holds budget hearings, the auditoriums may be packed. That is important to people. They care about that. Governments are governed by the budget. The budget is the key document. Yet in accounting we pay precious little attention to the budget, and our year-end financial statements do very little to integrate the budget with the financial report.

To be sure, we have a schedule that says actual versus budgeted. Yes, we do that. In fact, the financial statements are on a modified accrual basis rather than a full accrual basis—at least the traditional financial statements are on a modified rather than a full accrual basis—in order to

recognize that the budget is prepared on a cash or near-cash basis. But, still, the modified accrual basis is not the same as the budget basis, and we provide little information on the budget itself.

Even those who are the main users of financial statements recognize that the financial statements are inadequate. Standard & Poors, for example, one of the leading bond-rating agencies, says the prime factors that they look at in assessing the financial condition of a city are the economy and the demographics of the city. They look at who the main employers are. They look at economic trends. They look at population trends. They look at other socioeconomic data. They look at financial performance and flexibility. These are the types of issues that are included in the financial statements themselves. They look, of course, at the debt burden—no question about that. That is in the financial statements. But then they look at other things—administrative factors, goals, ability to manage risks, adhering to annual budgets, et cetera—only a small portion of which is actually included in the financial statements.

There are other deficiencies in the current model, and indeed the new GASB model. It provides only limited information on the condition of assets, especially infrastructure. The new model will indicate the cost and the depreciated value of the infrastructure. But survey after survey indicates that citizens really do not care about that information. What they care about is the condition of the assets. The current model provides little information about that.

The current model is constrained by pages. It is a paper report. The report is large, and it is getting larger. We are concerned with information overload. Therefore, we face tradeoffs as to what types of information can be provided. For example, GASB, when it developed its model, was considering whether we should have a statement of cash flow for each fund. It decided no; we could do that, but that would just add more pages to the report and would not provide sufficient information to justify the added pages.

So there is no question that the reports today are constrained by paper products. There are only so many forests that we can chop down to prepare government financial statements.

Finally, government financial statements are not designed for the world of e-commerce. I alluded to that just a moment ago. But governments of today are not going to look anything like the governments of the future. Governments, just like businesses, will be conducting its affairs on the Web. I guarantee you that we will all be paying our taxes on the Web. Governments will be collecting fines on the Web. They will be reading meters electronically, et cetera.

I believe we need a new view of financial reporting. We need a view of financial reporting that takes advantage of 21st century technology. I am not saying we should do away with our traditional values, our traditional financial statements. But we have to go beyond the traditional financial statements. We need something that expands the traditional view of reporting to include a wide range of information that has traditionally been considered non-financial.

What I am suggesting, of course, is that if you are going to assess the condition of a government, you have to go beyond the financial statements. You have to take into account some of the key characteristics of government. We have to recognize, for example, that virtually all information is in the public domain. We have to recognize that reporting is complex. We have to

recognize the importance of performance information. We have to recognize that our constituents want micro as well as macro information.

Let me just emphasize this. I am not talking simply about putting financial statements on the Web. We have to go well beyond that. The Financial Accounting Standards Board has prepared a set of financial statements for a company that it calls Faux.com. You can access this through the FASB Web site today. The financial statements that are on the Web are basically a linked annual report. What you could do, for example, is click on something like the balance sheet, and then you could click on any particular account. Let's assume that you clicked on fixed assets. You would then go to a schedule of fixed assets. If you clicked on that, you might go to a note regarding fixed assets. If you clicked on that, you might go to a comment in the management discussion and analysis that relates to fixed assets.

What I am suggesting is a model that incorporates this. Yes, it is similar, but it goes still far beyond what is a linked set of financial statements. What I am thinking about is something similar to what is described in a separate FASB report. This report by a research group projects what financial reporting may look like in the future. It proposes how businesses can use the Web to better communicate with constituents and cites the various advantages of using the Web. For instance, the Web reduces cost. It reduces the need to put out all the paper products. It enables you to communicate with new, previously unidentified consumers. Within a few years, virtually every household will have access to the Web. Obviously, the Web significantly increases the amount and type of information that is available to the general public.

So what I am proposing by way of a data warehouse certainly incorporates these features, and includes other advantages of the Web. For example, Web-based reporting enables us to have spectacular graphics. To many people, this is important. It provides information in a more meaningful way. Then, by streaming video and audio, it enables us to illustrate the report. It enables us, for example, to have a speech, a press conference, right on the Web. It enables us to have illustrations of traffic congestion or improvements in the city. Perhaps most importantly, it enables real-time reporting. Today the average government reports for from four to six months after the end of the year. A lot of good that does. Clearly, we are moving towards systems where we can report on an online basis.

What do I mean by a data or an information warehouse? It is simply an electronic repository for combining and storing vast amounts of information from different sources. These sources may include mainframe databases, client-server relational bases, spreadsheets, and text reports.

But it is the features of the warehouse that matter. These types of data warehouses do anything that is imaginable. We have the technology today to enable users to summarize and analyze data in any number of different ways. It enables users to drill down or back up to a desired level of detail. It enables us to mine data, using all sorts of statistical techniques to establish relations, such as trends and techniques.

For example, government analysts often use ratios. Anybody who has ever tried to analyze a government statement knows immediately that a question arises: How do you combine certain funds? Should you take into account the general fund only, or should you look at the general fund

and special revenue funds? Or should you look at the general fund, special revenue funds, and enterprise funds? From an analyst's standpoint, it is very hard to combine two or more types of funds. But today's packages allow us to readily view any combination of funds that we want.

Before I get to a couple of examples, let me just make a few other points. What I see as a data warehouse for a municipality would not necessarily report more information than is currently available within governments. What I am really talking about is a warehouse that draws information from different organizational units, from different departments, from different reports. I am not suggesting that we incur a huge cost to gather new information. I am simply saying, let's take the information that we already have and combine it, put it in a warehouse, if you will, so that users can readily access it. This will include, of course, the basic financial statements. It will include these financial statements, perhaps, on multiple bases.

One of the conflicts that GASB faced was, how should we report on a full accrual basis, on a cash basis, on a modified accrual basis? Why not have it all? If we are no longer concerned with paper, if you are no longer concerned with information overload, if people can pick and choose what they want, and governments already prepare this information or could readily prepare different bases at relatively little cost, why not make this available to users?

For example, with respect to infrastructure, we would report the capital assets on the government-wide balance sheet. This would then be linked to a schedule of fixed assets, and we would have the total fixed assets. But what if you want information on infrastructure within geographical regions? Obviously, the city has this information. The department of highways, for example, would know how many streetlights are in any particular region. Why not make this available? Why not allow somebody to drill down and get information on the condition of the streets in his or her neighborhood? This information is available. It can easily be arranged so that one can get the information that one wants. One could get the condition of particular assets—particular bridges, particular tunnels, et cetera.

Right now our financial statements have a single line for each major function. They say something like expenditure for health, expenditure for recreation, expenditure for police. Arguably, however, very few people really care about the total expenditures for police. What we are interested in are the expenditures for specific programs. We want to compare the expenditures with the results of those programs. Why not a set of online financial statements in which you click on "Police" and you get a list of the programs? You then click on a program, and you get the specific costs of that program. You click further, and you get the specific goals of that program, and you are able to relate the costs of that program with the benefits of the program. That is the type of information, I submit, that people want.

People want information on demographics. You cannot analyze the financial condition of a city without knowing something about population trends. Do you have a young population? Do you have an old population? That matters. Right now we have population information stuck in the back of the report in a statistical section. Why not have it linked to the accounting data, and why not have considerably more information than we have right now?

The same goes for economic data. Right now we normally list the 10 largest taxpayers. Why not give more information? Why not make available to the citizenry, to the public, the very type of information that a Standard & Poors or a Moodys or any other financial analyst must take into account?

Similarly, something as mundane as sales taxes, by itself, does not mean very much. You want trends. You want 10-year trends. You want to know on what types of products are we collecting the sales tax. You want to make predictions about what is going to happen in the future.

Obviously, if we have a database such as this, it is going to redefine financial reporting as we know it. I am suggesting that we are going to have a new role for financial officers. The financial officer is not going to do the same thing he did before. I think this is inevitable. Technology is breaking down organizational walls and rearranging them. Maybe we should change the name of the financial officer. Maybe the financial officer should be called something like an information officer. In the future, like it or not, financial information is going to be redefined. It is not going to be confined strictly to debits and credits.

Let me submit that organizations, whether we do anything about it or not, are going to be totally different in the coming years. Obviously, there are going to be new roles for auditors as well. If we put information on the Web, questions arise. What should be the role of the auditor? Should all the information now be audited? The truth is, I have no answer to that. I simply do not know whether there will be a demand for assurance on this type of information. It could well be that in the future the auditors will be concerned with assessing the entire information system. It could be that they will have to provide some assurance on performance data, on the economic data, on the fairness of how the information is presented. Let's face it. Information can be presented in all sorts of different ways. You can show a graph so that a trend looks flat or, by changing the scale, you can present the data so that it looks as if there is a major increase in a trend.

There will definitely be a new role for standards-setting bodies. Most certainly there is still going to be a need for more or less conventional financial statements. That is to say, people still want to make comparisons of one city to another. Therefore, there is some need for standardization. I do not see standards-setting organizations, such as the GASB, the FASB, or comparable organizations in any other country going out of business. I believe that there will be decreased pressure on them to resolve specific issues. You do not have to resolve issues under the information system that I am proposing. Users can have it both ways. If you want modified accrual statements, fine. If you want full accrual statements, you can have those, too.

I believe that these organizations would do a greater service by redirecting some of their resources. Obviously what I am describing is costly. No question about it. Smaller governments cannot now afford the needed technology. Maybe GASB might be better off redirecting some of its resources into developing generic software that any institution can use. Or maybe this will be outside the sphere of standards-setting organizations. We know, for example, that when it comes to performance measures, many finance organizations have resisted any involvement with GASB. They say performance measures have nothing to do with GASB's role. Fine. No problem. I am simply suggesting that the role of these standards-setting organizations will be redefined in the future.

This will not be an easy transition. There are going to be lots of interesting issues that we will have to face. For example, how much of this information should, in fact, be in the public domain? Earlier I said all information is in the public domain. That is true and it is not true. For those of you who work in government today, your salary is likely to be public information, but more than likely, your neighbor does not know your salary. That is because it is too much effort to find out what it is. Years ago, I could not have told you the value of my neighbor's property. Today I can tell you the assessed value of the property within five minutes. That is all up on the Web today.

So the question is, how much of this information really should be put on the Web? Do we want people to know everybody's salary? Do we want people to know the inner workings of government? Yes, you can obtain it today. In the United States, you can make a request under the Freedom of Information Act and get the information. But how much of this do we want?

To what extent do we protect the privacy of individuals? Then how do we prevent data warehouses from becoming public relations vehicles for existing officials? Go to existing Web sites of departments, of government departments, and, by and large, they are puff pieces for government officials. Go to the Web site of any department, and what is the first thing that comes up? It is usually the picture of the head of the agency.

We have questions of how we assure reliability and fairness of the information and how it is presented. We have questions about the extent to which providing all this information will increase litigation exposure of public officials, auditors, underwriters—anybody who is associated with this.

We have issues of how "real" real time should be. How often should we update the reports? What types of information should be provided on real time? Eventually, of course, the critical issue: Who is going to pay for all of this? It is not going to be cheap.

Let me conclude by saying this. The useful life of current financial models, whether that of GASB or any other organization, the expected useful life, is short. We are in the 21st century. Changes are taking place. The key question that we face as people who are interested in government is who is going to be driving this force for change? Should it be governments themselves or should it be outside parties? Change is taking place. We are going to have to adjust to it.

With that, let me conclude. As a typical academic, I have spoken longer than I intended, but let me entertain any questions that you might have, any comments, any responses to some of the outrageous comments that I have no doubt made.

Accounting for Social Insurance and Pensions

Thomas G. Staples, Deputy CFO, U.S. Social Security Administration

Good morning. It is my pleasure to be here today. I am honored to be a part of your conference. As a member of the U.S. Social Security Administration, as a financial manager, it is a privilege to be here and share with you, other financial managers from around the world, some of the ideas and ideals that we use in practicing accounting and accountability for social insurance.

Before I get started, I would like to introduce someone who is with me here today. If you have questions after I end this presentation, she will be around to talk with you about any specific questions you may have about the U.S. Social Security Program. In the back of the room is Susan Waring, who is an administrative assistant in our South Florida offices. She can answer questions in terms of the details of the Social Security Program. I am pleased that Susan could be with us here today.

The term "accounting" to me really means accountability. I think our last speaker spoke a bit about that as well. Financial statements alone are not very informative. Financial statements in conjunction with performance data, financial statements in conjunction with budget data, financial statements as a public statement about our enterprise—those financial statements turn to accountability. So that, I think, is really what we are talking about here today for a large public program like Social Security.

With that concept in mind, what I would like to do is share with you several levels of accountability that we have within the U.S.

As I think you know, we have, first, a broadly based population that is enfranchised—voters. Our representatives in the Congress and in the executive branch rely on those voters for their positions of trust. This so-called set of checks and balances is the first and highest level, and to me the most fundamental level, of accountability for the U.S. system. As a quick reminder, not unlike other countries of the world, our executive is responsible for administering the program. The executive prepares budgets, evaluates effectiveness, and talks generally about what we do in administering the program. The executive makes proposals to the Congress, in our case. But the executive cannot act alone in our system. The executive works together with the Congress.

The Congress, composed of elected representatives, passes the legislation in the case of Social Security, in great detail. The Congress passes the legislation that we use to administer this public program. That legislation must be passed by a majority in both our houses of Congress and must be signed by our president. So it is the Congress and the president in tandem that form the highest level of accountability for the U.S. Social Security Program.

In addition, of course, we have the federal court system. Our federal courts weigh in on Social Security matters continuously. The very existence of the Social Security Act—its origination—was passed on by the U.S. Supreme Court before it could become a reality.

So the executive, the Congress, and the courts are the official parts of accountability.

Something that is also important in this country is our press. As you know, we have a free and open press. They widely review, scrutinize, and inform the public regarding what is going on with our public programs. So while they are not listed anywhere in our constitution, as a practical matter they form an important part of accountability for the U.S. Social Security Program.

The federal government, as compared with the state governments, has responsibility for the general welfare of the U.S. citizens. The federal government has access to financial resources, in that it has the power to tax, the power to borrow, the power to print money. Those are fundamentals in most countries, but they are also important for us to keep in mind as we look at accountability.

Social Security in the U.S. is very complex, as it is in many places. It is not easy to characterize it. Some forms of our Social Security—social insurance, in a broader definition—are contributory. The worker pays. There may be a payment from the employer, maybe industry-specific. Some forms of what we call social insurance are non-contributory—the assistance programs that are typically income-tested. Other forms of social insurance in this country are both. Our federal employee retirement is both contributory—I pay, my employer pays—and there is a general government revenue contribution to the system. So when it comes time for standards setting, which I will get to in a little more detail later, it is difficult to take all these complex arrangements, roll them into one, and write a single set of standards for them. It is worth keeping that in mind as we go through this.

Today I am going to limit my talk to what we call Social Security. That is basically for old age and survivors, retired folks, and for the disability population. This is not only the disabled worker, but also dependents. To fill out the picture, under the general term of "social insurance" here in the U.S., we also include health insurance—most commonly referred to as Medicare—and we have a couple of very industry-specific programs, railroad retirement for the railroad industry and a black-lung program for underground miners. Those are not typically what we call Social Security, although in actuality the black-lung program is partly administered by the Social Security Agency.

Also under social insurance is unemployment insurance. In this country that is state-administered. We do not have short-term sickness insurance as a government policy. That is typically handled through the employer. We do have worker injury, or workers compensation, insurance. That again is managed at the state level and is purchased through corporate insurance policies.

A few words about Social Security. It was enacted in 1935. This is our 65th anniversary. We began to issue Social Security numbers in 1936, began to collect taxes in 1937, paid our first benefits in 1940. So among U.S. institutions, we have a considerable history.

We offer a comprehensive package of disability, retirement, and death protection. We pay monthly cash benefits to more than 44 million people, both here and around the world. We make payments wherever someone who is qualified to receive Social Security benefits may live. Today we make electronic payments in 25 countries. We have offices—we call them federal benefit offices—in 13 capitals around the world.

Benefits are based on earnings. For the year we are in now, our outlays are going to be roughly \$400 billion. Those benefits are financed from taxes paid by current workers and employers.

Our program is broad in coverage. It covers essentially all jobs and everyone in the labor force. There are some very minor exceptions. Participation is compulsory. Our contribution rates currently are 7.65 percent paid by both the employer and the employee. If you are self-employed, it is twice that, 15.3. Those rates include the health insurance, or Medicare, which is 1.45 of that 7.65 percent. So the retirement and disability, if you net that out, is 6.2 percent of your wages. Those taxes are paid on a wage base of \$72,600 this year. That is adjusted annually based on the growth in wages. The Medicare tax does not have a limit. It is paid on all earnings.

A few more facts, and then I will get to some more forms of accountability. Just in terms of scope, we have issued about 400 million Social Security numbers since we started in 1936. Worldwide, there are about 290 million active numbers today. We post earnings to 250 million of those numbers each year. The current assets in the trust fund are about \$875 billion, or roughly two years worth of benefit payments.

Our program is intergenerational. It is paid for by the current workers to the currently retired or the currently disabled. Payroll taxes of those workers are primarily used to pay benefits during the current year. I use the word "primarily" because right now we are running an excess, and those excess payroll taxes are deposited in the general fund of the Treasury, and an IOU, if you will, a credit, is put into an account for the trust funds.

As required by law, those trust funds are invested in U.S. government securities. That is an important distinction. They are not invested in marketable assets that can be easily sold. They are invested in the government. As I will get to in considerable detail in a few minutes, there are many oversight organizations that help us monitor these funds and their availability.

I said at the beginning that I thought our highest level of accountability is the fact that we have a set of checks and balances built into our system. The next level of accountability, to me, is what taxpayers need to know. Since we have a broadly based voter population, what taxpayers need to know is what our clients need to know. They are the people who tell their congressmen what needs to happen in our program. It is a very iterative, cyclical process. We have basic citizen accountability for the Social Security Program.

What do those taxpayers ask of us? They fundamentally ask, is the Social Security Program going to be around? That is the accountability question in folks' minds. Secondarily, they ask, what is the effect of this program on the entire government budget? It is almost a question, I think,

of affordability. So one is, is it going to be there; and two, do we think we are going to have the resources to make those payments in relation to the government budget? Lastly, will those future benefits be at a predicted level? Will they be at the current level adjusted for inflation, or what? Those are the basic questions that taxpayers ask of us in accountability.

Beyond taxpayers—and I am sure this is true for each of you—we have many other folks with oversight responsibility who watch over us. I mentioned the Congress earlier. In addition, the president has his Office of Management and Budget, which looks very, very carefully at how we spend our money. The Congress has an arm called the General Accounting Office, with which you are all familiar, that asks many important questions about the funding of the program and its future. Those folks want to know budgetary integrity: How is this program linked in relation to the rest of the budget? What is the plan for the future? How reliable are those projections?

They also look in an oversight way at operating performance. We are proud to say that we have a very low level of overhead for our Social Security Program. Less than a penny on the dollar is spent each year in administering the program. Those folks also look to us for fundamental stewardship: Is there integrity, basic accountability, for the handling of the funds? Lastly, the oversight organizations are looking more and more at our systems of control: Do we, in fact, have the information in place to say with certainty that we know what is happening with our program? Those are critical tests that oversight organizations are applying to us today.

Let me talk briefly now about some of those oversight organizations. First, we have a board of trustees. Our commissioner, the executive for our agency, is a member of that board; so is the Secretary of the Treasury, the government-wide accountant, if you will; the Secretary of Labor, on behalf of not only unemployment insurance, which they have stewardship over, but also representing the labor force of the country; and the Secretary of Health and Human Services. That person is there primarily because, as I mentioned, the Medicare program is a part of social insurance, and the Secretary of Health and Human Services has responsibility for the Medicare program. On our board of trustees, we also have two public members, one from each of the major political parties. They are nominated by the president after consultation with the Congress.

The trustees prepare an annual report to Congress on our financial and actuarial status. This is the basic bellwether of how the Social Security system is doing. This report is produced annually, by April 1, by law, and is eagerly awaited by all those oversight organizations, as well as the press which reports widely on it, and members of the public generally.

We also send an annual statement to all people who pay into the system each year that shows their contributions for every year up to that point, as well as an estimate of their future benefits. That is also an important form of accountability. It gives our public membership an opportunity to look at our records to determine if those records are accurate, and if they are not, to come and see us and make the changes that are necessary.

We also have an advisory board. So we have trustees, and we have an advisory board. The advisory board is a little closer to the daily operation of the program. They are within the agency. They are within the Social Security confines, as opposed to the other group that I mentioned, which is largely outside the agency. The Social Security Advisory Board has seven members, three

appointed by the president, two by the House of Representatives, two by the Senate. They serve a fixed term, six years. They are selected on the basis of integrity, impartiality, and good judgment—sort of general concepts, but those are the only requirements for those jobs. They advise our commissioner on policies of any kind related to the Social Security Program.

Next in terms of this second level of accountability we have an inspector general in the Social Security Administration, who is independent of the rest of the agency and reports to the Congress and to the public, as well as to the commissioner, on findings for audit as well as findings from investigations. So anything that is going on that could be fraud, waste, and abuse is generally the province of the inspector general.

We also have the General Accounting Office that gives us close oversight. The comptroller general is appointed by the president, with consent of the Senate, and has a 15-year fixed term.

Lastly, we have a recently instituted social insurance standard that is put out by the Financial Accounting Standards Advisory Board, FASAB. Just to give you a sense of FASAB, they have a principal member, a representative from the Treasury Department, a representative from the president's Office of Management and Budget, and the General Accounting Office. The membership must also include one Congressional Budget Office representative, one representative from defense and international agencies, one non-defense, civilian representative, and three private-sector representatives.

Their purpose, very fundamentally, is to consider and recommend accounting standards and principles for the federal government across the board. Social insurance is just one of their many responsibilities. Once their standards are adopted by the principal members, they become statements of the Federal Financial Accounting Standards. These standards are considered, in effect, federal generally accepted accounting principles, or federal GAAP. They are used by our auditors in opining on our financial statements.

The standards are new. They were just issued in August of 1999. This is the first year in which the FASAB standards have been effective for the fiscal year.

The standards are designed to assist any user who looks at the information to evaluate operations, to assess the government's financial condition, and to assess the future of budgetary resources to determine whether the government's financial position improved or deteriorated. The focus of the standards is largely one of trends over a number of years.

I will not bore you with the details, but within our Federal Accounting Standards Advisory Board concept we have various levels of responsibility for information. The information that applies to Social Security and the social insurance standard is generally required stewardship information. The idea there is that we provide a clear and concise description of the program, how it is financed, how benefits are calculated, and, again, its financial actuarial status for the long-term. It must include a discussion of the long-term sustainability and financial condition of the program. Projections and estimates are based on our best estimates of demographic and economic assumptions.

In terms of specifics, this standard requires that we present values of future benefits for current and future program participants. That is a big statement. In other words, we have to approximate, much like the actuaries do in the general trustees' report, what the likely future program participants are going to look like. We do that over a 75-year period. Seventy-five years, in our business at least, is a long time frame. Sometimes if we look back just 10 years, we are astonished at the changes we see. When you look forward with a crystal ball even 25 years, you are out further than most people think they can reasonably see. Yet the standards under which we operate as a social insurance program require us to do estimates 75 years into the future.

The standards require that we show contributions and tax income from or on behalf of all these current and future program participants. The standards require that we show the cash flow in nominal dollars as a percent of taxable payroll. The concept here is to show a measure of burden, a measure of burden on the taxpayer. We must also show cash flow in nominal dollars and as a percentage of the gross domestic product. In other words, we must relate, through these standards, our program size and its future growth to the nation's economy. That is what the gross domestic product is intended to represent here.

We must show the ratio of contributors to beneficiaries, the dependency ratio. Further, based on the fact that we are looking 75 years ahead, we must show some sensitivity analysis of what might happen if, for example, the fertility rates moved significantly up or down, if immigration or migration into the country changes significantly, if productivity changes significantly. Those kinds of sensitivity analyses must be shown in this report so the reader can see what might happen if something occurs along any of those axes.

Just to give you a picture—these are year-old data—of where we were in 1999 on this kind of standard (this is controlled for dollars as of that date, present value): the estimated future tax income to our system, 19.6—and that is in trillions. The estimated future expenditures, 23.3, with a difference of 3.7 negative. We also had on hand trust funds at that time equal to about 800 billion, or .8 trillion, so a net deficit over that period of time of 2.9 trillion.

Those are big numbers, but I think you can see that the net effect over that long-term period is 10 to 15 percent of total outlays in present value. It is not the same for all years, obviously. We are in surplus now. We will be in deficit in a few years. That is an average over that entire period.

Certain key financial events are going to occur in the Social Security Program. In 2012, the actual revenue coming into the system will be less than the outgo of the system. In 2021, if you count the interest income, the revenue into the system plus interest is less than the outgo. There is another date out there when the trust funds would, in effect, be exhausted from this negative curve. That date is roughly 2032, 2034, in that range. The trustees each year come out with a new date. We will be getting a new date on April 1 of this year.

I talked a minute ago about the fact that the FASAB standards require us to show a dependency ratio. The ratio they are primarily interested in is the population aged 65 and over in relation to the population aged 20 to 64. Our analysis indicates that currently there are five people aged 20 to 64 for every person aged 65 and above. In 2021, the number of aged compared to the

number 20 to 64 goes from five to one to about two-and-a-half to one—a major change, because we have an increasingly aged population.

Another analysis takes us outside of the traditional confines of Social Security and looks at the broader responsibilities of the taxpayer, with the notion that the taxpayers, or the working labor force, those folks 20 to 64, have responsibilities not just for the aged, but also for the dependent young. What does the trend look like if we say the burden on the taxpayer is those under the age of 20 plus those 65 and over? How much does that change? It goes from .7 to .83. It is an upward trend, but not as dramatic as the other one. What that means is, based on fertility-rate assumptions and other things, that the younger population is going to be declining in relation to the older population. So we are growing old faster, and we do not have as many younger folks. That has a couple of observations to it. One, they do not make up as much of the future labor force, but at the same time, we do not have as much responsibility for their care. They are a smaller portion of the total.

These are two fairly complex notions of the dependency ratio. Another one that we use is strictly taxpayers in relation to beneficiaries. That number is more like three or three-and-a-half to one, and will decline to somewhere around two or two-and-a-half to one.

Summing up what these standards basically ask, they are basically asking us to present information that can be widely used as to the accountability of the program. There is no one part of this information that is more important than another. It must be looked at in its entirety. That is the concept. We are permitted by these standards to show such additional information as we think is important in assessing the overall health of the program.

Lastly, I will leave you with a thought, because it is one that crosses our minds a lot. I mentioned that we are looking out 75 years. Just think for a minute what that means. Given that the most productive age for most folks in the labor force is around 45—it can be 50, depending on the job—the 45-year-old who will be most productively paying into our system in 2075 will be born in 2030. So we are making projections about events that are a long way into the future. The folks who are going to be the primary taxpayers in 75 years will not be born for 30 more years.

I bring this up because I spend a lot of time talking about hard facts and data, as best we can determine them. But, in truth, the future is a crystal ball. I think it is important that we keep that balance in mind. These trends that we are talking about on demographics can change almost as dramatically in the next 25 years as they have in the last 25. And there has been a significant shift.

With that, I close. This is my presentation for how accounting and accountability are dealt with in the U.S. Social Security Program.

Integrated Financial Management Systems—(What We Have Learned So Far)

Carmen Zuleta, Director Project Ilaco II, World Bank, Bolivia

Silvio Solarte, Consultant, Financial Decentralization Project

Elizabeth Barrientos, Consultant, Financial Decentralization Project

Carmen Zuleta, Director Project Ilaco II, World Bank, Bolivia

I am happy to be here with my team, Elizabeth Barrientos and Silvio Solarte. I am fortunate to be working with Silvio. We have been a team for the last ten years. He worked on the first stage, the first system that was developed by Bolivia. We went together to Paraguay after which he was the Director of the Uruguayan project to develop their integrated financial management system.

When we came back to Bolivia together as a team to see what we had to do, we came back to reality. My country already had an integrated financial management system that was developed in the year 1989. This system has managed the accounting system, the general ledger and the budget for all of these years. A reform took place within the Ministry of the Treasury where they had to be able to obtain information from the different organizations, to be able to process the data and generate information. In the system developed in 1989, we saw that the habits from the 1920s in accounting and budget accounting were kept the same way. They were processing things in the same old way.

Seeing this reality, and after having learned a lot in these last ten years visiting several countries, and having been fortunate enough to participate in an updating of a computer compiling all the information and experiences from the last few years, we developed a system called SIGMA to help us face change. This system does not only provide information. Information is easy to obtain. What we needed was to manage the operation. And remember what was said yesterday in the first session. There is no more paper. We had to think in terms of the process of the transactions and almost completely eliminate paperwork. Therefore, we talked about a management system and administrative modernization as a base for the new development.

This system has the same objectives as our administrative law that was passed in the year 1990. These objectives tell us to carry out the management of public resources in a framework of absolute transparency and to generate useful, opportune and reliable information to make decisions. Well, for ten years we had generated this information, but only as a great amount of data that goes into a pretty system that produces graphs. What is it that we needed to change in this focus? A fundamental change for us was internal restructuring. For each of the organizations in our government, we had to think about providing computers and creating procedures from the moment that someone sends in a request to buy a pencil until they receive and pay for that pencil. This is the only way to obtain transparency in the administration of our public resources. We should be able to measure these actions in terms of economy, efficiency and efficacy. Additionally, to meet with the requirements of the law, we had to incorporate internal controls into the financial system.

Based on these objectives, these are the fundamental characteristics of this system. The first characteristic is management centralization and operative decentralization—the law known as the SAFCO law establishes an administrative organization within the Treasury Department. It has the responsibility of creating and managing basic rules for all of the different systems. But the operative law, the development, the action, is the responsibility of the organizational units where that occurs. That's why we talked about operative decentralization.

What is the main characteristic of this system? That is single entry of all transactions. You do not have to repeat any data that was loaded up before. You may increase the amount of information. But everything that went in at the

beginning can be recovered, can be seen, and can be processed. This avoids redundancy and wasted time in loading data that already exists.

Another characteristic is procedures that limit the functions and assign levels of responsibility. Each user that has something to do with the system is assigned an exclusive role that allows him to carry out the specific task at that level. The executive who enters information will sign it through his personal ID number and with the use of his fingerprint. In this manner we are eliminating almost totally the amount of paperwork that went through all the desks. Each person, each secretary would stamp it, write down some information, save some information, and write the stuff in a book. The executive thought he was super powerful because he had to sign off on numerous papers. The power is no longer in the signature on paper. It is in having necessary, complete information to make the appropriate decision.

This system will allow us to produce simultaneous information insofar as the budget, the economics, financial accounting, and above all, management. Upper echelon is not interested in seeing the process of how many pencils are bought. All he wants to see is the results of an operation or the financial situation at any specific moment—management information.

Another main characteristic is integration. What does integration mean? Being integrated means that you can bring information from the buying module, put it in the budget, carry out the budget with that information and then generate accounting information. Thanks to technology, we have the possibility of having simultaneous information from data that can be integrated to all the modules that form the administration. We're talking about budget, administration of personnel, purchasing, administration of goods, fixed assets, treasury, credit and accounting itself. We integrate the information with the administrative procedures of all of the organizations like the one that controls all the systems and the different register centers. In the different executive units, we manage all these operations with their respective administrative addresses.

That is why, with these characteristics, the new system is composed of a central module. The central module, the SIGMA, has an online relationship with the different systems for internal taxes and the customs agency. It has a local module with its applications within each of the government entities. It has an on-line connection with the management system for the public debt that today in Bolivia works in the central bank. We will install a replicate of this and the public credit in the Ministry of Treasury so that we can utilize these tools on external debt as well as internal debt. I can automatically record budget transactions, the accounting and what should be done within the Treasury. We have another module for the municipalities. And something very important that up until now we have seen infrequently—an exclusive module for carrying out external loans or foreign loans. Above all, this system is connected with other systems that are being developed by Bolivia in a central manner, one of which is the administration of personnel.

Another great system is the state purchases, which will be informed by SIGMA, and the information about all the purchasing actions that exist within the state will be published.

We also have other systems that talk about the state's patrimony which has the fixed assets of all the goods within the country which will be fed directly by our system. And we have the banking network based on the new technology where the Treasury will utilize the single accountant and treasury. Bolivia currently works with 4,000 different banking accounts. Starting in June, which is when this system will start working, they will be reduced to a single central account for the general treasury.

Also, Bolivia has a different focus on the administrative management. It looks to measure results. For that, we created an information module at the Presidency and SIGMA will send data concerning the results that were obtained by each of the organizations. Now, we're not talking about financial results only. We're also talking about physical results, about information related to objectives and goals. We do not plan to have sophisticated indicators on the first day. The President has asked his ministers to establish a main objective, or two important objectives according to the characteristics of the different organizations, that can be met by the year 2000 and that can be measured based on the operations.

We now have an approved budget for the year 2000 to enter into our system. This means we can start the new system in the month of June as a pilot test. Then officially we will start next year with everything that has to do with central administration of the country.

We will have budget implementation, the valuation of such budget implementation, account statements, the investment account, the monthly accounts and statistics on public finance in one single system. The central level has budget, treasury, public credit and accounting. The vice ministries manage such information which is entered into the system by the local originating unit. The local units have appropriate modules for budget, treasury and accounting, and in addition, contracts, purchases, fixed assets and staff management.

At the municipal level they have the same modules and, in addition, they have one module which is different from other components, and that is collection. And as a result of this centralized management, municipalities have a direct relationship with hospitals in the region and with educational units in the region. These municipalities must send information to the central level pursuant to law. In addition, municipalities will use the banking network through the one single account, and they are to send information on goals met within specific periods.

The last module that we hope to complete is for foreign loans. It deals with application disbursements. It works in terms of financial organizations, but through a conversion matrix it will process the same information for the budget and for the country's accounting. In this manner, we have a huge conceptual focus. I won't take any more time. I would like to give Mr. Solarte the floor. He'll be talking more about the benefits of the system and the operation of the system.

Silvio Solarte, Consultant, Financial Decentralization Project

Good morning. Here is a summary of the different systems that Carmen talked about. We have SIGMA, everyone working on a centralized database at every single federal government entity. We have a purchasing system, the expense budget implementation, an asset system, personnel management, government debt, income, budget preparation and budgetary changes, the treasury and the accounting systems. All these systems will be working using a single, central database, with the exception of the personnel management module and the government debt module. Personnel will work at each ministry with a local database. The one for government debt will be operating at the treasury vice ministry with its own computer system.

The SIGMA operating module has the following features. It will always process transactions in real time at the workplace of the operation. What we have is a three-layered technology using the Internet, use of fiber optic and additional options for connections to other media. The databases will be centralized to process operations for all SIGMA components with the exception of staff management and public debt where we have the SIGADE system. Thus, coverage initially will be at 15 different ministries. These 15 ministries include 123 budget implementation units. In the second stage, 65 additional entities will be implemented for projects and for decentralized government entities. Thereafter, SIGMA will be implemented at nine municipalities and districts in Bolivia.

SIGMA will not be one single database for all public entities in the Bolivian government. We have one for central administration and there will be a SIGMA for each district and each of the Bolivian municipalities. There will be a periodic connection among these large systems in the municipalities and the central administration, but not on a real-time basis. Real-time basis will be for each SIGMA and for each workplace—for central management, the districts and the municipalities. There is currently a system at each district; it was a former system which was set up about ten years ago. It will be replaced, naturally, by SIGMA, which has better technology and integrates with more systems as discussed earlier.

The SIGMA network will be as follows: Centrally we have a database server. We have application servers—one server for SIGADE, one management server, one security server by the name of Proxy. The database server is layer three, then you have level two where programs are implemented, then we have layer one for terminals at each ministry. At these terminals the only thing we're going to need is a browser such as Netscape or Internet Explorer to access our central database programs. As I said, we have an application server, which means that we are using the plan server technology and we're using our technology which allows us to achieve savings. We can use the entire group of systems which are installed at the implementing unit. We do not need any file servers. And we have centralized management allowing us to control the entire system without the need to have database managers on these sites, except for the personnel management system. But for the rest, no computer experts or programmers should be required.

We are working with ORACLE. Everything is done with ORACLE Designer. No program is done without using the Designer. Then we have the ORACLE Forms Developer where we have the report, graphics and so forth. The ORACLE JDeveloper will be used for application and ORACLE Discoverer will be used in advanced stages for user inquiries and to create data warehousing basically.

That was for development. For the database, ORACLE 8i Enterprise Edition will be installed. In addition the ORACLE Discoverer (Admin. Edition) will be used.

One of the components that we're going to work with in the system will be to have the system operate differently according to the specific needs of users, such as in the case of the purchase application. In this application, we use a goods and services catalog. With such a catalog we can provide specifications and we're able to identify every single piece of property using classes which define any good or service. Each item will be categorized defining the features of the goods and services. For instance, we need a desk. As far as properties are concerned, number four represents the size we need. We want three drawers, medium-sized, enter number two. It is no longer wood, but metal, two drawers, and so forth. There are several properties and certain features assigned to these goods. Services are given tasks and controls.

We also have information available on brands. The parameters can be set for an item that is going to be estimated using average criteria or it can be entered manually. We have compound items and composite items and business branches. Thus, the catalog will initially be used in the purchasing and hiring system and for the inventory system. This is the goods and services catalog. Today we have 2,400 classes and 3,000 items in the catalog.

The implementing units will be consulting these catalogs for purchases and inventories. They are also requests catalogs. These requests will go to the standards unit and they will be entered in the central database. In the advanced phase, this operation may be centralized for some units which are considerably technical, for instance, the social investment fund which is devoted to construction. They may do their own catalogs. But as far as a piece of goods, we have a desk, medium-size, metal, the number of drawers. Or we have bond, letter-sized, white paper.

As far as the purchase system processing is concerned, we have the following: We need to file a purchasing request, and for such purposes we will be using the goods or product catalog. We will also use these purchasing processes to prepare quote requests. Once the request is prepared and is sent to vendors, quotes are received and we generate the purchase order. So, in the quote requests, we will also be using the catalog. The request is approved by the head of the implementing unit and approved again by another person who controls several implementing units. So requests coming from the purchasing unit will be analyzed by the administrative head who sets up the purchasing processes.

As far as competitive bidding is concerned, we have the following: We have the purchase request, request approval, the purchasing process. For competitive bidding we send out the list of entities invited and the draft of bidding conditions. Publications are prepared, many conditions are delivered, a reading commission is selected, or qualification commission is selected, envelopes are received and opened, the award is given, the contract is drafted, the receipt committee is selected, and thus the bid award process ends.

Carmen Zuleta, Director Project Ilaco II, World Bank, Bolivia

Why have we emphasized purchases? Because in all these years that you have given your presentations at this conference, we have seen accounting entries and budget implementation and the Argentine Treasury system has been shown. We're changing the focus.

All these entries originate automatically in the system. Each time a purchase request is approved, the system generates the budget entry. At the time the purchase is approved or a purchase order is generated or a contract is signed, the system generates the budget entry automatically. When you receive the purchased product, you enter the invoice in the system. At such time the system enters the accrual, the accounts payable, and the due date. In the past, all entries involving papers from purchase offices to accounting units and operations had to be entered manually. Now we generate them both automatically and transparently. Accounting can follow up with the administrative head and accounting can monitor this information without changing a screen.

Silvio Solarte, Consultant, Financial Decentralization Project

It is important to point out that all of this works from a list of beneficiaries or providers to whom the payment will be made—contractors or providers. These providers or suppliers work in our country. The offices of the treasury initially catalog these people or suppliers within the Treasury Department. We plan to decentralize this operation, this data entry concerning each supplier, and we will supply the following information: The ID number comes from a document number where it was issued, the country would be Bolivia, address, telephone number, etc. We will give it an Internet code so they have access to this information. Through the Internet, the supplier can see his account, which obligations are pending payment, which payments have been made, etc.

If a supplier chooses to have his payment deposited in his bank account, we can handle this. He must sign a paper saying that he wants payment to go to his account. He must bring in a certificate from the bank which states that the account is valid. But this will be verified with the banking system on an automated basis.

Again, we'll walk through the purchasing process to show you how easy it is. Let's assume we are in a different government unit and wish to request some goods. For example, we are at the computer in the Vice-Minister's Office. We would enter the address of the ministry; the type of expense, goods, for example; the operational unit; and source of financing. From the financing organization, we will check that there is sufficient budget, then we will pick the item that we wish to request. We go to the catalog of goods, and we will look for the general categorization, for example, office furniture. Now, my catalog appears. We have a series of items like desks, tables. We have the classifications. We have each item listed here.

Let's move on to see the detail concerning one of these desks. This one is made out of wood. We have the cost, the finish, lacquer, and a number of characteristics concerning this desk. We have fixed asset equipment. This is office furniture; the price will be calculated or entered by hand. If it has a brand, if it has equivalent names, if it has parts—we have a breakdown of all the different elements.

Then, we do a purchasing request. We enter this element, wooden desk. Then we select here and do the purchasing order. Let us request ten desks, for example, at a unit price of \$100. They will be delivered to La Paz, Bolivia. This is the date we wish delivery to be made. Let's leave that the same. Let's catalog another request here. Let us request five chests of drawers, unit cost of \$50, and let us deliver them also to La Paz. We can include any items on this request so long as we have sufficient money in the budget.

Now it is ready to be approved by the chief of the executive branch. The request was made by an employee who normally makes these requests as part of his job. Now the document is verified and at this given moment we have generated the order. We make sure there is sufficient money in the budget when we make the commitment.

This screen shows me all that has been done so far. We consulted whether there is enough money for this. In document number 17, which we created, here are the data to back it up. We have also created financial data for the treasury and the amount will be \$1,250 for the purchase order. This will be done automatically. This generates a single entry for \$1,250 which corresponds with document number 17, budget number 2, expense number 431, fixed assets for a value of \$1,250. From the request itself we generated the provision for that expense.

We have done the request now, then we will approve this request. This is done by a chief. The operator could have made a mistake. This request will be reviewed by the person in charge of that unit. The chief or the supervisor looks it over and approves it. It is approved now. Its status has changed. It says verified now. This is something that is done that perhaps doesn't add value to the process but it is important to make sure that the operator did not make a mistake. In the purchasing process you have to remember the flow. We have requested, later on it was approved. Now we go to where we order that item, the administrative director. He has a list of all the purchasing requests. He will review order number 17 and complete the process.

Carmen Zuleta, Director Project Ilaco II, World Bank, Bolivia

Our desire was to give you an example of how the system will be working within each executive agency, how the accounting process is carried out, how we can interpret the information and how we can produce management reports to carry out the goals and the objectives of an organization. Our intention was to show you that now we can work in a very simple way with the different icons, that we do not need accounting experts in order to process an operation.

We wanted to show you the total system, but we need more time because it is a quite lengthy process.

SIGMA begins to function in Bolivia in June of this year in five pilot organizations. That is the intention of the government with a mandate from the President of the country who has designated who will be the different pilot organizations. We will be able to test all the applications in the system by the end of the year, and in 2001 we'll start officially in the entire central administration of accounts. The life of the project should end by June 2002 and we hope by that date to be able to implement the system in the four biggest municipalities in Bolivia.

JIM WESBERRY (United States): Tomorrow at 2:00 in the afternoon we have an optional program just in Spanish about integrated systems in the Americas. We have several other countries that will be presenting the programs, but if we have time maybe we can see more of your system. We hope that you can participate in this program tomorrow afternoon.

MAX DELICES (Haiti): I just want to make a comment. Listening to what you were saying, I know that Singapore has such a system. And that system gives them the competitive advantage, especially in terms of transport. They are able to complete their processing sometimes days before the cargo comes in. And what are the advantages in terms of competitiveness that the SIGMA system will be giving you once it is implemented fully?

SILVIO SOLARTE (Bolivia): Well, the main advantage would be that we will have available information at any given moment. This is a great advantage. That doesn't happen nowadays. For example, the system was implemented ten years ago, but in our opinion it was implemented incorrectly because it was installed with local systems. Different offices have information, but it is communicated with batch processing, so it reaches the ministry with mistakes. Even though the information comes from similar systems, it is not trustworthy. This is why the government decided to change the technology and to set up a single database for all the systems. We want to have better control and we want information in real time at all times. Ten years ago this was impossible because the communication network from La Paz was not trustworthy and we also did not have a system that allowed us to carry out this type of design. Nowadays we are working with fiber optics. We are working with fiber optics all over La Paz. This is a great advantage.

The other advantage is the control. The accounting office, the general controller's office and all the entities in charge of auditing these systems will have the information available to review all the documents. Therefore, we have two great advantages, availability of information and great possibilities of control. This is my opinion.

Also, of course, with this technology, there is a reduction in cost because we will be able to reduce the number of personnel that work in the different local areas.

JIM WESBERRY (United States): The person who asked the question mentioned Singapore. Singapore does have a similar system. If you know of other similar systems, please let us know so we can invite them to do a presentation. Tomorrow we will have Tanzania from Africa the first hour, and we wish to invite world leaders in financial systems to the conference next year.

CARMEN ZULETA (Bolivia): I would also like to make a comment concerning the question that I think is quite important. Nowadays Bolivia does have a functioning system, but within this system we don't report all of the operations. It is a database of the different ministries sent to the Treasury Department. They send whatever they want to record, whatever is convenient for them to report. With our system, we cover all the operations including the payments. We carry out a program of expenses that meets with the obligation of the Treasury.

FRANK KATUSIIME (Uganda): I am going to ask a few short questions, so the answers will be short. For the purposes of planning an integrated system in Uganda, I would like to know your estimate of effort in the nine months that you have taken to develop and implement that system. Number two, what is the estimated cost to implement this system? Another one, maybe due to my poor Spanish, but was the external debt management system referred to in the

presentation a system whose English acronym is DIMFIS? Another one, at what level of implementation is this system? My last question, it seems to require a lot of technical, human and financial resources to put in place an integrated system that meets the GAAP and GAAS requirements. I know there are multilateral and bilateral donors here. Some of our countries, like Uganda, have the political will to put these systems in place. How much support in terms of finance and encouragement can we expect from the multilateral donors and the bilateral donors?

CARMEN ZULETA (Bolivia): There are several questions there. The first thing that I wish to point out is that this is a process of development that has been going on for ten years. It is very difficult to estimate the cost. We have accumulated considerable knowledge during this time and we have been transmitting this to this great guide, which is SIMAFAL-II. This document gives us the theory behind the new focus of the system and has allowed us to meet the specific specifications and needs of Bolivia. We believe this document will help other countries to see the focus for new administration.

As far as costs are concerned, the product is exclusively financed by the World Bank at this time and such financing cannot be discussed because it was generated as of 1989 and it has not yet concluded. After the conceptual design was developed, we started to actually build the system in June of last year. In June of this year, when the system starts operating, we will have our first anniversary.

SILVIO SOLARTE (Bolivia): I would like tell you about the timeframes. In June we started training the staff in ORACLE because our capital city wasn't using this technology. We spent almost two months in training, especially as far as the case tools were concerned. As I said, where we are working with ORACLE, this June we will start our pilot testing. In other words, after a year of development, we will boot up the entire system, but not all the modules. Personnel will be implemented in the year 2001. So, basically, the answer to the timeframes is this: I would say it takes a year and a half to two as long as the organization has enough authority, hierarchy and enthusiasm to place the system into operation. There are many examples of this. Some countries have taken six years to set it up, others have taken two or three. It depends. But given the experience, the timeframe would be from one to two years to start its production.

As far as costs are concerned, I would say that there would have to be a minimum budget of about \$2 million, depending upon the country and the size of the computer network that would be set up. The cost could be a lot higher. For instance, we're spending about \$1.5 million just in equipment. In addition, you have to take into account the costs of consultants, computer programmers and so forth.

JIM WESBERRY (United States): As to the public credit system, SIGADE is the DIMFIS. It is the same system SIGADE which is in about 50 countries. This proves that you can use common software programming in different languages.

Next week, in Geneva, Switzerland, on Monday, Tuesday and Wednesday, there will be a seminar discussing SIGADE for those people who have systems. There will be 200 or 300 people there. Hopefully, there is somebody here who will be in Geneva next week. It seems to me that I will be the only one. Those of you here who have given presentations may be able to give me a couple visual aids on your systems. We could use them in Switzerland. On Tuesday or Wednesday next week, I will be showing what is going on in different Latin American countries. If you can select two or three PowerPoint slides so I can take them with me, I would be quite thankful for this.

The Human Relations Side of Government Financial Management

Mortimer Dittenhofer, Professor, Florida International University

I am delighted to have the opportunity to talk to you this morning. Since we have had these conferences, I have been able to talk to an assembled group such as this twice before, and it gives me a great deal of pleasure to have the opportunity to talk to you today.

The area that I am going to talk about is one that has interested me a great deal. When I was going to school, I had a double major in my first college work, of economics and psychology. I have been interested in the psychological aspects of operations, government operations, ever since then. I have written a couple of monographs in this area. I am here today to identify some relationships of some of the basic psychological approaches to government financial management.

I am going to apologize for the fact that I will be reading my report, which I usually do for a purpose. I want to be sure that what I say is what I intend to say. The only way I can be certain of that is by taking a look at the prepared address.

Also I am having some eye problems. I cannot read quite as fast or as well as I normally do, so I will be have to hold my script up in order to be sure that I give you the information that I feel you should have.

Financial management in government, as well as in industry, is becoming more mechanized as we develop sophisticated electronic equipment that produces information, assembles it, analyzes it, and in many cases stimulates action guided by artificial intelligence, edits, and other non-personal devices and operations that conceivably replicate the ideal in each of these processes. The mechanical system is at the beck and call of government financial managers, who in the long run are charged with the responsibility of efficient, compliant and effective operations. Their constituents are not content with sophistication in decision making unless it produces good government and benefits the electorate. We must keep in mind that government today has a visibility that was unheard of decades ago.

The result of this state-of-the-art management information process must be evaluated by human financial managers and arrayed against their arsenal of experience, professional expertise, judgment and instincts. These qualities, in the end, are based on underlying behavioral relationships resulting from education, background and basic human reactions to the stimulants that are introduced by situations and environmental conditions described by the sophisticated devices in the accounting and management information system. Thus, the government financial manager is a captive of a mass of informational and mechanical guidance, on the one hand, and of his or her basic instincts and of his or her experiential patterns of operations on the other hand.

The basic concept of psychology is that it is the relationship between an individual and his or her environment. This relationship is based on a series of reactive attitudes to stimulus or, in our case, supplied by the grist of the information process. So, no matter how hard we try to mechanize the government financial management system, in the end it has to transverse the human interpretive tunnel that is permeated with the basic behavioral structure that is present in all mankind, though admittedly in differing degrees.

Thus, we are, in the next 30 or 40 minutes this morning, going to see how these behavioral phenomena serve to filter out of the mass of information the direction to which the government should proceed. Much of the material is taken from two basic governmental works. One is *The Application of Government Accounting Principles*, and the second is *Applying Government Auditing Standards*. They are both published by Matthew Bender. Material is also

abstracted from the behavioral chapter in Sawyer's *Internal Auditing*, published by the Institute of Internal Auditors. I am closely associated with all three of these, so I feel that I am free to quote from them as much as is appropriate.

We are going to, first, talk about the behavioral aspects of government financial management itself.

The government financial manager must be responsive to a series of differences in operations from the managers in the private sector. First, the public official must serve a government that is a creature of law and that can do only those things that the law provides, unlike the private sector, where an organization generally can do anything that the law does not prohibit. This restriction can cause inflexibility and resistance to change on the part of governmental officials.

Second, there is a general fear in the government of visibility. The government official is more comfortable in obscurity. Visibility is pounced on by political opponents, by peer adversaries and by the media. It can be uncomfortable for the official and can adversely affect the official's tenure and advancement.

Third, there is resistance to change. The public official generally is comfortable with present methods, even when inefficient. Change tends to be disruptive. Changes made to enhance an already adequate operation can be misconstrued as indicating that the previous methods were faulty.

Fourth, fears of encroachment into one's area of authority can result in what we call turf conflicts. Since government salaries are related to financial and physical measures of responsibility, rather than to managerial ability, losses of personnel, facilities or resources can adversely affect the individual.

Fifth, the top echelons of government are composed of fixed-term appointed or elected officials. These officials frequently owe allegiance to non-governmental groups and are interested only in short-term results, resulting in resistance to change from the career professional bureaucrat.

There are some significant differences between the public and the private sectors.

First, performance criteria. The private sector has customer satisfaction converted into profits as a measure of performance. However, the public sector tries to use efficiency, economy, effectiveness and conformance to budgets as performance measures. These criteria may be subjective, and are therefore difficult to measure.

Second, accessibility of government decision making to external influence. All government work is open to the public, to interest groups and to the media. Businesses, except in directors' meetings, can operate in reasonable privacy. Thus, the public official may be responding to conflicting priorities and values.

Third, the conflict between government policy makers and administration. Elected officials usually make policy, and the administration carries it out. These two groups generally have different goals and objectives, respond to different interests and are rewarded for different functions.

Fourth, the employment contract. Patronage and civil service systems in government reward employees for political activities or seniority rather than for efficiency and productivity.

Fifth, intense scrutiny by the media and public interest groups. Since government resources come from the public in the form of taxes, the government is fair prey for the media and public interest groups. Government officials thus exert much time and effort in protecting themselves, which is counterproductive, at times, to innovation and risk taking.

Sixth, emphasis on stability and reliability. The emphasis in government is on reliability, accountability and legality, rather than on maximum effectiveness and flexibility.

Seventh, emphasis on fast and visible demonstrations of progress. Long-range planning is often sacrificed in government organizations because of the elective process, the need for political support and the need to show short-term accomplishments.

Eighth, an atmosphere of control and mistrust. Since the government worker is subject to strict controls designed for the lowest common denominator in capability and in trust, the capable and trustworthy employee may conform to these low expectations.

Finally, differences in status. Working for the government is in many ways considered a lower status occupation than working for private sector organizations. The situation is a morale problem in many government agencies.

The consideration of these nine factors is important because they describe a series of unique personal problems that affect the attitudes of government officials. The government manager is not only responsive to the usual personal and group behavioral pressures, but also is influenced by reactions to many of these factors.

Management accounting systems do not function in a vacuum. They are created, designed and operated by people, and they are used by them for various management functions. Thus, these systems directly and indirectly affect many people. They provide information, in terms of economics, finance and output, about the operational aspects of events in the public sector, and they provide an overall view of the economic condition and status of public sector entities. Managerial accountants should consider the behavioral aspects of managerial accounting. By systematically analyzing the relationships between accounting systems, other forms of control and human attitudes and decisions, the social and behavioral sciences can focus our attention not only on the underlying conflicts and contradictions that characterize so many accounting problems, but also on the organizational and social potential of the accounting itself.

A different approach in identifying the importance of behavioral aspects of management accounting, which is now normally a part of the government accounting process, is exploring how management accounting information will influence behavior in all of the various stages of the management process, including (a) the setting of goals; (b) informing individuals as to what they must do to contribute to the accomplishment of these goals; (c) motivating desirable performance; (d) evaluating the performance; and, finally, suggesting what corrective action should be taken.

The use of government management information is important. Although computers can be programmed to react automatically to variations between standards that are entered into the system and the accounting manifestation of current conditions, it is people that must analyze a management accounting report to start some type of operational activity. These report observers, public sector managers and officials, being human, react to the behavioral stimuli to which all humans normally react—motivation, perceptions, resistance to change and reaction to stress and to conflict. Thus, the mental state of the report reader largely determines the action taken after considering the content of the report, or whether the report is considered at all. Therefore, management information must be presented in a manner that promotes its reception by its potential users.

How can government accounting be changed to conform to the many configurations of behavioral aspects of the readers and the users of financial statements? Can generally accepted government accounting principles be modified to conform to motivating managers who are most receptive to the self-actualizing motivational drive? It is possible to substantially improve government accounting systems to make them more responsive to human interaction. The recent position of the Government Accounting Standards Board in the United States, in issuing a directive, GASB 34, that requires dual reporting in the United States, is a step toward more descriptive information. The traditional government accounting system normally is designed to respond to the accountability demands of society, and not to assist in the achievement of more efficient and effective uses of the public resources. The systems of government reporting certainly provide information that could motivate many public officials to operate honestly, and thus to be responsive to the basic human instinct of self-preservation. However, government accounting systems should be designed to stimulate improved operations or to respond to the needs for proper decisions in the planning and organizing aspects of the government.

The government accountant or designer of a government managerial reporting system must answer some basic questions about the needs of report users so as to present accounting statements and reports that provoke a positive response from their readers.

First, who are the users of the information? What is their background? What is their experience? What is their sophistication in handling information, in decision making? For what are they accountable? What is their visibility to the public? How are these people motivated? What is the strength of the motivating drives?

Second, what information is needed? What level of detail is necessary? Is comparative information needed? Are standards available? How should the information be structured—by program, by organization, by function or by object?

Third, how is the information to be used?

Fourth, how often should the information be provided?

Fifth, what type of management philosophy is used in the government? Is it autocratic or supportive or participative or collegial?

Number six, what are the potential adverse reactions of government groups to workers being measured by standards or to officials being measured by budgets?

Number seven, what are the potential rewards for success and punishments for failure?

Answers to these questions and to others that the provider of management information anticipates as important, help to set the parameters of the government reporting system structure. In the design of the government management reporting system, the accountant must include reports that conform to the needs of the government report users. The accountant should forgo traditional theories about financial reporting and, if necessary, should compromise conventional ideas of limiting reports to pure financial reporting. Only in this manner can the system produce reports and information that government management will use, because the reports and their content are perceived as responding to their needs.

Some basic assumptions about government accounting: To understand the environment in which the government management accounting process functions, it is necessary to uncover the assumptions that affect the record provider and the government manager. We are relating to three areas: the assumptions about organizational goals, the assumptions about participants' behavior, and assumptions about management's behavior.

First, the organization goals. The assumptions about organization goals include, first, that legislation, regulation or directives prescribe organization goals. When these goals are obscure, they must be identified by accountable officials. There may be announced goals. However, the intended goals may be secondary or the result of achieving the announced goals.

Second, organizational goals may be subverted to the goals of dominant members of the organization, or subject to constraints imposed by other members of the organization or by an external organization.

Third, in modern government there is no single organizational goal. The organization has other formal goals, usually related to the area of the original goal. For example, a fire department has a goal of putting out fires, but it also has a goal of preventing fires.

Fourth, in the modern government organization, the formal goals of the total organization tend to be subjected to subversion by attention to the goals of the composite units. The procurement operation, for example, may be more interested in efficient purchasing procedures than it is in the accomplishment of its parent's goals and mission.

Fifth, qualitative goals in government replace the profit characteristics of the private sector. Thus, the government's goals are to be accomplished as efficiently and as effectively as possible.

Sixth, it is to be presumed that the accomplishment of unit goals will be conducive to the accomplishment of total organizational goals.

The second area, the participants' behavior area, might include these items:

First, the organization participants are motivated by a wide variety of psychological, social and economic needs and drives.

Second, the extent of an individual's participation varies directly with the expectancy of the achievement of his or her individual goals.

Third, the efficiency and the effectiveness of human behavior and decision making in the government organization is constrained by the ability to concentrate on only a few things at a time, by the limited awareness of the environment, by limited awareness of alternatives and their consequences, by incomplete and inconsistent preference systems and by limited information about the situations or information overload.

The third area that we are interested in right now is the assumptions about the behavior of management.

First, the manager in governmental operations is accountable for managing government resources honestly, efficiently, economically and effectively.

Second, the management role is a decision-making process subject to human rationality and cognitive ability.

Third, the manager is influenced by motivational needs and other behavioral influences that are described in this paper.

Fourth, the essence of management control and power is that acknowledged by other participants when they accept the authority of management. This willingness may be unstable.

Fifth, although responsibility and authority are assigned from above, responsibility must be accepted from below to be effective. Thus, there is no precise relationship between the manager and those who are managed.

You have heard me mention motivation several times this morning. I would like to talk a bit about motivation.

If someone were asked, "What makes an organization function," I think the answer would be, without question, motivation. This dynamic aspect of our daily activities receives the praise or the blame for most everything that happens, whether it is good or bad. Government operations are no exception. However, some complicating pressures or constraints will modify these basic drives.

Motivational drives and emotions cause a person to react in a certain fashion. In some cases, the reaction is automatic—for instance, when physical safety is threatened. In many cases, it is a cognitive action—the person reacts in a way that his or her emotions indicate will respond positively to that person's motivating drives. The motivating force may not be identified by the person as a motivating force. It is a feeling that the person has to satisfy a need, sometimes perceived, sometimes merely felt.

In general, modern motivation theory began with a man by the name of Abraham Maslow, a clinical psychologist. Maslow identified five levels of need: first, physiological; second, the need for safety and security; third, the need for being a part of society and having affiliations; fourth, esteem and recognition; finally—a need that he developed, I think, himself; I have not found it any other place—self-actualization.

The physiological needs are those basic to human survival, including food, water, warmth. The safety and security needs are the drives for physical and economic survival. While the physiological needs are inherited, the safety/security needs are learned responses.

The social or affiliation needs include love, belonging and intimacy. They include being a part of groups at work or at school, at church, a part of the neighborhood and the family.

The esteem/recognition need includes a desire to excel and to be recognized for it. That is the important part of that, the recognition. The self-actualization need represents the fulfillment of one's ability to perform activities that are enjoyable for pleasure and for self-satisfaction, and not because it is required to fill a lower need.

These needs vary in intensity from one person to another, and within one person, from time to time. Although the needs generally are considered as being accommodated in order, there are times when a lower need, such as physical or economic security, may be overridden to perform an act that brings esteem or recognition.

Next, we are going to talk about some diagnostic procedures for improving productivity.

Government financial managers can use diagnostic procedures to help develop a motivational strategy for improving worker productivity:

First, find out what outcomes each employee desires. Use the theories of motivation, observe behavior and conduct interviews. Second, establish a definition of the performance that is needed. Third, ensure that the expected kinds and levels of performance are attainable and are perceived to be so. Fourth, make clear and explicit links between the workers' desired outcomes and the desired productivity. Develop goal congruence and a system of rewards that is perceived by the workers as fair. Fifth, ensure that there are no subtle conflicting expectancies in the situation resulting from peer pressures or organizational duties. Sixth, check the strategy to ensure that it does not cause inequities.

The designers of government management record systems can use these procedures as a guide to develop a scenario for the use of the government management reports.

Relating accounting systems to motivation and behavior: A man by the name of George Bentson summarized several items of research on motivation and accounting. He formulated a series of important findings. The philosophy can be applied to the broad government financial management operation.

First, accounting systems encourage decentralization within the organization. Decentralization has motivational advantages. Second, decentralization, assisted by accounting reports, provides closer control by managers. Third, accounting reports and budgets serve as a reliable means of communication about goals and progress towards achieving those goals.

Fourth, accounting based on the smallest area of responsibility becomes a fundamental building block of the accounting system. This process allows a wide span of control and operating decisions on a decentralized basis.

Fifth, assign costs to the responsibility areas to motivate managers.

Sixth, budgets have different impacts on managers. Implicit budgets provide the best performance. Medium and high budgets result in close achievement because of the challenge. Low budgets that are attainable but not too loose result in lower performance.

Seventh, the timing of the receipt of the budget is important. Receipt before setting assumptions is best.

Eighth, budgets should be used to raise a manager's level of aspiration, rather than to communicate the top manager's goals and decisions. The first objective benefits performance.

Ninth, manipulation of budgets and reports by accountants to give false information about performance is potentially dangerous and expensive. It is divisive and could result in distrust of the accounting process.

Tenth, accounting reports give managers knowledge of their performance. Knowledge of performance motivates operations. The more specific the knowledge, the more rapid the improvement and the higher the level of performance. The longer the delay in the accounting reports, the less efficient the knowledge becomes.

Eleventh, overemphasis of goal-oriented cost reports becomes dysfunctional. The manager tends to reduce discretionary expenses and to falsify inventories to score higher rather than to manage better. The proper emphasis is difficult to attain.

Management of change is an interesting area. All action results in change. Resistance to change is one of the constraints that work against motivating forces. If one could visualize the two forces at work, the motivating force

would be pushing forward, and the reluctance-to-change force would be resistance causing inertia or the pulling back of a countervailing force. Thus, in designing government accounting to motivate the government manager, accountants must consider that the manager may resist change. However, some managers seem to want change, sometimes for the sake of change itself. In this case, the information in reports could inhibit change, although that seems improbable.

What are the forces that cause government financial managers to want to maintain the status quo and to resist the changes that the reports imply should be made, or that his or her own interpretation of the reports and professional judgment dictate should be made?

First are forces that are economic. In other words, the change results in a situation where the individual fears a loss of a job, for instance, or fears a reduction in the economic value of his or her position or skill or experience.

Second, there is a resistance to change caused by inconvenience. Some of the aspects of this are the requirement to learn new work, the possibility of having to relocate, a reluctance to change one's habits and the usual way of functioning and the expenditure of energy in having to accommodate a new system.

A third force against change is uncertainty, the fear of the unknown. One has to anticipate what new methods are going to bring, a lack of factual information as a result of changing, and the possibility of new supervision.

Fourth, symbols—changes in details that have been accepted as standing for qualities with which one is comfortable, and usually about which one is proud.

Fifth, threats to interpersonal relationships, threats to status or to socially developed skills or prestige, a requirement to work with a new set of supervisors and employees, and a reduction in the opportunity to exert leadership, formally or informally.

Finally, resentment toward the new order and increased control. Change requires more orders and more control until it is accomplished. This situation frequently causes resentment and resistance.

Resistance to change can be reduced, though the social psychologists tell us that it never can be completely overcome. The methods that they suggest are these: First, provide economic incentives; second, use two-way communication; third, use group decision making; fourth, use bargaining; fifth, effectively handle the symbols; sixth, make changes tentative; and, finally, make changes slowly.

Some functions of the government reporting process can assist in overcoming the resistance to change. The language used in the financial reports should be positive. For instance, the difference between government revenues and controllable expenditures could be titled "Contributions to Non-Controllable Expenditures." The change made to achieve greater contributions would be considered by the manager, then, as desirable.

When standards or budgets are used, the report recipients—the government operating managers—should take part in their development. Then the changes can be developed in a planning stage, when managers have a hand in the decisions made. Management reports should have a section for the comments of operating managers to achieve two-way communications and to provide the managers the opportunity to be first to suggest the changes that in all probability should be made.

Accounting should provide a "what if" type of report. When changes are seen as a possibility, the accounting arm should clarify the projected economic results by preparing pro forma statements of the probable outcome. When these pro forma statements are prepared, the language, titles, and account classifications should enhance the changed operation to overcome the resistance to perceived loss of status, symbols, power or leadership.

Before-and-after comparisons also should be prepared to clearly show areas of accountability and responsibility, controllable costs, contributions, and not only to show the excess of revenues over costs or expenses. Moreover, reports should be footnoted to ensure comprehension, and the report language used should be simple and understandable.

The government accountant should be aware of the constraints against change and should structure accounting reports so that the reports themselves do not become an issue, but instead encourage change in the interest of achieving individual and organizational goals.

Finally, in conclusion, the discussion of motivational behavior for government management reporting can be summarized this way. First, design accounting/reporting systems that assist the government manager in accommodating his or her motivational drives in the three highest of Maslow's five classifications—in other words, the social/affiliation classification, the esteem/recognition classification and the self-actualization.

Second, attempt to determine the general outcomes that the government manager desires. Third, inform the government manager of the government organization's desired outcomes. Fourth, develop reward systems that are considered reasonable and fair. Fifth, maintain a follow-up system to ensure that the government accounting/reporting system is functioning. Sixth, decentralize reporting to the lowest managerial level possible. This suggestion presumes that the organization structure is also decentralized.

Seventh, employ the concept of responsibility accounting. Eighth, provide budgets that encourage the manager's motivation and high performance, implicit as to definition, and early receipt, before the manager sets his or her aspirations. Ninth, provide accounting reports that motivate by disclosing performance relative to the budget, that motivate by containing specific information, and that motivate by being received promptly.

Finally, design reports that emphasize overall performance, even that resulting from discretionary expenditures, such as a low deadline time of equipment caused by good maintenance, as an example.

Thank you very much. I have enjoyed talking to you.

(These remarks do not include footnotes or references. They can be obtained from the speaker.)

Institutional Accounting Systems

Haivanjoe Ng Cortiñas, Controller General of the Dominican Republic

Good morning to all of you. First of all, I wish to express my thanks to the accounting faculty of the Florida International University for the invitation that you have given us. And also, thank you, Mr. Jim Wesberry.

Many of you will be asking yourselves, and probably with a lot of reason, why is an economist in this room where most of the people present are accounting professionals? You can thank Mr. Jim Wesberry, who had the daring to trust in us to do this presentation at such an important event as this one. I will try not to let him down and not to let my own country down.

First of all, I will not try to create any exaggerated expectations about our presentation. This presentation of the accounting system of the Dominican Republic is not seen as a paradigm for the rest of the countries present here, neither in Latin America nor in other parts of the world. As was pointed out by the title of this conference, the Fourteenth International Conference on New Developments in Government Financial Management, this conference talks about new development. In the particular case of the accounting system that we have in our institution, this is a new happening for the Dominican Republic. It is a new development for the Dominican Republic because what we inherited from previous public administrations provided total obsolescence in everything that had to do with central government and the general government of the Dominican Republic. So perhaps this presentation will not be a paradigm for all of you, but at least it will tell you of the effort by the Controller's Office of the Dominican Republic to contribute to the process of strengthening the institution, modernization and transparency that is demanded nowadays on a world scale.

Therefore, having given this explanation, I can tell you that the Dominican Republic, up until the year 1996 lacked a modern state. Its institutions—judicial, executive and legislative branches—were very weak institutions, particularly in the use of technology in the different administrative and operative processes. Knowing this, we made several different attempts to improve the situation through the Treasury Department, but the job fell to the Controller's Office of the Republic. The Controller's Office is an institution, based on its organic law 3894, that has the authority to develop and generate and implement, and to a certain point, demand that the different institutions that form the public sector in the Dominican Republic install accounting systems, administrative systems. We felt that it was necessary and time to begin to develop computer systems that could be utilized for everything that we do, administrative processes and accounting processes within our government.

Therefore, the Dominican government began developing a number of initiatives in the institutional field. We promoted a law, the capitalization law of public entities, and we began carrying out the law for civil service and administrative careers within the government. It had to do with the training of the public servants in the Dominican public sector. Other initiatives in the legal field had to do with the institutional strengthening of the public sector like reform of the taxes, fiscal compensation, an education law, a health law. In other words, we developed a number of initiatives to create the necessary conditions, legal conditions, that would allow the different institutions to be associated with the new wave of modernization at the world level.

In the year 1996, we developed these initiatives and brought them into the Controller's Office with the desire to share them with the rest of the Dominican public sector. We wanted the central government to at least start something to improve the administrative processes, the operative processes and also the controls, the most important part of the Controller's Office.

In this direction, the Controller's Office decided to develop a system of computerized information which covered a number of programs and systems that helped us enormously to transform the accounting office into an office that operated on a technological platform that included sophisticated work instruments, in this case computer equipment. It was also quite satisfactory from the human resource point of view. We developed this strategy because we felt that the accounting office had to gain authority over the other public sector organizations in order to implement, develop and demand that new technologies be implemented for the rest of the public institutions.

There were many programs that we carried out and many systems that we developed in the accounting office to the point that nowadays all of our activities are completely automated. The investment in human resources and financial resources to develop this technological platform is well justified by its results. Unfortunately, we did not have the international cooperation which would have been great to have.

When we developed this group of programs and systems, we exported them to the rest of public administration in several directions, to human resources, to asset registry, to different administrative programs for the documents, to payroll and a number of different programs. Once we created these conditions, we decided to be a bit more ambitious in this effort, and we started then to work in what we will be presenting here today—that is the institutional accounting system.

We began the development of this institutional accounting system at the end of the first quarter of the year 1999. For approximately nine months, technicians from the accounting office and from the field of automation developed the software that we will be demonstrating here today and more so tomorrow. We will talk to you about the user's manual for the accounting system which was developed, as I said, by the General Accounting Office of my country. We will discuss the software.

These tools, or this tool, if you will, should be credited to the technicians. They defined its objectives and its characteristics. To elicit acceptance in the public sector of the Dominican Republic, there were certain objectives that decided the development of this software.

The first objective was to develop a systematic registry of the different transactions, budget transactions that were carried out by the centralized public sector, and in principal, based on the budget that I will be explaining to you.

The second objective which was quite important for an organization such as the accounting office is the part that has to do with facilitating the decision making process. Specifically, in the case of the Dominican Republic, we wanted to use this accounting system to establish an organized process of decision making to carry out the budget. The culture in the Dominican Republic is very painful in the sense that there has been a lack of interest in taking responsibility for the decentralization of the operation. With the implementation of the accounting system, I feel that we have succeeded in making the accounting office responsible for everything that has to do with operative decentralization and normalization of the rules. The General Accounting Office has standardizing powers but not any powers to manage public resources. This is reserved for public sector institutions or organizations.

The institutional accounting system has two components—the budgetary component and the asset component. Here I'm going to digress. You know that in Latin America or in a considerable portion of Latin America, the General Accounting Offices are looked upon as police and some of you may think that I'm a policeman because I have come down here with a weapon that looks like a police stick. No, this is not a police stick. It is a laser point which was given to me at the hotel because I forgot mine. So I'm going to use this laser point which looks like a police stick. I am not a policeman in my capacity as Controller.

The budgetary component of the institutional accounting system was developed under a strict linkage to the Dominican Republic's manual on budgetary classification. This manual is governed by law 531 which is a legal standard of the Dominican Republic's National Budget Office. This deals with classification—chapters, subaccounts, programs and activities related to the nation's budget. So this institutional accounting system is closely linked to the three basic aspects involving budgetary implementation. These are budget allocation requests, payment orders and third, the component dealing with payment implementations.

The asset component is part of the institutional accounting system, but this component is not yet finished. The component dealing with the budget has been finished. The asset component is a lot more ambitious because it deals

with dual accounting entries. In the case of the budgetary portion, it works with single accounting entries and is linked to an international accounting standard governing the public area. We have modified accruals and the budgetary component is governed exclusively or basically by modified cash. The budgetary component deals with the accruals.

Naturally this institutional accounting system is the basis for integrated public financial administration. In other words, the Dominican Republic, as other countries, is making an effort to implement an integrated system. We have had difficulties with Congress as far as approving the legal basis supporting an integrated system. This system has been implemented in some Latin American countries, but in the Dominican Republic it is still in the conception or development phase because as far as government approval is concerned, the financing agreement that the Dominican Republic entered into with the Inter-American Development Bank has not been approved by Congress. Thus the integrated system has been delayed. Naturally, the General Accounting Office understood that it could not waste any time given the inheritance of obsolescence from the previous administration. For that reason, we developed the institutional accounting system.

The institutional accounting system is split into two areas—accounting and IT. The accounting component may not be too relevant to our presentation. As far as the accounting portion is concerned, I already told you that the system is closely linked to the manual and budgetary classification, and as I said, it is predicated on the processes of modified cash accounting.

The IT area is divided into three stages. Stage one deals with the manual load of systems which each institution must perform individually. How does this work? In the recent past, the Dominican Republic's public sector did not have a technological platform. Most institutions didn't even have personal computers. Well, at this time, the situation is totally different. We recently developed a technological platform involving local networks for some institutions, and in some cases they have at least one or several personal computers. The system that we have developed, the SCI, can be installed very easily in any personal computer with its appropriate peripherals.

Stage number two of the three that we have been discussing involves communications, communications between your accounting office and those institutions that aren't part of the public sector. For the time being, there is an Internet link whereby the General Accounting Office aids different institutions in implementing software, both for consultation and installation. A maintenance module is one of the eight modules included in the institutional accounting system. We have remote communication by way of the Internet, and the computer department has a permanent unit which provides help to system users.

The other stage, and that's the final one in the computer area, is the interaction between the General Accounting Office and government institutions. As I said earlier, we are creating the bases for linking and developing the institutional accounting, the integrated financial public system. We would like to have full integration of the General Accounting Office and the budget within the system. It is a later phase but the bases are set. There is a lot of resistance to change and I believe that the underdevelopment in our Dominican Republic public institutions made it impossible to put in an integrated system when other countries did. But we're working on that.

In the organizational area, the implementation strategy that we have used has several stages. Stage one deals with the central government. When we developed the first version of the institutional accounting system, version 1.0, we sent it to central government institutions. And we sent them the person responsible for accounting and the budget and the person responsible for the computer area. We conducted a one-week workshop in the initial stage where we displayed the accounting system. They were given appropriate explanations, and institution technicians had a chance to interact using their knowledge of the institutional accounting system.

After the initial stage, there was a second stage where we provided personalized assistance to those institutions having difficulty assimilating the system. As of January the first of the year 2000, we put the institutional accounting system into practice. System users provide feedback ongoingly. We'll see this in the maintenance monitor.

Now we'll proceed to the portion dealing with the system itself. The eight modules included in the institutional accounting system are these: The first one deals with fund allocations. Module number two is for preparing fund releases. Module three deals with fund coordinations. The fourth module deals with reimbursements. The fifth module deals with maintenance. Module six is the safety module. Module number seven is the reporting module. And module number eight is the assistance module. These eight modules are fully developed and are being

implemented in over 60 central government institutions that have been defined by us as accounting entities because they work with the nation's budgetary funds.

As in many countries, including the Dominican Republic, the Congress approves the annual budget through an appropriations process on behalf of all institutions in the government. These appropriations are approved by law, and the resources allocated throughout the fiscal year.

In the Dominican Republic the calendar year and the fiscal year are the same. The appropriations, or fund allocation, module starts out with the general directorate of the budget. This entity is responsible for receiving the different fund allocation requests from different institutions. This is generated on a form referred to as the budget allocation request form. In the institutional accounting system, they must be processed within the system. Before, this was done manually. As of April first of this year, all central government institutions are to generate their fund allocation requests, all their fund releases and all coordinations and all reimbursements within the institutional accounting system. They were given a period for maturity and installation from January through March. The institutions must load the system with the budget as approved by the nation's Congress and this must be done at the beginning of the year. They automatically get all the different budgetary items for the different accounts and subaccounts and then they proceed to execute the budget.

This module has three windows on its menu—request, cancellation and approval. As far as the request is concerned, that is the initial portion. Cancellation, well, sometimes, for some reason, it is withdrawn. It is cancelled and this can be done in the system. And, as far as approval, when the budget directorate approves, then this request for final allocation comes back to the institution. The next level deals with the release of funds by the department. This could not be done without the prenumbering assigned by the budget directorate when the fund allocation request is approved. So then the responsible person at the institution can generate the release of funds of the department given the approval of the fund allocation request form. And the release module also has an approval feature because as some of you know, those of you who have similar systems, and there are several Dominicans here, you know that funds release by a department does not mean that there is an obligation on the part of the government to provide the funds. This only takes place when the institution sends the departmental release to the General Accounting Office which does premonitoring in this case. Once this is approved by the General Accounting Office, it becomes cash as we call it.

The system screen for funds release contains the “chapter,” which identifies the institution, such as the Presidency of the Republic; the time period or fiscal year; the type, such as payroll; the fund, which is the general fund or a specialized fund; the date of the department, that is the date on which the payment order is generated; the number of the department; the date the auditing was done, that is when the payment order is approved; the auditing number; value; the function; purpose; a space for observations and the status. There are also details about the program, the subaccount, the activity, the object, and everything that has to do with the accounting registry of that budget item in particular.

Another one of the modules is the repayment module. It has a screen similar to the one that I showed you before on the release of funds. It basically has all the information that I was telling you before. We are talking of a payment, either the total amount or a partial, that was not utilized by the payee being returned, if you will, to the public government treasury.

This accounting system is not a rigid system that was developed at the General Accounting Office, was implemented by the General Accounting Office and that's the way it is. No, this is a system that will allow you to constantly make adjustments as required, for example, to accommodate special conditions that were not foreseen in the development of the system. This is accomplished through the maintenance module.

I can give you an example. When we first started to implement this system, the labor department realized that in the release of funds module, they could not do certain discounts based on the different rules and regulations of the institution. And we did not foresee this when we developed the system. The maintenance module allowed us to make the necessary changes and, in a week or so, the accounting office was able to give a satisfactory answer to the labor department. This is a general system that is very flexible and is capable of adapting itself to the different accounting situations that we may have.

In the maintenance module, we have for example all of the different chapters that form the Dominican public sector in its totality. Number 101 is the Presidency. Number 202 is the police and so on and so forth—the master file, if you will. When the system was first developed we did not foresee the incorporation of a new chapter in the Dominican public sector. But the new women’s secretariat began functioning this year. Since we have a maintenance mode, we were able to create immediately this new chapter which was incorporated into the master file.

We also have a report module which is very important since those of us who are public officials are required to have reports in order to make decisions. One of the virtues that any automated process should have for the use of the managers is the capability to generate opportune information, reliable information, transparent information. Now, all of the modules that we have seen that have to do with allocations, with the release of funds, retainment, everything that has to do with the budgetary cycle, they can also generate a report. These reports naturally can be generated by time period, by appropriation, the different coordination funds, the reimbursement order of payments, by chapter, etc. There are a number of reports that can be issued for accounts, subaccounts.

This reporting module will allow us, as a matter of fact, to measure in a way that has to do with yield. Now you know as well as I that one aspect that must be taken into consideration when we implement computer systems has to do with yield and investment. A large investment should be justified with better yields; otherwise there would be no reason for it. I can tell you that this system was developed without any type of difficulty for the General Accounting Office or the Republic, and no significant difficulty in the implementation phase. When I spoke about the yield, it would take the internal accounting department about 30 minutes to generate a request for fund allocation. Nowadays, that request for fund allocation generated by the system takes only five minutes. Another example that I can give you, the departmental order of payment, when it was done manually, would take us between 40 to 45 minutes. Nowadays it takes only eight minutes. This greater yield allows us to do more data analysis. Also, before, if we required historical information we had to go back to the paper archives or dead files. You know how much that costs in terms of time, money and human resources, and how tedious a job it is to do. This institutional accounting system is a quantum leap above our former manual processes.

We also have a security module which is a module that every system must have. It is available within this institutional accounting system. If we did not have a security module we would be exposed to alteration situations that could interfere with everything that has to do with the recording of important information. We are talking about accounting principles that are within the budget, carrying out the budget of the nation. I said at the beginning that this accounting system is divided into two components—the budget component, the one we are showing you today and the one we are using today in the Dominican Republic, and the patrimonial component which we hope to do. Both components will create not only a cultural basis but also the material basis required for implementation of an integrated system for public financial administration.

At the end of the month of February, our auditors visited some 62 different institutions in the centralized public system to verify that the implementation of the accounting system was underway. We found that the accounting system had been installed in 13 percent of the installations. Well, when we say installed, they were working with it with good results. Perhaps you are saying that since you started in the month of November of 1999, and only 13 percent of all the institutions have installed the system, that is a low percentage. Yes, that is a low percentage. However, remember what we said at the beginning, our institutions, the Dominican institutions, had a cultural level in the field of computers and a technological knowledge that was quite behind. I would say that most of the institutions did not have computers. I can tell you that when I was assigned as the National Treasurer, the Office of the National Treasurer did not have a single computer. Everything was done with a calculator. We’re talking February of 1997. We’re talking about the treasury of the nation. Never mind the rest of the institutions. Nowadays that is not the way it is. Things have changed enormously to the point that in the school system of the Dominican Republic, computer labs are part of the effort to create educated human resources for the wave of modernization in the world today.

With the document that was issued to force the institutions to use this accounting system, starting April first the General Accounting Office will not receive any type of order of payment, no requests approved by the budget if it has not been generated by the institutional accounting system. This will help us enormously in our effort to contribute to the modernization of the state. I was told just a few minutes ago that there are, in fact, 61 institutions that were approached and identified as accounting entities and they are to install this institutional accounting system.

If we review this entire process in general, it has not been troublesome either for the General Accounting Office or for the institutions that have implemented, inasmuch as initial resistance is typical of every single employee, even in the private sector. It is human nature. We have also worked on establishing subjective conditions to facilitate the transformation from resistance to change to corrective resistance involving the institutional accounting system. There are samples included in the user's manual and we will leave some CDs with the event organizers.

Something that should be highlighted in this final portion of our presentation is that the institutional accounting system that we developed did not have during its development phase any foreign assistance. It was a contribution on the part of our technicians with the help of feedback from the institutions that participated in the different seminars and workshops that we conducted.

Another important comment is that unlike many software programs that are developed and sold on the market, the SCI makes it easy for any user to solve any difficulty when it is installed, developed or implemented inasmuch as it has a module, a virtual module, which allows programmers to work without the basic assistance of the authors of the system. So Dominican government institutions don't have to be permanently tied to the General Accounting Office because this system is resilient. I don't want to compete with lunch, which is real strong competition, therefore I will not impose on you any more. I'd like to thank the School of Accounting at Florida International University and the person who invited me so that I would make this presentation.

KEVIN ARCHER (Bahamas): What is the amount of the budget in the Dominican Republic?

HAIWANJOE NG CORTIÑAS (Dominican Republic): After our latest census, we had a population of 8,200,000 people. The nation's budget that we are implementing at this time in Dominican pesos amounts to 50,200,000,000 pesos.

ISMAEL A. IMAÑA (Bolivia): This system is interesting but from the institutional standpoint, what is the role played by the Ministry of Finance or Treasury, and what relationship does it have to integrated systems? In my opinion, the role of the General Accounting Office is not included in the operational area. We would have to get an explanation of pre-audit and post-audit. I believe that those roles of the accounting office pertain to the Ministry of Finance. I would like you to give me an explanation.

HAIWANJOE NG CORTIÑAS (Dominican Republic): Our Ministry of Finance is not like the Ministry of Finance known by most Latin American countries. There are substantive differences between the Ministry of Finance and the Dominican Ministry of Finance. To give you an example, the Ministry of Finance in the Dominican Republic has nothing to do with government expense. They deal mostly with public revenues but they have nothing to do with government expense. However, the integrated financial system does link the institutions and the Ministry of Finance so they would have a more active role as far as the nation's treasury. And as far as the General Accounting Office, the Dominican control system has some different features from other countries. We have three basic tenets—the Accounts Chamber, which is constitutional; the General Accounting Office and an internal audit department at the different accounting entities. We said at the beginning of our presentation, and maybe I didn't make this clear, that a principle which governs the institutional accounting system is the principle of operational decentralization and standardization. For such reason we have provided standards for the institutional accounting system. In the operational area, well, the managers of the different accounting entities are responsible for managing and using government funds as far as revenues and expenses are concerned.

Technology in Government in 21st Century

Ramiro Valderrama, Consultant, ORACLE

ORACLE Corporation, as many of you may know is one of the five largest firms in the world by market capitalization now. We are in over 165 countries, we have 50,000 employees and government is not a sideline for us; it is the biggest moneymaker, revenue producer for ORACLE Corporation. Twenty-five percent of our revenues come from public services industries.

With me today we are fortunate to have Connie McDonald from our Global Service Industries. She is a program development manager. We are also very fortunate to have Manuel Fias, here also out of the ROSI. His specialization is financial management applications and he also has applications for the Comptroller. I ask you all to take the time to see the presentations that he has here and the integrated financial management systems that ORACLE has and is selling around the world. We also have Arlene Garcia who is outside attending to customers. She specializes in applications, financial management also, but also supply chain management, customer relationships, data warehouse, etc. So, hopefully, among all these people, they can answer your questions and I can do the presentation.

With that said, what I'd like to do is go over our base products and services. Many people know that ORACLE is the leader in databases. They know we're the leader in data warehouse technology tools. What often is forgotten is our expertise and our involvement in the e-business world.

With that I am going to challenge you visually for a second. Why did I bring this up? Well, right now there is a movement towards the Internet that people are starting to realize. And, in fact, ORACLE is a major player and so explains our stock market valuation: 93 to 95 percent of all public dot-com companies now run on ORACLE, including SISCO. How does this impact us? Well, as we start talking about technology and government in the 21st century, citizens are starting to look at the Internet and looking at technology and their expectations of what they expect from us has also started to change. They're also starting to look at the delivery of those services. So I'm going to focus on the narrow portion of e-government because e-business is such a broad subject.

First let's determine the objectives for technology. I was at the conference of the Inter-American Development Bank last week. One of the things that struck me is that technology has to be looking at how to strengthen the participation, transparency, but increase the benefits, the economic and social benefits, that come with the emerging knowledge, economy for all of our citizens. So with this as a backdrop and remembering this, we can start looking at e-government.

E-government of course starts at home with the e-business. Everybody today knows about Amazon.com. You are all ordering books or at least have heard about it. You know about e-Bay, e-Trade out there. And when you start thinking about what you expect from the government, the perception gets started at home. You are now able to go in at any hour that you want, order a book and have it delivered to your house. That expectation is now coming across to government.

Governments today are facing the same challenges that businesses face. Citizens expect the same improving efficiencies and the response to demand of private sector customers.

What are the drivers for change? It is bad enough that we are overworked, overtaxed, but now we have people that are coming to us and saying, "We need 24-hours a day service, 7 days a week to get our work done. We want to be able to address people." And the citizens are expecting more to be done with less for you. People are expecting you to do a lot more. Transparency and accountability are expected to increase, and the services are expected to be

improved. So, at times, you must all feel like you are being pulled and pushed. The governments feel they are being pulled in all directions.

As we look at the changes that are coming with the millennium, we are finding that there is a change in the perception of the people. They say the government shouldn't be doing service for the citizen, it should be serviced by the citizen. They don't want to stand in line. They want to go online and get things done. And instead of talking about the digital divide, which we'll get into more, we're talking about a digital democracy. For many years we've talked about eliminating paper-based government and going to a government online. More importantly to our countries here is going from physical knowledge to digital knowledge and the sharing of that information.

The citizen demands service, value and access wherever and whenever he wants it.

The 1997 forecast has actually been exceeded. E-mail, where it was very small in 1997 at 2 percent, is well over 30 percent. In Latin America it is growing even faster. The services from the Web went from 1 percent to 56 percent.

How many of you know what region of the world is the fastest growing on the Web on the Internet? Latin America is the fastest growing region in the world on the Internet. In fact, as we look at the studies, after the United States and Europe, we will have a greater percentage of the population online than Asia will. Obviously they've got mass numbers from China and India, but percentage-wise we're going much faster.

If you look at Jupiter and IDC's research, they are now predicting that by the year 2003 there will be 66 million users on the Internet. From the first indications they think this is very conservative—that it will blow out that number. We're exceeding all of the expectations. I saw this last week in *New Market Brief*. They produce a briefing for ministers of finance around the world and we participate in this program. They stated that it is conceivable that in many countries in Latin America people will do away with PC use and jump to wireless Internet use and become the first region in the world—gasp!—to make the computer obsolete. The penetration of mobile telephones and the WAP, wireless application protocols, are allowing us to leapfrog in many things that are taking place in North America and Europe if we rise to the challenge.

At the same time, of course, the challenge brings us back to reality. As government employees they start harassing us saying they want better service, better quality out there. On top of that, we're challenged by organizations like NPR, the National Partnership of Reinvention of Government, that says we've got to provide better service. One of the ways to do this is to offer more services via the Internet in electronic government.

What is electronic government? We're defining it as having three components. First of all, the connected citizen—giving access to the information that they need, putting them online instead of in line as we talked about before, in a secure and private manner. The connected employee, connected civil servant—giving them more productivity, more value of services that they can provide, providing the capability to procure things more efficiently and work more effectively. And there is the connected business—working as a supplier as well as a partner with government so that they, together with the government civil servants and the citizens, can be a much more productive society.

What we've talked about, government to government, includes of course the rule of law; the public participation, which comes back again to giving citizens the access to information; providing government agencies with access and information, that information; getting procurement, customs systems, financial management systems online and being able to share that so that you can capitalize on the advantages and the benefits that the Internet is now providing to many countries around the world. And you need solutions that tie together all the areas providing these services.

Not only are you expected to provide this information, but you have to be able to provide the information in a manner that is readily accessible anywhere and as well as in a manner that is readily readable and useable. So you have to take advantage of not only the data warehouse, but you have to be able to have a spatially enabled data warehouse. You have to be able to, at the level of the database, integrate images, audio, video and be able to bring this information to whatever type of mode the information is stored. Fortunately today we have those types of technologies and we're out there and countries are utilizing it. And we have, on top of this, the benefit that all of this information is now accessible anywhere at any time to the authorized user in a secure manner.

As we go forward, government employees are saying, what is the investment we're making? What are we getting out of it? And we think about these new matrices that are being created. We always hear about return on equity, return on investment, but really we're looking at getting a rapid return on information. What is the opportunity cost of having this? If the services are provided correctly, costs are going to go down and the level of service, the value of the service and the productivity of the government is going up.

Of course we always have the security challenge that everyone keeps in mind. You want to have this information but you want to make sure that only authorized users have access to it. You want to be able to provide transactions, knowledge, not just data and information. You want to be able to create one-stop services so that some person can go one place and not have to go to many different agencies to get something done. The vision basically is to have all this information in a common database. You want to utilize commercial off-the-shelf applications.

At the last conference and this one there has been a lot of talk about the need to start capitalizing on what is commercially available already, not building everything from scratch and repeating the financial management systems. Learn from our brothers that have already done it in one country and get the best of breeds together. Then modify it for the idiosyncrasies and laws of each country.

You can then go towards a virtual government where regardless of where you are, be it in a government operation, the administration, human resources or marketing, you're leveraging all of those resources. We've been in places, in Peru for example, where these actually become operational units. In Peru and in Chile, government agencies are looking at what human resources they have—what kind of training do they need, how can they fit into the new programs that we're about to launch. They start programming away with that as an operational device instead of just an administrative system.

What is a road map for e-government? Normally on the commercial side you're looking at the buy side, the sell side and the inside. In the government world, we're looking at the service to the citizen; we're looking at the suppliers and the procurement, the civil servant or the employee and the infrastructure.

Previously, when we talked about the government, people thought of it as a 9:00 to 5:00 operation. That's been changing. It's now 24 hours a day, 7 days a week, access by many methods, not just by your telephone line. It could be by a palm pilot or by a kiosk. Where it was before, it was very resource-intensive having to go and see these people—again, self-service by the citizen.

You all know when we looked at the civil servant he was inundated by paper; he wasn't able to be much of a knowledgeable worker. We're trying to enable him to access information so that he can have the analytical and strategic information and act much more as a decision maker. Again, you are also looking for employee self-service just like the citizen. You want that capability inside the government as well, and expect it.

Suppliers—this is a nightmare for all countries including the country that is 20 minutes out of Miami. You want to go from a paper-driven society to an electronically linked society. There are tremendous benefits to be derived. You want more efficient spending and accountability. You want to be able to capitalize on strategic vendor sourcing. You also want to be able to do self-service purchasing. And what is interesting is while we don't get as much publicity, there are fantastic projects and references that we have in Latin America that are world-class solutions. Infrastructure on the platforms—I think a lot of people talked about the costly deployment, that you want to deploy it without any costs. You want single maintenance points—the presentations earlier today touched on this—and rapid development of these applications.

Previously we saw a couple of presentations, including the one yesterday on financial management, that talked about how everything before was convoluted. You had to update multiple systems. Now, with integration at a click, you can go anywhere in the United States. ORACLE used to have 94 servers just for e-mail. We now have one server; everything is updated on one server. When we do the financials, 50,000 employees, 165 countries are updated instantaneously at one site, all of those machines. SISCO does the same thing on our software.

What are the results? You've got improved service for the citizen; you are empowering the citizen. That's a dangerous thing. They can come back and ask for more things later, leverage new delivery channels. And you're looking at new, innovative services that the government can now offer that previously had not been expected and

thought impossible to do because they didn't have access to information. And finally you are reducing the cost yet delivering better services.

It is always good to remember that while people look at technology and think of it as a panacea, there is a lot more that goes to the solution. And the biggest one is the cultural change, the institutional change that has to take place. The social issues, the political issues are real factors, particularly in our countries. Maybe the least of these is the technological aspect. Economy can take care of itself because many times we can show that you can save a lot more money by putting the system up. In Argentina we have a system based on one that we had done in Mexico for procurement online. They're able to justify the system by the savings alone.

Opportunities for change—what's taking place here? It basically has to do with online versus doing it by paper. You're saving nearly 80 percent of the cost of what it takes to go through a manual procedure. This has been documented not only in the United States, but in a number of other countries in Europe and even in Latin America. What we don't document is the potential benefits of the actual purchases. In the case of Buenos Aires, I remember that once they started putting the information online for the bidding to clean the hospitals, the price per square meter of hospital space being cleaned dropped to one-tenth. When the information was disseminated and people were now being held accountable as to who would win the project and at what price, the price dropped. So there is phenomenal savings that are taking place there. The U.S. government estimates that in the United States 10 to 20 percent of costs have been driven down by having it online. Plus their own internal procedure has an 80 percent savings.

The application, be it from us or anyone else, should be 100 percent Internet. Ours is the only one that is 100 percent Internet at this moment, 100 percent integrated based on Internet standards, making sure that it's open. Today and yesterday, the presentations continually kept referring toward different products, be it the database, the data warehouse, the application server, case tools. One of the advantages is that with integration we are allowed the flexibility to keep the standards open.

So what is the impact of what we're seeing? How is it starting to change? Well, now you are starting to see a convergence of the services that are being provided from the private sector and the government. The government can send a bill to the citizen and ask for a payment, a tax payment, online, and online the citizen can pass that payment forward. Already Chile is well advanced on this. The State of Rio is well advanced on this process, and the United States is now in preparation of doing it. In that regard, Latin America is actually further along than the United States in this activity.

Where is it going to have a much greater impact? It is when you start looking at the bigger picture. If you go to a local hospital because you broke your arm or you have a problem with your appendix, they can pull up your records in a secure manner, see what's happened, and see your condition. The doctor has that information as it's been updated with your latest ailment. He can prescribe medication. The medication can be checked against your records to find out if you have had previous allergies or reactions to that medicine. You can find out from your pharmaceutical company if there are discounts available. You can actually bill the social security department for part of that online. You can then find out if you are entitled to discounts there. And then all of your records are updated for the next time you go into the hospital. The interesting thing about it is that this is actually starting to take place in a number of countries. In Latin America there are a number of health initiatives that are also working towards this.

What does it require for change? We have to change our framework for the delivery of services. Previously we were looking at everything as being stove-piped, point solutions. You would go in to update your tax system, going into maybe to the land registry. You'd then go in to see about income tax, your VAT tax, and so on. You want to have a common infrastructure foundation. You want to be able to start operating multiple access points where people start sharing information among the different departments. You want to be able to start providing the information to the community so that they can analyze this information and then start providing a higher level of services.

Multiple channels are supporting this democratization of information. And we're starting to see the frequency of access increase as we move off of the personal computer. How many of you have Palm Pilots? They give them to you in the United States at birth. About a year ago *The Economist* in September had predicted that by 2002 more Palm Pilots would be sold than personal computers, and they are well on the way of achieving that. Most of you have mobile telephones. Nokia and Ericson had studies last month saying that by 2003 there will be more mobile telephones

than personal computers sold around the world. So, again, this is where Latin America can take advantage of its penetration and access to this information. And with our rapid growth in e-government, deliver those services.

Interactive TV—we have one of the highest penetration rates in the world for satellite and cable TV. So that is another mode of delivery that we should take advantage of.

Some of the solutions that we've been seeing in Latin America and Caribbean and some other places in the world I'll briefly mention here as we go forth. Sometimes one-of-a-kind solutions can impact one area and still have a significant effect on another area. The procurement system in Mexico was copied in Brazil and in other countries. Eighty percent of their procurement is now taking place online. Argentina is now putting up a number of these systems as I mentioned before. Department of Transportation I-Store allows people to go into the Department of Transportation and purchase trip information, maps and road construction sites. A system in Colombia that is going up right now allows the regulatory entity to control the sale, the licensing of mineral rights. It is also looking at linkages with customs to make them more competitive and watch how money is coming in and out of the country.

As we start moving further down the chain towards common infrastructure, we start looking at the financial management applications. The Valencia financial administration has gone completely ORACLE. Puerto Rico and Argentina are taking the tax model. For medical and health services, Latin America is trying to develop templates that are commercial off-the-shelf software that people can buy in different states. They can be customized and delivered so that you don't have the long lead-time and all of the development expenses. Additionally, it is supported by an international vendor.

Everybody criticizes our justice systems. We now have Web-enabled justice systems that have been rolling out in Latin America, in Brazil in particular. They have the Optal system in the federal courts where anybody can access official records. The workflow is automated and this has had a direct impact on the processing of the judicial sector as well as the efficiency of the court administration.

In the United States, the State of Connecticut decided to start putting out information not just on what crime takes place, but where it takes place and when and where people have been released from incarceration. They are putting that information at the disposal of the citizens so they can act upon it.

We also have a system for census. Census information is an incredible wealth of information. The United States is moving to put the census online where you've got demographic breakouts of information, salary, incomes, the distribution of these people. It is not online yet. Brazil is already online. Colombia is going online on the Internet. Chile also has projects that are well ahead of the United States in this realm. Tie this together with the land registry and tax administration system, where other significant advantages will come in the future.

Smart communities—we're looking at smart communities that allow the average citizen to take advantage of information that is being pushed his way—health, education, police information. The model for the European Community working on ORACLE was created in Valencia. It is now going to be replicated in 1,000 municipalities in the European Community. The average citizen can log on. The system modifies itself recognizing the user so that it shows the services in which you are interested or the stores where you shop. You can see your child's school records; you can see his health records. You can see what is taking place with the police in your neighborhoods and then leverage that information. Likewise, businesses can start looking at what's transpiring with the government and capitalize on this information.

As we move to the next generation services, we're starting to see many more integrated applications. Here in the U.S. they have the Utah State which is tying together social services, employment, training benefits—one-stop shop. You go in, you say I've got someone who is unemployed. What was his previous experience, how do I get him trained, how do I get him connected with people that are hiring? It is all done at a one-stop shop there.

As we look at Latin America, we're starting to take advantage of the same type of information. Right now ORACLE is in the process of bidding on 911 Puerto Rico, an initiative with the government of the Territory of Puerto Rico. You have the 911 emergency call system that everyone sees on TV, but what we'd like to have linked to it is health information, all the social service information. So if a policeman is on his way to O.J. Simpson's house, they know that there had been spousal abuse in the past. They know the medication issues associated with a call. Are there

other peripheral issues? Criminal records can be tied to it. All that information is going to be accessible in Puerto Rico.

We're starting to take systems that before had nothing to do with each other, looking at how we can make government employees more efficient, increase the value of the service that they're providing and bring that together for dissemination to the civil servant as well as the citizen.

Valencia, Spain—I'm just going to spend a second on this—was a model project that was created where initially we were looking at their budgeting and accounting. It started to grow from there to an integrated system where the accounting of the State of Valencia was going to be done in an autonomous fashion. As the system started to grow, we started to see the advantages of linking it with the treasury information, the debt information, the human resource systems, workflow, self-service capabilities, a much more complete and comprehensive system. This system has just been completed. The Italian government has come in and looked at it and they are now going to be adopting it for Italy as well. We're looking at bringing it to Brazil and Argentina, modifying it with some of the applications we currently have to develop a best-of-breed that can serve Latin America and the Caribbean. From there, hopefully, we can also adopt it in the rest of Europe.

And we talk about different delivery channels. How can we get this information? How can the average citizen access the information? Well, now you have several ways. You have your palm pilots. You have your ITVs, you have your kiosks, the call centers, mobile telephones. There is less and less and less reliance on the personal computer. That had always been a barrier of cost. Again, Latin America does have the opportunity, because of the way that technology has moved in the conversions, to leapfrog what was before seen as a big impediment to the Internet economy in Latin America—the cost of the acquisition, the cost of the training. It is much more intuitive to learn how to use a telephone with a WAP device than it is to learn the personal computer. You can pull off information—textual, information statistics, profiles, graphics, audits—and still do your community service, shopping, online banking.

Just as we started looking for the Holy Grail, how do we start this project? How do we start getting a cup of life? We developed a ten-point program. In this you've got to start understanding first you can't just automate what you have. You have to start looking carefully at the processes in your organization. What are the benefits you hope to derive? Don't just bring technology in as a panacea, reengineer and apply the technology to your organization.

You also have to conduct an internal evaluation as to your ability to apply it, which includes looking at your personnel. What is the level of your personnel? What training do you have? We used to categorize training as K through 12, and then we had higher education. We decided really it is continual education. It is from K on to infinity. You send your employees back to school to learn new technologies, new advantages. How else do they become knowledge workers and stay that way? That is the only way Latin America or any developing country will jump forward.

You can't limit yourself in your design. Even if funds limit you, you should be looking at your design to have the infrastructure there to support where you are going to be going in the future. Even the U.S. government will say, "We only have this money right now so we only want to look at getting databases and then next year we'll do the data warehouse." Lay the infrastructure for what you are going to be doing in the future. Don't limit yourself.

Define success—the measures, the matrices—so that you can compare where you are to where you wanted to be. This also helps you to go back to your funding agencies and ask for more funds. In the case of Argentina, as I mentioned, they were able to show cost savings. They went back to their funding organization and said for every dollar that they spent on the systems, the government was saving \$10. This was in Buenos Aires. Obviously that depends on each country and the situation, but you can do it if you have the matrices.

Establish an action plan. Outline the process. And of course when we're talking about accountability and transparency, who is accountable for each of these different processes and action steps?

Start small. Scale fast. When you have a big vision, remember, you can only bite off so much at a time. Get feedback from the key stakeholders, and the key stakeholders may not just be your agency. As you start to bring information together you're going to have other government agencies coming into play—citizen groups, maybe even lobbyists—coming together to hit those critical touchpoints we discussed earlier.

Develop and promote a single point of access. Nobody likes to go to four different places to shop or take documents. I don't know how many times in government organizations you have to stand in four lines to get something done. You can do it online in one place and have access to the other ones. That's the best. Even if it's just links to URLs.

Identify the barriers to success using the e-transformation services. This again is not just technological. It is the least of your concerns I think. You are going to be looking at the corporate culture, the training, the personnel that you have, environmental issues.

And we go back to what everybody starts with—doing the vulnerability assessment, making sure that you put the proper firewall securities in place. The technology is there right now. National Security Agency is using this stuff. NATO is using it out there. The question is do we get sloppy and cut corners?

Finally, a thought as you are going through and looking at the technology, looking at the development of e-government, seeing how this will be installed, don't forget ORACLE. Not only are we the biggest e-business provider, other sectors consider us the infrastructure player for this marketplace.

JIM WESBERRY (United States): Two questions on the Internet in Latin America. I agree with what you are saying, but the two big problems—the cost of ISP connection in Latin America and bandwidth—we have to solve those two problems. Are they going to be solved?

RAMIRO VALDERRAMA (United States): Right now it is interesting. You look at Brazil. Brazil has been doing some things that are fascinating. ISP providers are now giving away the access. There are a number of large initiatives there and they are now looking at Argentina to start giving away access to the Internet. Telephone rates are also dropping, dropping by the moment as we speak, which is something that is not happening in the United States. I don't see that as being an issue.

The costs used to be a problem, but now they are providing the access for free. They're making it up on the advertisement and the business-to-business. That is also something that we have to remember when we talk about the e-business side. We have business-to-consumer, government-to-consumer, government-to-business and business-to-business. The business-to-business and the savings generated from that is going to pull it off for Latin America.

I don't know how many of you are familiar with the automotive industry in the United States. General Motors, Ford, Daimler-Benz are getting together on all of their procurements. It is a \$200 billion a year business. They're putting it online, and they expect that over five years they will save \$80 billion just on the cost. The employees at work and the small and medium enterprises are in the process of utilizing the technology and are being forced to adapt. That will also be a big factor in Latin America as we start adapting that.

CYRIL RAMOS (Philippines): My question is more or less along the aspect of a moral issue. Every government spends an amount on technology, and such amount is considered as an investment. Now every amount that is spent by the government in the form of technology is a direct deprivation of certain amount that could be used for the production of goods and services needed by each constituent. And there is no doubt that technology is necessary in order to promote the efficiency and effectiveness of the delivery of services of various governments around the world.

But the main problem now with respect to technology, which I think is a very current issue, is the so-fast changes in the technology itself. If a government invests an amount of money for technology, it considers the proposition in that it can recoup such investment within a period of time. But what happens with the assumption that it can be recouped in five years if the technology changes in two years? This means the government is deprived of three years to recoup such investment.

Here comes now the moral issue. Will this fast-changing technology consider the vast investment of various governments? A very specific example of this is last year's event, the millennium bug. All governments were so concerned that there would be such a thing as a millennium bug. And I think that there were billions of pesos that were invested by the government just to address this problem on millennium bugs. Thousands of new computers were

procured so that computer technology installed in various government agencies would be considered Y2K compliant. But on January 1, 2000, what happened? But the investment is already there. And all the computers that were still useable had already been abandoned. These are billions in investment which could have been used by the various governments to provide services and goods to their constituents. But rather it was used in technology.

Now, in your presentation, I hear, maybe it's only a fear, that personal computers will soon be out of favor in the near future. And how many government agencies have invested in personal computers? So this is more or less a moral issue which I am addressing to the various computer multinational corporations. They also have to consider the vast investments being made by the government which diverts its resources in the form of technology against the production of goods and services to its constituents.

RAMIRO VALDERRAMA (United States): There are a number of issues that you've raised out there. The government should not be acquiring technology or setting the technology standards themselves, like, what was it, the government of France where they started to put out those boxes which were outdated very quickly. Let the commercial markets worry about these issues.

This technology that we're talking about here—the telephone, the Palm Pilot, the kiosk—all of them run on ORACLE. ORACLE has even spun off companies—the mobile dot-coms—that deal with those issues. So the same information that is on your personal computer, you can see it at home on your interactive TV, you can see it on your Palm Pilot. You can call it up on the telephone as the New York police are about to do. That information is there. I think what you have to do is go towards the open access and standards and not have the government developing the applications.

As far as the computer, again, remember it is not a panacea. It doesn't solve all problems. We're still the knowledge workers. The tool, the software behind it, only reflects our brains and our capacity. And in looking at what's taking place around the world, a lot of what we need to do is actually spent on technology out there. Last week the Inter-American Development Bank commented on the number of their projects, particularly cultural preservation projects. Guatemala has Indians that do beautiful embroidery work and build beautiful tables. Currently it is a very small market. What they have now started to do in conjunction with the government, multilateral organizations and international donors is to start taking these projects, putting them online, and making these small and medium enterprises more viable enterprises so that they can go out and reach much broader markets.

If you look at the situation of Costa Rica, Costa Rica invested heavily in technology and I believe now 36 percent of their exports are high-tech. So they've become much more competitive and much more ingrained to the world economy. But this depends upon us. How are we utilizing the technology? We have to think it out. We are the knowledge workers. Hopefully that answers your question.

CALEB MELATO MOKUENA (South Africa): My question simply is does this technology come bundled with firewalls? Is this a standard utility?

RAMIRO VALDERRAMA (United States): You have to buy the security. It is interesting because people are concerned about the capture of credit cards online. Humans are an interesting animal in nature because we're concerned about putting our number on the computer screen, but whenever we go to a restaurant we hand it to a perfect stranger. He walks away, we don't see him back there. We feel okay with that, but we have this problem when we're entering it in digitally. The security is there. The problems arise because a company doesn't buy the security devices that they should have. They don't put the incipations out there. If you think of NATO or if you're talking about the National Security Agency or the CIA, they are all operating out there. They have security. And of course they are always updating. It is not something that is static. Even your Norton anti-virus has to be updated.

Connie or Manuel, do you know of any major acquisitions or loss of money on the Internet in the last six months or a year? I don't recall anything. So most of the big companies already have that in there.

I think for Latin America the challenge may not be the security aspect but the delivery aspect. If you buy that book, how do you make sure the shipping gets it to you in time? And do you have the types of services built in to support it?

JIM HAMILTON (United States): One of the concerns I hear from the Philippines and others is the cost. One of the reasons there has been a lag outside of the United States is because of the cost. I know in the Philippines and Latin America it costs a lot more. Most people are still on by the minute or the hour, rather than having unlimited access to the Internet. But now people are pinching me and saying, "Is it really true you can have online service free?" And I say that is happening because of advertising on these Internet services. Ramiro, do you see that continuing and reaching out to other parts of the world?

RAMIRO VALDERRAMA (United States): Yes, I think you're going to start seeing the wave first in Latin America. Latin America was the first one, and Brazil in particular, to start doing this. It increased from the ISP providers who had initially done it, to commercial banks that are providing this to their customers as a way to capture new customers doing banking online. We're also seeing the governments in Latin America becoming more proactive. In the State of Rio, Brazil, for example, they are trying to build a process so you can do tax payments online from your bank. I see that as a trend that's moving forward in Latin America in particular. It will come north as well as east and west.

The Role of the Government Auditor in Detecting and Investigating Fraud and Corruption

Mario Andrade, Ecuadorian Civic Commission Against Corruption

It is with great pleasure and with enormous pride that I share with you a subject that is so current, a subject that links all of us. I am very grateful to the organizers for having invited me. Besides a professional satisfaction, it has allowed me to greet old friends again and to make new friends, exchange information and to know there is a great group that is involved in the battle against corruption because corruption affects all of us.

Corruption has no borders. And through these conferences and a series of specialized publications, we have been able to prove that in the same way as the economy has been globalized, the same way as we have globalized the cultural exchange, also, unfortunately, corruption has been globalized.

When I was preparing this presentation, I wanted to begin with something that will reflect this globalization. It is important that together we make a permanent commitment to face it in our workplace, to face it in our personal activities, and to face this problem in our professional activities. This conference each year has greater international coverage. We can see the presence here of many representatives from different countries who, in our first conference, were not present. This is an additional reflection that there is a need to integrate these efforts and to integrate common actions.

The task of the government auditor in detecting and investigating corruption is the subject that we will be discussing here. The agenda that we will be presenting covers five important points. I ask each one of you to please consider what we discuss as it pertains to the specific characteristics in your country. Since the subject is delicate, I will approach it from the point of view of my experience in Ecuador and in some countries in which I have been fortunate enough to do a comparative study and where I lived through the experience.

We must speak in depth about a plan of action that allows us to identify the main corruption and fraud areas. Many countries have these plans, whether they're called anti-corruption plans or transparency plans or whatever name they may have used. With these plans we can identify the flow of money involved in corrupt acts, which is key to a more thorough review on the part of the government auditor. In Ecuador we have the Ecuadorian Civic Commission Against Corruption. Then I'll be talking about the way to investigate and punish people who commit corrupt acts. Thereafter I'll talk about anti-corruption strategies and naturally the two last items will deal with the auditor's role, what has been done throughout time and what must be done, and the different perspectives in the fight against corruption. It is not only incumbent upon the auditor to fight corruption, it is incumbent upon everyone.

The main corruption issues are as follows, but these are not the only ones. That's why I insist that each of you perform a self-analysis involving your own reality to discover these issues and how to fight them both effectively and efficaciously. In addition, we must be efficient against corruption. We must be efficient money-wise.

Unfortunately, in our countries, and in Ecuador in particular, politics has not been the best option to serve society. On the contrary, politicians have used society to create ill-gotten gains and personal benefits. Many of these characters are here in Miami and they have an extraordinary lifestyle offending both the Ecuadorian community and the international community. Given that such politics are not for servicing society, a series of situations occur which I'll be speaking about at length later. Obviously there are honest people as well as dishonest people in controlled organizations. Many officials who take power, whether in the legislative branch or in the executive branch, wish to have full control. And they see control organizations such as the General Accounting Office as an opportunity to appoint a person who could go after his opponents or favor him with an opinion or issue a report that does not reflect true facts. One of the problems of at least the last three governments has been making a huge effort to appoint Controllers who have been very, very close to them in order to clearly derive some benefit or attack their political enemies.

Given the work of the Anti-Corruption Commission and my own job as government auditor since 1973, unfortunately, we have seen that some reports that we have issued which are fully documented with legal basis, appropriate evidence and the integrity originating in independence have fallen by the wayside when politics enter the picture. A politicized judiciary and politicized control organizations are extremely dangerous to democracy. They are extremely dangerous to the public accountant who acts as a government auditor.

Based upon this context, there are a whole host of other situations such as government hiring. A huge corruption problem in our countries is, without a doubt, government hiring. And in government hiring, about 30 to 40 percent of the nation's budget is invested. When you have invisible avenues, when projects are not carried out thoroughly, we have hospitals without drugs and raw materials. Education is poor because there is no equipment. The media doesn't allow you to advertise products. Through public government hiring a political debt can be repaid at the right time. Undoubtedly, in government hiring, and in other areas mentioned earlier, the entrepreneur has much to gain.

A lot of investment in technology has occurred. An earlier presentation mentioned the Compranet system. There are other systems in neighboring countries that were developed to create a transparent environment as it pertains to government hiring. Customized systems with political roots can allow people to be hired who can literally work without earning a salary. The services they provide to certain individuals allow them not only to make a salary, but also they make very large amounts of money which lets them live in such circumstances that would never be available to them otherwise. Decentralized systems may be the answer as far as this area is concerned. Huge steps have been taken but there is still a long way to go.

Discretionary budgets. It has been traditional to have reserve accounts. A few days ago I visited some Central American and Caribbean countries. We saw general items that were put anywhere and there was no answer whatsoever when we asked about planning. It is just the President of the Republic's huge petty cash. Reserved expenses, well, a huge number of these have existed. These expenses allow huge discretionary limits.

There are poor public services, many of which create difficulties in selling facilities. And the public servant starts to deteriorate just as society does. Society becomes ever more permissive and it accepts as valid a process where it has to pay bribes. It accepts that it is positive to get preference even if a bribe has to be paid. This decays human behavior. Naturally, this must be changed and this must be changed from the very beginning. A new society must be formed based on values and law abidance.

Deficient information systems. We have heard here at this conference that society should have access to information. An informationless society is a society that does not respect public service because they believe that tax money is not being used for anything positive. So this information system must be available to the citizen and naturally commitments should be set up with the media. In small municipalities, in those countries where we still don't have technology to a full extent, it is important to consider providing information, even if it isn't by the most modern technological means, but provide some information so that citizens can become aware.

When there are natural disasters which to some extent can be forecasted ahead of time, you get new rich people who don't think of their kin, who don't think of solidarity; they just become rich. We have seen boutiques and stores where donations are given without any consideration or commitment to society. These situations must end and a good portion of this is involved in the strategy to be taken by the government auditor. We should look at a reality and determine the areas where corruption is likely to occur and create specialized organizational models and specialized investigational models as well. Obviously professional auditing is a good component.

Let's find some solution to these problems that can be guidelines for anti-corruption domestic plans. Naturally the solutions I offer today are very quick. If you wish to arrive at anti-corruption plans using the program managed by Jim Wesberry, you can get comparative studies of anti-corruption domestic plans that have been prepared in our region.

Another corruption issue is campaign costs. If campaign costs are not controlled, the chances of having undesirable people leading a country is very high. Several laws have been issued in countries limiting expenses in elections. They make it compulsory to publish names and amounts of contributions. I believe that this avenue is essential. The government auditor should audit this information and propose legal initiatives through the appropriate channels. It should be the purpose of auditor associations. And I'm not talking about public accountants only. In such a complex world, there are auditors from other professions different from that of public accountants. And multidisciplinary teams are evermore indispensable. We public accountants have handled audits traditionally. However, today it is more essential to have multidisciplinary teams.

Millionaire-type contributions. This problem does not exist only in underdeveloped countries or just in Latin America. Every day we find out about millionaire contributions in both the United

States and Europe. Anyone contributing huge amounts to a political campaign is not doing so just because he has bought into those political ideas. There is a risk that this person is doing this because he or she needs financial advantages and privileges. Obviously officials are appointed and laws providing privileges are approved. A good component for government auditors specializing in legal provisions is this: What is the aim of some laws? Some laws have a clear beneficiary.

In some General Accounting Offices, such as in Chile, there is a chance to find out about legal provisions before they are issued, and naturally this is not the behavior in every single control agency but some initiatives can be taken. On the anti-corruption committee we are forming a team so that they can analyze these legal provisions before they are issued because unfortunately they can create considerable distortion. Colombia has worked with many municipalities in order to have a politician be accountable for things he has promised. Information involving promises and fulfillments is essential. And the involvement of the citizenry is extremely important. All of us are citizens.

Controlling organizations. When there is a clear intent to harm independence, then we are going against an auditing standard. Without independence it is impossible to talk about audits. Without independence it is impossible to talk about an institution that can meet all of its objectives. I believe that we can take some initiative. Guatemala has a form of election that should be analyzed by electoral colleges.

The period for which the Controller is selected is worth discussing here. For example, take parameters that are extreme. In the case of Chile, it is for life, or at least it used to be for life. In the United States they are appointed for 15 years. We have to look for an in-between point that adapts to the needs of each one of the countries. This is from the point of view of the election mechanism and from the point of view of trying to stay independent. There have been three or four Controllers that have had problems in the countries within the last decade. In the decade before that there were more than eight, because of lack of independence, because of dishonest characteristics, who had serious problems with justice, serious problems with the citizens and of course who created very serious problems for the economies of the countries.

I want to talk about a legal mess, but we could also talk about a number of laws that create that condition. There was a study done in our country that talks about at least 54,000 different laws that exist for the democratic life of the country. Costa Rica did a similar study that ended maybe two or three years ago. The study was conducted to simplify the legal dispositions, make them easier to handle and permit a reorganization and a simplification of the laws. To not do so would create confusion.

Together with all this we had to modernize the justice system. You can see the condition of the administration of justice just by looking at their files. Now what degree of reliability does the administration of justice give? Administration of justice does not guarantee equality. A justice system that does not guarantee that laws are applied uniformly must be modernized. It must be modernized quickly.

In all of Latin America there has been the presence of an independent organ of the Supreme Court of Justice that tends to supervise the administration of justice. Some advancement has been

made in this sense, but I believe that the international organizations should put a lot of effort into this so that we manage in an appropriate period of time to get proper administration of justice. Perhaps you know about this, because of the news, at least it was heard in Ecuador—about an indigent person who had to rise to be heard. In Honduras it is said that justice is for the rich. You see different forms of how justice discriminates and how privileged the justice system is.

Customs. I believe that this is a problem that should be dealt with in many countries. The system has to be modernized. There is a way of electing and it should be by merit. And obviously the obsolete system must be replaced. It is necessary to search people? Can we not determine the contents of a suitcase without having it handled by people? They can create a selective method of checking that luggage or those packages when they are going in and out of customs. All this, of course, produces a lack of trust on the part of the citizenship.

Public hiring. In many countries there is no national plan for hiring. Now when there is no investment in a national plan it is very difficult to have a clear definition of what the needs are. On many occasions they build a school next to an existing school. There might be the need to create another school but not without the necessary numbers for the national plan. It must also be coordinated with the Controller's Office. In one country there was a bank—the Integrated Investment Bank—that came to give support to this type of need so there would be a national plan for investment. We should know the name of the equipment, the name of the consultant. This, as we have said before, helps a lot. This does not solve anything, but it helps when we utilize systems like the one in the previous demonstration. I believe that Chile has done some of this. Colombia is working in this area with computers. And it is very important.

So we should eliminate privileges and hiring should be conducted through legal competition, free competition and a supervised selection process. Something that is worthwhile mentioning is citizen participation. In our country, they are headed towards decentralization, not only because it is the style, but because there is a great need for it. It is there that we must put emphasis on citizen participation. Some call it social accounting. There are different names. But it is worthwhile for the citizens to have direct action in the planning and direct action in carrying out the different jobs. They can supervise, using a term that we do not like very much. Who better to supervise them so that public works are carried out, but the person who is going to benefit from it?

About budget, we have said that reserve global accounts do not have appropriate transparency. We started this conference here today with a presentation about SIGMA. There is a great need to implement an integrated system. It is a good mechanism for controlling this type of situation and of course it facilitates the process. On many occasions we have put our professional auditors through a rigorous training process, but there has been no integrated financial systems with which we can work. Never mind auditing, we don't even have management auditing. Therefore, an integrated financial management system will facilitate the process of auditing. If we do not have a system such as this one, it is very difficult to develop proper auditing.

Lack of information about expenses. How much have we spent in comparison to the successes we have had? Now it makes the job of the auditor easier from this point of view, but from the point of view of the supreme auditing authority, we must push for the proper system for rendering accounts. I saw with great satisfaction, and we're talking about maybe ten years ago, how the

Controller General from Puerto Rico presented her report with a clear rendition of all the accounts. One week she said, "Well, let us talk this week about giving account to the people in Puerto Rico." And she said, "What has each department done? What have they accomplished based on what had been planned?" Also, they had had their financial statement audited by another accounting office in the region. For some time the supervising organizations in Latin America and specifically in Central America and the Caribbean thought it would be a good idea for the accounting offices in the region to audit the other accounting offices, do the quality controls in order to improve the process for rendering accounts.

Well, who controls the General Accounting Office with a professional control, with an independent control? Now centralization has been a problem as we have said, and the strengthening of the local government is a great need.

Deficient information systems. Misinformation makes it difficult to investigate corruption—to follow the money. This becomes very complex. There are some ways in which we have tried to do this, but I believe that an automated system is indispensable for organizations that deal with banks or with the paying of taxes. We have made some serious efforts in terms of automation and we're headed in the right direction.

Now, concerning the communications media, in the last two months we have been talking with the Central American Newspaper Center, doing workshops for those newspaper people who have to do with the investigation of corruption. With them we have established a strategy to create a better commitment and ethic conduct that will allow them to become a part of this great crusade. And it is important to meet with the three Ps that were mentioned here in order to catch a big fish, to fry him publicly. If there are no means of communication integrated into this task, it is very difficult to make this happen. Fines and punishment do nothing to prevent negative coverage in the media. We need to communicate.

Now we have seen with great concern that some resources that come in through loans or donations have been destined for other purposes. In the Central American area, with the El Nino problem, we have seen very, very strong examples of this. The wrong people were involved in receiving those donations. Many people from the outside sent donations with the apparent purpose of giving aid to the citizens who needed it the most. That didn't happen. I think that the ISA should be planning more themselves because with technology, this could be a much smaller margin of error should a disaster occur again. I believe the ISA should be giving some thought to having certain concurrent controls, but only for those situations that occur during the emergency. Other controls should be left for after the emergency. I repeat, leave it for later. I believe that in these emergency situations it is better that we think in terms of a mechanism to do concurrent participation during the emergency process and of course corresponding controls after that emergency.

What is the Anti-Corruption Commission? Because of the lack of credibility on the part of the citizens, Ecuador created an organization that started out with the name Anti-Corruption Commission. It was requested by our President who was arrested because of a job that we did. He didn't like that very much. He was sorry that he elected that commission. He was in jail because he put a great amount of advisors in Congress that only collected money. And they didn't do

anything else. Our job consisted of identifying these cases and, of course, he had to go to jail. But that's not the point. The point is to avoid these problems. However, we have the key to identify these things and punish them accordingly.

This commission came before Congress in 1998, and now we have our own law to give viability to Congress, to the resolution that Congress made. It is in the Constitution. It has seven members. They are the Anti-Corruption Commission. I do not believe the commission is necessarily the answer, it is simply an alternative that perhaps is worthwhile to know about and to evaluate because we have to strengthen preexisting organizations. The commission cannot punish people. They issue reports which are issued to the proper jurisdiction.

What are the ways to identify corruption? One way is to create confidence, accountability and responsibility in order to make denunciations. Many people don't do it because they fear reprisals. But it is well worth creating confidence to locate those people who have access to information and who think they do not have any support from the top.

When I recently came back to Ecuador after the job that we did in Central America and the Caribbean, I told the bank superintendency that if we are not careful, situations similar to what occurred in Mexico and is happening in Colombia were not as distant as he might think. Therefore another control organization would be the bank superintendency. It is worthwhile analyzing the reports from these different institutions. It is worthwhile to follow the rich and famous people who one day appear with tremendous homes, with incredible property, and who flaunt that wealth with lack of any concern for other people. I believe that a law against illicit enrichment is a key process, and to train people to fight against illicit enrichment is important so that there will be specialized auditors in this struggle against corruption through illicit enrichment.

Now, if we get a denunciation, we have to qualify it—where it comes from, the quality of the evidence. It is important that people provide us with evidence in order to do a proper investigation. People are committed to give that information when they get the necessary support, when we create that level of confidence to which I referred, then you have the possibility of success. As in any other investigation, an auditing task must be carried out to prove corruption.

When we go back to the point of receiving the payment, we go back to illicit enrichment. On many occasions there is no way of reconciling the tax forms of these people with the income that they have received. Or with what they have in their patrimony. There are people who specialize in this and we have been working very closely with the prosecutor's office so that the judicial police can do a proper follow up on the suspect's behavior and expenses. Some people live a very rich life in the economic sense but incomes do not equal that expense. Now when we have collected all the evidence it is important to evaluate it with the participation of experts and it is also indispensable to have the denunciation. The experts evaluate the evidence not only for the purpose of auditing but also as evidence in a criminal prosecution.

Having done all this, based on the laws of each country, it is good to evaluate whether due process has been followed. Without due process, this case can be lost if it is not handled correctly. We must be careful as to what we say to the media. It is not necessary to prove 50 or 100 points of criminal activity. Two or three cases that are well identified and are properly evaluated are

sufficient to submit to the authorities. Try to get an answer of a commitment and of course do the appropriate follow up.

The government auditors are a big team. In some countries bigger than others, but this is a team that is identified as government auditors rather than auditors in the General Accounting Offices. These are the internal auditors and the internal auditors have a lot of information because they are inside the institution. We have to give them a lot of support. We also have to give training to the executives so that they know how to utilize these auditing services for meeting their objectives. The auditors and the bank superintendents—this is a team of auditors who know all about auditing. They specialize each day in what is called money laundering. The auditors from the different companies that carry out auditing tasks for the government, they also need our support.

I believe that the problem with the banks, and the financial problems in Ecuador, are due to companies or authorities that do not adhere to proper auditing rules or international rules for accounting. There are some accounting rules that control the different financial administrations that are open to discussion and they deviate from the normal rules. When they deviate from these rules it is necessary that a review is done by a professional group, by IFAC or some such.

Auditors need to acquire specialization in matters of investigating corruption. Prosecutors are using these types of services. It is important to get the two together.

Yesterday we heard about a concern involving valuation and strengthening of internal controls. I believe that when auditors conduct the right assessment and when there are sound internal controls in place, there is less of a chance for irregularities. Provide the ability to understand administrative controls. The main responsibility in designing internal controls belongs to the government. We support this. Present recommendations to modernize the systems and processes. Simplify processes and systems. This is important in this fight against corruption.

We're not going to stop auditing financial statements. We will continue auditing, but we could have specialized teams working at General Accounting Offices that can easily conduct prompt investigative work. This alternative should be taken into account in this fight against corruption.

Have a society service team comprised of people committed to independent and honest service. Otherwise, it is very difficult for the rest of the staff to do the job. Strengthen professional associations. What has been done in this regard? There has been specialized training in several countries. There was specialized training for auditors in investigative techniques for corruption conducted in Chile and Colombia. This has been taught in Honduras, the Dominican Republic, Peru, and some other countries which I've forgotten. Interestingly enough, given a case of corruption that only Jim could tell us about, we requested that this be taught in Ecuador. This was not possible, but it is scheduled for this year.

In the meantime we have designed several manuals and guidelines based on our own experience. I believe that the experience told by the Puerto Rican Controller on Friday should be taken into account given the years that their specialized investigative units have been around and their link to law enforcement organizations. There are initiatives to have coordination among

control organizations. I'm talking about bank superintendents and public prosecutors. And this must be intensified with the courts. Strategic alliances should be set up with the media. I have achieved this personally with some of the media in my country. We have been lecturers at five conferences. Unfortunately I won't be able to go to Costa Rica on Monday. I was invited and I was really interested in going, but my work prevents me from doing so. Over there we're creating several organizational courses so that we can have feedback or exchange information with the media.

Comply with the appropriate standards. Issue new control laws based on these standards. We should create links with international organizations. I don't believe that the Inter-American Convention of Caracas in 1996 should be forgotten. We talk about extradition and this is never carried out. We talk about creating a legal enrichment law. What must be done? I believe that amongst the topics that I have repeatedly mentioned, we must design a law against illegal enrichment that deals with finding that money. There are many initiatives in this regard. I myself coordinated some of these last year. There is a commitment to conduct a comparative regional study and maybe from this a good product can be originated. It should be included in the different laws in each country.

Train auditors and prosecutorial personnel to conduct these investigations and investigate illegal enrichment. Make sure that the Inter-American Convention is complied with and the international trade organizations make efforts so that the practice of some European countries that have used bribes as deductible expenses, is eliminated. There is an international effort being conducted in this regard.

But we must do something that is important to all of us. We must form a new citizenry which respects the laws and the property of others. We must strive to set examples for our children, our clients, our students. For those of us who are teachers, we should make appropriate changes in our lives and we should set up social structures that can face the powerful economic forces. They are powerful and those of us who strive for this should create a social structure that would make us strong in this regard. This is not only incumbent upon auditors but incumbent upon every single citizen on the planet.

Thank you very much.

JAIME MARTINEZ DURAN (Dominican Republic): At the beginning of your presentation you said that it was important that everyone fight against the corruption which takes place to a greater or lesser extent in our countries, and you talked about the structure created in your country. And you pointed out an area on which I will base my question. Given political reasons, several factors come together in each of our societies. One fights corruption in an honest manner, others try to derive sheer political advantage, and I was quite gratified that not only we lawyers are involved in this. There is a multidisciplinary team of professionals that handle all of this. You said that you had to assess the evidence to determine if the evidence met the requirements to conduct an investigation.

In my country, and I believe this experience may exist in others, I repeat, given political reasons, sometimes there is an interest to deal with corruption as something to hurt your opponent. Sometimes when we request that evidence be filed, the people have said, “No, we don’t want any evidence concerning that institution or that official. He must do his job.” Thus we don’t have any way to reach a specific conclusion.

My question is, what is your experience? Another important component is the press—our media. The media is interested in getting out news. I think it is very interesting that you say that this is a struggle where every single person takes part. Not only lawyers but also other people. What is your experience in dealing with the media as to the aspect of dealing with corruption?

MARIO ANDRADE (Ecuador): I believe that in our country and in Central America there have been recent experiences of people in control institutions who try to play a political game. I don’t believe that controlling audits should be linked to politics. They are opposites. It is legitimate to have both but having close links to parties and political organizations is not compatible. The law of the Anti-Corruption Commission says that in order to be a commission member you must not hold an executive position. You should be just another citizen that could have access to the situation.

As to access to evidence, it is not always easy to get such access. It is not always on file. Or what is on file doesn’t say very much. Sometimes everything has all the signatures and seals and you must seek outside sources. So the key component is to determine where we can be more successful in getting evidence. But naturally we have to evaluate what evidence will have the best quality and what evidence can we get with such quality in the least time possible. As far as dealing with the media, you must be extremely careful.

At the main Anti-Corruption Conference in Durban recently, there was a lot of discussion with the media about their need to have an ongoing business. The business must sell first-hand information, but they should also assure that the honesty of others is not compromised. Our experience has shown that we have a wonderful relationship. Hopefully it will not end up in a divorce. Up until this time it has been a great experience. And they have helped us a lot.

Another point—when we send a case to court or to another control organization, every 15 days we follow up on the case. Naturally, we’re maintaining the independence of each government branch, especially the judicial branch. What could happen? Cases could lapse and thus there can be impunity.

LIONEL BERNARD (Haiti): My question is this: What are the mechanisms that have been put in place by the donor nations so that the money that they are giving to developing countries doesn’t have to turn around and go back to these donor nations?

MARIO ANDRADE (Ecuador): I believe that when projects are started, and many of us may have participated in designing and implementing projects, there is a need to have considerable local ingredient. Government-to-government loans are loans that have had an ingredient from the lending government with a very foreign added value providing very low participation to local governments. I believe that from the beginning of the project design the key is to get a more important percentage or balance including the specialized personnel and raw materials generated in each country. I believe that is one of the alternatives so that the resources arriving through any channel, sometimes by

way of non-reimbursable loans, could allow a significant contribution to the countries. I believe that it is when you design your negotiation process.

And there is something else. If our countries are not competitive, if our countries do not have a developed capacity, they will have to get some technical assistance. So it is important to develop each country's competitive capacity.

Auditing Integrated Financial Management Systems

Michael Parry, Consultant

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It is a great pleasure to be here this afternoon speaking to you. I thank you for the invitation.

I am glad I was not introduced as being English, because I am not English; I am from Wales. Wales is a province of the United Kingdom. I always congratulate many of the people in Africa and Asia for having got rid of the English. We are still trying.

Wales is actually where Richard Burton and Anthony Hopkins come from. I do not know whether you can see the similarity. You will have to make do with me, anyway.

I am going to speak to you about the audit of integrated financial management systems. We really ought to start off by defining what we are talking about. The classic model of an integrated financial management system starts off with planning/budgeting. I put planning and budgeting together, by the way. I do not think they are separate disciplines. I think they are really two sides of the same thing.

Along with planning/budget, there is budget execution—the release of funds, cash and debt management and the area that concerns most people here, accounting, and then monitoring and reporting.

That is the integrated financial management system we are talking about auditing. The question is, where does the audit fit into that? Usually in diagrams, it is shown somewhere on the periphery—a big mistake. It should be in the middle. What I will be suggesting this afternoon is that audit should be at the center of the integrated financial management system.

To support this argument, what I am going to do is go through a number of areas, starting off with the nature of accountability and the role of audit in that process, and then looking at the different concepts of audit and also looking at both the public and the private sector. I think there are lessons to be drawn by looking at that comparison, and then by relating that to the audit of the IFMS, the integrated financial management system, in terms of the audit of the IFMS cycle, the audit of the government entity, the audit of performance, and the audit of transparency and preventing corruption.

Let's start off by looking at the nature of accountability. This is really the agency theory of government, that the government is the agent of the electorate and is responsible to account for its policies and management. As I said, we will compare that to the private sector, the company. There are many analogies to the company. Accountability of companies is the accountability of

directors, as the agent of the shareholders, again for its policies and management. In both cases, it is A accounting to B. That implies that B has some power in relation to A. In a democracy it is through the ballot box; in a company it is through the shareholders' meeting.

The problem is to operationalize that concept. In practice there are some quite major difficulties. The members of the public or the shareholders do not have access to the detailed information about the company. It is not really practical for them to do so. The same applies to the government. You cannot have members of the public walking in and inspecting your books. Eventually, that may become feasible, but certainly at the moment it is not. Even if they did, they would not have the expertise.

What this does is introduce a third party in that process, the auditor. The auditor, as a small group of people, has the ability to look in detail at the records of the government or of the company, and also has the technical expertise. So immediately you have got over two of the problems of accountability. You have access; you have technical expertise.

But there is still a problem of the linkage to the electorate. You cannot really have the electorate talking directly to the auditors. It just is not feasible. So you have to introduce a fourth party into this. I am not familiar with Latin America. My experience is with Europe, Africa, Asia, Pacific regions. In most of those regions, there is a concept of a parliamentary committee, a committee of the legislature, which reviews the reports of the auditor and is able to take some form of action. Certainly in the United Kingdom, the Parliamentary Accounts Committee, as it is called, is something that most public servants live in fear of. They can be called before it. It will review the reports of the National Audit Office, and it will question officers about their behavior.

Through this process, you have dealt with several of the problems of accountability—not all of them. I think it is a mistake to see audit as being accountability. Audit is a subset of accountability. Audit does not question policy decisions. Audit is limited to ensuring accountability for the policy decisions. In that sense, audit is a subset of accountability.

What audit can do is make the consequences of policy decisions more transparent. Actually, that can be quite a thin dividing line. There was an interesting example very recently in the United Kingdom, where the National Audit Office reported on the large-scale privatizations that took place in the Thatcher era of public enterprises. It commented very adversely on the methods that were used for selling those companies. It did not comment on the policy of privatization, but it did comment on the policy by which they were sold. Without getting into the details, they were valued on a basis that subsequently emerged as being a very substantial under-valuation. There was no question of corruption in any direct sense. It was simply mismanagement. Or was it a wrong policy decision?

So when we say the auditor does not question policy, it can be a gray division between policies and the outcomes of those policies. I think most people would accept that audit is not there to look at policy, and therefore, in that sense, it is a subset of accountability.

So audit, in the private and the public sectors, has the same origins. It is about achieving some aspect of accountability. But as audit has evolved, audit has evolved very differently in the private

and public sectors. Again, I think there are lessons to be learned by looking at that. If we take this division of audit approaches, we find that there are differences both between the private and the public sectors and very considerable differences within the public sector on the approach to audit.

Private sector audit traditionally grew up in the 19th century with the industrialization of countries, when you separated the ownership from the management. Through the process of accountability we described, we looked at the transactions of the company and reported on those transactions to the shareholders. Certainly, when I came into auditing in the private sector, which was rather longer ago than I care to remember, that was what we were really doing. We used to call it "tick and post." What has changed is a move away from that sort of audit to a risk-based audit focused on the audit of the financial statements of companies. If you look at the work now of the major audit companies and what the auditors within them do, they are essentially expressing an opinion on the financial statements. In doing so, they are going through a risk-management exercise. I thought the talks earlier this week about risk management were very relevant, because this is really what private sector auditing has been about for a long time.

Auditors in the private sector will not be concerned with the transactions. They will not be concerned with the value for money to the shareholders. They will not be concerned even with legal compliance, except insofar as it puts the company generally at risk. So it has moved quite a long way from the nature of public sector audit.

With public sector audit, you can actually look at it in terms of the organization of public sector audit and also in terms of the conceptual approach of public sector audit. We identify four organizational structures in public sector audit. The first one is the quasi-judicial approach, the court of auditors, which is certainly common in many European countries, and I think is probably also quite common in Latin America, although I do not speak with any authority on that. It is quasi-judicial because, generally speaking, the court of auditors, despite its name, will not have actual judicial powers.

That is the approach, for example, that you have in France, the court of auditors. It contrasts with the independent audit office, which is very much more an Anglo-Saxon tradition. In the United Kingdom we have the National Audit Office. In many of the countries around the world that used to be part of the British Empire, now the Commonwealth, we talk about auditors general—the same idea, independent audit office.

In some countries the supreme audit institution is a government department. Actually, Sweden, I believe, is of that model. Although the practice of the Swedish audit office is very independent, I think, technically, it is a government department.

The fourth approach is the collegiate approach, which is really where you have what amounts to a committee managing the audit process. In actual fact, in Austria it is called the court of auditors, but its nature is a collegiate approach.

It is quite difficult when you try to put those together. One of the problems that has emerged in Europe is establishing an audit function for the European Union. We actually do have a European court of auditors, but there has been some disagreement about its role. It has come out

most noticeably now in the reports that have been issued on the problems with the management of the European Commission—different views of the approach. It is now tending to move towards the approach of an independent audit office, despite retaining the name.

So you have at least four different organizational models, all of which can work, all of which can be acceptable under the INTOSAI audit standards. As we heard earlier this week, there is a move to recognize more clearly the concept of a court of auditors in those standards, which is not really recognized at the moment. Whichever organizational model you have, you have different approaches to the audit. They tend to be linked to different organizations, but I think that is more for historic reasons than any other.

First of all, there is the narrow audit approach, the audit approach where the auditor is seen very much as checking the individual transactions and ensuring that they comply with the law. Quite a lot of Southern Europe tends to follow that model. That is all the auditor has done, traditionally, just a check to ensure compliance with the law.

That contrasts with a broad audit approach. Obviously, there is a whole spectrum between those two. An example of a broad audit approach is the U.K. National Audit Office. Equally, in the U.S., you could say there is a broad audit approach—Australia, New Zealand and other countries. The audit, first of all, goes beyond just looking at the transactions and looks at the whole financial activity of government, but then goes even beyond that and starts looking at the performance of the government in terms of the value for money that it delivers to the citizens.

Then you have what I think ought to be treated as a separate approach again, the audit of the financial statements, which is relatively new in government audit. The idea that governments issue financial statements is relatively new. The idea that the auditor expresses an opinion on the financial statements in the way that a private sector auditor expresses an opinion on the financial statements is also a relatively new concept.

When we look at this, what we see is that there is a real spectrum of organizational models, a spectrum of audit approaches. What we need to do is relate those to the audit of the integrated financial management system. We have an ex-ante approach to audit, before the financial cycle actually begins, we have an audit going on during the course of the financial cycle, and we have ex-post audit, after the financial cycle is completed. We can move from the narrow audit approach to the broad audit approach.

In the U.K., there is now a move for the auditor to audit budget assumptions and report on those budget assumptions. I understand that a similar process takes place in Russia. There is also a move in some countries, including the U.K., for the auditor to examine the performance measures—Tony Bennett talked about performance measures—before they are accepted. So those are examples of ex-ante auditing, both of which are recognized in the INTOSAI auditing standards.

Then you have audit that takes place during the year. In some countries you have a pre-audit process, an audit of transactions. I actually do not think that is properly described as audit at all. The INTOSAI standard on that is, I think, a bit ambiguous, because it obviously does not want to say. It is really more part of your internal control, and anyway tends to become infeasible in the

sort of integrated systems we are talking about. Internal controls can be audited during the course of the year, and they commonly are. The procedures for attaining value for money can also be audited during the course of the year.

Then there is the traditional ex-post audit, after the end of the financial year. This is the audit of legal compliance, which takes place under all government audit systems—but that is where the narrow audit approach ends. There is also the opinion on the accounts, which we just talked about, and then the value for money, or performance, audit of the outcomes.

Let's relate that to the changes that are taking place in the public sector, which have been touched on during the course of this week. The "New Public Management" is the term that tends to be used.

It is the emphasis on management; standards and performance measures (again, Tony Bennett spoke to you about this); output controls, a focus on outputs rather than inputs, output budgeting; disaggregation and decentralization (Dr. Dittenhofer's very interesting session this morning on behavior aspects emphasized the importance of that); competition, competition within the public sector. Something the U.K. has been very keen to introduce is competition for services, so that, for example, doctors are able to buy services from different hospitals using public funds. Following up on that—a focus on private sector styles—I keep hearing these IT consultants talk about looking at the business case for doing things, or the business strategies. I keep thinking we are not actually in business, but those are the words that we are now all using.

Focus on discipline and parsimony in resources is something with which you are all familiar. Perhaps you will say it has always been there, but I think there is an increased emphasis on that.

We could add to this the demand for transparency and accountability, which is now so important, and the drive against corruption. Those are not actually in the standard texts on the new public management, but I think they are really very much part of it.

So we have a change in public management which feeds through to the financial management of the public sector. The buzzword, of course, is "integration," integrated financial management systems. I am not quite sure what a disintegrated financial management system is. Integration should always have been there, but what we are talking about are greater degrees of integration made feasible by new technology.

Improved tools of financial management, things like medium-term expenditure plans, much closer integration of cash management, debt management and other information that is in the system—a lot of that is made possible by communication and information technology. It is conventional to say that communication and information technology should be driven by the needs of financial management. Of course it should. But at the same time I think it does actually represent a new paradigm. I think it is very clear, when we hear the sort of talk we have been hearing this afternoon, that in fact the whole nature of public financial management, and indeed public management, is being changed by the communications technology that is becoming available.

How does that relate to what we are talking about, the audit of the integrated financial management system?

The first question is, what parts of the integrated financial management system should be audited, what parts within the cycle of financial management—planning and budgeting? Budget execution? Accounting? Reporting? Monitoring? What parts of the integrated financial management system should the auditor be concerned with? Secondly, there is the entity concepts and their impact on audit, and obviously there is the financial-statement audit. Thirdly, there is the audit of performance. Fourthly, if I can encapsulate all of these in just one point—accountability, transparency and the drive against corruption.

Take each of those in turn. I would suggest that the audit should be of all the stages of the financial management cycle, from planning right through to the reporting stage. First of all, there should be, as part of the role of the auditor, an ex-ante audit, an audit of the budget assumptions before the start of the financial year. There is considerable merit in the auditor auditing budget assumptions. You obviously should not be auditing the policy decisions that are implicit in the budget. Many budgets are totally unrealistic. They are based on wildly overoptimistic forecasts of revenues and then inflated forecasts of expenditures, with the persons responsible knowing full well that neither of those will be achieved. I know of one country where we work where they inflate the revenues every year and then put in a budget for all of the vacant posts in that government, knowing full well they will never be filled. Then you underscore on both your revenues and your expenditures.

Does it matter? Yes, of course it matters. You are not using the budget as a proper resource allocation tool. A proper audit of the budget assumptions would identify that sort of behavior pattern.

I think that performance indicators are tremendously important. They need to be good performance indicators. They need to be properly set. An audit can help with that process, can help make them more realistic.

I do not know of any country that does it, but I think it is something that may be thought about in the future, and that is the concept of the auditor expressing a view on the financial risk in the budget, the financial or fiscal risk (if you want to use that term) in terms of the probabilities attached to the forecast being achieved. Forecasts always have a degree of uncertainty. Some countries have quite significant risk in their forecasts—for example, if you are heavily into mineral extraction. I am currently working in Papua New Guinea, where a very large part of the government revenues—as much as 40 percent—comes from mineral royalties and taxes. Those are subject to world price fluctuations. So there is a significant degree of fiscal risk. So that is something the auditor could report on, but I know of no examples of that.

Then the ex-post audit, on the probity of transactions—a bit more than their legal compliance—whether public monies have been properly used for the purpose intended, on performance and on the financial statements.

So I think our first conclusion is that the audit should embrace all stages of the financial management cycle.

The audit of the entity of government: The concept of the government entity is very fundamental if you are going to carry out any sort of audit of financial statements. It is also quite a difficult concept. I have been reading that in New Zealand, which has probably gone furthest in this move to treating New Zealand as New Zealand, Inc., or New Zealand, Ltd., one of the big problems has been identifying the boundaries of the entity of government. What assets does the government own? You have to recognize that there are entities within the government environment that are not part of the central or national government, public enterprises. Public enterprises are entities in their own right. You have quasi-governmental bodies, things like universities, for example, which are entities in their own right. In some countries—and it is certainly becoming true in the United Kingdom—the government agencies are entities in their own right and have their own accounting records. Local government, sub-national levels of government, can be accounting entities.

One of the problems when we look at this concept of consolidated financial statements for government will be defining exactly what you consolidate and also the legal authority, particularly of the supreme audit institution, to audit some of those organizations, which will vary among countries.

If we have entities, we can have financial statements. Financial statements are traditional in the private sector, and that is what the auditors report on. Now we have the concepts—and, again, we have heard this from Ron Points on the IFAC standards—the concepts being laid down as an accounting standard for the public sector. Why, actually, does the public sector need accounting standards? I would suggest that the reasons are good ones, but they are quite different from the private sector.

Why do companies have financial statements? First of all, companies have to determine their tax liabilities. They may not like it, but it is pretty important. They have to determine their dividend capacity. They have to give an indication of solvency. None of those is relevant for a government—well, perhaps you might say solvency is. Governments do not pay tax; they do not pay dividends, unfortunately. Certainly at the national level, the concept of solvency is very different.

The last point is that the financial statements for a private company are a measure of financial performance. It is very difficult for the public sector to use financial statements in quite the same way. We can talk about budget surpluses, but they are not necessarily a measure of financial performance so much as fiscal policy.

So why have financial statements for government? There are good reasons. They encourage better accounting. Anybody who is experienced in working around the world knows the problem of getting good government accounting, of identifying the unpaid bills, of identifying the assets, of identifying the liabilities. A move to financial statements takes you down the road of identifying those assets and liabilities.

It also forces improved asset and liability management. You cannot really have financial statements unless you know what your accounts receivable and payable are, unless you know what your fixed assets are.

The financial statements encapsulate key information, and hence they enhance accountability and transparency. Finally, the assets utilized are identified.

So financial statements, I would suggest, are important in the public sector, and they ought to go beyond the very limited accounts that countries have traditionally produced, which were really just income and expenditure flows, or not even that; they were just receipts and payments flows under a cash accounting system. They ought to go further than that, as has been suggested, again by Ron Points on the IFAC. They should include a balance sheet, a cash flow statement, as well as a revenue and expenditure statement.

Obviously, if you are working under cash accounting, what you put in a balance sheet becomes much more limited. But you can, in fact, use, even under cash accounting, your financial statements to have memorandum statements, which contain much of the key information. You can have statements of accounts receivable, accounts payable, fixed assets, liabilities and contingent liabilities. It is not as good, because you do not get the nice hierarchical structure that you do from accrual financial statements, where you look at a single figure for accounts receivable, and then you can look at how it is made up. Nor do you have the lock that you do with accrual financial statements, where you can ensure the figures tie up. So it is not as satisfactory under cash accounting, but in fact you can still provide that information.

Therefore, the auditor, the supreme audit institution of the country, should be expressing an opinion on those financial statements, be it under cash or under accrual accounting. I am talking about a short-form opinion analogous to that which is used in the private sector, and indeed which opinion is largely defined in the INTOSAI standards.

It is a very salutary experience having a simple, clear expression of opinion. We heard at the start of this week how much it matters in the U.S. if a particular department gets a clean audit statement. It is very simple; it is very clear-cut. You get a clean one or you don't get a clean one. It is a very good discipline.

So the second conclusion is that the audit of integrated financial management systems should include an audit report on the financial statements. I would extend that to say "whether under cash accounting or under accrual accounting."

The third point we talked about was the audit of performance. The problem with the public sector is that accounting is not a complete input/output model. If you look at the private sector for a minute, accounting is actually a marvelous model of a private sector entity. It is a complete, universal input/output model that applies to any type of business activity, in any country anywhere in the world. There is no other model which is as good as that in the private sector. That is why accounting has been so successful. You might even go so far as to say that the collapse of the Soviet Union was a recognition of the superiority of the private sector accounting model, not "Star Wars."

You do not have that in the public sector. You do not have it in the public sector because, although money measures inputs, it does not measure outputs, and therefore you don't get that nice difference, which is the profit. Without the profit, the accounting model cannot measure performance. You just do not have the figures there to do so.

I think that is a very important statement. It struck me, when I came across it, that that really does summarize very neatly one of the major differences between financial management in the two sectors, and why financial management has been so dominant in the private sector and is only now becoming so important in the public sector. It is because the simple accounting input model does not work so well.

So you have to do something else instead. You have to move to non-financial performance measures. Go back to what Tony Bennett was talking about when he talked about the problems of setting non-financial performance measures, and also how important they are. Those performance measures provide the starting point for any audit of performance or value for money.

If we can look at the cycle of the performance audit, we have the government policy aims and goals, with which the auditor will not normally be concerned. Those are formulated into budgets and operational activities, and from which, through the budget execution process, you have the inputs within any given department of government. There is management of the operations of that department—be it education, provision of health care, police services, or anything else—the outputs, which will typically be service delivery in some format—health services, education, law and order—and then the monitoring of those outputs back to the policies, the closure of the feedback loop.

The audit intervenes at four points in that cycle: first of all, as we have suggested, on an ex-ante basis, a review of the targets of the performance measures; secondly, a review of the efficiency; thirdly, a review of the economy; and then, finally, a review of the effectiveness. I think that is quite important. We normally talk about the three "E's," efficiency, economy, and effectiveness, which is correct. But as an auditor, you are also reviewing the performance targets themselves. Put all of those together and you have the value-for-money audit.

I do like the numeric example that Tony Bennett uses—I have seen it before—where he demonstrates that you can have all of those subsidiary points moving in one direction, but you actually are not getting good value for money.

So the third conclusion we would suggest is that the audit of the integrated financial management system should include a performance, or a value-for-money, audit. I use the terms as being synonymous.

The fourth area—and this follows very much what Mario Andrade was just talking about—is the audit focused on transparency, accountability and against corruption. As far as transparency and accountability go, I think this is really like saying motherhood is a good thing. Everybody is in favor of transparency and accountability. We have already indicated that the auditor has a role in

that, particularly through his reports on the financial statements, which lend credibility to them and therefore enhance transparency and accountability.

The auditor's role in relation to the drive against corruption is, I think, a much more interesting and problematic area. I come from a commercial background. When I was taught accounting, and later taught auditing, I well remember the phrase that "the accountant is a watchdog, not a bloodhound," that the auditor is not there to seek out examples of corruption or misuse of funds. He will report on it if he sees it, but that's all.

I think we have to question that and ask, is that any longer a proper limitation on the role of the auditor, and particularly the role of the supreme audit institution in a country? The external auditor, the supreme audit institution, is uniquely placed in many ways in the drive against corruption.

Let me just cite some of the reasons for saying that. The audit by the SAI is the only independent, regular, systematic review of government activities. There is nothing else. It is the only thing that happens every year, that happens across government, that is systematic. So that, in itself, puts the auditor in a very unique position.

Secondly, in most countries the auditor has independence guaranteed by the constitution. If he doesn't, he or she should have. So we have someone who is independent and is carrying out this examination.

Thirdly, we have the specialist technical skills that reside within the supreme audit institution.

Finally, we have the ability—indeed, the requirement—for the supreme audit institution to comment on systems, procedures and, generally, on the activities of government.

So I would suggest that for the supreme audit institution not to be actively involved in the drive against corruption is a massive underutilization of a resource that exists and is available and is in place. I would not go any further than to say that I think that this is something which INTOSAI as a body and the members of the body need very seriously to consider. But I think it is actually a very serious issue. I think, when we have these various conferences and activities on the issue of corruption, it is an issue that really does need to be addressed.

So the conclusion that we reach overall is that the audit should embrace the whole of the IFMS cycle—ex-ante, current, and ex-post audit. The audit should be of the government entity, and there should be a report on the financial statements of government. The audit should include the performance of government, a value-for-money audit. The audit should focus on transparency, accountability, and support the drive against corruption. If we relate that to the model with which we started, we set the boundaries of the audit of the IFMS very widely. It includes the audit of budget assumptions, the audit of performance measures, before the financial year; the audit during the financial year to identify misuse and corruption—no need to wait for the end of the year—internal controls, value-for-money procedures; legal compliance, the opinion on the accounts, and the value-for-money audit of outcomes in the ex-post audit. All of those should properly be within the boundary of the audit of the IFMS.

Those are boundaries which, if you read the INTOSAI standards, are all within those standards, so we are not suggesting anything new. All of those are audit activities that are carried out in different countries.

Therefore, I would suggest that the conclusion we had right at the start, that auditing should be at the center of the integrated financial management cycle, is in fact an appropriate conclusion.

Thank you.

Systems and Technology for Governmental Administration in the New Millennium

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Good afternoon. First of all I would like to thank the organizers of this event for inviting me to talk about these topics involving modernization and technologies in government management.

Today's agenda will include five topics. The first topic is institutional intelligence in government. We will deal with this topic in detail. Then the institutional environment and the challenges faced by government, and we're going to try to provide some examples involving the use of new technologies for integrating several technologies with the government. Finally I will give a very brief summary of the future—what we call the interactive digistars electronic democracy.

Let's start with the first topic. In the initial stages in 1960 and in 1970, information systems could be rated as back-office systems where mainframe hardware was the usual thing. In the 1980s through the 1990s we found front-office systems based upon PCs, LANs and the beginning of the World Wide Web. In this new century, we find a new technology originating—Internet, or e-business as far as businesses are concerned. The number of users has grown exponentially up to one billion users. Let's see how all of this has taken place.

What actually took place is an investment in the personal computer relationship. In the initial mainframe stage we had one computer to 100 people. At this time there is one computer to a person. And in the new millennium there will be 100 computers per person. What do we mean by 100 computers per person? The concept of the computer in the future will be a microchip which will be practically discardable in the future. Paper was a revolution and the microchip will replace paper so we'll have discardable microprocessors. And these relationships will increase until we have processors in our own body. We'll be walking around with processors.

What impact does this have upon society? Well, we started with computers for institutions, then computing for people, then computing for connectivity so that all of us can connect. In other words, we went from computerized institutions to network knowledge workers to an Internet society and why not a world wide information society? This is the scenario as far as technology is concerned.

How did computer science evolve with information systems? These have gone from manual integration to application integration with ERP Internets, enterprise portals, data interaction and applications. What we call a second generation of enterprise portals has evolved to automatic processes. We could call it, in the future, corporate information factories, because what we are managing is more and more information. Naturally we have evolved from structured data management to unstructured data management because, as of the new millennium, the data explosion will require us to handle a volume of data which will be more and more difficult to manage given their volume. Naturally they will require ever more powerful tools to handle this complexity.

So let's see what impact this could have on government. Basically what we call e-business would have to become e-government by analogy. How can we use the Internet, the Web, to transform and reinvent government and especially to make government administration more transparent?

Let's talk about what we can call leading trends. There can be a lot of data stored in an organization. They can be spread all over and they can be a gold mine. Entrepreneurs have realized this and they have developed tools to use this information to benefit the enterprise in order to get a competitive advantage. In the case of government the same

thing takes place. The government has large volumes of information in storage which must be used and analyzed in order to enhance the role the government plays in society. And naturally Internet is accessible and ever present. The Internet connects all of us. It also becomes a leading trend that should be utilized so that there can be better governments. And another leading trend is the transformation and evolution of data warehousing to what we could call information warehousing—an infrastructure containing both information and knowledge.

This information and knowledge structure could be structured more or less as follows: First of all structured data—structured data are data that we store and recover from information systems or through the information that is stored in the data. We know its structure. We know in what field we can find the information. Then we run into a series of integrated applications. In the case of the enterprise we can see the SAP—that's a pretty popular application. Government-wise, in Latin America, we can see the SIAF, a system developed for Guatemala. And these can be accessed by the citizens through databases for managing transactions or OLTPs. And finally, given this structured information, there are mechanisms that we have through the Internet to find out what the citizens think of government. We can use extraction tools such as ETL and naturally we use tools to improve the quality of data in order to load what we can call a data warehouse. This data warehouse can also serve for data marts, we'll explain this term later on, and conduct analytical applications so that we can do consulting, analyzing and data mining. The term "data mining" means to find opportunities within the information we have in databases so that we can find out how to govern better or, in the case of the enterprises, how to get a competitive advantage.

On the other hand, we have non-structured data. These are in specifications, orders, papers, drawings, reports, any non-structured information. Tools have been developed for extracting non-structured data. At this time we have i.Reach Informix. How can this be used for governing? We'll try to talk about this to some extent, as well as the repository for the database and managed content.

This finally leads us to a government portal where we have structured and non-structured information for the benefit of both government and the citizenry. We can call this the government of knowledge—of knowledge development and institutional intelligence. This is the beginning of a more significant revolution in history. Actually, we are the main players in this revolution and the environment for this revolution is the Internet. It is a media which surpasses early revolutions—the printing press, the computer, the TV, the radio. I consider myself to be a main player in the emergence of modern computing in the 1960s. And now I'm seeing a new stage, and that is the evolution of Internet.

Why is it important? Because Internet provides a different and new economy based upon the interconnection of human intelligence. And this new economy will demand. We're not going to do things because we want to but because we have no other alternative. We must involve new entrepreneurial institutions and new government institutions because the corporation of the new economy is different from the 20th century corporations which were based on the industrial revolution. The new economy and new government will have to be different and be based on institutional intelligence. As the private sector is working on developing business intelligence, those working in the public sector must work as well on developing institutional intelligence, that is, government intelligence.

Let's take a look at the components of this infrastructure. I'll try to be as didactical as possible and show you the current model which is basic for implementing and designing this informational corporate structure. We'll be showing you each component and we will be applying them so you can get an idea of the importance of this model.

The model has a whole host of components. I won't read them to you, but I'm going to describe them step by step. The initial portion of this model could be referred to as the institutional operation. This portion of the model is referred to as institutional intelligence, and this portion of the model is referred to as institutional management.

Institutional operation is made up of several systems for reporting and so forth, and based upon them we want to set up a structure of inherent features. And the institutional systems will allow us to do this. There are techniques that allow us to improve the situation as we see fit. So these are the primary data. They represent the institution's daily operations. They support daily operations which usually require manual interface. The information should be utilized because it includes a tradition of operations which contain very important data so that the government can gain a competitive advantage.

Let's take a look at the institutional intelligence portion. Institutional intelligence is the ability to analyze data and information used to support decision making. That's the definition. It is a significant data consumer. It manages huge amounts of data. The components of institutional intelligence are data warehouses, data marts, interfaces for decision making and the process for obtaining data and generating information. The data warehouse is an integrated data source which has been captured instantaneously. In other words, we take pictures of this information in order to form the data warehouse. The data mart is a subset of data in the data warehouse which is formatted or organized to perform a specific function. In the case of government, we could have data marts for management of the citizenry or accounting information or financial information allowing us to measure the performance of government management. We could have specific data marts for managing strategic functions and we will be taking a look at the model appropriate for this. I recommend the balance scorecard model and examples of strategic functions could be the following: knowing the demographic profile of voters, citizen behavior, needs in a particular municipality. This would be very important information which would create a competitive advantage over political adversaries.

Let's take a look at institutional management. Institutional management allows the institution to act based on the intelligence you get from the support system, to make the strategic decision for the technical user of the data. The components of the warehouse of operational data is different from the data warehouse because this is integrated data that is dynamic and updated, oriented toward decision making. It can take place in any part of the organization. It does not support any operation in particular. Of course it has interfaces and an example of this would be the database of the electorate of the citizenship. How does this function, this concept of the corporate infrastructure of our information? We can get the information or we can capture data. This is how we develop institutional intelligence—we capture data and convert this data to useful information, information that would allow us to know or get a competitive advantage.

This is how we capture the data. First of all we have the different systems that form the institutional operation—the internal and external systems that process operations day to day. They feed the warehouse. They interface with other applications. The institutional operation is important because it provides the operational data that represents the corporate infrastructure of the organization. An example of this would be the billing, collecting taxes, services. Citizen satisfaction, attitudes and requirements are external data. The data warehouse could be a source of information for all of this.

Another important aspect is what we call the integration and transformation model, which includes capture, modest integration, transformation, reengineering and data load in the data warehouse or in the operation of data warehousing.

Another important aspect of data warehousing is the collection of historical data that varies through time, used to support the process of decision making. It is a central component of institutional intelligence. It is a source of data for the data mart and provides a common point of view of the institutional data. It allows flexibility in interpretation. The data warehouse contains the lower level of data necessary for different analytical functions. For example, demographic data regarding the citizens—how are they voting, what are they asking for, what is their opinion on campaign issues, do they think the government is doing the job? This is information that the government will need. I believe that we are tired of just seeing these type of systems in the treasury. We have to go further. The reason for the existence of the government is to give service that is efficient and to satisfy the needs of the people.

Now let us look at another important part which is the management of the data. The manager of the data is basically responsible for all the support and consultation regarding the data. Once we have built all this information around the data warehouse, through the process of data delivery, the manager can format and filter the information and give this information to the data marts so it can be used for decision making.

The data mart contains information according to the specific requirements of different units or different functions within the institution. They can be in a different PC from the data warehouse. It could be a different machine; it could be the same computer. It is the responsibility of the manager to effect an interface that can be used for decision making.

Now, let's look at what we call institutional management, which is yet another component. The operational data warehouses change very quickly through time. Management utilizes these reports in the process of making tactical decisions.

And finally there is the transactional interface. There is a difference between this interface which is the DCIs and the transactional interface for technical aspect, short-range decisions.

We have seen now the fundamental components of the corporate infrastructure for institutional information. Institutional operation covers all of the aspects that have to do with capturing data to create the data warehouses and the data marts. Institutional intelligence obtains information for decision making, both tactical and strategic. And of course all this is integrated into institutional management.

Now we will look at the different components that will help the architecture give it uniformity so it will work. For all of this to work at the same time, it has to have a framework reference. At this time we have the information services. The information services optimize the use of the infrastructure of the information through its organization and knowledge assimilating all of this within the institutional processes of the government. A number of tools allow us to implement the work of the institutional intelligence.

When we get to operations and administration, which is also important, there are actors required to assure that resources are optimized and that growth is handled appropriately, and above all, that the growth of the information is handled appropriately.

On the subject of management systems, we have the management of data acquisition, the management services and finally management of change. Management of change is very important because in any process of implementation of a structure such as this there is resistance to change. Therefore, within the administration of this process, we need to develop techniques that will elicit cooperation from the different officials, the different executives from the government. We can facilitate the process of change through teaching, through understanding. Above all, the high level executives should understand that all of this contributes to the development of intelligence that will allow them to be in a better position to be better public officials.

Please forgive this detail but I think it is important that you have an idea of this new infrastructure, and what we today accept as a model. This model is the fundamental model for the development of information technology for the beginning of the millennium. What good is all this? How important is all this technology and all this complexity? Many of you in public management don't want complexity.

Well, it is important because the government faces an environment where people are more informed. They demand excellent services. They also want personalized treatment and they are interested in better social conditions. The citizens of the new millennium are more interested in social benefits and optimal social conditions in which the public officers do their duties and handle things with transparency. They're less concerned about ideology, and this is a phenomenon that we are now noticing. A specific political party can win an election and after a year or two the people no longer want to know anything concerning this political party. Among other things it is because there is no fidelity to ideology. There is, however, concern that things work well and the services work and that things are handled cleanly and with transparency. And above all, that electoral promises are kept. Therefore, this task to provide information is important because it allows us to satisfy our clients which are the citizens and the voters.

Now this is something that we have to get in our head. The same way that a businessman has a great concern with what his clients think about him, about the services or the products that he produces or sells, in the same manner, the public official has to be concerned with what the citizens think about the way he is handling the government. He must offer public services in accordance with the desires of the voters and the citizens. This is obvious. Anybody can understand this. And if anybody can understand this, we can then develop the necessary infrastructure for informational intelligence that will allow us to meet these requests. Why? Because every politician wants to stay in the government. He has a vision or a mission to carry out and he needs time and he needs happy citizens. He needs to identify with the citizen and to do things in accordance with his mission as a public servant.

Therefore, what are the challenges to the government? The challenges are to develop the institutional intelligence, to understand the environment, and above all, to make better strategic decisions. The budget must be planned and executed in a balanced way. It is not enough to divide the money among our organizational units, we also have to look for important aspects that have to do with society.

Another important thing is if we are going to have management controls, we have to do it based on the critical factors to be successful as a public official. We have to base those controls on the things that the people want the most, that the people demand. That is what the public official should be doing. That's where we have to put the emphasis.

We should be taking advantage of the fact that this society is more interconnected each day and the Internet connects all of us. We have to have a developed mechanism that will allow us to have direct communication with the citizens. And as a matter of fact, make them participate in the decision making. This would guarantee the transparency of public management. I believe that the rulers, the politicians, often act in good faith and it is not always possible to prevent corruption. Someone from the Controller's Office in Venezuela said there was no way of controlling and evaluating what was being done by the government because we had to have at least 100,000 auditors to do it. Therefore the only solution possible is to put the citizens in charge of controlling it. The citizens themselves do the analysis of what the government is doing. How do we do this? We provide that information to the public. This is called information technology.

We have to be creative and use the technology of the Internet to provide better services with less investment. Why? Many of you in Latin America say, "Well, how much does all of this cost?" Well, we have to be creative. One way of being creative is to use outsourcing. Find out which institutions have the necessary technology, who have the infrastructure, that would allow us to develop our services. This way the investment will be minimum. This is an important solution in reinventing government.

Another important point is that the organization models and the management process must be efficient and efficacious. Why? What is it that private enterprise wants? They want loyal customers and more clients. Well, the same thing is true for politicians. They want more partisans and new people to join the party. And of course all this leads to what we would call a competitive advantage over our political adversaries. Therefore the technology cannot be an end unto itself. The technology cannot be handled exclusively by the technicians, by the engineers. The technology has to be handled in accordance with the political objectives of the head of the government, in the positive sense of course, in the ethical sense.

Let's see what kinds of products are used and how they are integrated. Nobody, no person, no institution, no organization, no company can give you the complete solution. It is not possible. This is something that we have to get in our head. We have to understand this very well because unfortunately the technology vendors always tell us that they have the complete solution. "If you use my database you should use my system, and you should use my computer." The businessman is getting bigger and more monopolistic each day. Now, what happens is that knowledge is distributed in such a way that specialization is what really rules. You will find products and solutions that are very good that you have to integrate. Therefore you have to be aware of this because information technology will allow integrating different products, different solutions, different technologies.

In our case, we have integrated a solution for the financial administration process. We use the protocol SIAF and another product called SIGLO, which is a local system. We use balance scorecard as it applies to government. This is a technique that has been very successful in the private sector and it now begins to be very successful in the United States in the planning and the control of the government sector. It was first used at the municipality level and for this we have a protocol strategy. This is a product that integrates with other products.

What happens when the politician needs geographic information for decision making? He wants funds to go to the municipality where they voted for him not the municipality where they did not. Therefore he needs tools or information systems that are geographic in nature and this is why we use a product called Geomedia.

Another important action has to do with content management, the management of the information contained on the large number of documents produced and received by the government. To achieve a paperless office, we image the documents. In this case we use a product called Laserfische. I'm not doing any advertising. There are a lot of good products, but what I want to point out to you is that you do not have to be married to any product in particular. Most of these products can be integrated.

So far as content administration, we use an e-transparency called I.reach which facilitates making all the documents available to the public, both internally through the Internet and externally through the Externet. For what we provide within the public administration, we also provide to the citizens and to the voters.

And finally, for integration of all the data we use products like Datastage, which is for extracting data iterations which is a methodology for doing data warehousing. We use other products. For instance, there is a product that provides geographical information. We can capture data either on the Internet, surveys or any structured or non-structured media and analyze them. It provides geographic information where the color has a meaning—the most populated, less populated, where there is a higher population growth rate, different variables. There is a product dealing with outsourcing, one dealing with human resources. We could get an x-ray if you will. We can get information on a map so that we can understand our environment and become better leaders—information that should be measured and known in order to develop government action leading to improving citizen's circumstances.

Another example of a good product is i.Reach. This product is used to disseminate information on the Web. It could be an Externet, Internet or on the Web itself. So you decide who can publish information, who can read it. This is an application that we're developing for a municipality in Caracas. They decided that the municipal agendas, all topics posed in city council, should be published on the Web so the citizens would know what was going to be discussed the following week. They wanted all results, even who voted and how. For instance, the mayor has opponents in city council and since people are not interested in municipal issues as far as the politicians are concerned, his opponents voted against the interest of the majority of the population. The mayor told the people which of the councilmen had voted and for what. The whole population wanted to take a look at this. And with this mechanism, i.Reach, why not show all the bids in a public bidding? Why don't we show all the bids on the Web so that the population finds out if the contract was awarded appropriately and honestly? In order to have a corporation registered, the stockholders have to send us information, and this information could be shown on the Web to find out whether there is a relationship between decision makers or stockholders or directors. And society itself will find this out. This is the scenario where information management should go in order to guarantee that our government and thus the leader can be more attuned to his voters.

Let me do a summary of what I have discussed today and the scenario that we are facing as to government administrative renewal. Take a good look. What we have at this time is the following: citizens addressing government agencies. The agencies in turn use information systems to respond. The change is this: citizens are armed with information and thus the government agency does what the citizens want. Voters interact with governments. The citizen and voter should be the king in this process because the rulers rule for them. Well, where can this lead us? It leads us to a new paradigm where by way of technology we find a way to operate that benefits society. First of all, we would like to have effective officials and for this purpose we use the PC. The PC and multimedia allow us to have different types of tools so that we can be better individually.

Another important aspect is this: the government team as a whole should have high performance. With networks and technology and through systems integration, we can reengineer our operations to do away with processes that are either redundant or don't add any value to the output or achievement of the administration.

Another important aspect is the integrated government. By and large governments and municipalities are not integrated with providers. The organization that we have designed up to this point should change. We should have a fully open government. For this purpose, Web technology is the basic tool. Electronic data interchange allows us to interconnect our host providers business-to-business or government-to-business. And thus we can be more efficient in managing processes for the citizenry. We need outsourcing and external relations. We should integrate with service providers. That would allow us to provide better services and avoid making large investments. In the case of the city council, they do not need all that infrastructure to fulfill the wishes of the citizens.

And finally a government that is totally interconnected which is the concept of e-government, the information highway.

What does the future bring? On the one hand, as there is more spreading of political and economic power, as there is more spreading of knowledge, we go from slavery to the feudal period to the industrial revolution. For when knowledge is in the hands of more people we are no longer slaves, and we're no longer under feudalism. We enter the era of knowledge and finally we enter what could be referred to as interactive digital democracy. And undoubtedly, this leads to freer citizens. Citizens are undeterred because all of us have the power of knowledge and the ability to act.

Finally there are the companies with which we have set up strategic alliances in order to work on this integrated concept that could be referred to as government institutional intelligence.

Thank you very much.

AQUILES A. NIÑA BATISTA (Dominican Republic): What is your opinion of the Internet as far as high costs in Argentina and Mexico? I doubt that the Dominican Republic, Bolivia, Haiti and Guatemala could provide free Internet access because they don't have enough people. What is your opinion of this, and of the bandwidth for the future growth of the Internet?

DAVID UZCATEGUI (Venezuela): For sure Internet is a technology that overwhelms us and naturally it expands exponentially. Moore's Law states that computers double their processing capacity every two years, and thus they are ever cheaper. Computers will be ever more powerful in terms of their computing capacity and they will be ever more cost effective. As a result, Internet is a medium that will be as expensive as the phone. Maybe a few years will go by. When the phone came along, they thought that very few people would be able to have phones. When the TV sets came along, it was thought that very few people would have TV sets.

As far as the Dominican Republic, I believe that the Internet is ever more important because society is going to change a lot. People are going to move less and they'll be more focused on working at home, for instance, just like in Venezuela or Colombia or El Salvador. Just as they spend a lot of money in building highways so that cars can travel on them, we must develop infrastructures to provide the citizens with Internet access. This is essential.

You must take a look at this from the strategic standpoint. Any president who wishes to upgrade the lifestyles of his people and who wants to take advantage of government institutional intelligence must support the use of the Internet. Because in the long run it is a lot more cost effective to communicate on the Internet than any other means of communication. It is a lot cheaper than sending a letter via FedEx. We can send the whole document by e-mail. And the use of e-mail increases. So governments must make the investment to develop Internet infrastructures so that the entire population can have access.

In Venezuela, they developed public sites to which the population could go to learn how to use the Internet. Some of the more developed countries having the highest number of users are those countries that have forced telephone monopolies to implement flat rates where one single amount is paid for a telephone line connection to the Internet. Governments must do these things because we must recognize that this is the medium by which every single human being will be interconnected. As of now we can connect to something as small as this hand-held computer. We can receive and send e-mail through this. We can't turn our back. We have to invest in this. Governments must invest to place us in the forefront as societies of the new millennium.

FELIPE CASTRO (Dominican Republic): You mentioned that one of the objectives of a government to attain efficiency in the new millennium is to provide the citizens with access to the Internet so they can monitor the electoral promises of the politicians. Not only in our country but in all of Latin America there are really high rates of illiteracy. I would like to know what strategy can be taken by our government so that the population can monitor the electoral promises made by the government? They are not described on the Internet and they are not described in a Web page.

DAVID UZCATEGUI (Venezuela): There is no question that in the many Latin American countries, not only the Dominican Republic, but in our own country of Venezuela there is a lot of illiteracy. The thing is to be creative. The way is working around the language with a CD-ROM in a computer. Why can't they learn the computer language?

A few years ago, like 30 years ago, 20 years ago, there was a campaign for every member of my country to learn to read. It wasn't the government who promoted this. It was the businessmen and this is very important that the politicians and community leaders commit themselves and make the civil society participate in all this. The businessmen have a social responsibility. And in my country, 30 years ago these people learned to read based on the instructions on a record and a book that was given. This campaign was quite successful.

Let's kill two birds with one stone. Let's do the campaign for literacy through the computer. People will learn two things. One, they will learn how to read and write, and number two they will learn how to operate the computer. I

believe that the interest of people would be greater. And this happens quite often. People are reluctant to use the computer, but once they use it they become addicts. I've always been involved in computers, because I'm a graduate from computer school. But the more I used the computer I became a greater addict. I spend at least two hours connected to the computer browsing on any given day and this doesn't sound like very much. So therefore we have to stimulate them. The government has to look to be creative because there is no question that this is the way.

A number of years ago, when computers first started in Venezuela, I did the first Congress systems meeting and a writer for Venezuela, Mr. Pietre, was the main speaker for that meeting. Mr. Pietre is 90-some years old. He is still alive and very lucid. I was surprised when I saw a writer such as Mr. Pietre at this conference because the subjects all had to do with computers and very few people knew about that. He said, "You are surprised that I am here at this conference. I want to say something to you. Everybody knows me as a writer, everybody knows my words, but let me say something to you in this assembly. I am illiterate." Everybody started laughing because a person who dominates language like he did, a person as important as Mr. Pietre, how can he say that he is illiterate? He said, "No, even though I speak many languages, even though I know about history, even though I may write novels, there is something that I do not know that should be fundamental in humanity and that is computers. Those who do not know this new language are illiterate."

Of course we have to speak, read and write our own languages. But if we do not learn and dominate this new language, we are illiterate in general terms because this is the media through which human beings in the new millennium will be connected on a permanent basis. We have to battle illiteracy of course. But we have to think of the real illiteracy, because it is not enough to know how to read and write. The government has to invest a lot of money so that the citizens of the country know this new technology, so they are not illiterate in computers.

In order to conclude, there is another possible answer to the question. It is said that by the year 2070 no one on the planet earth will know how to read and write. No one. Why? Because the computers will talk with us and we will talk with the computers.

I got a new phone a couple of weeks ago that I purchased in the office for the six directors of the firm. I say "Mommy," and it calls my wife. I say, "office," and it calls the office. Yesterday this phone rang when I was out here. I didn't have enough time to respond to it, so the office sent me an e-mail concerning the message. The e-mail came out on the screen on my phone. I can set it up to read and also receive stuff from the Internet through the phone. And how much do you think this phone costs? Another thing, six people have 3,500 minutes each month, collectively, on this phone. How much do you think this phone costs? Ten dollars. Ten dollars. What they sell is basically the service. But it is becoming more credible that soon you will have a computer, an earphone, and you will be talking to your computer and you won't have to read or write. I'm serious. They are forecasting this. They solved the problem of illiteracy on the entire Planet Earth.

Integrated Financial Management in Tanzania

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Good morning, ladies and gentlemen.

During this session, we will review the implementation of an integrated financial management system in Tanzania. I should say that the views we will express will be our own rather than the government of Tanzania. I should also say that we are stakeholders in this process, so we will be careful about what we say.

The presentation will look at the background to implementation. It will look at the change strategies which we adopted to try to implement this system. It will look at the main public expenditure management processes which we were trying to encompass within the system. It will look at the software chosen and the technical infrastructure, and it will look at the current status of implementation.

This case study will demonstrate that it is possible to utilize a modern integrated financial management system, a package-based solution, in a heavily resource-constrained environment—in other words, in an African public sector environment where resources are very limited.

If one looks at Tanzania, as one would expect, the case study is inevitably context-specific and requires an understanding of the underlying political and social-economic conditions. Given the short time I have this morning, I will just stress two particular initial conditions. Firstly, since 1995, following open elections, Tanzania has been vigorously pursuing a process of transition from what was essentially a socialist, centrally planned economy towards a more liberal, democratic and mixed economic framework. Secondly, in 1994 the Tanzanian economy was in serious difficulties—inflation running at over 25 percent, money supply growth at over 35 percent and a large fiscal deficit in public finances. That fiscal deficit was being financed by borrowing from the central and commercial banking sector.

The social indicators, even today, are difficult. You have a life expectancy of 49 years, and declining. In fact, malnutrition affects 44 percent of the children; safe water supply is only accessed by 50 percent of the population; adult literacy is at around 30 percent; and primary school enrollment is at less than 60 percent. Clearly, government policy in this context has to be targeted on poverty reduction, economic growth and macroeconomic stabilization.

What was the situation when we started? On an annual budget of approximately \$1 billion, the government was running a deficit in excess of \$100 million. This was clearly unsustainable. There was heavy domestic borrowing, as I have said, from the central bank; cumulative outstanding domestic suppliers in excess of \$200 million; treasury bill rates of over 50 percent; uncontrolled government commitments and expenditure; budgets where the expenditure was set at a level which the resources could not match—in other words, we were not collecting revenue. We even had the donor community aiming to withdraw support to the country on the basis of corrupt tax exemptions.

Widespread failure to account—I don't think more than half the ministries obtained clean audit certificates. Of the 300 main bank accounts—and I do mean 300 main bank accounts—more or less all of them were unreconciled. It depends a lot on what you mean by reconciliation. If you mean produce a statement, then, of course, you might say a lot were reconciled. If you mean guarantee that that statement equals what is in the bank, then it is a different story.

This situation clearly undermined service delivery, it undermined accountability, it undermined the ability to formulate policy and make decisions, it undermined transparency, and, of course, it facilitated corruption and adverse public interest decision making. So, clearly, there was an urgent need to do something about improving the public expenditure management framework.

In 1995, after the first democratic election in Tanzania, we had a new government. That government, I think it is fair to say, recognized the need to improve public expenditure management. Part of that recognition was to enter into an agreement with the International Monetary Fund to undergo a structural reform process. That structural adjustment program and ESAF agreement included the usual mix of policies with which many of you are familiar: reduction in the size of government, fiscal sector reform, deregulation, liberalization, and privatization.

I would like to just focus on the public expenditure management component. Within that public expenditure management component, we had four central themes. One was to mobilize revenue. This essentially involved the creation of an independent tax authority outside the Ministry of Finance, and a large program of activities aimed at improving the tax base and improving the collection capacity of the tax authority.

On the expenditure side, we had a very tough cash-budgeting/cash-rationing system. Essentially, the government agreed to restrain domestic expenditure to a ceiling equivalent to the past three months' average domestic collection. Initially, that resulted in a massive squeeze on all activities within government, with some ministries and agencies, for the first three or four months, receiving little more than salaries. In addition, to support that process, it was agreed to centralize payments. All checkbooks were removed from all principal Secretaries. We were not the most popular people in Dar es Salaam. All payments were posted through the Treasury. There was also a sustained effort to improve the debt management administration and the creation in the Ministry of Finance of a debt management unit. It was recognized that debt management was not only the responsibility of the central bank.

Apart from the specific policies in respect to public administration, there was also a need to develop the organizational capacity of the Treasury and related financial management units in

ministries and agencies. We went through a process of restructuring, retraining, staffing, which is still ongoing.

Another theme was legislative reform. The legislation was over 50 years old in reality, and related primarily to the previous colonial administration. So we had to draft a new finance act, including new standards for public sector accounting.

Finally, the area that we are going to talk about primarily in our presentation is systems reengineering and automation.

There are four main areas that we were interested in pursuing. The first was in the area of macro modeling. This process is generally done together with the IMF, the World Bank. It involves the Planning Commission, the Ministry of Finance, and the Bank of Tanzania. They essentially try to determine a consistent set of targets, forecasts and targets, in respect to economic growth, et cetera, within the economy.

In the government sector, they are obviously creating targets related to the deficit, related to total expenditure, total expenditure on salaries, total revenue, total tax receipts. That feeds into a medium-term expenditure planning process. That planning process involves, again, the Planning Commission, the Ministry of Finance, the Ministry's agencies and departments, the Cabinet, obviously, and then external participation from the World Bank and the donor community.

The third aspect is the annual budget process, which, of course, again involves the Planning Commission, Ministry of Finance, agencies, the Parliament, when appropriate, and in recent years the business community and the civil societies.

Once the budget is approved, we then go into the budget execution process, which involves cash and liquidity management, revenue collection, commitments, disbursement, accounting, budgetary control, performance management, financial reporting, audits and evaluation.

You should note that up to 1994, 1995, these processes were essentially fragmented. They were the responsibilities of different agencies, and they were not linked. In constructing an IFMS, our desire was then to meet the needs of all the stakeholders involved in these processes in a cost-effective and sustainable manner. Given the nature of the processes, the use of modern information technology and management systems and, more recently, communication technology was clearly, in our view, appropriate.

What are the constituent elements, then, for us in an IFMS framework? We identified four elements. Firstly, a classification and analysis model provides for structuring the data and informs us of what kind of output we need for meeting the needs of these various stakeholders. There are really three types of models available in the public sector. One is the traditional government budget and accounting model, which has been developed to include performance management; two, the system of national accounts, which looks at the overall economic flows within the economy; and three, the government finance statistics system, which is an IMF-generated system which looks at the linkages between the government and its impact on the rest of the economy.

The second element is the actual set of systems that you use, the information systems, for collecting the data, processing them into information, presenting them in a form and analyzing them so you get knowledge, and then generating useful information for the stakeholders.

The third constituent element is the communications system, which links it all together and links it to the stakeholders. Of course, the fourth constituent element is to build the underlying institutional capacity to manage this entire framework.

In our context, where essentially the existing systems were completely dysfunctional, and, in addition, the business culture was risk-averse and bureaucratic, and furthermore, there was little sustainable capacity in-house to develop a system, where do we go? We took the view that the best approach would be to adopt a best-practice solution. By that I essentially mean to go out into the marketplace and to find a package that already embodied the best principles of budgeting and accounting, and to try to apply that package in our own context, while simultaneously building the capacity to be able to utilize that package.

In a sense, this also reflected a broader desire, a desire to try to use the strengthening of the financial management process to improve the entire public administration process. Obviously, finance is a key issue in public administration. If you can get the finance component working properly, you have a chance to affect the rest of public administration.

We made some assumptions, which I think may be regarded by some as fairly risky; nevertheless, we made them. First was the assumption that we could find such a package. Second, the package would be database-orientated, scalable, and could support the kind of communication systems we wanted in terms of wide-area networks and the Internet. It would be modular, capable of being implemented in a modular fashion according to the capacity of the organization with which we were dealing. It would be flexible, capable of customization, but primarily parameter driven. We didn't really want to make too many changes. We wanted it to be Y2K-compliant. In addition, we wanted it to be a generic public sector solution. We wanted to be able to apply it in all forms of the public sector entity in the country.

We also were very keen on ensuring sustainability. We didn't want to have a situation where we had international consultants coming in, setting up the package, spending a month with us, and then walking out. We wanted to involve a local consultant in the delivery of the package, even if it was sourced from an international package supplier.

Of course, it should support the business reengineering approach that we had adopted, and it should not cost too much. We initially had a budget of only \$1 to \$2 million. Eventually, that was doubled over the implementation period. That had to cover consultancy, software, hardware, and the wide-area network we were trying to create.

You must remember, the government of Tanzania has a relatively small government, but we have a very large organization structure. We have 60 different accounting units, 60 ministries, agencies. That doesn't count the local authorities, the projects, and a host of other entities.

We needed, finally, to achieve some fairly rapid implementation credibility. One of the key issues in a developing country is to make sure everybody gets paid. There is a big drive from everybody to be paid. Any system that you implement that does not ensure that the payment process works and works well will immediately cause you problems. So we focused on the payment process.

In trying to find the package and in implementing the package initially, there were a number of key issues which were of concern to us. I will cover these key issues in more detail.

We actually went out for tender for the package in 1997. After a tender evaluation process, which essentially consisted of trying to ascertain which local consultant could do the job and implement the package, we chose a local consultant known as Softech Consulting Tanzania to implement the package. Harish is the managing director of that company.

So implementation began in earnest in January 1998. We are talking three years down the line now.

Key issues: The first issue was the chart of accounts. We wanted a chart of accounts which would provide us with analytical capacity to service the needs of our stakeholders. That meant we needed to provide information on a sectoral basis and organizational basis, a cost-center basis, a project basis, on a performance budget basis, on a geographic/location basis, on an economic basis, on an accounting basis. We wanted to try to do this through the means that has already been discussed in this conference, single entry. We didn't want to have to put too many entries into the system. We didn't want to have to create tables to translate data from one system to another.

We also had some specific public sector accounting requirements, which you don't usually find in a package, and usually not in a commercial package. We wanted the package to cope with the exchequer and the cash management system. We wanted it to cope with the public debt management system. We wanted it to do commitment accounting, monitoring and control. We wanted to be able to use modified cash through to accrual accounting, depending on the entity with which we were dealing. We wanted, because of our central payment system, to be able to have multiple cash accounts, but one bank account. We wanted, of course, specific reporting requirements. We wanted it to interface with some of the other systems which were in operation, examples of which are the commonwealth secretariat debt recording and management system, the payroll and human resource management system, and the various tax revenue and collection systems.

We looked just at the chart of accounts. We produced, during the first six months of implementation, a four-dimensional chart of accounts. The first dimension deals with the ministry, the department, down to the level of cost center, and essentially identifies the responsible manager. It also gives us program analysis and sector analysis. If we look at the sub-programs and programs, we can, by extracting a report, get sector analysis.

The second dimension is a performance budget dimension. It enables us to set up within the accounting string, objectives, activities, sub-activities, and to relate these to specific targets.

The third is a geographical/location string, which enables us to identify region and district. The last is an economic category or accounts string.

We chose a methodology of embedding in the account code the IMF GFS statistical analysis. When you get an account code in the Tanzanian government, it equates directly to a GFS code, so you don't need to have any kind of translation. Another reason for doing this was that we could adopt standards embodied in the GFS analysis, in the manual that the IMF has promulgated.

These are each independent dimensions, so you can link any dimension with any other dimension. It takes a good many digits to accomplish this. You might say this is going to cause major problems when we try to enter data in the system. But, in fact, in a modern accounting system, where essentially you are dealing with PICLists and where you are able to reduce or default much of the code, it has not proved to be a serious problem at all.

In terms of the budgeting process, we wanted a situation where we could set up within the system all the budgets in the form of planning trees, where we could associate with those budgets specific objectives, targets, et cetera, which would directly interface with the general ledger. This would enable the budget office to establish the medium-term expenditure framework, and the ministries to operate within that framework to produce the various ministry submissions. Then the budget office can review those submissions and amend, adjust and prepare the budget for submission to Parliament.

That would also feed, then, into the general ledger as the setup parameters for the new financial year and enable comparative reports for budget monitoring to take place.

Another area was the consolidated fund. I don't know how unique this is compared to other countries, but we have in Tanzania two funds. One fund refers to recurrent expenditure, the other to development. The recurrent is funded essentially by tax and domestic revenue and by short-term financing and recurrent grants. We issue from that fund amounts of money to a central payment system. This central payment system will then pay all the bills on the account of ministries, agencies, and departments. The central payment system is located in Dar es Salaam, where most of the expenditure is, but we have regional sub-treasury offices in all the regions, and they operate on a similar basis.

For the development fund, we have basically a ringed-fence fund. Since 85 percent of development expenditure is financed by donors, there is a great concern on the part of the donors to ensure that their money is used for the purposes intended. So into this fund we put development grants and development loans, and then we again issue exchequers to projects, agencies, to central government ministries, to enable them to pursue development activities.

We issue recurrent and capital exchequers. We have tried in this system to remove the words "development expenditure." We recognize development finance, but we do not recognize development expenditure.

In terms of commitment control, as I indicated earlier, we had a large buildup of domestic arrears. I am sure it is a problem with which many of you are familiar. Spending agencies tend,

when they are resource-constrained, to put the bills under the table or to enter into illicit credit arrangements that result in a buildup of domestic arrears. So we wanted a very strong commitment control system.

What we have done is to utilize the exchequer and warrant issue system as a commitment control system. When we issue an exchequer, a spending authority, to a ministry or an agency or a department, we expect them to disaggregate that exchequer in the form of warrants and to enter it into the system. They should do this in accordance with the budget on a periodic basis. But, in practice, given the cash constraints, they may only be able to do it on the availability of cash.

Once this is in the system, it represents a commitment control total. The system will not allow any commitment to be made through the system which would involve total payments and commitments exceeding this commitment control system. We have introduced this in phases. It started as cash control. It then took on the LPOs, and now it is all commitments.

Another major issue for developing countries is donor accounting. Typically, and certainly in Tanzania, most of the development budget is financed by donors, about 85 percent. Most of that is not recorded at all within the central government system—or typically has not been recorded. It sits outside the system in independent bank accounts being run by independent projects, being administered by independent project staff. There are very good reasons for that. Donors don't trust our procurement, they don't trust our disbursement, they don't trust our accounting, and they don't trust our auditing systems. Obviously, if you don't trust any of that, you are very reluctant to give the country the money directly.

So what we have tried to do is to utilize the system to convince the donor that the system has integrity. They can actually use the system, even if they maintain the administrative arrangements. The moment they use the system, we have all the information in it, and we are able to incorporate it into the government system.

All that really happens is that an individual donor will have a bank account outside the government system, either offshore or onshore. He will pass money, following some sort of disbursement decision, to a government-related cash account, which may, again, be in foreign currency or in Tanzanian shillings. Immediately, the money is deposited in this account; it is accounted for within our system. We will then issue either an exchequer to the central payment system, which will then fund the project, ministry or agency, or we will issue a transfer to the local authority concerned or other independent entity, who will then execute the project. Donor reporting then comes from the system.

To accomplish this, we bought a package called Platinum Enterprise Resource Management System. It is an American product. I will ask my colleague, Mr. Bhatt, to give you some details on the package. But I think, actually, the package is probably not the important issue. The important issue is that any commercial package could have been chosen, and subject to its meeting the assumptions we made, we could have used that package.

Harish Bhatt, Managing Director, Softech Consultants, Tanzania

Good morning, ladies and gentlemen.

Platinum ERA is a product by a U.S. corporation known as Epicor Software Corporation. For people in the United States, when I talk about Platinum, they immediately associate it with a company formerly known as Platinum Technologies. At the outset, let me say they are not the same. The product name is Platinum.

This product was chosen by the government of Tanzania for implementation as part of its strategy for integrated financial management systems.

What I am going to do is quickly walk you through the basic features of this system. It is not possible to discuss in detail everything about the system.

Of the various modules supported on the system, I will quickly start with the core, the general ledger. The system has been developed in visual BASIC and it runs off server database. For those of you familiar with ERP systems, Platinum would be classified as a mid-range system. It is not at the high end, like the SAP or the Oracle. It comes in-between somewhere. Effectively, it is a commercial enterprise resource planning system. That is what it was when it was selected.

The key idea was that we should be able to customize it to meet some of the additional needs that the government of Tanzania had. Peter has already pointed out that these were things like commitment control, the ability to do exchequer releases, the ability to manage one bank account and yet account for something like 50 or 60 different entities using a single bank account. So these are the sorts of changes that we made within the accounting package.

At the core of the system we have the general ledger, which, effectively, is the end-point recipient of every transaction within the system. However, having said that, this is a single-point-of-entry system, so you enter a transaction once in the system, anywhere, and you don't have to repeat it.

So we have the general ledger. We have the bank books. The bank books are primarily for the management of the various bank accounts. It accommodates multiple currencies, so you can maintain bank accounts in any currency of your choice. You have accounts payable, which we are using for the purpose of either supply- or non-supply-oriented payments. Supply-related is any procurement-related payment; non-supplies are any other bills, including things like salaries or any other expenditure that is not associated with procurement per se.

At present, for example, we print something like 1,500 checks at the central payment office in Dar es Salaam. This is on an average day. Towards the end of the month, the volume shoots up to something like 7,000 to 8,000 checks a day, which we are printing centrally.

So the general ledger, the bank books, and the accounts payable become part of the core of the system that was implemented initially to manage the accounting of the government.

Another module that we are already using is accounts receivable. Now, many people in the government will suddenly start wondering, what exactly is accounts receivable doing in the government? We are using it to keep track of a few types of debts which are a problematic kind of debt in the government, especially in Tanzania. These are things like imprests. I don't know what the correct word would be in the rest of the world. This is money that is given to various government officials as advances, either for trips, for travel, or for any other expenditure. Eventually, they are supposed to account for it and retire it. So we are using the accounts receivable module to keep track of such imprests, as well as staff loans, and also dues from subsidiaries wherever the government still has shareholding.

Again, let me quickly explain to you, the government of Tanzania, even now, shares in a lot of public sector enterprises. To be able to keep track of dues from such subsidiaries, we are using accounts receivable.

We have a requisition manager, which effectively allows you to enter requisitions from any department within the organization. This requisition has certain workflow requirements built into it, where you can authorize a requisition or you can turn down a requisition, and so on. If the items are available in inventory, you can issue them directly.

One of the most powerful sub-modules that we are implementing for one of the agencies of the government is the tender management system. Tendering, obviously, is a major activity, because the government does a lot of procurement. The tender management system allows you to create a tender, define a tender, specify conditions, define evaluation criteria. You can issue the tender, and when you get the tenders back, the system will help you to evaluate which of the tenders that you have received is probably the best, and how you award that.

This is a critical module that is going to be used very effectively by one of the major agencies of the government of Tanzania.

We then have the purchase order system. The purchase order system is where you generate all your local purchase orders. Here commitment control comes into the picture. In other words, if the item is not on budget and if there is not enough money released for it through the exchequer, you cannot make a commitment. It became a very powerful way to control over-expenditure within the government.

We have inventory management and quality control, which is used by some of the agencies. The central government per se does not use it right now. We have the asset management system, which allows you to define all your fixed assets and allows you to do automatic depreciation. Again, the central government is not using it right now, but the agencies are.

We also have an asset maintenance module. This module is currently used to manage the various fleets of vehicles that the government has, effectively keeping track of expenditures associated with repairs, maintenance, and consumption of fuel and other types of consumables.

Another module is a budget manager. The budget manager is a sophisticated tool that allows cooperative effort among various people, starting from the level of a department within an

organization right up to the ministry level, to compile a budget. This budget can then be shared by the ministry, the various planning authorities, the budget office. You can get into a dialogue. You can save various versions of the budget and eventually come up with one budget that will be the final budget of the government of Tanzania. This year the 2000 and 2001 budgets of the government of Tanzania have been done using this tool, the budget manager on Platinum ERA.

Besides this, we have other modules that are related to project management. Project management allows you to define or manage projects. These particular modules are being used by an agency in Tanzania that is responsible for construction of various main and trunk roads within the country, as well as maintenance of regional roads. Most of you may be aware that roads projects actually start in the middle of a financial year, may last over a number of financial years. They have their own budgets. They have their own peculiar control requirements. So the project management modules are used by these agencies to manage the projects.

Finally, there is a payroll and HR module on the system. But as we speak right now, the government of Tanzania did not select the Platinum HR/payroll module. It currently uses another software known as Lawson, which is also a U.S. company. They have implemented the HR and payroll from that organization.

This entire system is Web-enabled. I will explain to you very quickly what implication that has in terms of how we are intending to use the system in the future.

The first task that we had, taking a look at the various government requirements, was to map the requirements of the government of Tanzania and determine which module within the Platinum ERA system would be used. The planning and forecasting was done by using a module called the budget manager. We then had the authorization procedures, which also dealt largely with the exchequer releases, warrant of funds, commitment control, and so on, which is a customized module within the system. We then had the liquidity and the bank account management, which is directly handled by the bank books. We had trade-related expenses, which is mostly procurement, which is handled by the purchase order. We had other non-trade expenses and revenue accounting. Non-trade expenses are handled by accounts payable. We had revenue accounting and debtor management, which has been mapped on to the accounts receivable, inventory management, asset management, fleet management.

As far as the reports go, the modules of the system support a number of what are known as popular report writers, like Crystal or FRX. Using them, you can generate a wide range of reports of your own choice.

In order to implement this accounting system, this integrated financial management system, the structure of the system requires that we have one control database, and then we have what we call a subsidiary database. The control database effectively represents the government of Tanzania as a whole, and we call that the Treasury, which is actually the parent or the holding organization within the government of Tanzania. Then each ministry or department or agency is actually a subsidiary database within that one single entity. By doing this, what we have is a common chart of accounts across the entire government of Tanzania. This helps us in consolidation of information from any ministry when we are producing the final accounts for the government.

In addition to that, each ministry has its own subsidiary database. By that approach, they can only work with and are restricted to their part of the information. In other words, they cannot have access to information of any other ministry. The only people who have access to information across the whole system are at the Treasury.

In addition to the central government, the structure of the system is such that it allows us to consolidate information from other parts of the government. Sub-treasuries are the mini-treasuries in the regions, where the funds are forwarded by the various ministries. Payments take place, and eventually we need that information to come back to the central system so that it can be consolidated. At the center, at any one given time, therefore, we are in a position to know what is happening in any one of the regional sub-treasuries.

By the same approach, we can consolidate databases from various districts, projects, or agencies that are using the same system.

I will just quickly run through the key functionalities that the system has. In terms of purchase orders, you can raise a purchase order with a commitment. You can record receipts of goods. You can do a quality check. You can record invoices from supplies.

With accounts payable, you can enter payment vouchers. Authorization is extensive. At every stage, there is a very good workflow control, where various people need to authorize every stage before it can proceed. You can generate payments, and the system writes checks. Currently, we are writing checks because our banking system does not support electronic fund transfers. In Tanzania, that is still not done. So we are still working with checks.

The general ledger holds the chart of accounts. It also holds the budgets. The only entries that are ever made in the general ledger are adjustments. Also we use the general ledger to produce the final accounts.

Cash management deals with the bank accounts. The accounts receivables are used to manage imprests and loans, as well as revenue accounting. Commitment control is a customized module that was built into the system and handles the exchequer and warrant of funds. The budget manager helps to set up, compute a model budget. You can analyze it and you can discuss any changes.

Finally, we have developed something like 300 to 400 various types of reports that are very specific to the government's needs.

A very brief overview of one of the features of this system: how we write checks and do reconciliation. Every ministry enters transactions from its own building, from its own office. These transactions are entered into the system. They have to be authorized. Once the payment has been generated, they do not write checks.

The printing of the checks takes place at what we call the central payment office, which is a single office located in the Treasury. Since this system is implemented over a wide-area network,

there is no flow of paper. So once a transaction is entered at the ministry level, the checks are written out at the central payment office. These checks, including the lists associated with what checks were written for the day, are then distributed back to the ministries or are picked up by the ministries for sending on to the beneficiary.

As far as reconciliation goes, the central bank, where the government holds its accounts, gives us information on magnetic media, which are either tapes or disks. We use that information to do automatic reconciliation within the system. We get this information on a daily basis now. It took us a long time to hammer out our problems with the central bank. Like many central banks, they are not very flexible, and they think that they are probably holier than anybody else. So it took us almost two years, arguing back and forth with the central bank, until we got our information right. But we are now at a stage where we get information at the end of every day. We can use that to reconcile our bank accounts automatically. So the actual transactions that you need to enter into the bank account for any reconciliation are very, very few. The bulk of the transactions are reconciled automatically.

To implement such a system, from day one, we set up the system as a centralized system. Effectively, that meant that we had a bank of servers at the Treasury (what you would call the Ministry of Finance), and at the Treasury itself, there is a local-area network which serves a number of people who are close-by or are within the building. Typically, this is the Ministry of Finance itself, the public debt section, the accountant general's office, the auditor general's office, and the civil service. The civil service is not necessarily in the same building. They are about a kilometer-and-a-half away. There is a fiber link between the Treasury system and the civil service system.

However, in order to support the various ministries—and they are located in a radius of about 15 to 19 kilometers away from the Treasury building—we had various alternatives as to how best to form a wide-area network. Ultimately, we chose a radio modem solution. The radio modem solutions that were available when we started gave us a throughput of 3 megabits per second. We now have systems that are giving us up to 25 megabits per second. But we had a fairly good bandwidth with which to work. The deployment was rapid. We set up a wide-area network in under five weeks to set up and manage the distribution to the various ministries.

Incidentally, this project was awarded at the end of 1997. In early 1998, we started the business process reengineering work, and by July of 1998, we were up and running in 12 pilot ministries. We just had a six-month period within which the hardware had to be installed, training had to be carried out, customization had to be completed, so that we would meet the deadline of starting on the 1st of July 1998.

So this wide-area network was set up. Each ministry then has a local-area network within itself, but there is no storage of data in any of the ministries. These terminals in the ministries just act as terminals to the central system. Also we have implemented Citrix MetaFrame. Instead of using PCs in the ministries, we are using NCs, so that cuts down the bandwidth requirement.

The current Dar es Salaam metropolitan wide-area network has 43 sites connected to it, with a center at the Treasury, which is the Ministry of Finance. The metropolitan area network covers 43 different buildings in a radius of about 19 kilometers.

The next stage was to take a look at how we were going to integrate the various regional sites to the central system. To this end, we intend to use the Internet or, where possible, private networks. Private networks have one limitation: They work out to be very expensive in terms of bandwidth requirements. So, where possible, the next approach that we intend to use Internet services. To that end, we are implementing a virtual private network at the central Treasury which allows us to have a number of features, like blocking specific addresses, encryption, a high level of security in terms of who logs in, and so on and so forth. Each of the original systems has a radio link to the nearest Internet service provider, and we will then use the Internet as the medium through which we will do our accounting.

Again, it means the regional systems will not have a server. They will just have terminals. They already have the terminals; they are already operational. They are leveraging the information off central servers located in Dar es Salaam.

Tanzania is in East Africa. Currently, all the ministries are located in Dar es Salaam, and there is one ministry in Dodoma. So the ministries actually are all clustered in Dar es Salaam, with the exception of one which is in Dodoma.

We have 19 regional sub-treasuries, which are the payment points for the government of Tanzania throughout the country. They are also up and running. They are functional, as we speak right now. We are in the next phase of integrating all these regional offices with the central office in Dar es Salaam. All the 19 sub-treasuries were up and running as of June or July of last year.

The Tanzania Revenue Authority, which is one of the principal agencies of the government of Tanzania, oversees the collection of revenue, tax-based revenue. We have implemented the same system in Dar es Salaam. As we speak now, the system has been rolled out to all the regions in Tanzania. It is the same IFMS that has been used throughout the country.

We have also implemented the same system in 28 local authorities within Tanzania. For example, in Shinyanga, which is one of the towns, there is an urban authority and then there are three districts. This is already operational. All the 28 local authorities are operational as we speak. We are extending the same system to 21 local authorities starting in July of this year.

Finally, we have a number of donor-related implementations. These are project-specific implementations. We have what is known as the Health Basket Fund. It is a mechanism whereby all the donors are putting their money together, now that they have more confidence in the Tanzanian government's ability to account for these funds, after seeing two years of operation of the IFMS.

I will now ask Peter to wind up the rest of the presentation. Thank you very much.

Peter Murphy, Consultant, Treasury, United Republic of Tanzania

Obviously, an implementation of this scale and scope doesn't occur without some significant problems. We just wanted to identify quickly those problems.

We still have transactions that occur outside the system, particularly in relation to donor flows. We are working with all the donors to try to persuade them to come into the system.

We still have instances of procurement-related fraud. We haven't implemented all the procurement modules in the system in the central government. We are hoping, as we implement them, procurement frauds will be reduced.

Our users at the level of operators are very efficient. Our users at the level of managers are not yet really utilizing the system and the information coming from the system to the extent that we would want. We are working hard trying to train managers on how to use the information coming out of it.

We have weak utilization of the debtor systems. Obviously, people are not very keen on following up on amounts owed. This is a rather pervasive culture. So we have to work with that.

We have resistance, in particular, to utilizing the procurement modules. There is a large vested-interest group who do not want this system implemented.

At the accounting level, we haven't found it too difficult to implement this accrual accounting system, even though we only had accountants who were basically experienced with cash accounting. It took about a month or two for everybody to get the idea that you were debiting expense accounts and crediting accounts payable, and then debiting accounts payable and crediting cash. It didn't take very long. But we still have rather low levels of skills vis-à-vis the full system requirements. Again, we are working to restructure and train.

The banking system constrains us, as Harish has already said. The system is fully able to deal with electronic transfers, but as yet, there is no national banking system.

Probably our biggest problem is to be able to retain the workforce that we have actually trained. We have in the accountant general's departments a group of around 50 staff, all young graduates who have been put through two-and-a-half years of IT and CPA training. Those young graduates are very well qualified, very well motivated, but very poorly paid. So there is a great danger, unless the government recognizes the central importance of this staff, that they will simply migrate to the private sector where they will be paid very much more. That is a big sustainability issue.

Obviously, such an implementation is not just about systems; it is about a whole range of things—hardware, the ability to supply it on time, communications, software, training, commitment, data, management, controls, procedures, people. We have only shown you one small part of what has actually gone on in trying to make this work.

What next? We will progressively increase the coverage throughout the government. We will try to get all the donors' projects involved. We will move to full project accounting and management. We will implement it in all the agencies, extend to all the local authorities, change over to the Internet-based communication. Currently, we are using leased lines and telephone lines to transfer information. We will improve the management and quality of the information. We will try to follow up on expressed interest from other countries.

The conclusion, then, is that, from our point of view, it is possible, even in a severely constrained resource environment, to implement a flexible commercial software package in a government environment, and to implement accrual accounting and to satisfy the conditions related to reporting, et cetera.

If anybody would like to see the system in operation, it will be outside for a period of time today.

Thank you very much, ladies and gentlemen.

Strengthening Central American Supreme Audit Institutions

Fernando Herrero, Project Director, CABEI/OCCEFS Project

Good morning. The screens that you have just seen are not a product of my imagination. These screens appeared as headlines in the different communications media in Central America within the last 18 months. And they show the need for having independent General Accounting Offices in the region. This is basically the subject we will be discussing here today.

The first thing that I would like to emphasize is that the transformation of the General Accounting Office in Central America is a paradigm change. It is not a simple, marginal change. To introduce a lot of new technologies is really something that goes deeper than that. It is a change in the organization of the society itself, and the way in which it functions. There is a need for development. It is not just introducing advanced technologies. It goes beyond the General Accounting Office toward democratic governments.

I would like to say also that it is a political change. The discussions that we have had for the last few days in this conference have been centered on technical aspects. They suppose that there is already the political will to carry out these transformations. In this case, when we talk about the General Accounting Office in Central America, the political will really does not exist. And a big challenge that we face is to have the technical capability and the political capability, and join the two together to create a new consensus in the region. I would like to widen the subjects that have been discussed here and talk about the conditions necessary to carry out the process of modernization in our countries.

Together with the Central American Bank for Integration and with the support of the Inter-American Development Bank, we started a project that is located specifically within this perspective. This project is to develop a Central American consensus for the future development of a General Accounting Office. It also hopes to strengthen the situation between the great organizations and the accounting offices because it is very difficult for entities that are inside the country to develop projects with multilateral agencies which are basically very far away. Our project, as I said before, is directed toward looking for a new agenda within Central America. I began by conducting comparative studies among the countries in the region about strategic planning, public opinion, organization, human resources and a legal framework. This served as a basis for internal dialogue within the institution, national dialogue and dialogue among the different GAOs.

Having said this, I would like to tell you that my presentation will be divided into four parts. The first three identify the components that will allow us to advance in the transformation of the General Accounting Office. The first is institutional modernization and state reform. The reform

of the General Accounting Office is not possible if we consider them by themselves. It is important to go to a bigger framework that includes the entire reform of the state.

The second component is peace and reconstruction. After many decades of war, reconstruction of the region has begun. And after the catastrophic floods caused by Hurricane Mitch last year, the challenge that we now face is considerable, but not daunting.

The third component is a new line of opportunity provided by the consensus of the international organizations and the academic organizations to go from the simple organization structure of the 1980s and 1990s to organizations that emphasize sustainable human development.

And these three components give us a window of opportunity that I wish to present in this forum for two reasons: number one, many of you come from the Central American region or work in it, and therefore you have the commitment to look for solutions to the problems that we have there. And number two, I think it is interesting for the participants from other countries and other regions to see how we present the political subject as the precondition for obtaining technical transformation.

In order to speak of institutional modernization and the need for reform within the State, the first thing that we have to know about the GAO is that they are very heterogeneous. They are very different among themselves. Some are very advanced, very developed and function with great capability and a lot of resources. Others have found themselves for many years with very few resources and they have not had these advantages. Some of them concentrate in internal control, some are very connected to the executive power, others are completely independent from them. In the Central American region we find a great variety insofar as the GAOs are concerned.

Within the process of modernization, however, there are common threads in each of these countries. And I would like to point out three of these elements. Number one, the international organizations have insisted, for many years, that the accounting office should specialize in external auditing, instead of trying to actively participate in the decision-making process. This has not been possible in most of the countries in Central America. In all of the General Accounting Offices there are many other functions besides specialized auditing procedures after the fact.

A second element, essential element, of the modernization of the accounting office is political and financial independence. Political independence is highly questioned within the region. There has been no consensus to convert the GAOs to organizations independent of political pressures. There are some very notorious cases in which either the Controller General is named by the President or the officers in charge of the accounting office are politicians themselves. They use the General Accounting Office for their own personal purposes. Also we have the subject of financial independence. We have seen this as a necessary condition so that the General Accounting Offices can carry out their duties without the executive power or any other government authority having the capability to extort, to force them to go in one way or another. This is a subject in which there is very little consensus in Latin America and we have had very little advancement.

And then we have technological advancement in auditing, computers and human resources. However, we realize that the reform of the General Accounting Office cannot be done inside the

General Accounting Office. Only one part of the process takes place inside the General Accounting Office—the reforms that we need to push need to transform the rest of the government. Many of our General Accounting Offices are very isolated. They have no access to appropriate levels in the different institutions in order to carry out a relevant task. It would require a massive incorporation of technology, and a decision for global transformation on the part of the State.

When we talk about external control after the fact as the responsibility of a general accounting office, this requires a change in the mentality of the rest of the State. We may give more responsibility to the manager in decision making, but we should develop internal control systems. In other words, the fact that the General Accounting Office does not co-administer the operation of the organization with the executive power does not mean that there should be gaps. The internal control process is one of the most important and complex reforms that we must have, and it is something that requires a political will and a political consensus.

True reform requires the redefinition of political functions, as well as the function of the accounting office. A requirement that is also fundamental in this is a significant strengthening of the law in the country. For those of you who do not live in Central America, this may seem both minor and obvious. But in the case of Central Americans, the will of law is quite weak in our countries and the strength of the law in and of itself is even weaker. So if you wish to introduce state-of-the-art management technologies or models providing more independence to decision makers, we require a solid rule of law and the law is to be abided by so that corrections can be made and deviations prevented. If institutions want their executives to enjoy empowerment, it is obvious that the GAO reform is also a change in this paradigm, is a change in the way things are done, and therefore it requires a national consensus and political decision to do it. A decision by controllers to modify the institution is not enough. We have to set up a domestic consensus that allows you to redefine the role of these institutions.

In this regard, it should be mentioned that GAOs have a significant advantage in this region. I am referring to their image as far as the public is concerned. First of all, based on a study that we conducted in every single country involved in the project that I am leading, it's been clearly set forth that corruption is one of the main three issues detected within this region. Even in the country where there is least corruption, as per the International Transparency Index, the population indicates that corruption is one of the most significant issues. Income and personal safety are the other two issues identified. GAOs in three of the seven countries contribute considerably to the good use of public resources and fight corruption.

Thus we conclude this initial portion by saying that we must proceed from GAO modernization to government reform. That was the broad mission that I indicated earlier. And second of all, it pays to expand the support base for GAOs. Its product has high priority but its task is not very well known by the majority of the population. Thus, we know that there is significant work to be done in order to get support for this institution and strengthen it as it carries out its efforts in the future.

Another area I want to refer to in this presentation deals with human development. And it must be emphasized once again that Central America is a very heterogeneous region in terms of human development. One of the countries that has high human development is located within this

region, and some of the other countries have no human development in terms of institutional/political development. The international embassies show clearly that one of these countries has a long-standing tradition for democracy and the other countries endure acute periods of institutional and political decay. Recently, within the last three years, we have seen some improvement with respect to civil and political rights of the population in these countries.

We have a country within the region which has one of the lowest corruption percentages. At the same time we have the country having the highest corruption in the region. That gives you an idea of our heterogenousness. However, agreement has been sought within these countries and avenues for improvement have been identified.

In 1995, the Central American Alliance for Sustained Development was created, a joint vision of development efforts on the part of these seven countries to promote democracy and solidarity and understanding of the guiding principles for action on the part of Central American governments. These in principle are in the Guatemala and El Salvador peace treaties and in the Declarations of Intent made by the countries that were subjected to Hurricane Mitch. However, the consensus is quite weak when it is based upon general statements. When you try to make more substance of these issues, the consensus disappears within the region and it disappears not only among the different countries but also within them.

There is a huge demonstration currently on Costa Rican streets against actions promoted by the government. In Guatemala and El Salvador, to mention two more countries, a critical component is peace plan financing. It was agreed that tax rates would increase in both countries. This has been achieved to some extent in El Salvador and a lot less in Guatemala, which was not able to comply with the agreements set forth in the peace treaty. There is massive opposition by the public to any tax increase, even when it is assured that these taxes will be used for social development.

In Honduras and Nicaragua, the countries that were most affected by Hurricane Mitch, the issue of corruption has not been faced as fully as we all wish. Actually, the Vice President of Nicaragua acknowledged recently that this issue will take a long time to resolve due to cultural differences.

As we try to proceed from the general consensus to specific action, we find that this consensus tends to disappear in the countries located within our region. Despite this, we must proceed from peace treaties to reconstruction and development. The different goals that were set at different times in the region have not been met. With modernization, however, GAOs will play a very significant role in controlling the use of funds in the reconstruction process.

Finally the last point, from structural adjustment through sustained development. In the 1980s and 1990s, in what was later referred to as the Washington consensus, the emphasis of economic and social policies was on achieving the macroeconomic balance lost in the 1980s, and on correcting government involvement in price systems by deregulating markets and reducing the role of the government by privatization and deregulation. There was a marked lack of interest in social development, especially in the 1980s, as acknowledged appropriately by the World Bank. The situation that existed throughout the 1980s and 1990s has changed, and new possibilities have

opened up. First of all, the instability of macroeconomics is maintained and by and large it is acknowledged that market prices play a role in allocating funds within our economies. It was uncovered as a result of liberalization of deregulation policies and due to the reforms that have taken place in the countries of the former Soviet Union. It has been shown that it is not possible to have a market operate appropriately if several preexisting conditions are not met. And some of these preexisting conditions deal with developing institutions. The market in and of itself is an institution.

As the market develops, the government develops. A different government. A government that is able to regulate. A government that is able to have property rights respected. A government that is able to invest in social development. So there are new demands on the role of the government, which means that the initial interest in the 1980s and 1990s which minimized some of the role of the government no longer exists. Now, the important thing is to have the government carry out its tasks and carry them out appropriately. So this opens up new possibilities to transform public institutions.

The people working in these institutions must perform a large part of this transformation. Now, within the institutions that have been reasonably identified as critical institutions, we have democracy in and of itself. In recent research that was presented at the meeting of governors that took place last week, a significant relationship was been found between the existence of democratic political systems and the development of countries. It was found in terms of human development for the purpose of improving lifestyles. A different set of indicators was used to measure democracy, to measure political rights, to measure civil liberties, and it's been found that this plays a very important role in the development of these countries. This was not clear before. Bear in mind that during many periods it was said that democracy was not compatible with development. In certain countries, it was required to have authoritarian regimes during development. Democratic regimes could come later. Well, this vision has changed radically.

The development of democracy has become an important element on the agenda of many international organizations. Not just bilateral organizations, but also multilateral organizations have become concerned about this. Along these lines, we have the issue of strengthening the rule of law and the respect for the law, as well as sustained human development and the elimination of poverty.

In conclusion, all these new orientations in the academic community and the international development communities provide a broad mission of development. And those that strengthen efficaciousness and efficiency have the highest priority. Thus, once again, we state that we have an opportunity for change. Plans are in motion to transform the role of the GAOs as part of a more general change in Central America. Our task is not easy. In Costa Rica, which is the oldest democracy in Central America, it took a civil war to build independent civil service and an independent GAO. As I said at the beginning, this involves touching the very root of our society. This is the time to strengthen dialogue, and apply pressure. Opportunities have opened up in our countries and it is a challenge to many of you here. Let's not forsake this. Thank you very much.

FELIPE CASTRO (Dominican Republic): There is an aspect which the GAOs have not taken into consideration, and that is to propose that education be developed more widely among the people. We, the inhabitants of these Latin American countries, could better carry out our responsibilities as citizens if the government promoted more openness for its inhabitants. This should be taken into consideration when the general accounting offices continue advancing in their process. This is our opinion.

FERNANDO HERRERO (Costa Rica): Concerning what you pointed out, one must keep in mind that education in general is not the responsibility of the GAOs. However, I do believe that I mentioned that support for the GAOs tends to come from those who know what they do. Sixty percent of the population in Costa Rica knows about the General Accounting Office, 20 percent in Guatemala and the other countries in the region are between these two values. Therefore, there is a great gap that can be filled by developing a pro-education program on specific subjects that concern society.

LIONEL BERNARD (Haiti): I would like to know your opinion about the meaning of peace. What do social peace and democracy mean in those countries of Latin America, the Caribbean, Africa and Asia when people live in the deepest poverty and lack education?

FERNANDO HERRERO (Costa Rica): No question. This is a great challenge that we all face. And it is very understandable that peace is threatened among other countries because of the lack of education. Education has to play a central part in the future development of all our countries, not only the developing countries but also in the more developed countries. The development of human resources is certainly a most important component for future development of the nations.

JOSE ALVAREZ (Peru): In my country, the General Accounting Office is the organized system that covers everything that has to do with the national control system. We have a program called Program for Denouncement and Citizen Suggestions in which there is participation of the public. The system has been extended all over the country, and what has happened in my country is that the number of accusations is greater than the number of suggestions. I would like to know whether you have a similar problem in Central America, and what are the suggestions that the people have given the GAOs in order to get closer to them and be part of the fiscalization of this part of the government process?

FERNANDO HERRERO (Costa Rica): Yes, we do have programs for making accusations within the different countries. One problem that has been mentioned in several countries is the lack of follow-up. There is no capability on the part of the GAOs to follow up on these denunciations. The denouncement system more or less loses its effectiveness and legitimacy.

The other problem is that the investigative process is interrupted when it reaches the final consequence. Then we find ourselves with a perception of weakness.

AQUILES A. NINA BATISTA (Dominican Republic): Yesterday in a presentation made by Mr. Mario Andrade, he discussed the social accounting office. We would like to know if you can suggest the necessary mechanisms for decentralization, or de-concentration of the accounting

office to create greater participation of the citizen in the social accounting. We would like to know whether there is any Latin American experience in this sense.

Within the same framework, in most of our countries, there is a Republican system of government, the three levels of government, the executive, the legislative and judicial system. It also happens that our country is highly politicized, and does not allow the General Accounting Office to be independent and impartial when they issue the different auditing reports. We would like to know what system would be an intermediate-type system, if you will, that will help the General Accounting Office have a certain degree of independence within the institution and also function more efficiently. What suggestions can you give us along those lines?

FERNANDO HERRERO (Costa Rica): Politicization of the General Accounting Office is a reality, as I said before. The General Accounting Office should be independent from the political arena. This does not mean that he cannot be a politician. He should be a specialist, but it does not necessarily mean that he should not be linked to the political entities existing in the nation at that time. The experience in Central America with the supreme auditing authority has been varied and difficult, without going into great detail. But we all know that the Congress in Guatemala fired the Controller General of Guatemala a few days ago. For several years there was a severe conflict between the Controller in Nicaragua and the President of Nicaragua. And lesser conflicts have presented themselves in many nations. In others you find a very close relationship between the Controller and the executive power which takes away independence from the GAOs. That is the case in Panama and somewhat in the Dominican Republic where the Controller General is in reality an internal controller of the executive branch named by the President.

As to your question on the effort to separate and give independence to the accounting office, it is really the most important thing that we need to do in order to strengthen the institutions within the region. It means that the Controller General should be hired according to political and technical knowledge. He should be hired for a term that goes beyond whatever period of time the government is in power. The classical example is that of the Comptroller General in the United States who is appointed for fifteen years. We have tried to lengthen that period of time in our countries. The Controller General should retire independent of his age, so he can have total independence during his administration. In a political situation it is necessary to stay in touch with the divisions of power in the different countries because we don't want to create an organization that is so independent it is also completely independent and isolated from the three powers of the State. So therefore it is important to have a dialogue in order to carry out this type of reform.

If you will allow me to mention, in the case of the Dominican Republic, it is particularly difficult because of the balance of forces that existed during the last government period. It was not possible to pass reforms by Congress because of this lack of balance within the government.

Concerning the social accounting office, you should present this also in your dialogue. This specific subject should be discussed in the fight against corruption.

ANGEL SANTANA (Dominican Republic): I am a judge from the General Accounting Office. The General Accounting Office is the oldest government accounting entity, established in 1854. Ten years after independence, the GAO was born, the General Accounting Office. One

hundred years later, in 1954, the Controller's Office was established within the nation to give support to a terrific tyranny that we had at that time. The GAO is nominated by the Congress of the Republic, and only three out of 50 people are submitted to the executive power. Right now I am a member. After 17 years working in the GAO from a junior auditor, I have the honor now to be one of the judges and a member because it functions as a tribunal. It has been a Cinderella for many years. We now have a budget of 30 million pesos, and this is something that I would like to know. Can you tell us about this challenge of independence within this administrative court? When we look at accounting offices, all or many of the Controllers have found themselves with their hands tied if they do not respond or if they deviate from the government purpose. They are so politicized that they cannot carry out their tasks as professionals and as officers of control. We have many cases, not only the ones that you mentioned. We have several other cases that need not be mentioned. We have the death of a Controller in Columbia many years ago, and right now the only bastion that we have is Puerto Rico, if you can put it that way, in terms of taking to justice the perpetrator of malfeasance of public funds. What is your vision of the GAO being protected in the future?

FERNANDO HERRERO (Costa Rica): Well, as I mentioned before, the subject of independence is a critical subject. In the case of the Dominican Republic, we find ourselves with an institutional organization that is different from what we find in most of the countries because of this coexistence between the General Accounting Office and the Controller's Office. I understand that there are different proposals along those lines. I understand that they have been directed to strengthen the General Accounting Office, and in a certain way to join it with the Controller's Office, to handle the external control function, and strengthen the present Controller's Office to handle internal controls, and to support the executive branch. This is one alternative that has been presented by some of the authorities in your country. There are a lot of ways to do the same thing. We should not be hung up on the names of the organizations or the dates. The essential thing here is that we make wise decisions, that there is an organization that is independent and that there is an authority that is capable of carrying out the responsibilities.

Quality Control of International Project Audits

Tim Cox, Regional Inspector General for Latin America and the Caribbean, USAID

I'd like to begin by saying it's an honor for me to be speaking to these people. We have at this conference a group of people who are very influential in many different countries, and I think that's the real strength of this conference. Again, it is a pleasure for me to be here, and I do appreciate the opportunity.

I'd like to start by asking you to just think for a minute about this quotation that says that audit is not a thing, it's an event. And do you get the point that I want you to get from this; I have to ask you to then think about what is an event? An event always involves interaction. It could be interaction between people and things, or it could be between different people. But an event always involves interaction, and it is interaction that produces quality. If we think, for example, about an automobile moving down an assembly line in the process of being manufactured, by and large it is going to be interaction between people and things, between people and tools and materials. That's going to determine the quality or lack of quality of the finished, manufactured automobile.

If you think about an audit and moving through its different stages of planning, fieldwork, reporting, there will be some interaction between people and things, but by and large it is going to be interaction between different people—between you and your staff, between the staff and the clients and so on. It is going to be interaction between people that determines the quality of the audit. And that interaction is going to be taking place at every stage of the audit.

What that means then is what actions are we going to undertake to produce a quality audit? Quality control is also going to have to take place at every stage of the audit, and that's really one of the main points that I want to communicate to you. Quality control, I don't think, can be the last step we go through before we issue our audit report. Quality control has to be a process and it has to be a process that occurs throughout the audit.

I'm going to give you a bit of background on my office, so you can understand my working environment, and then I'm going to talk about quality control from two different perspectives. The first from the perspective of an organization that is supervising audits done by others and the other from the perspective of an organization that is using audits done by others. And then I'll talk about quality control from the perspective of an organization that is doing audits with its own staff.

The discussion is going to be at a real practical and specific level. I'm going to be talking by and large about techniques that we use on a day-to-day basis in our office, and I'm sure those of you who are auditors are probably using many of these techniques yourself. If you aren't, these are techniques that can be implemented immediately, whether you are an auditor or whether you are somebody who is using audits as part of your work.

Let me just give you some background then on my office. I work for USAID, U.S. Agency for International Development. We have, within USAID, an Office of Inspector General which provides audit and investigative services to the agency. We have six regional offices around the world, and my office is one of these. It is the Office of the Regional Inspector in San Salvador in Central America, and we provide services to the sixteen USAID offices or missions in Latin America and the Caribbean. These missions have an annual budget of about \$1 billion. That is the portfolio of development cooperation projects over which we are responsible for providing audit coverage.

The great majority of the audits that we do are financial audits where the auditors are expressing an opinion on financial statements to provide information on how USAID funds are used. And really, the reason for doing the audits is to gain a level of assurance that those funds are used for the purposes for which they were intended.

Almost all of these financial audits are done for us by public accounting firms or, in a few countries, by SAIs, by supreme audit institutions. I want to make the point that on these audits that are done for us, our only involvement, and our only reason for being involved, is from a quality control perspective.

We also do some audits with our own internal audit staff. These would be typically performance audits. We might be looking at how well an AID program is working or how well AID is carrying out some management function. But the point is that in my office we actually have experience in doing quality control over audits done by others and doing quality control for audits done by our own staff.

With that very brief background out of the way, we can start to talk about quality control, and I'm going to begin by defining quality control. I'm going to say that quality control is a process that we use to make sure that auditors are meeting auditing standards. But I don't want you to understand that in the sense of a simple compliance test, because I don't think it is. It is more that, as auditors, we want to do high-quality, professional work. We want to provide a useful service to our clients and to the countries where we work. I think we can treat auditing standards as a tool that helps us do that. Auditing standards help us do professional work and they help us provide a useful service. Quality control is a tool that helps us meet the auditing standards. Auditing standards constitute the criteria or a yardstick against which the quality of the audit results are evaluated.

I indicated that we're going to talk about this from two different perspectives. If you are supervising audits done by other organizations, or if you use audits in your work, you're going to have quality control concerns when you select your auditors. You want to select auditors who are going to do quality work for you, and you're going to have quality control concerns when they are planning their audit, when they are carrying out the fieldwork and when they are at the reporting stage.

Similarly, if you perform the audits with your own staff, you'll have quality control concerns when you staff your audits, when you are planning them, supervising and reporting on your audits, and then, depending on which auditing standards you are following, you may be required to

undergo some kind of internal or external quality review process. And we'll talk about those at a separate stage.

We will go ahead then and begin to talk about quality control from the perspective of an organization that is supervising audit work done by others. In my office, when we select perspective auditors, essentially what we are doing is following the provisions of an aide-memoire that was negotiated and signed by several of the international donors active in this region, in Latin America and the Caribbean back in, I believe, December 1994. AID signed this aide-memoire; obviously, IDB and the World Bank signed as well. The aide-memoire had two purposes. One was to improve audit quality, and the second was to reduce duplication of effort on the part of the auditors and on the part of the donors.

What the aide-memoire did was to establish common standards or criteria to be used by all the donors in evaluating perspective auditors and in evaluating audit quality. And it established a process to be followed when we qualify or pre-qualify perspective auditors. We still follow this process today.

Essentially, the process is when an accounting firm or an SAI is interested in doing audit work for us; there is an initial discussion where we explain the requirements. If they are still interested, we ask them to provide some written answers to a questionnaire. Really what they're providing us is very similar to a technical proposal where they will describe their experience in doing audits in accordance with international auditing standards. They will give us information on the qualifications of the staff—their experience and education—their CPE programs, quality control processes and some other matters as well.

If, after we review this proposal, we feel that the perspective auditors probably are qualified, the next step would be to visit the auditors and do what we call a quality control review. We actually review the working papers for a recent audit or maybe several recent audits, again, to verify that they are in fact following acceptable international auditing standards.

If the results of that review are satisfactory, at that point we would add them to a list of qualified auditors. When we're ready to select auditors to perform a specific audit engagement for us, then we go through some type of competitive contracting process where we try to select among auditors on the list. Our objective is to get the best quality audit work that we can at the lowest possible price. The details of how that competitive contracting process works varies from contract to contract, but virtually always we will follow some type of competitive process.

Once we have selected our auditors, at the planning stage we have quality control. Essentially what we're trying to do is achieve a level of comfort on our part and on the part of the auditors, that they understand what the requirements are, and that the work that they're planning is going to meet our needs.

We use many different model statements of work which are very detailed. We've used these over a number of years and they've been refined by many different people. At this point we feel that they express very well and in a lot of detail what we're looking for from the auditors. I want to mention that we passed out some diskettes that have copies of the slides I'm using. They also have

copies of the documents to which I'm referring—the model statements of work that we use, and later on I'll be talking about some desk review guidelines, quality control guidelines and so on. Most of these documents are in Spanish and English, and we also put them on the diskette in several different formats including a plain text format. So you should be able to read those documents and use them if you wish, regardless of what programs you're using on your computers.

Also, for higher risk audits, where there's a great deal of money involved or we have a specific concern about the program or the organization that's being audited, normally we would approve the auditor's audit program. This of course would include the detailed audit steps that the auditors plan to carry out.

Now, while the auditors are churning out their fieldwork, when they are actually doing their audits, if we're talking about a lower risk audit where there is not a lot of money involved and where we don't have any special concerns, we might not have any contact with the auditors. But for a higher risk audit we normally attend the entrance meeting with the auditee. We do this to make sure that we, the auditors and the auditee, all understand what our role in the audit is going to be, and how it is going to unfold. We attend the exit meeting with the auditee to get some information on what the auditor's findings and conclusions are, and get an initial read on what the auditee's position is—in other words, are they in agreement or not with the auditor's conclusions?

Also, for higher risk audits, we may visit the auditors during the fieldwork. Right now, USAID is implementing a very large disaster reconstruction program in Central America to respond to the effects of Hurricane Mitch. Because of concerns about accountability for those funds that have been expressed first by many different groups in the region and also by many different groups in the U.S. government, we've been asked to try and help put in place exceptional measures to make sure that those funds are well spent. So, in many of these audits, we are visiting the auditors at least once a month to verify that they're on track with the fieldwork. Essentially, we get a briefing from them on what work they've done since our last visit. We ask them to highlight if there are any unusual issues or problems that they've encountered, and we will review their working papers on an ongoing basis to verify that they're following our statement of work and that they're following acceptable auditing standards.

At the reporting stage is where we traditionally think of quality control as occurring, but I want to point out that at this point we're really pretty late in the audit process. Hopefully we and the auditors have built in some quality during the planning and fieldwork stages of the audit. If not, it's really going to be difficult to turn things around at this point. You do have to have quality control procedures at the reporting stage, and I want to mention a couple of these.

For every audit report that reaches our office, we do what we call a desk review of the report. And then for a sample of those reports, at least ten percent of them, we will do a quality control review, which is a more in-depth review. I'll tell you what we mean when we talk about a desk review and a quality control review.

A desk review is where, based on a review of the audit report itself, we're trying to make a judgement about whether or not the auditors followed acceptable auditing standards. The guidelines that we use are quite lengthy, but some of the more important issues would be: we want

to verify that the audit report is complete, and that it contains all of the opinions and reports that are required in our statement of work. We want to verify that the auditors make exclusive reference to the auditing standards to be followed. We want to make sure that their opinion is correctly formulated. A big concern here is if the auditors express a qualified opinion or if there is a disclaimer of opinion, we want to be sure that they explain correctly the basis for the disclaimer. We review the financial statements that have been audited to make sure that they make sense, that the numbers add up, that they're consistent with one another and that they include all of the required notes and so on.

If the auditors have identified any questioned costs, we might want to get some money back from the grantee. It could be for any number of reasons—that they've identified expenses of the grantee that are explicitly prohibited by our grant agreement or maybe that they found costs that just weren't necessary to carry out the program, or the amount might not have been reasonable, or they might not have been adequately supported by receipts or other supporting documents. But we want to be sure that the auditors explain why they are questioning the cost, and we want to see that the auditors present the views of management officials in the audit report itself.

Now a quality control review would be a more in-depth review that involves visiting the auditors and actually reviewing the working papers. Again, the guidelines that we use are quite lengthy, but some of the more important issues would be: we want to find out if the audit was adequately planned, that it was adequately supervised. We want to see that the auditors obtained sufficient, competent evidence for their opinions and for the findings and conclusions of the report. We want to see that they obtained an understanding of internal control, that they assessed control risk, and that they used that information to plan the substantive tests. And we want to see that they identified the compliance requirements in our grant agreement and they carried out a review of compliance.

I want to share a couple of lessons that we've learned in doing quality control over audits done by others. One thing we've learned in the last year or so is that you really need to make a large investment in doing up-front types of work with the auditors—planning the audits with them, doing technical assistance, doing training. Where we haven't done this, the final products we see have a lot of problems. That is frustrating to us, and I know it is frustrating to the auditors. So an adjustment that we've had to make in how we do quality control is to make more of an investment in these up-front tasks with the auditors.

I'll give you an example. A lot of the problems that we were finding in reports that reached our office seemed to stem from a lack of understanding on the part of the auditors on the differences between auditing in accordance with generally accepted auditing standards and auditing in accordance with GAO government auditing standards. And so we developed a training course that focused on what those differences are and provided the auditors with some guidance on how to meet the additional requirements in government auditing standards. During this year I believe we've provided that training to very close to 1,000 auditors in 14 different countries. Obviously this is a big investment of time on our part, but it makes a tremendous difference in the quality of the audit reports that are reaching our office.

The other lesson is obvious to most people, not to all. You have to do quality control in a way that makes it possible for the auditors to succeed. I can really, confidently, match my nit-picking skills with the nit-picking skills of any person sitting in this room. And I have people who work with me who are much worse than I am. But that's not very helpful to the auditors. And so, over a period of months in my office, we had to take a step back and look at why we are doing quality control. It is obviously to improve audit quality. It is supposed to be something that helps the auditors do better quality work. And so we've tried to make a better judgment on things that have to lead to rejection of an audit report, for example, noncompliance with auditing standards. We can't knowingly issue an audit report that doesn't meet auditing standards. But we want to distinguish between that on the one hand and on the other hand comments that I might characterize as suggestions. These are things that the auditors really can try and incorporate into future audits—issues dealing with timeliness or problems with the English language or problems with clarity in expressing the findings and conclusions in the reports. Those things shouldn't normally result in rejection of work, but we can send the auditor's review comments in a letter or a memo.

We've talked a little bit about quality control from the perspective of an organization supervising audits done by others, and now I'd like to talk about doing quality control from the perspective of an organization that is doing audits with its own staff. It is somewhat of an obvious point here that when you're talking about maintaining quality of audits done by your own staff, any management action that you take is going to have an impact on quality, either positive or negative. But what I'm going to focus on are some techniques that have been useful to us. I think the techniques are pretty commonly used, and hopefully some of them will be relevant to your situation as well.

Our first concern when we're talking about audits done by our own staff is when we're staffing our audits. The audit standards require us to obtain the services of qualified auditors. We only want auditors working for us that have the ethical standards and the basic intellectual ability and the work ethic that is going to allow them to be successful. So how do we identify auditors like that and how do we keep them in our organization?

I think that we have to do that by offering them a competitive compensation package. And I'd like to talk about this because I think a lot of the organizations that are represented here, those of us who work in the public sector, often don't have a lot of flexibility on salary. I think generally we're required to follow civil service requirements, and we may not have the flexibility to match, dollar for dollar, salaries that are paid in the private sector. But I think many of us that don't have flexibility on salary may have flexibility in some of these other areas, and so I'll just mention them briefly.

Many of the organizations that we work for, I think, offer their staff a degree of status or prestige. I'm going to use the U.S. General Accounting Office for example. There certainly is a level of status or prestige associated with working with the supreme audit institution of the United States government. I think in many of the countries in our region, in Latin America and the Caribbean, there is prestige that goes with working for an SAI or for working for one of the more successful private accounting firms. That can provide some psychic benefits to our staff. It is a form of non-monetary compensation. Training is obviously something that we need to do to accomplish our mission, and the auditing standards hold us responsible for providing the training

that our staff need to do the work that we're asking them to do. In addition, if we're providing quality training, this helps our people keep their skills current. Again, it is a form of non-monetary compensation.

I want to make one point about training which basically is that training need not have a narrow focus. If you are requiring the INTOSAI auditing standards, they say "SAI personnel should have a good understanding of the government environment, including such aspects as the role of the legislature, the legal and institutional arrangements governing the operations of the executive and the charters of public enterprises. The conduct of performance may require in addition to the above training in such areas as administration, management, economics and the social sciences." So training need not have a narrow focus. When I think back over the last three years or so, in our office, we have provided training to our staff in areas like teamwork and interpersonal skills, presentation skills, writing skills, statistics, how to use different software packages, automated audit tools. This year we're going to do a class on appropriations for the staff. So there is a wide variety of areas where we need to train our staff. And, again, if it is high quality training, this can be a form of compensation.

I think it is very important to provide our staff with access to state-of-the-art technology. Again, we have to do this to carry out our audit mission, because all of the organizations that we're auditing rely much more heavily than they have in the past on automated information databases. We need auditors who are acquainted with technology. And again, by providing them access to state-of-the-art technology, we're helping them keep their skills current and it is a form of non-monetary compensation.

The planning stage. The INTOSAI auditing standards require that the auditor plan the audit in a manner which ensures that an audit of high quality is carried out in an economic, efficient and effective way and in a timely manner. Again, we're trying to reach a meeting of the minds between the staff management and our clients on what audit work the auditors are going to carry out.

I'm just going to mention one of the techniques that we use which I think is very helpful. We explicitly check with the clients to verify that our audit plans are going to meet their needs. When we do our annual audit plan, and we're trying to identify risk and target our resources where they're needed the most, we will arrange meetings with several different components in USAID and ask them if the audits we're planning are going to meet their needs or whether there are other areas or other types of audits that we need to do instead. We also meet with the staffs of seven different congressional committees for the same purpose, to see if the audits that we're planning are going to meet their needs. Now, of course, when you do this, what you find is that when you have multiple clients, when you have different customers, they don't always agree on what they want. To a degree, they have competing needs. And so we find that we need to make compromises, but it is just such an advantage to be able to make compromises from a position of knowledge—of knowing first-hand to what extent we're meeting the needs of our individual clients.

When the audit fieldwork is underway, the standards, of course, require that we properly supervise the staff. I think the real basis of supervision is that everybody in your organization has

to have tasks with deadlines. I think without tasks and deadlines, supervision is not possible. And, in our organization, from the staff auditor level, to my level, and I would venture to say to the level of our Inspector General, everybody in our organization does have tasks with deadlines.

I also wanted to talk about staff evaluations. There have been many studies done on adult learning which show that feedback is more effective when feedback is immediate. And so we focus a lot of attention on the work product, whether it is a draft report or working papers or a letter or a memorandum, we try to provide immediate feedback. Maybe this is informal feedback. We also have a parallel formal system that requires us to meet with the staff throughout the year and tell them verbally where they are performing well, and where they need improvement. Then at the end of the year we do a written evaluation for each staff member. The formal evaluation system that we have is extremely time-consuming. I would say that I spend in excess of 100 hours a year doing staff evaluations. But, in my opinion, it is time well spent. I think that we owe the people who are doing our work for us honest evaluations that tell them what they are doing right, where they need to improve. And tell them in a way that leaves them feeling motivated and hopefully eager to get back to work and eager to improve their performance.

At the reporting stage, there are three techniques that I'll focus on. Probably the most important of these is what we call referencing. I'm not sure how widely that term is used, but we use that term to refer to a line-by-line, word-by-word, number-by-number verification of the audit report contents back to the working papers. When this is done properly, it gives us a high level of assurance that our opinions and findings and conclusions are supported by sufficient and competent evidence. We require that this referencing process be done by an auditor who is not involved in the specific audit that he or she is referencing. We're talking about an internal review here, and it can't be completely independent, but it can be independent in the sense that that the auditor will not have been involved in the specific audit being referenced.

In my office we deal more or less continuously with presentation issues—issues with how the report is presented. This is part of the audit business. Unless you're extremely fortunate, some members of your staff are not going to write well, or this is something with which they struggle. We periodically provide training to the staff on writing skills. I don't think this is something that you can train on once and the problem will be fixed. I think it is something you have to reinforce periodically. And then when we have staff that really have difficulty expressing themselves in writing, one thing we'll do is ask the staff member to put together an outline and have the supervisor approve the outline before they put pencil to paper, before they begin the drafting process. What this gets us is a first draft and even if it is not particularly well written, it is well organized. That saves us a lot of time and it saves the staff member a lot of time.

And then there is the timeliness issue which, in my opinion, is just a core customer service concern. We need to get our products to the customer in a time frame that they think is reasonable. And to help us do this, what we've done is set up standards for each of the different products that we issue. We have systems—essentially logging systems—that tell us how well we're doing against these timeliness standards. I report on them on a monthly basis to my management and to our staff. This has been of assistance to us in improving our timeliness.

The last thing I want to mention now is the quality reviews, either internal or external quality reviews. If you're following INTOSAI auditing standards, these say that the SAI should adopt policies and procedures to review the efficiency and effectiveness of the SAI's internal standards and procedures. If you're following GAO government auditing standards, they require that your audit organization have an internal quality control process and that you also undergo an external peer quality review at least once every three years.

I'll make some comments about those quality reviews. When we're talking about an internal or an external quality assurance review, the reviews need to be qualified and they need to be independent. This is a function that you would assign to very senior, very highly qualified staff. The reviews need to be independent. If you're conducting the review with your own staff, they may not be able to be completely independent but, at a minimum, they should not have worked on the specific audits that they're going to review.

The reviews need to cover a reasonable cross-section of audits. They need to be representative of the work that you do. And the review should include a review of the audit reports themselves, a review of the working papers that support the report and other documents as well. For example, to verify compliance with continuing professional education requirements, the reviewers would need to look at your training records. And the reviewers need to issue a written report. This just adds a degree of discipline to the process.

I want to share at this point some lessons we've learned from our experience in doing quality control over audits done by our own staff. I could only think of one. I don't know if that means we're doing a really terrific job or I'm just not very observant. But the lesson I want to share with you is it really is important to set quality standards even if we know in advance that we can't meet them yet. The best example I can give you here is with respect to timeliness. This is something that we track very closely, but by tracking it so closely we know that we don't always meet our timeliness standards. We are meeting them only intermittently. Nonetheless, the first step to improvement is to define where you want to be. You have to set the standard. Our keynote speaker on Monday, Bert Edwards, said, "If you don't know where you're going, any road will get you there." So the first step to improvement is to set the standard. And it's important to set standards even if we can't always meet them.

At this point I'll just recap briefly what we've talked about. We've talked about quality control from two different perspectives. We've talked about doing quality control over audits done by others, and we've talked about doing quality control over audits done by our own staff. I made the point that quality control has to be a process that occurs at each stage of the audit, and I've suggested some techniques that we use that may be relevant to your operations.

Thank you for your attention. That concludes my presentation.

ERNESTO PEREZ (Ecuador): In your presentation there was a lot of emphasis upon quality control technical areas. My question is this: Why didn't you also emphasize the results inasmuch as it is well known that the USAID is cost-effective? People who receive donations do not use funds in the best manner possible or to the full extent thereof.

TIM COX (El Salvador): This is a concern. My concern is more with whether or not we're even in a position to measure cost benefit. In my office, in a performance audit program, we've done a lot of work on performance measurement issues. In other words, has our agency established performance measures that are objectively verifiable? Are they using data that is complete and accurate, and has been verified? I think there has been some improvement, but I think people on the program side in USAID feel that we're a long way from where we want to be on performance measurement issues. I think at this point, with the data that we have, it is very difficult to even measure cost benefit from many of these projects.

AQUILES A. NINA BATISTA (Dominican Republic): In the projects that you are financing in Latin America and especially in our Caribbean nations, I understand that you are using cost-benefit analysis to monitor these investment projects. I didn't understand your last answer. When you evaluate the impact of project financing in our countries, are you, in fact, using the cost-benefit analysis method for projects?

TIM COX (El Salvador): Yes, we do that. It is something we try to do, but again, what we find is that we don't have measures or we don't have data that are reliable. When we look at that question, in nearly every instance that I can think of, we end up disclaiming an opinion and saying we really can't answer the question because of lack of good measures or lack of reliable data.

Fraud Auditing in Puerto Rico

Manuel Díaz Saldaña, Comptroller General of Puerto Rico

Thank you very much for inviting me to this event. I bring a special greeting on behalf of the entire staff of the Comptroller's Office of Puerto Rico. It is an honor to be at a conference of this magnitude. We thank Dr. Mort Dittenhofer from FIU for inviting us. Hopefully, we will be able to reciprocate by sharing our experiences and achievements in relation to the topic that has been assigned.

Fraud auditing is a complex issue that can be analyzed from many different perspectives. In addition, it is a very important issue given the implications and impact it might have on the economy, the government and the political life of a society. Certainly, fraud and corruption problems lend themselves to many different analyses. For instance, you can analyze the technical and procedural areas, or the legal or legislative issues. You can also analyze the economic effects on a country or the administrative problems for either public or private institutions. These issues can also be discussed considering their impact upon the public policy of nations, both individually and globally, such as in the case of Europe and Latin America. In particular, fraud, corruption and misuse of public property have implications on ethics and in the moral behavior of people, societies and governments. So this is a complex and comprehensive topic, and we will try to cover some of its tenets.

Our presentation is divided into three parts. First of all, we will describe the Office of the Comptroller of Puerto Rico, its mission, its organization, work philosophy and the public administration policies that we have implemented. Second, we will be explaining our prevention plan; and third, we will be talking to you about our fraud auditing program. Then, if it is all right with you, we can talk about your concerns and answer your questions to the best of our ability.

We find it necessary to provide you with a short summary of who we are, how the Office is organized, our policies regarding the mission and the values that support us. The Comptroller of Puerto Rico must audit all the revenues, accounts and disbursements of the central government, its agencies, instrumentalities and municipalities in order to determine if these were done pursuant to law. This authority is conferred upon the Comptroller by Article III, Section 22 of the Constitution of the Commonwealth of Puerto Rico. The Comptroller has a tenure of ten years pursuant to this constitutional provision.

Article VI, Section 9 of the Constitution specifies both the objective and mission of the Comptroller in terms of establishing that public properties and funds shall only be used for public purposes and always in accordance with the law.

The Office of the Comptroller is organized into four main areas: administration, legal support, strategic planning and total quality management, and auditing. These areas in turn are distributed into ten main divisions, as follows: The Office of the Comptroller, Finance and Service Division, Human Resources Division, Legal Assistance Division, Information Systems Division and five Audit Divisions.

The Office of the Comptroller of Puerto Rico has 477 employees: 350 auditors and 127 support personnel performing legal, executive and administrative duties. That's our work team, which copes with very big, difficult and necessary responsibilities which are required for the well being of our society and people.

I am fully convinced that if a country does not have core public servants and officials devoted to maintain both transparency and honesty, maintain public ethics, and maintain the seriousness of the responsibility of the government to the people, it is not possible to sustain democracy, justice, or the civil liberties which many countries say they have nowadays.

Therefore, I would like to give public recognition to all my colleagues from sister countries that are devoted to the responsible task of controlling corruption and fraud. When I took over the position of Comptroller in October 1997, we conducted an in-depth review of the processes related to the functions and strategies that had been carried out by the Comptroller's Office up to that moment.

The Office of the Comptroller of Puerto Rico was created in 1952, and I am the sixth Comptroller of Puerto Rico. The Comptroller has a duty to perform. His duty is to review all government transactions involving public funds and property in order to prevent fraud and misuse. This must be done every single day, because it is the constitutional mandate or role of the Comptroller. But that is not our only role. From a certain long-term historical perspective, there are other aspects of our work which are even more important and difficult to carry out. For that reason in 1997 I started to emphasize prevention. Therefore our presentation today will include not only auditing for fraud, but preventing fraud.

The Office of the Comptroller of Puerto Rico now investigates and controls fraud in government operations focusing on two areas which complement each other—fraud prevention and auditing for fraud.

We can see the changes that have taken place in the Office of the Comptroller of Puerto Rico in three distinct aspects.

First, we saw the need to set up a new working philosophy for public servants. As we will see shortly, this philosophy involved refining a set of values, principles, behavior paradigms and ethical standards by which the Comptroller's employees guide themselves and provide an example to society. The main objective of our philosophy and values is to face government corruption and particularity fraud, with a full conviction that we are not going to tolerate them. Our "*Zero Tolerance to Corruption*" program is based on that conviction. This must be done with both bravery and determination because without willingness or determination, changes are not achieved, problems are not solved and people do not modify their incorrect habits.

Second, we had to design new strategies for the future because circumstances existing at the end of the last century and the beginning of this century are quite different. We set up goals, activities, work calendars and evaluations, all of which were translated into a three-year strategic plan.

Third, we defined and put into operation the management principles that would set the basis for our performance and execution. This principle is the Total Quality Management philosophy.

When a public or private organization, be it profit or non-profit, has a philosophy of values and convictions, a strategic plan for future development, and it implements an effective and efficient management policy, then the road to achievement becomes easier, clearer, more direct, more transparent, and it becomes possible to render accounts to those to whom the organization is accountable.

In our case, our clients are the people and the Government of Puerto Rico. In order to monitor and educate, one must set the example by exhibiting an excellent organizational conduct that should influence the rest of the public agencies and those entities that conduct business with the government.

We started by redefining the mission, vision and core values of the Office of the Comptroller of Puerto Rico.

A mission is the principal goal which guides an organization and constitutes its reason for existing. Our mission is to oversee transactions involving public funds and property with independence and objectivity, in order to ascertain they have been carried out in accordance with the law. In addition, our mission involves the promotion of effective and efficient use of government resources for the benefit of our people. This mission involves a post audit operation which is delegated to the Comptroller pursuant to the Puerto Rican Constitution.

The vision is like the sum total of values that an institution wishes to perpetuate and that guides its operation toward the future. Our vision is becoming a world-class model of public administration characterized by: the excellence of its highly trained human resources; its devotion to ongoing improvement; a sophisticated infrastructure; top-quality service; and its service to Puerto Rico as a true agent of change, integrating the efforts of the public and private sectors in order to promote the honest use of the resources entrusted to the government by the people.

The core values are the ethic standards that sustain the individual conduct and the collective behavior of an organization, and motivate the people to serve with excellence and perfection in their tasks. The values that we have established at the Comptroller's Office in Puerto Rico are as follows: *commitment*—we are dedicated to our work; *integrity*—we work in a responsible manner; *sensibility*—we respect the dignity of all human beings; *justice*—we watch for the strictest compliance with the law; and *excellence*—we are constantly improving ourselves.

I think that with this explanation you have a general idea of where our Office is heading, how we are focused and the functions that we carry out.

Now, let us go to the second topic which is our prevention program. Our prevention program has many objectives, strategies and activities that we have developed with different sectors of our society. We will describe the strategies and activities that we feel are more relevant today.

When we began our work, we noticed that the municipal governments were a very problematic area which was open to corruption and fraud. Due to a lack of adequate controls, there was a climate of susceptibility for such illegal activities to happen. For example, the absence of financial statements or the delay in updating them was an indication of a serious problem.

Based on this situation, we proceeded to carry out the task of personally visiting the 78 municipalities of Puerto Rico in order to carry our preventive message to the mayors and the municipal legislators. Our message emphasized the need to improve the administrative and financial municipal processes. As an anecdote, I should confess that many people thought that we would not be able to meet this goal of personally visiting all the municipalities of the Island. No previous Comptroller had ever done anything like that. People thought that after we had made the first dozen visits we would run out of gas, and feel the effort was too much. Well, they were wrong, because we visited all 78 municipalities in Puerto Rico and, besides that, we did it at night since the municipal assemblies (city councils) met after working hours. It took us six months to carry out this project.

We know that our task produced good results because for the last two years the number of municipalities that prepared their financial statements at the appropriate time had increased significantly. So you have an idea. As of October 31, 1997, only 13 municipalities had completed the financial statements. By the 29th of February of this year, the number of municipalities with up-to-date financial statements increased to 70.

The program of prevention was developed with a massive program of orientation or education at two different levels. Internally, we were aiming for the entities or government institutions. Externally, we were aiming for all the citizens of the civil society.

We have offered seminars and orientations to a total of 6,100 officers and public employees in the last year alone. Externally, we have gone to key groups in our society. We have offered seminars and orientations to some 1,000 professionals in the different associations, schools or institutions that form this important social sector.

In order to fight fraud in an effective manner, we made some strategic alliances with other government entities, mainly with the Department of Justice, the Office of Government Ethics, the Office of the Special Independent Prosecutor and the Federal Bureau of Investigation. All these alliances were made with the purpose of being able to make speedy referrals of cases of fraud and corruption.

An important prevention strategy is to provide exact information concerning different subjects. That is why we have prepared several manuals for orientation of officers and public employees regarding critical areas of the government that are susceptible to fraud. These manuals explain in

great detail, without any ambiguity, what must be done to avoid fraud, especially in delicate areas of purchasing, contracting and construction.

Another strategy that has been tremendously successful concerns our establishing relations with higher education institutions. We carried out this task by meeting with the presidents of private and public universities to create an open and systematic dialogue on the need to educate people in all types of careers about ethical values. Work groups were organized to promote and stimulate the creation or incorporation of ethical elements and moral values in the curriculums of all universities. This effort is giving us very good results.

As you may imagine, an essential task of the Comptroller's Office is to spur legislation that is relevant and effective in fighting corruption. In Puerto Rico we managed to obtain the approval of a special law, called Law Number 222 of August 6, 1999. It requires that all officials elected in a general election or in a special election take special training offered by the Comptroller's Office in the proper use of public funds and property before they can be sworn in and assume their jobs within the government. All of them have to go to our Office to be oriented before they can take over their government jobs.

Another project that we initiated was to compile all the legislative initiatives, all the laws that existed regarding the oversight of public funds and property from 1952 up until the tenth of December of last year.

One of the most important efforts carried out within the last few months was the creation of an anti-corruption plan which we call "*Zero Tolerance to Corruption.*" This plan includes approximately 50 recommendations directed to combating corruption in the government, including fraud. Since this year is an election year in Puerto Rico, we submitted this plan to the three candidates for the post of Governor of Puerto Rico so they could endorse it and make it part of the platforms of the political parties that they represent. You can imagine the impact and the publicity that this move caused. Sometimes the times are ripe for doing things and, as they say in the scriptures, one has to watch for the signs of the times.

In our prevention program, we also promoted in a very insistent manner the four recommendations of the International Monetary Fund. The first one is that you demonstrate political will for having zero tolerance of any activity that produces corruption within the government. The second one is that you should give greater transparency to the discretionary powers that favor corruption. The third is that you should increase salaries and incentives in the public sector in order to promote honest behavior. The fourth one is that you look for a solution to the problem of financing political parties.

We have established ten management principles for a healthy public administration, or what we call "benchmarks" for good public administration. We promote these principles everywhere we go, and they have had a very good approval rate because they are logical, reasonable and effective. These are the three criteria for evaluating any kind of management measure—logical, in order to be consistent in itself; reasonable, so that you can defend it with good arguments; and effective, so that it really functions in practice.

All the government entities in Puerto Rico have received these principles. We are convinced that if we apply them in a consistent and systematic manner, we will have high levels of efficiency,

effectiveness, responsibility and honesty in the municipal government, in all of the public agencies. These principles are:

Adopt rules and internal procedures in writing that contain effective internal controls for administration and accounting, as approved by the appropriate levels.

Maintain a competent internal auditing office—obviously, one that is independent.

Meet all the requirements of the regulatory agencies.

Adopt a strategic plan based on the business philosophy of total quality management.

Maintain a budget.

Update financial reports no later than six months after closing out the fiscal year.

Stay up to date with all technological advances. Without technology, without computers, we will not be able to succeed in having good control. We will not be able to improve government. We have to invest and get more training in technology.

Maintain files and control documents that guarantee the security of the financial information. Documentation is indispensable in the government. In private enterprise, we also need to have documentation, but the level of such a requirement is not as high. External auditors, all of the auditors, all of them, always have to write reports which include recommendations. What happens with these recommendations? Are they considered or are they basically left in a drawer? In Puerto Rico we have an executive order from the Governor that requires that all the Comptroller's recommendations have to be answered. All the recommendations have to be followed through.

Maintain an adequate system of recruiting, evaluating and rewarding personnel. We also have a continuing education program that is compulsory for all of our personnel. We established a requirement of 40 hours per year minimum for our auditors and 24 hours for our support personnel.

And finally, and most important to me, is the adherence to the government ethics law which includes the preparation of financial reports. We have an ethics law that is very advanced—a very good law.

These ten principles are what many people in Puerto Rico call *the Ten Commandments of the Comptroller's Office*.

The last point that we will be presenting to you concerning our program is the publication of special auditing reports. In the special report DA-99-35 we expressed the results of a study that we did on the function of internal auditing within the government. The study revealed that there are serious deficiencies in the function of internal auditing in the different organizations that were questioned. Among other things, we determined that 69 percent did not have sufficient auditing personnel to carry out the auditing in an efficient manner. Eighteen percent did not have rules or procedures of auditing in order to carry out their functions. Fifty-two percent did not utilize any

computer equipment to carry out their tasks, and 38 percent did not give follow-ups to the recommendations contained in the internal auditing reports.

Another special report, TI-00-6, expressed the results of a study regarding the use of funds and public property for political purposes. We based our report on the findings included in the reports issued by our office for the fiscal years 1988-89 to 1997-98. The study revealed that \$1,803,977 was used improperly for political purposes and the highest incidence occurred in the municipalities. All of this is contrary to what is required by our Constitution.

In special report M-99-4A, we expressed the results of a study about the functioning of the municipalities in Puerto Rico in relation to ten critical areas. These include financial statements, accounting systems, bank reconciliations, budget deficits and investment plans. This study demonstrated that 51 of the 78 municipalities in Puerto Rico attained substantial improvements in their operations. As a matter of fact, on the 4th of June of 1999, for the first time in the history of the Comptroller's Office, we organized a special act to give the municipalities public recognition for their efforts.

Now let us go into the last point of our presentation. We're going to refer to the actions that we have taken in auditing for fraud.

It is important that we agree about this concept. We define fraud as an illegal act which involves trickery, simulation or any form of deceit. Against the State it is an illegal act when public funds or property are involved. At the same time, we define it as the abuse of the public position for personal benefit.

In our experience in the Comptroller's Office, we have identified certain areas that present, if I can be allowed to use the term, a temptation, an opportunity, to commit fraud.

Among these we can point to legislative payments for works and improvements, or privatization contracts in which the proceeds are deviated for private or political purposes. In the construction contracts, they use multiple "change orders" that double or triple the cost of the original contract. Contracting services, like for collecting garbage after a hurricane, is another area where fraud occurs frequently.

However, we know this very well, and that is why we have to take strict measures concerning fraud auditing. One of the actions and measures that we have taken to maintain constant vigilance and to detect fraud is to work very closely with our legal division. The practice is to assign an attorney to work with the audit team. The legal division determines whether there is any crime involved in the schemes that are detected and reviews the referrals we make to the government entities that have the responsibility for prosecuting those criminal acts before the courts.

In matters of fraud, it is important to make a strategic alliance with those communication media who have open channels with the people. For that reason, we started a program of radio announcements sponsored by the Radio Association of Puerto Rico, without cost to the Comptroller's Office, in order to motivate citizens to report to our Office matters concerning fraud

that they may detect or know about within the government. We also have a hotline where we can receive calls from any citizen.

Frequently, we hold meetings with the government entities responsible for prosecuting criminal cases which allows us to follow up on the cases that we refer to them. We meet once a month with the Secretary of Justice and his prosecutors in order to see the progress in these cases. We also set up special training for our auditors regarding criminal activities and investigations. Such training is conducted by the prosecutors that work for the Justice Department of Puerto Rico.

Among our external consultants, we have experienced professionals in the collecting of evidence and the prosecution of fraud cases. These consultants advise our auditing teams.

As soon as we detect fraud and our legal division determines that there is probable cause to believe it to exist, we refer this in a letter to the Department of Justice or the Government's Ethics Office or U.S. Attorney's Office, so that a criminal or administrative investigation can begin promptly. We don't have to wait for an audit report which, as you know, takes some time before a referral is made. This helps us keep the cases within the time frames established by the respective statutes of limitations.

To recognize patterns of behavior and detect multiple fraudulent actions, we frequently create computer databases to locate information quickly. We also coordinated with the judicial branch to set up special court divisions for prosecuting white-collar crimes, including fraud cases, and this requires that the judges receive special training. These judges will receive training in accounting, finance and fraud so they can work on these cases diligently. Imagine the auditor as a person who will draw a map of the fraud scheme so that the judge can receive the best information possible and completely understand the case.

As Comptroller, I get personally involved in potential fraud cases. I do this by conducting regular meetings with the auditing teams. I summon them to my office and oversee the progress that is being made. I provide them with guidance and set up deadlines for each case.

We have mentioned many things, and now I will provide you with a summary of the most important ideas.

We have discussed many things about the programs implemented at the Office of the Comptroller of Puerto Rico. But we would like to highlight three ideas, issues or conclusions.

First of all, the government and legislators must show that there is a political will against corruption. If we don't have real political support for zero tolerance to corruption, our work becomes very difficult. Rulers and legislators must join in the fight against corruption so that the people understand the commitment against such a "cancer," against such a serious problem within the social organization which we refer to as "politics."

In the case of corruption and fraud, we in Puerto Rico are saying that laws are not enough, that ethical standards are not enough, because the person who holds a position of authority has discretionary power. This is where political will is critical because if, deep down inside, a person is not strongly against corruption, he will give in to temptation.

Second, any government entity that oversees also has the responsibility of promoting citizen satisfaction and confidence in the public administration of goods and services belonging to the people. This is achieved by having an honest government while at the same time the citizens are educated or getting educated on the work done by the government.

This means that the government and the public administration's actions should be visible, their intentions must be known, their results must be subject to evaluation, their processes should be subject to control and their information should be published.

In this ongoing reporting, it is the people who themselves remove corrupt individuals and elect competent ones. That's the challenge to the democratic systems—maintaining an ongoing surveillance of elected rulers so that they report on their work with responsibility, efficiency and honesty.

Third, auditing for fraud is a mechanism and an essential strategy to detect and prosecute the people who are liable. But as we have said, this type of audit must be complemented with other processes. Other processes and strategies must be implemented for the purpose of educating all of the citizens, all of the social sectors and all government agencies on moral values, on effective management principles, on public ethics. You must prevent, you must educate. People must be trained from early on, both in school and in the family.

The work in which we are involved should be jointly undertaken by society and by all governments, not by one single agency. Furthermore, it is the duty of every single nation in the world, because corruption and fraud have global implications. We in Puerto Rico have joined our voice and will to those of you here to identify ourselves with the common values of liberty, justice, respect for the law, government transparency, public ethics, peace and good will, all of which encourage us to continue our work on behalf of nations and humanity.

On behalf of my colleagues, I would like to say once again that we are grateful for this invitation to speak today. Thank you very much.

JUAN CARLOS MIGONE (Peru): First of all, I would like to congratulate you on the wonderful presentation that you gave us on the issue of corruption. I understand that the role of auditor is somewhat difficult at times. I have always said that our profession is extremely difficult because at times we have problems with friends and colleagues that we find along the way. As Comptroller, have you had an experience of this nature, and how did you face this problem?

MANUEL DÍAZ SALDAÑA (Puerto Rico): I have unpleasant experiences because if you remember, I was part of the Governor's team. From 1983 until 1987, or for almost five years, I was the Secretary of the Treasury, and I was very close to the Governor. Even before I was part of the government, I was the personal auditor for the Governor and for my chosen party. So I had a very close relationship with the government. Once I was appointed Comptroller, I could not participate in any political event or activity, or give my opinion in this regard. Therefore, I left my political party, and this was publicly known.

Almost a year later, a very unfortunate case took place in Puerto Rico. Hurricane George arrived in September of 1998. It really hit Puerto Rico. A lot of federal aid came in. One of the most important leaders, a mayor for the party in government was charged in November 1998 with extortion, bribery and other very serious offenses. The public found out about it. He was arrested. It really impacted Puerto Rico. I made some statements that were not well received and the Governor scolded the Comptroller. He said that I should not have made such statements. My statements were these: I recommended to this mayor that inasmuch as he had been federally charged, he should resign from his position, that public administration had no room for him.

This caused a lot of commotion, because in Puerto Rico, just like here in the U.S., we have what is called the “presumption of innocence.” You are innocent until proven guilty. I still maintain this. Even though he had not been taken to trial, the charges were so serious that I recommended that he should resign. That was my personal recommendation. And you know what happened. The Governor got upset, he scolded me, and the lawyers went after me. They told me that I had no authority to say that. But what is said is said, and about three or four months later, the trial took place. He was found guilty and everybody said, “The Comptroller said it. He should have resigned from the beginning.” This is just an example. There have been other examples.

This very week we issued a report where we questioned the constitutionality of the appointment of an official. Now we are in another big dispute at the Office of the Comptroller. We conducted legal research and as we see it, payment received by such officer is illegal because he was appointed against the Constitution, and we’re requesting the Secretary of Justice to take action. They are saying that the Comptroller is overreaching his functions. We have conducted legal research and we know that we are right. It doesn’t matter. These attacks will take place. They are unpleasant but we will go on.

There have also been personal attacks, mayors who have not liked their reports. One mayor called me irresponsible and things of that nature. This is not pleasant, but this is part of the job and we must carry on.

JOSÉ GARCÍA (Dominican Republic): I would like to congratulate you on your presentation. The Office of the Comptroller of Puerto Rico described a conceptual and theoretical framework for preventing and auditing fraud. Is it still a conceptual project or is it the application that’s taking place in Puerto Rico?

MANUEL DÍAZ SALDAÑA (Puerto Rico): It’s the application. Every single day we are working on all fronts, including the people in the communities. Politicians can do away with the Comptroller if he is alone. When we see something wrong we must let the people know about it. If the media does not know what the Comptroller does, if the people don’t know what the Comptroller does, the Comptroller will be alone and he can be dismissed. It is a reality.

MANUEL ESCALANTE CUEVAS (Dominican Republic): Allow me to congratulate you on your wonderful presentation. You said that there was a legal framework supporting the auditors before cases proceed to the Department of Justice. What steps does the Office of the Comptroller take when the court does not agree with you?

MANUEL DÍAZ SALDAÑA (Puerto Rico): If we believe that the law has been violated, we refer this case to the Department of Justice and they have the constitutional mandate and the authority to take this to court. In Puerto Rico, the Comptroller is not authorized by the Constitution to take cases to court. The Comptroller investigates. He publishes a report. He refers the case to the Department of Justice. The prosecutors must handle the case. In order to make sure our cases are as comprehensive as possible, as I said in the presentation, we include the legal component in the audit work. So internally our attorneys examine the evidence, and they determine if this is sufficient to refer the case to the Department of Justice. We support prosecutors in their investigation, and we even go personally to testify in open court. If the judge determines that the case is not appropriate, the State can appeal. And that's all we can do.

CARLOS DELGADO BOLAÑOS (Ecuador): I congratulate you for your professional presentation. My question is, very briefly, what is the procedure to ensure that the contents of the reports, especially the findings and the recommendations, are made available to the citizens of Puerto Rico?

MANUEL DÍAZ SALDAÑA (Puerto Rico): All of the reports from the Comptroller's Office are published in the newspapers. The press in Puerto Rico is a natural ally. They insist that we do it and it is very good that they do. If they think the Comptroller is not doing something correct or it is not in agreement, they say so. We have no problem with that. It keeps us balanced.

Besides including it on the Internet, about a year and a half ago I requested that each municipality include the Comptroller's reports in the public libraries. In Puerto Rico you can find the Comptroller's reports. In this election year, I made an administrative commitment that I would publish all of the auditing reports regarding issues that are quite significant in Puerto Rico that are awaiting the Comptroller's decision. I will publish all these reports 60 days before the elections. Some are quite dramatic. So before elections, the people will know what the Comptroller feels about different issues.

LUIS ALFREDO GUTIERREZ (Peru): What information or what procedures do you utilize to carry out the auditing of fraud in a particular entity?

MANUEL DÍAZ SALDAÑA (Puerto Rico): The most critical part of auditing is the planning stage. There, we see among other elements, the previous external auditing reports, the problems and the remedial actions carried out by that entity from the last audit. In order to determine the most susceptible risk areas, we rely on the three political parties in Puerto Rico. I imagine it happens like that in other countries. They monitor each other pretty closely. Everybody has people in all of the government agencies and they give us information that will help us to go into the different areas.

I can mention a very critical area right now, which is the Port Authorities in Puerto Rico. This is so serious that we may be prosecuting some of its officers next week. We are also going to establish a training program for all of the personnel at that agency on ethics and controls.

ANGEL SANTANA (Dominican Republic): What is the budget of the Comptroller's Office, and who supervises it? Secondly, what is the percentage of audits at the municipality level and what are the results?

MANUEL DÍAZ SALDAÑA (Puerto Rico): The budget of the Comptroller's Office is around \$23.5 million. This year we are before the assembly to ask for an increase of 26.7 percent. This is quite a large increase in percentage, but the budget of the Governor of Puerto Rico is around \$2 and \$3 billion.

Who supervises the Comptroller's Office? Everybody asks that question when we do these presentations in Puerto Rico. The Comptroller's Office has to report to the legislative assembly and is subject, like any chief of agency, to the scrutiny of that legislative assembly when he does a request for the budget. We make a presentation to the legislative assembly and there are also representatives from the three political parties. They supervise what the Comptroller does. We also have external auditors.

Concerning municipal auditing, the law of the autonomous municipalities requires that the Comptroller audit all the municipalities in a two-year cycle. We have to go every two years to every municipality. Right now we have 42 ongoing audits concerning the municipalities. As to the other agencies, the Comptroller audits some every year, others every two years, and others every three years. Where there is no established date, the legislature leaves it to the discretion of the Comptroller's Office. There are areas in which we are there permanently, such as the water and sewer utilities that have been privatized. Also, in the Department of the Treasury where they collect taxes, we are there on a permanent basis.

The Anti-Corruption Eruption—A Global Update

Jim Wesberry, Director

America's Accountability/Anti-Corruption Project, Casals & Associates

Good morning everyone. Before I begin my formal presentation, I will take you through our Respondanet Website, both the Spanish and English versions. The two Websites are fairly similar, but they are slightly different. We'll look at the scrolling news that you have probably already seen.

Today's big news is that the first Hispanic mayor of a city in New Jersey got indicted for corruption, which is not good news, but that's the kind of news we put up there. In another, a Russian customs chief says officials help smugglers. Danish Socialists are charging the U.S. with corporate espionage. Next we have Columbia; President Pastrana proposes corruption referendum to strengthen punishment in wake of scandals in Congress.

We've got a lot of buttons you can click on here. The Anti-Corruption Projects and the Integrated Financial Management Projects have Websites. Over here we've got a list of Spanish stories. Here is the one about Nicaragua and the Nordic countries having suspended aid. I didn't mean to bring that up for our largest delegation, but the Nordic countries have suspended aid and that came up at the IDB meeting very unfortunately. But they have expressed a great deal of consternation to the extent that it is very rare when donors cut off or suspend aid.

Let's pull up the story where the Constitutional Court of Guatemala has upheld the appeal of the Comptroller General. The Comptroller General of Guatemala was fired by the Congress summarily without a hearing and without charges. They just hauled off and fired him. He appealed to the Constitutional Court. The Constitutional Court has restored his job and he is back in office. He actually never left because he went on an internal inspection trip and they couldn't find him to tell him he had been fired. He is back in office today and yesterday as Comptroller General of Guatemala, but it is only a 48-hour ruling. This is a very unusual case that has not happened in the last 30 years in Latin America. I was talking to the Comptroller General of Chile about it, and he doesn't remember a case like this either. But the Congress is going to have to present their charges against the Comptroller General and I suppose he might have a chance to reply to them. You can imagine what this does to the independence of the Office of the Comptroller General no matter how it is resolved. This is why the Comptroller General of Guatemala was not here speaking yesterday as originally planned.

I think I'd better move on in my presentation. We're trying to give you a little bit of every possible means of communication. While waiting for this morning's session to begin, we played our two videos of the Nicaragua project and one of our last Respondacon Teleconference on Corruption. We have not had any teleconferences since Respondacon IV, which was in 1997 in Lima after the International Conference.

I'd like to interject a commercial for our summit. We cordially invite all of you to come to the summit September 21 to 23 at the Crystal City Hilton. You all have the red brochure with the red apple on it. This is the symbol of our summit, an apple with a bite taken out of it. You have the brochure and it has the registration forms. It is not on our Website yet because our Webmaster was on vacation for the last two weeks, but it will soon be on our Website. You'll be able to register on the Internet. You can register by e-mail or you can fax in the forms. You do have to register separately with the hotel just like you did for this conference. This is the next Consortium conference. It is the Fifteenth Annual International Financial Management Conference. The first conference of the Consortium was 17 years ago. We skipped two years, but that conference and this conference are the two big events of the Consortium. Then we also have the events like the one in Madrid that Jim Hamilton announced.

What I will be speaking about now is the Anti-Corruption Eruption—the present state or the global state. We're in a situation where we have two concurrent eruptions—an eruption of corruption that has caught the attention of people far across the world. That name was coined by Moses Nam, a very distinguished Venezuelan, in an article about 10 years ago. So we, in effect, have two eruptions—the Corruption Eruption and the Anti-Corruption Eruption.

I went to a lot of trouble to get our Webmaster to get me this artwork, and I turned on the news this morning as we went into the Internet and, by chance, a Japanese volcano is erupting today. I'm sure that was part of the plan. It hasn't started yet, but before the day is over, we can probably show the Japanese volcano as a live eruption. But all of us are concerned. People that live in Quito are concerned about Guagua Pichincha, and Richard Persons and his family have just moved to Nicaragua where there is a volcano erupting 12 miles from Managua. Many countries are subject to the threat of volcanoes, but for others it is hurricanes, tornadoes and all types of weather events.

The entire world is subject to eruptions of corruption, and eruptions for corruption happen periodically. They have happened cyclically over the ages of time. There is a book titled "Bribes" that is about 800 pages long, and goes back to the time of the Egyptians and the Chinese—the first civilizations. Each of those civilizations had eruptions of corruption. There were movements to calm it down, in other words to stop, to cap the eruption, and the eruption died out for a while and then it came back. In all of the older civilizations, they've gone through periods of eruptions of corruption. The people rise up and complain about it and take measures, and corruption dies down but it comes back again. We have to figure out how to stop all these continuing eruptions of corruption. That is one of the hardest things that we face today in the decisions that we're going to talk about.

What is corruption? Is it a cancer? President Wolfensohn of the World Bank described it as a cancer eating away at governments. Is it a fungus? That's what I've used through the years. I've talked about the fungus of corruption—a plague, a curse. A lot of people describe it as AIDS. Or is it just plain insanity? I've come to the conclusion that corruption is a cardiac problem. A heart problem. And that is the theme in all my speeches in the last year of our AAA project. But corruption is a heart problem. And I'll come back to that as we go through the day, and I'll remind you every now and again.

We have to choose between ethics and corruption. That is one of our hardest choices. Remember Tuesday afternoon when Paul Makosz highlighted the ethics situation? We thought we had an answer and then the situation got worse. We started thinking about changing our answer. And then with the third bit of information, it got worse. And a lot of people did change their point of view. We have hard choices between ethics and corruption. When it comes down to the bottom line, it is a heart problem. It is a problem not so much of ethics versus corruption as a problem of the heart.

Speaking of President Wolfensohn, he said, "Corruption is a cancer on the body politic. We must talk about it. We must bring it out into the open. We must support governments and civil society in their efforts to fight it. If we lose this fight, we will not be able to eradicate poverty nor bring about social justice." This was just a month after he made his famous speech on October 1st at the joint meeting of the World Bank and the IMF. But President Wolfensohn of the World Bank faces some serious problems in choices. On March 21st, just a short time ago, he said this: "Nick Stern is the best person for this critical job, and I am convinced that the selection process warrants my unique decision to waive this staff rule." To waive this staff rule meant an executive override of control. A magnificent example, but a bad example. The whole thrust of the COSO report that you heard so much about during this conference is the control environment. If you don't have a control environment, you can't have control down at the level of approving vouchers and making payments and other things. And the big thing that the COSO report talks about is executive override—when the executive does something different from the rules. Now let's discuss this case just a minute, and then Doug Arnold is going to personally go back and tell Mr. Wolfensohn what I said.

Nick Stern was named Chief Economist of the World Bank last week or the week before last, by President Wolfensohn. Now, that would fine. He apparently is totally qualified for the job. He is a Nobel Prize-caliber economist. He is totally perfect for the job. He's got one problem. His brother is the Vice President for Human Resources of the World Bank. What comes under Human Resources? Staff rules. What are staff rules? Part of the internal control environment. And the staff rules dealing with ethics and nepotism are very, very important, or they wouldn't have them. So, what President Wolfensohn is saying when he says, "My unique decision to waive this rule," is that this unique decision was only made for this one person. He would not have done it for his wife. He would not have done it for the wife of the Vice President of Human Resources. He would not have done it for one of you. If you

wanted to work for the World Bank and you had a brother working in a low position, you wouldn't be able to work there. When you fill out a form for the World Bank it asks you what relatives you have working at the Bank, and if you've got any close relatives working there, you don't get hired. They write you a nice letter saying, "Thank you for applying, but you are not eligible."

But Mr. Wolfensohn, in that most historic mistake of his whole career, after being a good example for the last three years, proves he is just like everybody else. Tragically. That ruined my whole morning. I was so upset, because I worked for Wolfensohn. I was on his Anti-Corruption Task Force. I admire everything he's done. He literally broke my heart. And I hear, not from anybody in the room, but I hear that the staff of the World Bank was totally demoralized after that. And well they should be. I'm not even on the staff of the World Bank and I was totally demoralized. And this is what presidents and ministers do, and all the governments. And that's what we need to stop. The exact nature of it doesn't make a lot of difference. Whether the man is the greatest economist in the world, or whether the man is just a lowly auditor or accountant, if you're going to have rules for purposes of anti-corruption, then you better follow your own rules or you become discredited.

James Wolfensohn probably doesn't know it yet, but I hope you will tell him, "That ain't no way to run a Bank. That's not how you run a Bank if you're going to be the apostle of anti-corruption for the international world." He made a serious mistake. I do hope and pray that he will change his mind and revoke that appointment. The thing that makes it even worse—and it's even worse than what I've told you—this same gentleman was considered by the previous President of the World Bank, and his brother was working there then. At that time the brother offered to resign so his brother could move into the job of Chief Economist. This time there was no talk about that. They just broke the rules. They broke the rules for the people at the top. And when people at the top break the rules for the people at the top, the people at the bottom have no respect for the rules and they have no respect for management. And that's what's just happened last week at the World Bank.

Let's talk about the threat of narcocybercriptocorruption. Corruption in cyberspace will challenge corruption fighters of the 21st century on a scale greater than we can possibly imagine. The battle between Transparency International and Opaqueness Intergalactic, World War III, will be fought digitally with subatomic particles in a cyberjurisdiction never visited by humans which has no laws and is not on any map whatsoever. Here is a flash-forward to the possible future:

March 31, a day like today, but ahead 34 years in time, March 31 of the year 2034. Here is an article in the *New York Times*: *Cybercorruption has created a new class of electroelites richer than all the kings, emperors and billionaires since time began. Thirteen supermagnates now control all economic transactions on earth. They are the creatures of cybercorruption which, beginning early in the new millenium, began to bypass all jurisdictions and borders, and move at the speed of light. They are cryptologically impenetrable, and defy tax collectors, auditors, criminal investigators and prosecutors.*

The originally illicit proceeds from narcocorruption, pornocorruption, gamingcorruption, eroscorruption, and armscorruption passed through multiple cyberlaundromats across the planet instantaneously. Within a few seconds they were available for reinvestment in legal enterprises which remultiplied profits through cyberevasion until ultimately the group of cyberzillionaires came to economically dominate the earth and control all organized affairs.

The decline in strength and eventual division and disintegration of the nation-state created the opportunity to maximize the economic power of the most lucrative transactions of the free economy democracies, those involving crime and corruption. Transparency has been made opaque by the cybernarcocryptocorruptors. Bottom line: crime and corruption now pay...and pay better than ever here in the 21st century.

Hopefully we won't be seeing this scenario in 34 years time. But it may happen. Let's go back 39 years: Buenos Aires, December 1995. *Argentine officials today confiscated a computer from the home of a 21-year-old Argentine student. The United States Attorney General publicly charged him with illegally entering computer systems at the U.S. Defense Department and the National Aeronautics and Space Administration, including the Naval Command, Control and Ocean Surveillance Center in San Diego, California, the Naval Research Laboratory in Washington, the NASA Jet Propulsion Laboratory in Pasadena, California, the NASA Ames Research Center at Moffet Field, California and the Los Alamos National Laboratory in New Mexico where they invented the atomic bomb. He obtained access to*

unclassified information about satellites, radiation and engineering but apparently, the government said, he did not gain access to any classified information.

He first gained access through the Internet to a computer system at Harvard University's Faculty of Arts and Sciences, then moved into the U.S. Government systems. He was also reported to have gained access to computers at the California Institute of Technology, the University of Massachusetts and Northeastern University as well as others in Korea, Mexico, Taiwan, Chile and Brazil...all without leaving his parents' home in Buenos Aires.

The U.S. Attorney General used cybersurveillance through court-ordered wiretaps to gather evidence on the Argentine hacker but he is not extraditable under existing treaties.

They left him in the hands of the Argentine government. Obviously, this happened just five years ago. He is probably now a noted electronic surveillance consultant in Argentina.

Many of the world's countries are invaded daily through the invisible border of cyberspace defying all possibility of the maintenance of controlled national territorial boundaries. One of the major problems of the Information Age is that most people don't feel like they are doing anything wrong when they just "borrow," perhaps not even printing out, electronic data from across the world which someone left unprotected.

I've provided you with a paper detailing some current cases involving transactions of this nature and also some suggestions on what can be done in order to avoid this. For instance, you should force the selection of complex non-word passwords so that dictionary-based password cracking algorithms cannot be used. And of course, require that passwords be changed on a regular basis. This can be done automatically.

What will we do tomorrow when all transactions and communications are digitalized and opportunities for cybercorruption multiply faster than techniques for protection? Right now it is said that cyberrich supernarcocrooks, the worldwide Mafia that includes everything at this time, can hire the best lawyers, the best accountants, and the best computer and IT techs because they have more money than any government. Governments are still paying wages that don't even compete with the private sector, let alone with the underground arena.

What will we do tomorrow when cybercrooks buy whole governments in one single purchase instead of the old way of bribing one official at a time?

What will we do tomorrow when proliferating new microstates cater to the whims and needs of the cyberwealthy while larger governments go bankrupt due to electronically diminishing tax revenues which escape by jumping from one tax-free jurisdiction to another?

What are we going to do when cybercorruption becomes a way of governance?

Here are a few statistics and the lessons they are teaching:

—Electronic bank robberies average a quarter of a million dollars each. Only two percent of the cyberrobbers get caught and only one percent goes to jail. Old fashioned pistol-toting bank robbers average about \$7,500 and 80 percent are imprisoned, if not shot in the act. Lesson: Cybercrime is more efficient and less risky than any other type.

—Bank robbers are estimated to grab about \$60 million a year in the U.S., of which about \$10 million is recovered. Cyberrobbery profits can't be so readily measured but could be around \$10 billion. They are almost never reported nor is the money ever recovered. Lesson: Cybercrime is not measurable, and is unstoppable, even today.

—Forty-two percent of Fortune 500 companies surveyed recently reported unauthorized penetration of their security systems. Seventy-five percent of major business and public entities polled recently reported computer fraud losses in excess of \$100 million but only 17 percent reported the crimes to public prosecutors. Lesson: Cybercrime is often quickly covered up and forgotten.

—The U.S. Defense Science Board's Task Force on Information Warfare has warned of a potential national security disaster predicting that by the year 2005, attacks on U.S. information systems by terrorist groups, transnational

organized crime syndicates and foreign espionage agencies are likely to be “widespread.” Lesson: Watch out! The Sendero Electrónico terrorists are coming.

Before continuing, I’d like to make some personal comments. Governance has five big enemies: Kleptocracy is the number one enemy. You have heard me before, or have probably heard that I always say that kleptocracy is democracy’s number one enemy. The word “kleptocracy” in Spanish and English is only differentiated by a C or a K. The definition of kleptocracy is government by thieves.

The second biggest, in my personal opinion, is the corrupt political party. A political party often begins with a young man who had a vision for better government, anti-corruption, progress, solving the problems, dealing with illnesses and serving the people. But you all know what happens. This small, idealist party has about two years existence at most, because the pie to split is quite large and once it gets its piece of the pie or worse yet wins the Presidency, all honesty and idealism is lost. The number two enemy against democracy worldwide is the corrupt political party.

The third enemy is unaccountability. Accountability is so popular in English and so hard to convey in other languages. The failure to perform all your duties, the failure to prepare financial statements, is a form of unaccountability.

The fourth enemy of governance is disinformation. There are several ways this can happen, such as making uninformed decisions by ignoring information. Maybe the books are not updated or perhaps information was available but not used. But the most common is this: having obsolete information, particularly having this information deliberately. Given my many years of experience, I do not believe that it is possible to have financial systems that are so bad as many are in the world today unless there is a deliberate intent to have false information.

The fifth enemy of governance is impunity, and you know this quite well. The failure to punish corrupt acts and investigate is obviously terrible. But one of our big struggles, and this is more so in Latin America than in the Western world, involves convincing officers or international agents that it is easier to have honest judges and prosecutors if reliable evidence is tendered. So, in order to defeat impunity, we must have financial systems that generate information that can provide evidence whenever there are cases of corruption.

Government financial managers are the soldiers in the battle or war against administrative corruption. As I said at the beginning and as I’ve said before, this will be the Third World War. I’m not the only one who says this. Senator John Kerry from Massachusetts who chaired the commission that investigated all of this in the Senate of the United States wrote a book about the investigations. He said that in the 21st century we are initiating World War III against narcocryptocriminals that are the globalized cybercriminals. Therefore, in spite of the fact that it may seem that we are separated from all this as accountants, directors of budget and treasurers, we are warriors in this battle.

The weapons used: A solid practice of financial management and internal controls, including much of control accountability made credible by audits performed by both internal and independent auditors. The role that we have is to strengthen the financial management and the accountability. The responsibility of the financial managers is necessary to preserve democracy. But this is done through transparent services, added credibility and then finally, and most important, opportune information.

You have heard the word accountability from all the speakers at this conference. The word accountability is so popular that we cannot talk in the government of the United States or any other government that speaks English without repeatedly using the word accountability. In Spanish, the word we use is not really the correct translation, except every once in a while when you are in an accounting office. We don’t produce accounts any more. We have bank accounts but the government produces financial statements. The accountant produces financial statements. Therefore, we named our bulletin, by recommendation of Jorge Barajas, when he was the Director of the AAA Project, “Accountability,” and we have used the word “Responsabilidad” in Spanish because if you do not use this word you will have grave problems in understanding the translation.

An example is the Canadian Foundation. They have a book translated into Spanish that uses the word “accountability” throughout the entire book. But the problem that we have with that word is that it comes out in another language, which is neither Spanish nor English, when they use it in certain parts of the book. Therefore, the

Interamerican Accounting Association, in two conferences, one 10 years ago and the other one last year, has recommended using this term in Spanish for accountability. I understand that they have the same problem in French and Japanese and in many other languages. But if we are unable to have a single word to express this and to convince people what accountability is, we will be having problems in all of the countries. Ex-British colonies, including the United States, which used to be a British colony, as many of you are aware, know what that term means. But for the rest of the countries that speak a different language and do not have that concept, it is not very clear.

How can financial managers counteract corruption? Professional government financial managers are proficient in the techniques and practices of sound accounting, budgeting, cash and debt management, including the required internal controls that must be built into such systems. These techniques and practices inhibit, disclose and help confirm and identify corrupt practices and their perpetrators in the following ways:

—They impose discipline in the public activity. Financial manager-supported practices and procedures force a disciplined on-time approach to public activity and financial reporting. By contrast, laxity permits long delays in presenting information thus impairing its usefulness and making its acceptance long after the fact practically automatic since to question it would be to waste time on long-past transactions. Professional financial managers set up standards that require all transactions to adhere to the same rules, eliminating the loopholes and alternative mechanisms that foster and cover up corrupt activities.

—They strengthen probability of detection. Strong internal managerial controls put in place by professional financial managers, including appropriate audit trails (requisites of sound financial management), increase the probability that corrupt practices will be discovered and identified as such, permitting a prompt investigation.

—They create a disadvantage for the corrupt. A professionally directed financial management system surrounds the potentially corrupt person with internal control mechanisms as well as vehicles which promote and require transparency and timeliness in reporting. This places that person at a real disadvantage, as compared to the situation where lax controls and/or false controls provide cover. False controls are those controls, often legally imposed, which appear to impede criminal conduct, but actually foster and encourage it. They are abundant in developing countries and often are designed intentionally to aid the corrupt or are well intended but facilitate corruption. They now seem to be growing in the developed countries and are also often found in the International Financial Institutions themselves.

—They protect highly vulnerable areas. Internal managerial controls implanted by professional financial managers impose a discipline on discretionary power over those resources and expenditures which are typically subject to a high degree of vulnerability. Typical areas of abuse are travel expenses, consulting contracts which are often subdivided to come below thresholds of review, particularly valuable or attractive and portable assets such as vehicles and portable computers, not to mention the inevitable temptation for kickbacks posed by very large capital expenditure projects or acquisitions in large amounts. Now we are seeing how this happens in Central and South America. We're now getting instant control. These are not previous controls. They are instant controls. I don't like the word concurring controls. This is called continuous auditing. Listen to this term: continuous auditing. This is the term of the future. The Canadian Institute of Chartered Accountants has issued a book that has been distributed widely here in the United States. The 40-page book is about continuous auditing, talking about auditing on-line. They are talking about immediate auditing, a macrosecond, one split second after the transaction.

—They permit proper management and oversight. Proper and timely managerial reporting on financial operations produce the necessary feedback to supervisory and oversight levels within the organization.

—They facilitate audit. Professional and timely internal and independent audit which focuses on highest risk areas is made possible where financial managers are present to insist upon adequate systems, especially accounting systems which comply with internationally accepted professional standards. As Tim Cox said yesterday, the auditors utilize the systems to find the area that has higher risk and go into the examination in a different way.

—They provide psychological control. This is really the best control. This is what keeps us honest. Those who are honest are kept honest this way. We want to be good. This is natural. If we do not have any fear of being discovered and punished, the people who are honest may lose their honesty in the midst of temptation, especially if they have an emergency or a need, such as a sick child. The most honest person in the world will become a crook. It has been well established that fear of discovery and punishment is a prime factor in discouraging corrupt practices.

The knowledge that internal managerial controls are in place, constantly being emphasized and improved by financial managers and subject to selective audit review, is a powerful disincentive to the potentially corrupt.

There is an anti-corruption advantage of integrated financial management. Integrated financial management systems (IFMS) are required in the United States by the Office of Management and Budget. Professionally directed IFMS provide powerful new high-technology tools which can be applied in the fight against financial fraud and corruption as well as mismanagement. Here are some of the ways that IFMS counteract corruption:

First of all, a prime advantage of IFMS is that it allows multilevel budgetary control. Budgetary review and control may be exercised at the operating, supervisory and central levels based on varying thresholds of activity or other factors. Automatic flash points may be built in to call attention to deviations in areas of high vulnerability as well as to repetitive inappropriate budgetary manipulations. Not long ago, people had to carry paperwork from one ministry to the other ministry and they had to put a stamp on it and then you took it to the treasurer to get a check. Of course, you needed 20 different signatures. Now we have a single payment.

Another advantage is the avoidance of cash flow “surprises.” When this is done correctly, we execute the budget relying on a constant flow of funds. Before the system, you knew very well whose payment would not be delayed. The friend of the high official, he is the one who receives a check. The other supplier who has been a decent person, has provided better service and to whom the state owes a lot of money, is the last one to collect because he is not among the preferred people. Actual cash flows can be monitored at appropriate levels through effective and timely cash management practices, cash flow forecasts can be prepared and the typical cash unavailability surprises causing draconian austerity crises which destroy possibilities of achieving budgeted objectives can be avoided.

IFMS also spotlight weaknesses. Exception reports can be designed by professional financial managers to provide prompt feedback to operating managers in areas where patterns of weaknesses are appearing. This can be done on the screen and on paper in order to call attention to suspicious activity.

I forgot to tell you that I’m experimenting with a psychological program. You can see in my presentation from time to time an apple with a bite taken out of it. This is the symbol of the Anti-Corruption Summit that we will soon be having. You are subconsciously seeing this apple and from now until September 21, every time you see an apple you will think of our Summit and it will make you want to come to Washington. If you can’t go to Washington at least you can eat the apple.

The anti-corruption advantage facilitates the application of prior internal controls in the processing of the transaction automatically without any obstacles in its execution. This is the internal validation of integrity. The appropriate internal validation of the integrity of transaction data is provided for at each key step during the processing of transactions and duly documented electronically so that internal controls do not delay execution and external controls may be limited to the post-audit function.

Another advantage is accounting control over resources. The accounting system maintains general ledger controls over all valuable resources which are independent of the operational level. Many governments (both for internal purposes and project accountability) have heretofore been unable to control or account for important assets such as receivables, land, buildings, other fixed assets, vehicles, computer equipment, software and all types of electronic equipment. We control these now by using bar codes. These things had never been controlled before in all the offices in all the different countries. They have to have an on-line electronic inventory in order to control their assets so we as auditors can verify them appropriately.

Transparency in public reporting is another anti-corruption advantage. Complete and timely monthly, quarterly and annual financial reports are available for disclosure as is appropriate to legislative oversight committees and their staff and to the public at large. This is provided for in most national constitutions but rarely accomplished. In Argentina they have been placing financial information on the Internet for the last three or four years. We congratulated them in this same room the first year that they were on the Internet. Guatemala also has financial information on the Internet and I hope that other countries, if they’re not within the system that was mentioned here yesterday afternoon, will soon be. Once that information is available, electronically, and the citizens can look at it, it is very difficult for a dictator to emerge. This is one of the things that is very good about the Information Age. Once transparency is achieved it is hard for officials to cover up “bad news” when it is contained in financial reports. The

capability to ensure that “bad news” is never published has been a major reason why disciplined and transparent financial reporting has long been avoided.

IFMS facilitates consistent enforcement of policies and practices. That is, it requires that the regulations are consistent, that the system obligates it to be consistent throughout the government, something that is very healthy and has been impossible due to human nature.

IFMS permits decentralization of authority and accountability in such a way that the people at the level of operations can order an item of supply. They can order the hiring of personnel. They can order the files, supplies or assets. They can order the issuance of a check directly against the budget and know what they are doing. This is something that has never been possible before.

IFMS reduces the need to have many accountants. Somebody mentioned this on Monday or Tuesday. It is no longer necessary to have so many experts in accounting involved in the operations. You only need them in the central accounting office where the accounting is being done. This reduces the possibility that the data may be manipulated, so long as there are adequate controls included in the design of the system, of course.

IFMS allows for instantaneous auditing focus on the areas and types of transactions identified as vulnerable or subject to corrupt practices. This is the type of auditing that we have to carry out nowadays because the volume of transactions will never allow us to examine everything. We have to identify areas of vulnerability.

IFMS allows fast and efficient comparison of data. It shows tendencies or trends that may be irregular.

Finally, IFMS allows the use of computer programs for the selection of audit samples as well as similar tools resident in the computer.

There are advantages for the honest. There is a tremendous need to protect honest employees from temptation as well as from the shadow of suspicion which constantly falls over them when corruption is suspected or discovered involving either international projects or public sector activities in general. Every professional government financial manager has to protect other public servants 1) from temptation to perform dishonest acts, and 2) from damage to personal reputation due to unproven or not-provable allegations of wrongful acts, by ensuring that internal managerial controls are adequate. Here is how professional government financial managers provide an integrity safety net for the many dedicated and honest public servants:

Internal managerial controls limit the number of persons placed under suspicion. Professionally directed, sound financial management and internal control systems, especially IFMS, establish clear lines of responsibility and authority. They provide for appropriate segregation of incompatible duties and provide for clear audit trails which limit the number of individuals placed under suspicion during investigations where irregularities are discovered. When I was a young auditor there was an embezzlement in an office where the taxes of the largest county in my state were collected. They had about 120 tellers in a huge room. Each had an old validation machine that provided validation of tax bills paid. We had 123 people under suspicion. All the tellers plus three people who received the money from them and counted it. All of these people were under suspicion. And without appropriate controls, all of these people are deemed to be suspects. For months we investigated this until finally the guy who was stealing made a mistake and we were able to catch him.

Secondly, IFMS allow you to document evidence even when folks are under suspicion, assuring the acquittal of an honest person. Professionally designed, appropriate paper-based and electronic documentation of evidentiary matter which supports financial flows assure the eventual exoneration of the honest even when they may temporarily be placed under suspicion. The person under suspicion who knows there is an appropriate system can rest better at night knowing that eventually the dishonest person will be identified and this dark cloud will be removed from the head of the honest.

Thirdly, and perhaps most importantly, IFMS reduce the possibility of having pressure applied to work directly or indirectly with corrupt individuals. This is the pressure to corroborate or bring pressure on the auditor when the boss says, “You have to help out. All the other employees are helping out.” Most collusive white-collar crime in the private sector is a result of people who are under pressure to be part of the group. Professionally directed IFMS provide a

disciplined control environment and a series of specific control practices which act to diminish the force of corrupt official and/or peer pressure upon financial staff. This in turn makes their professional career service more personally rewarding as opposed to being an unbearable burden upon their consciences.

In conclusion, the Treadway Commission and the Committee of Sponsoring Organization (COSO) in the United States, the Cadbury Commission in the United Kingdom and the Criteria of Control Board in Canada have focused great private sector attention upon the importance of internal control to the safeguard of resources and assets. But internal controls still need great emphasis in the industrialized countries and are basically in their infancy in most developing countries, the governments of which heretofore have preferred to rely upon false and external controls thus fomenting fraud and corruption.

The concept of internal control, which originated in the accountancy profession during the 1940s, has been expanded to now encompass the entire scope of managerial responsibility. It forms today's generally accepted framework for the safeguard and maximization of limited resources in the private sector and should do the same in the public sector as regards international development projects.

Fraud and corruption can never be eliminated, but they can be substantially counteracted and hopefully diminished by professional government financial managers duty-bound to insist upon sound financial management policies and practices accompanied by appropriate internal managerial controls applied together with other disciplinary measures in the criminal, prosecutorial and justice fields.

It is imperative that the areas of government auditing, criminal investigation and justice administration be completely de-politicized in order that they be independent, effective and credible in our global society.

Audit Coordination Between International Organizations and Supreme Audit Institutions

Douglas Arnold, The World Bank

Good morning. I am really glad to be here this morning. I'm going to talk very fast. The only person I know who talks faster than I is Jim Wesberry, and I'm going to try and beat him today. I feel that I must speak in Spanish today, and at the conclusion of my presentation, English speakers, French speakers and speakers of other languages will realize why I had to speak in the Spanish language this morning.

I would like to start out by conducting a short survey. Those who work in auditing, please stand up. People who do not work in auditing please stand up. Fine.

When we started the seminar, I noticed that in the morning our room is packed. Look at it. It is full of people. This is real good. But what happens in the afternoon? Well, in the afternoon, we don't have so many people. They have gone away. I don't know what happens. I don't know why. I do know that in Miami there are lots of nice things—the beaches, the stores and the Everglades. But I must warn you that there are some dangers here too. Look out for the alligators.

I am pleased because the room is full. But I have bad news for you. In this conference, we had someone pass away. This morning we need to identify the body on this gurney. Let's do it together.

It is financial management. Now, for the interpreters, when I say financial management, I would like you to explain this as old financial management. Who killed it? Who is the one who killed it? Coordination. Old financial management was killed by coordination. Coordination is a disease. Do I make myself clear? Coordination is a disease. It is an illness existing amongst governments, government officials and multilateral organization officials. Coordination is an illness, a disease. I have seen it kill off many projects. I have seen it kill a whole bunch of efforts. Do you know what coordination is?

Coordination is talk, talk and more talk, and then not doing anything at all. Coordination is when I say what I am going to be doing and you tell me what you're going to be doing. This is coordination.

Take a look at these figures that I got yesterday. I was amazed by these statistics because of one thing. These figures are as of December 31st, and at this time we are almost upon March 31st. This information is almost three months old. It is useless.

Old financial information is worthless. But maybe we can learn some things. It is hectic at this time in the World Bank's portfolio for Latin America. There is over \$30 billion in current loans of which over \$200 million is devoted to old financial management. They have a list of current projects conducted by the World Bank in Latin America working with old financial management which is dead.

It is very interesting to be a World Bank presenter because at each conference I feel as if I was among alligators. Every single person wishes to blame the World Bank for the problems that they're having. Corruption is caused by the World Bank. If it were not for the World Bank, there would not be corrupt people anywhere. That is what people tell me. Now I must make some things clear in relation to this topic. There are two things: Countries who request loans from the World Bank are sovereign countries and they are under the obligation to monitor these loans and use them efficaciously. This is clear. It is very easy to blame the other guy. From the beginning of the world we have seen this. The serpent was blamed and Adam blamed Eve. From the beginning we have always blamed the other guy.

The other thing I must explain this morning is that the World Bank, the current World Bank is no longer yesterday's World Bank. And it is important that we say this so that you can see that something big, new and important is taking place at this time. What is new with the World Bank? Number one, there is a lot more people dedicated to financial management within the Bank. My wife is an author of books. She has published two books already and has another four or five which are in line to be published. And many times at home we talk about words, because a word paints a picture. Words are precise. Old financial management is dead and I hope that we shall replace it, this old financial management, with precise words that explain what it is.

In new financial management, the Bank has already realized that things cannot continue as they were. We have hired many new people. In 1997 we had 25. At the end we hope to have 141 people dedicated to this new financial management.

Besides having more personnel, the Bank is already focusing the new management of new financial management on fighting poverty with passion and professionalism. These new managers will help the regional vice presidents and directors of the different countries to promote solid integrated financial management in all of the operations that are assisted by the Bank. Also, a new team has been created to study the cost to plant the regulations of safeguards and trust, assuring the effectiveness of the development.

From the fourteenth conference, I would like to take you now to the nineteenth conference. Where will we be in five years? In five years, this is what we foresee. This is what we dream in five years. All of the countries of the world will have a more solid acceptance of new financial management based on accepted accounting and auditing standards. No country will have its own standards. We see that in five years we will all have international standards for accounting and auditing. We will see a different world, a global world, and there is no time for a country to have its own standards. This is dead. This is something from the previous century. In the new millennium we will live in a new world. We must have global standards. The World Bank is very much involved in working with IFAC, with ISFC and other institutions so that we can have global standards.

We see in five years that the decision power of the government will take into account and will give value to new financial management. We know that many times we are not taken into account. We see a future in which the new financial management will be taken into account.

We see in five years that the people in all these countries will have confidence in the decisions made by the government concerning the use of public funds, the people's funds. There is mistrust right now in the countries of the world. There are people who say if the government would only use the money correctly, I would pay taxes. But since they don't do it, I'm not going to do it either. Now we see a new world—a different world—a world of trust.

Speaking of trust, international donors, the multilateral organizations carry out all of their projects within the government systems. In one country this year the Bank approved five new projects. In each one of these projects a new unit was created to supervise, watch, because they do not trust the government systems. The World Bank realizes that this is not the way to proceed. We hope that within the next five years that we will be doing projects where constant supervising, watching, controlling and managing are not necessary. This is our new vision for the future.

Another important part of our vision for the future, and this will touch each and every one of you, we see in the future that the audit report of any project in the world will be published on the Internet so that everybody can see it.

We need collaboration. What has died is the old financial management. What has died is cooperation. We do not need coordination. What we need is collaboration. We need collaboration in order to carry out our mission. Collaboration is to exchange ideas and then to work together toward the same end.

I know that about half of you work in general accounting offices and the other half work in other things. Think of your objectives. Think of your work. One of your objectives is that there should be excellency in the use of government funds and excellency in the presentation of your reports. I think that every one of you share these objectives.

Now, in international organizations, we also have objectives. Our objective at the World Bank is a world that is free of poverty. We can collaborate when we know the intentions of one side and the other, and we can see that we have a concordance in our goals. We can collaborate because we have transparency. We have concurred in our goals. Collaboration is to work together.

When we talk about collaboration among the organizations we mean collaboration among the multilateral organizations such as the IDB or the World Bank, or perhaps some other entity, or collaboration among the supreme accounting organizations. Now, here at this conference, somebody asked me, “When will the donors have a Single Audit Act?” Never. We will never have it. But we can collaborate so that an auditing is sufficient for the Inter-American Bank and is sufficient for the World Bank and is sufficient for the USAID, etc. We can do it.

There are differences among the rules of the different institutions. I spent one day with the Director of Auditing of the Inter-American Development Bank to see the differences between them and the World Bank. I knew the differences between the World Bank and AID. I found that the differences that exist are not great. And those that do exist are the ones that we ourselves have created. If we did it, we can change it ourselves. We can work together to assume an auditing that is sufficient for each organization. We have to change some dates because the Inter-American Development Bank has a shorter period of time than we do, but this is easy to change. We can make our period of time shorter because it is way too long.

Let me tell you this because I believe that it will be useful to all of you. The requirements of the World Bank are wide and flexible. We can explain the auditing requirements in four words: Acceptable for the Bank. That is what is in our laws and by-laws: Acceptable for the Bank. It doesn't explain what it means. Therefore, we, ourselves, can decide.

There are four things that an audit needs as far as the World Bank is concerned. One: the auditing must be independent of the activities and entities that are being audited—easy, no surprises there. Two: the auditing must meet with all of the IFAC or INTOSAI international standards. A report that says we have met with the standards of IFAC with the exception of this one or that one is no good. Three: the entity that carries out the auditing must have the necessary resources to do it on time. Four: the program must have a supervision program and quality control program. If an entity can do these four things, we can accept their auditing.

In the world of Latin America, I am the person who approves the signatures, the different companies, and I can say to our auditors from the GAO who have come to audit us, honesty in this world does not have a passport. Let me explain that. Honesty does not have a passport. Some people think that because a company is well known their work is trustworthy. This is not always true. This is a lie. We do not qualify the different countries by name. We don't classify, we don't approve, and we don't go by names or by nationality. We do it by the quality of the work.

The World Bank does not allow us to pass the buck. If a loan recipient is the Minister of Treasury, it is the Ministry of the Treasury who provides the auditors and presents the report to us. In some countries the general controllers are the ones who want to do the auditing. Fine. But make the arrangement with the project, not with us. We do not allow anybody to pass the buck because we have some very strict requirements. If the auditing report does not get to us on time, we will cut off the funds from that project. We want it to be the fault of the project and not the fault of the general accounting office of the state that has not been able to carry out its duty.

All of us are partners in this process. For such reason I emphasize the difference between coordination which is a lot of blah, blah, blah, and collaboration which means to listen and do things together.

What can the multilateral organizations do and what can you do in relation to this new world? Multilateral organizations can do several things. The first one is that we can provide you with a list, openly, of all our development projects in your countries. Oftentimes we don't know what the other guy is doing in the same country. I congratulate the Central American Integration Bank, because last year five Central American countries and the Dominican Republic got together and discussed their projects. We can give any general controller here a list of the projects existing in your country. We can provide funds for technical assistance in order to help monitoring entities or overseeing entities. We can provide training in our requirements, like quality control and so forth.

We can give you automatic access on the Internet to something new which the World Bank has made available to you in order to help each of you perform your work. We call it the Barrier Connectivity Initiative. It is very easy to find: www.worldbank.org. If you need information to audit any World Bank project, you can do so.

You can help agencies set up and maintain appropriate systems. This does not depend upon the Bank. One of the things that we saw in yesterday's meeting was quite interesting. With \$10 million, and with a commitment on the part of a very dedicated group of Guatemalans, something incredible was done in two years. Maybe we don't need to spend as much. Maybe what we need is to put in more effort. This conference has been excellent because it has given us many new ideas.

Something else that you can do is document the different processes that are being followed in your own countries. Something that we recommend is this: Conduct a short self-evaluation comparing your laws to what you all do, and then compare these two things against international standards in order to see what else you can do differently. And while the Bank is making arrangements for disseminating audit reports, you people conducting audits are invited to publish them. You don't have to wait for the Bank to do so. You who perform the audits can post them on the Internet.

Besides the Barrier Connectivity Initiative, we offer some other interesting things on our Website to help you with your work. There is a "Checklist for Good Financial Management." It is a checklist you can use to conduct a self-evaluation. It is just an internal control questionnaire. Something else you can see is reports on project management, and also training materials. All World Bank publications dealing with new financial management are under Publications—English language publications, then comes Spanish, then comes French.

We provide you with an opportunity to ask us questions. There is a section by the name of "Ask a Question on World Bank Procedures." Any question at all. There is a discussion database where you can ask your question and somebody from the Bank will answer using one single voice. It will cite the rule and the manner in which it is applied. There is a section concerning frequently asked questions. If you have any indication of wrongdoing, there is a method of addressing this wherein you can report anonymously.

If you want to report a corrupt act in a World Bank project, and this is a collect call which means you don't have to pay anything, dial 704-556-7046. Since we are in the U.S., there is a 1-800 number: 1-800-831-0436. All this is on our Webpage.

The third purpose of the Webpage is to get us interconnected. We have shown what is there, and I would like now to explain what we want to do. Behind each of the areas which are the seven regions into which the Bank has divided Latin America, it says, "Officers of the World Bank for this Region." Using this and the map you can find the person with whom you can speak. We are sending a letter to all the countries, indicating that those government officials who would like to be on our Website should send us their names and their e-mail addresses. What we want to do is build a network with photos, names and addresses of persons ready to collaborate in answering questions. If any of you, during the course of the day, would like me to place your picture there, we'll take it and then on Monday you'll be there on the World Bank Webpage, where we're talking about financial management.

You each have two sheets of paper. Take out one sheet, one you don't want. Write on one page the word "coordination," and on the other page, "financial administration." I have a 10-year-old son who now and then says some inappropriate words not bad words, just inappropriate. What we have done with Michael is grab him by his hair, set him at the table and tell him to write on a page the dirty words that he spoke. Then we crumple up the paper and throw it away. So here we have the word "coordination." I thought of asking you all to throw your papers up here, but I don't want to collect 800 papers. It would be better for you to keep them. That word, "coordination," does not exist for those who attended the 14th annual conference! We have replaced it today with a new word, "collaboration." I don't coordinate I collaborate. The difference is that we work together as partners.

The other one that has been dead in the Florida swamp at this 14th annual conference, is "financial administration." That is very important, because some gringo somewhere has given you bad information. The correct, the complete word is "financial management," because that is what we do. Previously we did financial administration, paying accounts, etc. We continue doing this. But now we are dedicated to financial management. Let's move into the new world!

I hope you found my talk interesting and informative. Thank you.

The Role of Supreme Audit Institutions in Combating Corruption

Arturo Aylwin Azocar, Comptroller General of the Republic of Chile

Good morning to all of you. I am here to discuss the task of the supreme auditing authorities or the general accounting office in the battle against corruption.

In the first place, when we analyze this subject we cannot lose sight of our particular environment—the reality of the situation in each country, and the international context. This becomes particularly valid in the scheme of globalization which has been discussed quite a bit over the last few days.

It is not necessary to belabor the causes and the elements of corruption, nor must we mention its tremendous destructive effect both morally and materially. Corruption has to be faced as a scourge that is irreconcilable to all upright people in both the public and the private sector. Corruption is indicative of something wrong in society in general. We cannot, therefore, take sides concerning this matter. Above all, we must recognize and understand that the common citizen has greater sensibility concerning corrupt acts when those corrupt acts are committed by public servants, those that form the administration of the state.

As we face this phenomenon we have to assume an intelligent attitude, a rational approach to successfully overcome the evil of corruption. That is why this morning I feel it is a good idea to point out the other side of corruption, which is probity—probity of the public officials, or those who are in charge of the state, because our main mission is to preserve, to defend, to strengthen honesty and probity. We could say that honesty is the vaccination against corruption in the administrative environment.

As an illustration, I will point out this morning the broad concept of the honesty of the Chilean legislature. In the constitution, there is a chapter devoted exclusively to the development of honesty or probity in carrying out public tasks. There it is established that public officials must adhere strictly to the principle of administrative probity or honesty, and in this process they must serve in a morally blameless manner.

Based on this broad concept, there are three elements that form what we call probity or honesty. In the first place, it is necessary that every public official have a personal ethic that is immaculate in every way. Following that, the official should maintain a completely honest and loyal dedication to carrying out the public function to which he/she was assigned. It is important to emphasize this element. A public servant that does not carry out his duty as an official, who does not carry out the task that was assigned to him, fails this test of probity or honesty. He commits an act of corruption. If a public official does not completely carry out his duties, and yet accepts payment for performing those duties, he does not meet his obligation to serve his nation. Consequently he goes against the principle of probity or honesty.

The last element within this broad concept of probity is the preeminence of the public interest above that of the private person. If a public official has a conflict where he/she may personally benefit at the expense of the public interest, the public interest should prevail.

There are certain assumptions that should be made by the supreme auditing authority in terms of defending probity. Corruption cannot be avoided or cannot be attacked only through supervision or fiscalization. That would require a cultural battle. We have to have a good system of financial management that requires appropriate intervention of the courts. There should be no doubt about the importance of controls as a fundamental instrument carrying out this purpose.

And for that same reason, no one can doubt the fundamental task of the supreme auditing authorities. For these entities to be capable of defending probity and efficiently attacking or joining the battle against corruption, it is indispensable that they meet certain criteria. I will be speaking very frankly here today because the worst thing that we can do is ignore negative suppositions.

Of course, there is a golden rule which is a fundamental base for all of these matters. And that is that every supreme auditing authority must be in itself an example of probity or honesty, otherwise that supreme auditing authority will lack the necessary authority. It will lack credibility. It will lack political recognition and social recognition. As a matter of fact, this demands a great deal from each one of the officials that form these supreme auditing authorities. It demands great objectivity without any political partiality, without being anybody's instrument—neither the government nor the legislative branch nor the different political parties nor any other interest. If this condition does not exist, the general accounting office or the supreme auditing authority loses all of its moral strength in the eyes of the public.

There is another presupposed thing. The supreme auditing authority must have the means, resources and independence that are necessary to carry out their task in a professional way without fear and without any barriers.

In the third place, the supreme auditing authorities must be effective. It doesn't help them in any way to have a title if they do not have the necessary support. It is a big mistake on the part of governments to weaken or discredit higher overseeing institutions. It is also not a good solution when parallel organizations are created because instead of achieving better control, there are contradictions and discredits of a different nature. The higher overseeing authorities must be directly in control. GAOs should be open to the public, but they must be careful. It is a matter of having responsible social control. It is a matter of setting up responsible channels for the purpose of filing complaints and making appropriate arrangements to conduct appropriate investigations resulting from responsible complaints. Social involvement must be responsible. Let's not be mistaken.

Unfortunately, the media does not always act appropriately in this vital area because many media thrive on scandal. They have no concern for improving control systems, or attacking, in an efficient and efficacious manner, the issue of corruption.

As was said these last few days, efficient and effective monitoring by higher overseeing institutions needs to be integrated in a system wherein the budget, the treasury, public debt, accounting and audit all reside. Appropriate information mechanisms should be operational. Mechanisms for cooperation, mechanisms for reciprocal report, all of these should be in place in all higher overseeing institutions. They should also be in place in the organization that oversees each higher overseeing institution in this world of globalization. This is a fact which can't be denied.

For this purpose, it is essential to be part of and become a member of international regional organizations of these institutions. It also involves joint, cooperative actions in addition to acting with other international organizations, one of which is being the sponsor of this event. The experience that we have acquired during this conference is quite significant.

Monitoring on the part of higher overseeing institutions should include the entire government of the nation, and when I say the entirety, I mean not just a portion thereof. I believe that it is a huge mistake when higher overseeing institutions do not monitor municipalities or do not monitor government colleges or universities. All government institutions should be subject either directly or indirectly to the oversight of these institutions.

I enthusiastically join the proposition stated by Jim Wesberry in his presentation this morning, to the effect that we're currently facing this phenomenon by the name of cybercorruption. As a result, we must be especially concerned about using information technology in an appropriate manner.

A question that comes up is the following: What is our role in the fight against corruption? Overseeing institutions should be inspired by the important principle of administrative honesty or integrity. And the action for protecting honesty, which is tantamount to an attack upon corruption, involves several different actions and is manifested in different manners. I dare to mention them very briefly this morning.

Naturally, acts in preparation for decision making on the part of the administration must be monitored because oftentimes the seed of corruption is in these acts of preparation. We have attested to this on many occasions in our country, especially in the matter of entering into government contracts. If there are terms that are unfair to the other parties, they are also unfair to the public. Some irreversible circumstances could arise. Compliance with administrative procedures should be monitored when such procedures are for the purpose of avoiding corrupt practices. It is fine to say, "Let's not be too concerned about procedures," but let us not deceive ourselves. We must not forget about procedures because oftentimes this is the means used by corrupt people for illegal transactions. Financial transactions are to be monitored, including budgetary operations. It is not just a matter of monetary activity or moving money from one place to another, as was explained appropriately in several lectures before me. It is basic to oversee compliance with transparency of government management.

Higher overseeing institutions should be very demanding in order to ensure transparency. Likewise, actual compliance with officer liability standards should be monitored and also liability affecting third parties within the government should be monitored. Special attention should be given to appropriate performance of agreements entered into by government organizations with individuals.

Corruption is not just a matter of committing fraud against the public wealth. There are several modes of corruption—diversion and abuse of power, forms of nepotism, personal gain, misuse of information technology and computers and so forth. We must not overlook that one of the main objectives of an overseeing institution is that of upholding the moral wealth of the nation and not only the physical wealth thereof. We have included in our policies and in our objectives this important principle. The general accounting office ensures the physical wealth and the moral wealth, if you will, of the nation.

We must pay very special attention to those operations that involve a greater risk for corruption. Many of them have been mentioned here—procurement, contracts, donations, loans, subsidies or contributions to private organizations, authorizations and permits when they affect the use of the soil and so forth. As you have heard during this event, there is complete agreement on this issue amongst the different presenters. Monitoring should be extended as well to those institutions that are not part of the official government but participate in government actions, such as private organizations that receive government funds for specific purposes.

I am just summarizing some of the experiences I had at the Chilean general accounting office. We are convinced that our legal monitoring has been effective. Monitoring in a rational manner has created respect for legality as it applies to standards, and it has avoided many irregular situations. Likewise, it has been extremely important to have the GAO perform its work in the area of public accounting. Our accounting in Chile is worthy of considerable respect by the whole national community because the nation's balance sheet, submitted by the GAO, is both professional and objective. The GAO also prepares documents in an open fashion, open to the entire community and government organizations. Next Wednesday I will confidentially submit the nation's general balance sheet to the new President of Chile. It has been ready for over a month, but because of the change in government we have not been able to present it to the president.

Today it is essential to work as a team. The work of the accountants is no less important than the work of the attorney or the administrator. It is an instrument that belongs to all, and we must act among the different disciplines as a team. We believe that the system of appointing the general comptrollers in Chile has been enormously positive. The Comptroller General in Chile is appointed by the President of the Republic with the agreement of the Senate. And once he has been appointed, he cannot be removed from his post. He only stops being when he is 75 years of age or when he fails in his task. The Chamber of Deputies in that case can accuse him before the Senate and the Senate acting as a Tribunal determines if there is sufficient reason for him to be removed. We believe that this is an excellent illustration of working together as a team with different administration organisms reciprocally respecting each other's competencies.

When I talk with many of you, I realize that we basically have the same problem areas. One of the most difficult sectors is that of the municipal sector. That is where we have the most problems. That is why it is very important that we should quickly adopt the necessary measures to overcome these complicated issues.

Also, we as accountants, have had a very good experience in assuming a more active role alongside the administration and alongside the legislative body. We have been able to present appropriate solutions in many

situations. The idea is to give support. It has also been extraordinarily useful to take advantage of the support given to us by other countries and by other entities or organizations.

I want to take it upon myself this morning to give public recognition for all the good that we have received from a number of different international organizations such as the World Bank, the IDB, the different organizations who participate in this event, as well as the support given to us by other nations. A few years ago I was in Puerto Rico. There I saw some very interesting things. A short while later I applied them in our own general accounting office in Chile with excellent results. We appreciate the experience of this event, the enthusiasm with which we have been received, the brilliant ideas that we have received from Mr. Wesberry and others like him. The general accounting office in Chile would not be the way it is right now if we had not had the enthusiastic support we received from Mr. Wesberry. We believe that that support has been very useful in strengthening the national monitoring system, and this has created positive public recognition. Last week the general accounting office of the republic received a declaration from the President of the Republic, all the ministers, and from all those who work in the government, which cited their respect for the integrity and honesty of the general accounting office.

We have done a lot of work in the training department. The general accounting office of Chile, as does general accounting offices all over the world, appreciates the importance of appropriate training. It is also important to point out the value of planning and how valuable it is to internal auditing, and, of course, how valuable internal auditing is within the general accounting office itself.

I now refer to some key points that we must necessarily consider in this struggle against corruption. First fact, inefficiency facilitates corruption. It can also be the beginning of corruption itself. Therefore, we feel that the general accounting office must be concerned with this subject, without limitation and without excluding anyone. We then, in concert, are careful not to act inappropriately. To act with negligence in itself is an act of corruption.

In the second place, the struggle against corruption demands a public report about the final results of the auditing. The great rule is to advertise it, publishing everything. Supervisory and monitoring entities must be included. Their procedures should be periodically examined. We should not be prevented from interviewing ex-public officials when we do our auditing. They may have precisely the information we need. There will always be different degrees of support amongst the supervising or monitoring entities. The courts should have the authority to suspend and to punish those public officials, if necessary. I know that this is a problematic subject, but what usually happens in these cases? The general accounting office detects an irregularity, presents the need for punishment and the administration does not respect that proposition. The case becomes more dramatic when you're dealing with the mayors. Many of the mayors in our country have been involved in some illegal activities. However, they have not received any punishment because the general accounting office does not even have the authority to accuse them formally.

Training is an indispensable task that must be carried out and should have the maximum priority. Training is an integral part of the control activity. We have discarded the idea that in order to train people one has to work extra hours outside of the usual working hours. Training must be done within the usual working hours. Otherwise, our public officials would not be able to meet the requirements that the community expects of us.

I would like to mention a subject that is very important and quite delicate. What should our attitude be concerning the competency of our public officials? I think that one must assume a positive attitude in front of the public. The worst thing that we can do is to create situations, negative attitudes, generalize ideas of corruption when that does not correspond to reality. To treat public officials in that way creates a lack of motivation that favors corruption. Consequently, we cannot treat the public official as if he was alleged or supposed delinquent. We should be concerned about strengthening the national system; not causing doubts when evidence of wrongdoing has not been established.

In order to do that, we should support, in a very different manner, the internal auditing process. We are not the ones that own the general accounting office, and consequently we have to create the necessary consensus in order to modernize our institutions of international support. It is very important that this be done in cooperation with the different monitoring entities of the different countries, and with other multilateral organizations such as the International Consortium on Governmental Financial Management.

The task carried out by all these different organizations is very positive. There are many ways that corruption can take place, and we have to face these together taking advantage of the experiences of one another in facing common problems—things like money laundering, illegal associations, customs fraud, drug trafficking, bribing at the international level. Monitoring organizations should be demanding that the agreements in international treaties should be adhered to in this battle against corruption. That includes all the agreements and recommendations that have been made by INTOSAI and other regional organizations that unite all these regulatory agencies. There should be a very definite position regarding this issue. In this matter, I share absolutely what was said here yesterday by one of the presenters who pointed out that we are obligated to exert legal pressure as we go to war against corruption. It is vital and the task is giant.

We must carry out this task with great probity, with great efficiency and in an intelligent manner according to our transcendental controls, facing our citizens with absolute transparency by publishing all of our actions using, in every way possible, the technological capabilities perfected by our human resources. There should be controls over those organizations that are in charge of the monitoring. We should be training the citizens as well as the public officials—training that will go way beyond what is mere training. We have to play an active role in the process of modernization of our respective administrations and in presenting the necessary legal reforms. We do not believe that this is just a matter of changing the rules. That's a simplification. The rules are just instruments for action.

But none of what has been said here is sufficient. Let us not fool ourselves. Before anything, above all, we must have the will and determination to strengthen probity. We have to be willing to repress any type of corruption even though it may appear to be a very small case of corruption or just an improper practice. We must do this with all of our strength. We must act without consideration for anyone's status, under any kind of circumstance, no matter how irrelevant it may appear. We must demand exemplary punishment to those who engage in corrupt practices, be it by negligence or by overt action or by not doing something.

I conclude my speech by pointing out the following: The prestige of the higher overseeing institutions will depend upon our acting jointly with the international organizations, with the whole community to achieve this purpose. It is a huge challenge. The experiences of this meeting, the propositions which have been made, the feelings that we have perceived here, make us extremely optimistic. Thank you so much.

FERNANDO HERRERO (Costa Rica): Arturo, I would like to ask you a question. When the role of the GAOs is discussed in fighting corruption and in general at this meeting, a lot of emphasis has been put on public expense. There are a lot of problems to solve in this area; nonetheless I would like to ask about the role of the GAOs in fighting corruption in regard to public revenue. This topic has not been discussed at this event. If we do discuss it, we're going to find that it is as large or even larger than expense corruption. Some fraud regarding value-added tax payments in Chile indicates that this fraud amounts to 30 percent. And this is a country that has the best monitoring over value-added taxes in Latin America. This is just a form of reference to provide us with an idea of the magnitude of the problem we're facing. I'd like your opinion on this topic.

ARTURO AYLWIN AZOCAR (Chile): My categorical answer is in the affirmative. For sure we have to worry about both revenues and expenses. I mentioned that overseeing institutions should ensure that the different administrations pay close attention to those loans they have made to individuals. Many individuals do not live up to their agreements, and government institutions are passive in this regard. The GAO must pay attention to this. On the other hand, in my presentation, I have tried to say that we must go beyond this, because at times there is not even any money available or any money involved. There is inappropriate inference. There is nepotism. There is inappropriate negotiation. There is an inappropriate diversion of power such as when a political enemy is persecuted. There is manifest negligence in the discharge of official duties.

In the last few days I submitted a report to the new administration which said that in the health area many health professionals are not completing the workday. And that is part of the problem involving the deficit in health. There is no money involved whatsoever. We believe that monitoring on the part of the GAO goes way beyond just making a numerical assessment. Obviously, and in the final analysis, everything will have a given monetary cost and may also entail other costs. We must become concerned about all areas in our fight against corruption.

ROSMOND JEAN-PHILLIPPE (Haiti): You spoke about the involvement of the courts. How do you see this involvement on the part of the courts when the law says that courts are to recognize only those cases in their jurisdiction?

ARTURO AYLWIN AZOCAR (Chile): Here we must comply with the legal and constitutional regime in each country. There is no doubt whatsoever that by and large there is complete separation between the jurisdiction of courts of law and administrative actions which include the overseeing role on the part of specialized organizations in the area of public administration. But at any rate, there is always a close relationship between what is done by courts of law and the tasks performed by overseeing institutions. Overseeing institutions are provided information mainly by complaints about those irregularities that are deemed as crimes.

Unfortunately, in Chile we have had a bad experience because we find many complaints with the courts are not dealt with appropriately. Fortunately there was traditional reform in Chile recently and the position of nationwide prosecutor was created. He is willing to work very closely with us and will play a very active role in expediting these proceedings in coordination with the government defense counsel. But in our country, just as in other countries, the GAO wears two hats. On one hand we are an overseeing organization performing auditing tasks and monitoring legality, as stated earlier in the Chilean case. Then we become controller offices to the extent that within the GAO there is a true court for the purpose of making public officials civilly liable.

When we talk about a national monitoring system, we want to go way beyond just administrative monitoring. In this domestic monitoring system, courts of law will also be included as well as the chamber of deputies of parliament. Administrative internal controls will be included in collegiate organizations such as municipal and regional councils. The media will be included. In fact, each citizen is a control. All of us make up this great national monitoring system.

Fraud at the National Level

Courtenay Thompson, Consultant, Courtenay Thompson & Associates

Good afternoon. It is a pleasure to be here and I appreciate the opportunity to visit with you. I think it is awfully presumptuous any time someone from the United States tries to tell the world how to deal with corruption and fraud because, quite frankly, we do not yet have our own house in order. We're not even close. But for the past 18 or 19 years I've been doing fraud training for companies and governmental groups primarily in the United States but a bit of the time outside. What I want to share with you today is an approach to dealing with fraud.

We're going to be talking about the challenge fraud presents, the role of controls, and getting management commitment which is really the key. We're going to talk about fraud training for management. We'll go over macro and systemic fraud.

I have a question for you, by show of hands. How many of you work for organizations that have written policies that tell management what to do when corruption or fraud is suspected? How many have something in writing that tells people what to do? Look around the room. One hand? Two hands? Three hands? Four, five, six, seven, eight. How many do not have such policy or instruction? Keep your hands up. Quite a few more.

How many of you have ever been to a conference or a seminar that was a waste of time? Training is a waste of time unless you get a behavioral change. If you don't gain the ability to do something at the end of the session, you've wasted your time. So you want to walk away from here with specific things you can do—things you can do to make you worth more to your organization.

Let's talk about the challenge that fraud presents. The first part of the challenge is simply that there is too much fraud out there—too much dishonest and fraudulent activity. With corporations, I use what I call the one-percent rule. There is no organization in this room that is not losing at least one percent of their total budget to dishonest and fraudulent activity. There is too much fraudulent activity out there. The one-percent rule refers to losses in inventory, loan write-offs, over-charges by contractors and vendors. It includes false insurance claims in government insurance programs. It includes false travel vouchers. It is all dishonest and fraudulent activity. By the way, in the United States, some of my clients believe they are losing as much as 10 percent of total revenue to dishonest and fraudulent activity. That would include some in the insurance industry that have false claims as a major challenge.

The second part of the challenge is that the perpetrators could be anyone. In my lifetime we've lost a Vice President of the United States to fraud. We've lost members of Congress. We've lost beloved religious leaders to dishonest and fraudulent activity. The perpetrators could be anybody. That does not mean that everybody is dishonest, but it means that anybody could be.

Part three of the challenge: there is doubt that government executives, legislators, managers, auditors and law enforcement can stop fraud. It is just too pervasive.

Number four: you need to be aware that there is a growth in commercial predatory practices. Businesses worldwide are under increasing pressure to make their numbers, under increasing pressure to make their sales. And what that means is that they are more willing to take risks and defraud their customers. We've seen that in the United States with our public utilities. We've seen that with the telephone utilities right here in the State of Florida. One of the telephone utilities settled \$130 million for their fraudulent marketing practices. You see it in predatory credit card sales practices, and you see it in fraud by consulting firms and big accounting firms.

Number five: for many, fraud is really the greatest challenge when it is fraud for the benefit of the organization. Now, for corporations, that is fraudulent financial reporting, and that is marketing fraud. What is it for those of us in government? In government you can have fraud for the organization also. That is fraudulent financial reporting. That is misreporting things to those who have oversight. That is making false statements to the World Bank in a loan or project application.

Number six: you need to be aware of the danger of willful blindness. Willful blindness is the ability to look right at something and not see it. Hans Christian Anderson wrote about that in the fairy tale, “The Emperor’s New Clothes.”

Despite all these challenges, the message for you at this conference is you can make a difference. You can make a difference in prevention, detection and response. But it requires you doing some very specific things.

Let’s turn now to the role of controls. On the right-hand side of the honesty scale are those who are totally honest—people like you and me. We’re totally honest, aren’t we? Absolutely. We would never steal, no matter what. You could give us all of your wallets and pick them up in a week, and the money would still be there, wouldn’t it? Would you like to try that? No? That’s who your managers think work for them—totally honest people—people who would never steal no matter what. On the other end of the scale, we have the totally dishonest person.

Now, for the purpose of training, I usually talk about a fellow from the Southern part of the United States. He’s a fictional character named Billy Bob Bodine. Billy Bob Bodine will steal anything not tied down. We can bring Billy Bob into this room and chain him to the podium. We can come back tomorrow and Billy Bob would be gone. The chain would be gone, the podium would be gone, and the AV equipment would be gone. Everything would be gone. And he would have rented out this space for someone else to do a conference. Do you think internal controls will protect you from somebody as dishonest as Billy Bob Bodine? What do you think? No?

The way you keep Billy Bob Bodine out of your organization and protect yourself from Billy Bob Bodine is with aggressive screening. But if we’re not as honest as you and I, or if we’re not as dishonest as Billy Bob Bodine, if we’re in the middle somewhere, we will move up and down the honesty scale based upon three variables.

The first variable is opportunity. Opportunity is increased at remote locations and small branches. Opportunity is increased any time outsiders like contractors or consultants keep the records, and whenever controls break down. Opportunity is increased during times of change. Opportunities increase during expansion and introduction of new services.

The second variable is pressure. Pressure will cause somebody to slide down the honesty scale. Earlier today Jim Wesberry was speaking about the pressure of having a financial problem in the family—an illness, a child who’s sick. But you know, sometimes the pressure is just to have a nice lifestyle. Sometimes the pressure is caused by greed. We’ve seen people with tremendous incomes who would cheat or steal because they just wanted more. Pressure can be to survive or pressure can be to thrive. In the United States we had cases a few years ago involving financiers. Ivan Boesky and Michael Milken were people worth hundreds of millions, even billions of dollars, yet they cheated to get a little bit more. Pressure can be to maintain a government program. Pressure can be to help the poor. People who really believe in their programs will sometimes cheat to keep them going.

The last variable is attitude. If you want to see the larceny come out in people, have them feel they are underpaid or mistreated. Those who feel rules or procedures are unfair will cheat. Other attitudes include, “Everybody is doing it. It is just government money.” Have you heard this before? “Rank has its privileges.”

I would like you to make a note, those of you who are making notes, rank has its responsibility, and the responsibility of rank is to set a good example. By example we are led and, by the way, your executives and your politicians need to know how important this is. There is an organization in the United States called Wal-Mart. You may be familiar with it. It is moving worldwide now. Wal-Mart is extremely successful. Their sales last quarter were just recently reported as being \$61 billion U.S. dollars for one quarter. That is a huge number. They have a “no gift” policy. The executives cannot be entertained by anyone. They cannot even accept a free lunch. They have what is perceived to be a very high integrity. Those who have worked with them, trying to sell to them, say that as best they can tell the people really believe it. Integrity is part of their culture, but it started with the example of the CEO.

By the way, we do a program called, “Fraud and Awareness for Managers,” and in that program the executives have to buy in on the importance of setting a personal example. I have never seen a place with high integrity that had royalty and serfs. This does not mean everyone gets the same salary, but it does mean that we cannot have executives who lord it above the rank and file members of the organization.

All fraud is done by those we trust an important thing to keep in mind. That’s something executive management needs to know because, at some point in time, some manager will say, “Well, we trust that contractor. We’re relying on them.” All fraud is done by those we trust. The way we impact managers is by asking them this question: How many of you have responsibilities for hiring other people? I’ll ask that of this group. How many of you in the audience have responsibility for hiring other people? Do you hire, say, 10 percent thieves to make life more stimulating for yourself? No? Neither does anybody else. Managers hire people they trust, they promote people they trust, and they are betrayed by people they trust. The role of controls is to protect us from those in which we have faith—protect us from those we trust.

The golden rule of internal controls, the one thing you can count on—internal controls break down. You can have the best controls in the world, but they will break down because humans are involved.

Simply stated, you must get commitment from management. It starts at the top, and I’m talking about the heads of your organizations, the top elected leaders as well as the top appointed leaders. The number one people must be against fraud and corruption. We can talk until we’re blue in the face. We can talk forever about corruption amongst those of us with financial responsibilities. But what must really be present is executive commitment. It is essential. Here’s the question we ask executive management: Do you want to see fraud? And some of them say, “No. I don’t want to see it—no.” That’s the wrong answer. The right answer is, “I don’t want to have it, but if it is there I want to see it.”

Here’s a one-line item for you: Real leaders want to see problems. Bureaucrats don’t, and those who are too political do not. But real leaders want to see problems because they know within problems lie the seeds of improvement for the future. You have to want to see it.

A number of years ago I was talking to the chief executive of a small company. The chief executive of the small company and I were discussing willful blindness. And he said, “Courteney, I am surrounded by people who tell me things I want to hear. I pay very good money to those people who will tell me those things that I do not want to hear, but that I really need to hear.” He said it is like being a general going into battle. I turn to my lieutenant and say, “Do we have fuel for the tanks? Do we have bullets for the guns?” And not wanting to disappoint me, he says, “Yes.” He said, “I can handle the problems I know about, but I cannot handle the problems I don’t know about.” You must make your executive management realize how important it is to want to see problems related to fraud and corruption.

One of the things I hear regularly from people is, “We don’t want to report fraud to law enforcement. We don’t want to report it to the auditors because of the bad publicity.” How many of you have heard that? It is bad publicity to have fraud. Here’s how you deal with that as an issue. When someone says it is bad publicity to have fraud, you compare it to the worst publicity. Never disagree that fraud is bad publicity, because fraud is bad news, isn’t it? It would be silly of us to think it is good news. Fraud is bad news, but worse than fraud is cover-up. Fraud is an embarrassment. Cover-up cost Nixon the White House. Fraud will get you an article in the newspaper. In the United States, cover-up will bring out investigative reporters with television cameras. Fraud is a bump in the road of life, and an opportunity for management to do the right thing. Cover-up cleans out executive offices and cleans out elected officials and destroys political parties.

Within agencies there should be a written fraud policy that reduces the likelihood of mishandling. This is so important, I will say it again. Have a fraud policy.

You can increase management accountability by adopting the following: Management is responsible for knowing the exposures to fraud in their areas and for detecting suspected wrongdoing. I need to tell you a story. A number of years ago, before I became a consultant in 1981, I was Director of Audit for an insurance company. This was a smaller insurance company. We had 10 on the audit staff, which is much smaller than the really big ones. This insurance company had previously had severe financial troubles. They had lost money in real estate back in the 1970s before it became fashionable to lose money in real estate in the 1980s. They wrote off 95 percent of the company’s net worth.

The stock went from \$25 a share down to $\frac{3}{4}$ of a dollar a share. They filed false reports with the SEC. They filed false reports with the state regulatory authorities that, in the United States, regulates the insurance agency. The regulators came in and removed executive management. They brought in a whole new team—a new president, new general counsel, new chief financial officer, new internal auditor. I was brought in to start the audit function.

One of the first things I said was we needed a fraud policy. And the new team of executives agreed. One of the things we put in this policy is this sentence: “Management is responsible for knowing the exposures to fraud in their areas and for detecting suspected wrongdoing.” Those who reported to our president came to a meeting to discuss this written fraud policy. They agreed that the fraud policy was a wonderful idea. They could see the need for it because we told them about the dangers of mishandling cases. And we told them about the exposure to being sued if we fired somebody inappropriately. They agreed it was good to have a fraud policy, but they said, “There is one thing wrong with this fraud policy.” They said, “This sentence says it is management’s job to detect fraud. That should be removed. Get that out of the policy. Then it will be fine.”

“We’re in sales,” they said. “We’re in marketing. We’re in financial services. We’re in corporate services. Remove this from the policy and then it will be just fine.” Have any of you ever worked for a boss who looked over his or her glasses at you? How many have had this experience? This is sometimes not an encouraging sign, is it? Our chief executive officer was a great big bear of a man. He held up one of his massive paws. He looked over his glasses at his executives like this, and he said, “Hold on. You are the same people who have told me that no one understands your areas as well as you do. But now you’re telling me that others—the internal auditors, the public accountants, and the controllers department—know your areas better than you do yourselves?” There was silence in the room.

Have you ever been down to the seashore and watched crabs walking sideways? Have you ever seen that? All these executives started going to the left and then back to the right, and then to the left, and then to the right. Right then, at that moment, their belief changed about their responsibilities. They said, “It is our job, isn’t it?” And our CEO said, “Yes, it’s our job. It has always been our jobs.” He did one thing more. He went over to a flipchart, and he wrote down the letters, “P-O-D-C.” And he said, “When I went to college years ago, I was told that the job of the managers was P-O-D-C, which stands for planning, organizing, directing and controlling.” He said, “You know, this controlling is not an important part unless we don’t do it. And if we don’t do it, we can have fraud, waste, and abuse come right back at us and put us back on the front page of the Wall Street Journal.”

Now, I’m not going to tell you that that sentence caused management to worship internal controls. When auditors went down the hallway in that company, people did not sprinkle rose petals at our feet. But I will tell you we never again had a manager say, “It’s not my job,” because the CEO had made it clear.

As financial manager, one of the most powerful things you can do is to mobilize management. If you can mobilize management in the fight against fraud and corruption, it is worth more than all the control systems in the world. You cannot control crooks. You can make it more difficult for them, but if the people at the top are crooked, you have no chance. Fraud policy will not stop corrupt leaders, but policy can encourage well-intended managers to do the right thing in the moment of truth.

I want to tell you another story about a different CEO. This is the chief executive officer of a company where we do fraud awareness for managers training. We’ve done probably 20 training courses for them over the years and trained executives from the top all the way down. This particular executive ten years ago went to the Director of Internal Audit and said, “I want you to work with me to improve the integrity of our organization.” Did you hear what I just said? The CEO said, “The integrity of the organization.” He didn’t say, “Help me get better controls.” That’s nice too. But he said he wanted “the integrity” to be better.

One of the things that he felt was very important was to make sure that management understood their responsibility for controls. About two years ago he had a meeting of all those who reported to him. This is the chief executive officer. They were sitting around the boardroom conference table, and he said, “I’d like everyone in the room to stand up.” And they all stood. And the chief executive said, “Those of us standing are responsible for the control environment here in the company.” He then pointed to the auditor and the chief financial officer and he said, “I would like you two to please sit down.” And they sat. He then said to his staff, “Those of us who are still standing have primary responsibility for the control environment.” He said, “I hope you will use this fine resource we have,” and he

pointed to the internal auditor and he pointed to the chief financial officer, “These are our resources to help us do our job.” Isn’t that powerful? Isn’t that strong?

If the CEO wants to fight corruption, it will be fought. If the CEO doesn’t want to fight corruption, it won’t be.

How many of you have a report that goes to executive management at the highest level that details all known dishonest activity? How many have a report like that—a fraud summary, a suspicious activity report? One? Two? Three? Four? Five? Five of you have that. How many don’t have such a report? That leaves a lot of hands. How many don’t know whether you have such a report? This report is a wonderful idea. Let me tell you why it is a wonderful idea. It reduces the chance for cover-up. It encourages management to do the right thing. I will also tell you that most members of management don’t realize the amount of fraud that is going on in the organization.

One of our technology clients is very large. They have over \$40 billion a year in sales. We started doing fraud training for them a few years ago. We’ve never trained their managers, just their audit staff. I mentioned that everyone is losing at least one percent of total revenue, and in that company that would be at least \$400 million. The Director of Audit went to the Director of Security and Investigations and said, “This silly consultant from Dallas says everyone is losing at least one percent of total revenue to fraud. Do you think that could be happening here? And the head of security said, “No, we don’t think so. We think we’re losing three to five percent.” That was a big surprise to the head of auditing. And he said, “Well, how could that be?” The head of security starting listing the cases and it suddenly became apparent to them that no one had ever listed the cases before.

Best practice is to list your cases because it will encourage management to do something about them.

Let me tell you a story about a client. One of my clients has a suspicious activity report. This is a very large organization. They had a sales manager who made very good money. He made over \$300,000 a year. Even though he made over \$300,000 a year, he decided to cheat on an insurance claim, and he changed documentation to get another \$125 on an insurance claim. That was turned over to the security investigators for that company. They investigated and found out the man indeed had done it two other times. The total he had stolen was about \$300. In that company, the man’s bosses did not want to fire him. They said, “He’s a top performer. We don’t want to get rid of him. He is too valuable to lose.” But in this particular company, it went on to the suspicious activity report, and on the suspicious activity report there is a column that says, “Disposition,” or what happened? Here it said the person was disciplined and told to pay the money back. That went up in the organization all the way to the chief executive, who looked at it and said, “Fire this man.” Isn’t that interesting?

There has been a lot of talk about transparency at this conference. I think transparency is wonderful. I don’t really know Transparency International well, but I know them by some of their work and I like what I have seen.

I want to give you another word, though, and that is sunlight. One of the U.S. Supreme Court justices a number of years ago said that, “Sunlight is the best disinfectant.” What that means is if you let people see things in the light of day, sometimes the problems are resolved.

Fraud training is essential in getting executive commitment. You want to train managers including executives in fraud-related expectations. Managers need to know the dangers in responding to fraud. I’m going to mention five dangers to you. The first danger is mishandling the investigation. The second danger is civil litigation or being sued. That is not as big a problem in other parts of the world as it is in the United States. We do know how to sue each other, and we do it with a vengeance. Some of my clients have paid large settlements for mishandling people who are suspected of wrongdoing.

The third danger is career damage. The most damaging kinds of fraud, those that give you the most difficulty, are fraud by executives and elected officials, and fraud for the benefit of the organization. I talk to one or two people a month who have lost their jobs because they tried to do something their organization was not ready for them to do. In other words, they tried to handle dishonest and fraudulent activity. I think that is even a bigger challenge outside the U.S. than it is in the U.S., isn’t it? Is career damage a real danger for you people? Isn’t it? Yes? Career damage is real. I think it is so important to have policies in place so you can have strategies that force you to do the right thing. If you have a policy that requires you to fully investigate, that requires you to report, then you are much safer. I’m not going to be so foolish, though, as to encourage you to do your jobs. Sometimes in this course we teach the Serenity

Prayer. I call it the auditor's prayer also. "God grant me the serenity to accept the things I cannot change, the courage to change the things I can and the wisdom to know the difference." We teach fraud. We do not teach suicide.

The fourth danger is physical violence. This stuff is serious. Some of you were talking about formidable opponents. Some of you are dealing with strong opponents. There was a suggestion earlier from the gentleman from the World Bank that you could call an 800 number and there was a place to go on the Web and ask about fraud. I encourage you to do that. But be aware, every time you do that you leave tracks right behind you. Do you want that? Now, if you're talking about embezzlement by a low-level employee, that's probably not a danger. If, on the other hand, you're talking about the Premier, the Prime Minister or the Head of Technology in your agency, it may be dangerous to do that.

Managers need to know how to detect fraud. They need to know why internal controls break down. Managers need to know how to balance healthy skepticism with trust of others. One of the real barriers to training management in fraud-related matters is they say things like this, "Well, I trust our employees here. We don't want our employees to think we don't trust them." So they'll push back from controls. They'll push back from these issues. So you have to reconcile that for them. And we do that in classes with managers. We do that by telling them all fraud is done by those we trust. We'll ask them, "Have you ever had somebody steal here at the agency?" And they say, "Oh, yes." And then you ask them, "Was that a trusted person?" And it always will be. So what you do is what I call belief change with managers, and you get them thinking that they have real responsibilities for governance and stewardship even though they trust the person.

Executives and elected officials need to know the power of executive example. I've seen executives that set the best tone, the best example. I've seen some who, when they got to a certain position, no longer had a personal expense. One of my clients called me about a year ago. We had just done a fraud program for them. He said, "I have to tell you something. One of the vice presidents just came in and gave me three dollars." I said, "What was that for?" Here is the story he told me. He said, "Last night I had to send a fax to my son. I had to send him some documents. I don't have a fax machine at home, so I used the company fax machine outside my office." He said, "You know, I realize that it will cost more for the company to deposit this \$3 than the \$3 itself is worth." He said, "Ever since that training, it has become really obvious to me that I must set the best example." Isn't that powerful?

Executives must be reminded. Some of them know it already, but executives must be reminded that everyone is watching them. I used to work at a place that had a problem with money. They left money out. Specifically, they left \$2 million out at night. It was all in checks; it was not currency, anyway. The vice president said he wanted the managers to stay and make sure everything was locked up before they went home. And his assistant said that would not be practical because the managers and supervisors liked to leave early to beat the rush in the parking lot. Isn't that silly? Those of you in this room need to know that others are watching you at all times. And your executives and managers need to know that they are watching you. They watch the long lunch hours. They watch the personal telephone calls. They watch what is on travel expenses.

Write down these words: How Do We Know? How Do We Know is a tool for your executives and managers. How Do We Know? It applies everywhere. We started discussing it with work hours. One of my clients had people who worked around the clock—they worked a night shift. I started asking their managers, "How do you know the people are there at 3:00 A.M. on Sunday morning?" And the managers would say, "Well, they fill out a time sheet." And I said, "Well, how do you know the time sheet is accurate?" And they say, "The supervisor signed it." "How do you know the supervisor was there?" And finally they say, "I don't know." Then one very experienced manager said, "I will tell you how I know, Courtenay." I said, "How's that?" He said, "I go in." He said, "Not every night, not every week, but every once in a while I'll go in to see what is going on at 3:00 A.M. in the morning." I said, "What have you found?" He said, "Well, I found the people who went fishing." I said, "Really?" He said, "Yes. Three went fishing and their friends signed them in. They were very surprised to find that I'd come in. I found the people who went out for a meal. They were allowed a short meal break, but they spent several hours flirting with the waitresses at the coffee shop and having a meal. They were surprised. And then I found the people sleeping. They had beds set up in the back of the warehouse and took turns having naps." So it is very important to go in.

How do we know the price is right? How do we know they delivered first-rate materials? How do we know they delivered all the materials and not just some of them? How do we know the work was done by the attorney, and not a secretary? How do we know the consulting firm worked all those hours for which we were billed? How do we know

that trip was for our agency and not some other? All these questions are extremely powerful tools for executive managers.

The title of this presentation is Fraud at the National Level. We've talked about very important things, but there are two concepts I'd like to introduce to you. The first concept is macro fraud. I use the term macro fraud to describe fraud that is a threat to the total organization. It could cause the demise of a company, or an industry. In the United States, the savings and loan crisis was a macro fraud. A defense contractor that is defrauding the federal government can lose their right to do business with the government. That is a macro fraud. I would think that in your environment a macro fraud would be one that would cause a failure of a system or something that is so bad that you could lose the ability to get funding from the World Bank or an agency that is supportive of you.

Here are some lessons to remember to avoid macro fraud. Thieves flee regulation. Illegal activity goes to the area with the least regulation. We saw that years ago in savings and loan in the United States and some insurance companies.

Also, thieves ingratiate themselves to politicians. They give gifts, they give the use of airplanes and homes, and they allow politicians to participate in investments. And when the going gets tough, the politicians intervene on behalf of the thieves. We now teach two courses through the Institute of Internal Auditors. One is Fraud Detection and Investigation for Internal Auditors; the other is Purchasing Fraud. In the Purchasing Fraud, we're talking about gifts. Psychologists tell us that gifts are compelling at a subconscious level. If I do something nice for you, at the subconscious level, you will want to reciprocate or do something in turn for me. I don't know whether they have this outside the United States, but in the United States there are charitable organizations that solicit money. One of the things they do is send mailing labels out for you to use on your mail. They have your own name and address on them. People will send money to those organizations even though they don't care about the organization, because they got the gift. I would like a show of hands. How many of you have given money to an organization that sent you a gift? Has anybody done that?

Another lesson losses are hidden in non-regulated, non-consolidated subsidiaries. By moving the losses there, they can be kept away from watchful eyes. That actually happened in an organization back in my public accounting days.

Remember also the perpetrators could be anybody. In recent cases they've been successful people. In one case the perpetrators included a partner in a CPA firm who was originally fooled and then corrupted by his client. Three of his partners knew he was receiving payments from a client and yet did nothing about it. That happened right here in Miami.

Besides macro fraud, the other concepts I'd like to cover is systemic fraud. That is fraud that is a way of life. In an industry or an organization, this includes over-billing by healthcare providers, false claims for unemployment insurance, kickbacks in some kinds of purchases, extortion on construction sites, false travel expense claims. This would include customs officials, with their hands out, taking payment in exchange for letting somebody go through customs.

Now, this is how you fight such fraud. First of all, call it fraud. Call it illegal. Get the people at the top to agree that it is unacceptable and they aren't going to tolerate it. So often, as finance people, we are out there by ourselves—a lone voice in the wilderness. You must get the people at the top to agree that these things must stop. And by the way, if you can't get that agreement, you're really wasting your time.

Tell people that the activity will not be tolerated in the future. Tell them, "From this point forward, this is an unacceptable practice." By the way, a lot of fraud is an exaggeration of a previously accepted practice. A lot of what goes on that's improper is an exaggeration of something that's been tolerated. So you must be very specific as to what's okay and what's not okay.

The area of corruption and fraud is very complicated. It's got tremendous political and social implications. It is not easy. If you have a situation where salary levels require somebody to get gratuities or payments, it is awfully tough to tell them to quit taking it.

Look for the occurrences of the worst cases. Look for the occurrences that can be used as examples.

You spend all the money necessary to make the cases against the perpetrators. And you spend, in the United States, if necessary, \$100,000 to make a \$10,000 case, because you are dealing with a systemic problem and you want to spend all it takes because you are sending messages. And you publicize the cases.

This is what's being done with healthcare in the United States right now. They are spending a lot of money to try and make cases and get publicity and slow down the health care fraud problem. Part of the approach includes criminalizing activities previously tolerated. By the way, one of the dangers that I didn't mention earlier is going along with something that's been accepted and tolerated forever and ever and ever.

Belief leads to action, and action leads to results. By the way, that is what your work is really about, isn't it? It is about your own beliefs about corruption, your own beliefs about what can be done about it, and it's about changing management's beliefs, executives' beliefs and the politician's beliefs about what can be done.

Are you going to leave here committed to making a difference? If you are, just say yes. This is not easy stuff, and don't leave here thinking that I think it is easy. But I've found that working with management on fraud-related matters can be one of the most satisfying things you can do. I wish all of you the absolute best with this.

Thank you for having me. I really appreciate it.

Internal Audit of Municipalities

René Fonseca, Consultant on Government Auditing in Guatemala, World Bank

Good afternoon. Let us talk about the basic functions of the municipalities. They basically all do the same things in all the countries. For example, so far as the infrastructure, they fix streets, they create parks, bridges, markets, parking lots, etc. As far as the urban area, they see who the taxpayers are, they control the population and health, water, cleaning of the city sewage and education. In many places, they are in charge of primary education, art schools, the music conservatory, perhaps a national theater. At the social level they manage many different small organizations that have to do with the community. They handle community transport; they control traffic, police, and the fire department. You will see that the function of internal auditing goes beyond what the municipality does.

Municipalities have a number of problems—in the first place, simple problems with the budget. This has to do with demographics. Many people in the main cities come from the countryside, and this creates a number of imbalances and the budget is really not adequate for the needs that are presented. Really, municipalities are in debt and they often don't have the capability to meet even the most immediate needs.

The political aspect. In many cases small municipalities do not have what they need. The big news about it is when they do it's because there are representatives in Congress who fight for the budget of that municipality. Therefore there is a great advantage to being well connected.

The social aspect. There are a number of things in the city that can hurt that sector. You have beggars, for example, drug addiction. There are a number of people who are homeless in the streets and municipalities have to do something about them.

The educational point of view. They have to educate the population in terms of transit, in terms of cleanliness and a number of other aspects. They also have to educate the people who are running those municipalities. For example, what happens in a small municipality? Usually the mayor is elected because he is very popular but perhaps he doesn't have the necessary education. He will have a number of problems because he is unable to administer a municipality. I know cases of mayors who have gone to jail because they unknowingly signed a document containing an illegal transaction.

Control aspects. Because of the magnitude and the size of the municipalities, some of them will have a well-organized situation, especially those institutions that have to do with the big cities. In small municipalities, they really don't have the control culture; therefore they have total disorganization.

System aspects. There are no systems. There is no accounting. Therefore, there is no internal auditing. The results are malfeasance of funds, bad utilization of funds.

And personnel aspects. I said before, in small municipalities, there are personnel who are not prepared, who do not help the administration. Every one of those personnel in the small municipality was inherited from somebody else, a father dies and the son goes in to do the job.

Within these municipalities we oftentimes have a constable doing the internal auditing. Tradition says that he is considered the center of responsibility. The mayor, the representatives from these municipalities demand that the internal auditor is the one who checks and in many cases signs off on these documents. This gives them a backup so that they really become a go-between for the responsibilities of the people.

The auditor in this dimension is only concerned that the document meets with legal requirements. The only thing the auditor is looking at is a document, that there are available funds in the budget, the necessary signature. He doesn't know what exists behind this document. You have to go deeper into detail in order to establish that. The internal audit review is supposed to ensure that everything behind the document is okay. This is a lie. We know that a number of things can go wrong. The question that we have to ask is where were the auditors when this happened? Well, they were checking papers and stamping their signature. They did not look for benefits derived as a part of their act. In other words, internal auditing is checking only the legal part of the transaction. There is no review to see if that transaction is really benefiting the institution, in this case the municipality.

They count the documents, that's about the only thing they do. They inventory the documents. They don't evaluate the systems. Of course, the municipalities do not have appropriate systems; therefore the internal auditors do not have the option to evaluate the systems. They review the legality. A transaction is well done if it has the necessary signature, it is within the budget, supposedly it went into the warehouses and that's the end of that. Are they using these funds correctly? Are they using the services correctly? Are they evaluating? Are they setting parameters to see how efficiently the funds were spent? They are not.

Physical controls. They don't check the cost based on the benefit. And auditors are not getting involved in that.

What is the process for internal auditing? It does not include a planning stage. The experience of the auditor is paramount. Many people who have come out of the general accounting office will go into the internal auditing department. And there is a very big difference between internal auditing and external auditing.

Without concrete objectives, there is no planning. It is based on the experience of each auditor, usually a former accountant from the operating area, and therefore the objectives will not be well designed.

Supervision, in many cases, does not exist. One person does everything. This person has direct contact with the mayor.

There have been a great number of presentations made at this conference. Everybody talks. Everybody talks about integrated systems for information, integrated systems for financial administration. They talk about management. The gentleman from the World Bank said that we should call it new management. Right. You have all seen a municipality in your different countries. Often they do not even have a computer. They say that internal auditors should be involved with the database in an integrated management system. They're not. They check documents, which is what they know the most about, and that is what they practice the most.

Besides, we have other difficulties in this: lack of administrative culture. What can we demand of people who don't even study after high school? They don't have the possibility of changing things. A technical education is very limited. These people are prepared only to review things. In the presentation from Chile, the gentleman said that all of the effort of the general accounting office is dedicated to evaluating expenses, not income. In our budget nobody steals anything, no one takes anything. No, they steal in the process. They raise the prices. They deviate the resources too.

The upper echelon is responsible. They have to make sure at the executive level that the situation is under control. These executives should give them a different focus, and also provide the required technology.

What it is we have to do? First of all, we have to give them a process. We start with the evidence, if you will, which is the work of the operational areas. These are the clients of the internal auditor. We add the integrated management system. We have internal controls through legislation. And then we audit. We audit the financial operation, the legal operation, and the operation of public works. We audit the computers, environmental, ecological. The process of auditing is the evaluation of this evidence and the reports and comments and recommendations that we make.

We have to change our work focus. Internal auditing has always been a management tool. But to be a useful management tool, you have to have the credibility of the users. How to win that credibility? First of all, auditors have to be well trained. Auditors should have the vision to evaluate. They should see the institution as an entity that provides the services. Auditors should think and act as a manager. How can we serve them? How do we advise the management, in this case the mayor, when he doesn't know anything about it? A purchase document has 18 different signatures, 18 different stamps. How many do you think were involved in the internal auditing? Eight of them were internal auditing. In other words, it passed through the hands of eight internal auditors until it was approved. There were signatures; there were stamps and all that. We cannot pretend that we are advising the mayor when we are reviewing only the documentation. We need an internal auditor with many skills who knows what is happening in the market.

All the institutions are talking about total quality. The executives say let us look for total quality, give me a course, and then they forget about it. There is no further involvement from the executives. There is analysis of value added; the different processes should be evaluated in this dimension. Benchmarking is being utilized for risk control. There are a number of things in the

market that internal auditors should know about in order to provide this advice that we're talking about.

But instead, this is the reality. The internal auditors say that 20 documents have not been signed. Recommendation: No document should go out without being signed. "Where do I sign?" You sign these 20 documents, that's it, that ends the problem right there. We have to look for other things. I don't care that they haven't signed the 20 documents.

Another case of what is happening is that internal auditors evaluate a specific point, for example, accounting. They evaluate accounting, they give recommendations for the accounting, but the process has other connotations. There are other administrative units that intervene in all this. There are other processes that are interconnected. Many times we help the accounting but we do damage elsewhere. We need a global vision for action. Auditors should evaluate each department like the client does, from the clients to the administrative units to where the technology is. There are different processes, and therefore these processes have to be evaluated and the internal auditors, in my opinion, are the guarantee for control.

This should provide support for promoting ethics and transparency, which is talked about a lot, but not often carried out, especially ethics. I say that corruption is like gossip. Everybody does it and nobody wants to acknowledge it.

Another facet is the introduction of integrated systems. What are we going to do there? We must generate a process for evaluating this. If you have the technology, planning the audit should be part of the database. The database, when analyzed, will allow us to prepare audit programs and then carry out the work. We conducted research and we concluded that we get 80 percent of the information we need from systems and 20 percent from the work environment. If we talk about ethics, 20 percent of the assigned time should be devoted to getting information from the database while evaluating the database environment should take you 80 percent of the time. So it means that conversely they do have a relationship.

In the final analysis, you have your auditor's report and it can be on diskette or maybe on paper. In Guatemala it is this way. The general auditor goes to the database and he takes into account the fact that you have a unique taxpayer number. And then we say, list all purchases that are less than \$10,000 that are related to this taxpayer number. And then he can ask the database to tell him whether the service or goods was received or not. He can get information about contracts.

The minister of finance in any country plays a very important role. For such reason, the Chilean Controller General and the Peruvian Controller General said that they had no problems. If they have anything left over in the budget it was theirs. In other countries they reduce budgets. In one country, 10 percent was reduced. And it was said that it was not enough. It is a political matter. That's the problem. There is no financial independence. What can we expect from a GAO or an internal audit unit? They cannot do their work. We cannot talk about management. We cannot talk about ecology service. How can we measure this if their budget gets cut? How can we say that the budget was not executed pursuant to the amount? Is that efficiency?

Information system assessments. In many countries this takes place. This operates on gossip. Some places they don't even need e-mail. Something takes place in the basement and in two weeks the entire building knows about it. It's incredible. They don't need any technology. They find out about it real quick. And then apart from the tools used to process information, the general auditor must check how the information is tailored to executives. At this time we are assessing the budget. There is a management information system which is extremely good. It is large. It's powerful. The executive, whether he is a mayor or an administrator, can access any information he wishes on the execution of the budget. The question is how many people are using this?

Internal auditors play a very important role, yet they are not taken into account when loans for modernization are made. Internal auditors should be included so they can follow up later on. GAOs aren't even included in loans. Perhaps the system includes hiring private companies. Our partner has new visions and I believe that this could change a lot as far as the institutions are concerned.

How reliable are information processes? The internal auditors that I just described, can they measure this? Can they evaluate technology? Can they talk about technology? We must include the internal auditors at the outset of the development of systems; otherwise it is going to be very tough.

Will the citizens use this information? GAOs are opening windows to inform. So we must set up strategic alliances, for instance, with the media. What should not be given out? What should we report on? For instance, the minister of finance has a computer; anybody can go in and get information. We have to evaluate that information in order to see what can be supplied. If it cannot be evaluated, that should be the end of it. We should promote transparency in processes and systems, but only if the information we provide has been evaluated and deemed appropriate.

Here is an example of what is taking place in Guatemala. The new budget is a program budget. We have examined the processes in order to determine the action of the accounting entity. There are two programs, auditing and control of legal operations. These things complement each other. Each has specific activities such as direction, coordination, external audits, document specification and recording and follow-up on opinions. There are leaders such as the head of the entity, the administrative officers, the technical computer directorate and a legal directorate.

Supposedly the program provides results. But what happens? The minister or accountant has discretion to take one line item and transfer it to another. If I have the discretion to transfer these funds, how can I assess that these activities over here are actually driving the products? Internal auditors do this, and not even the GAOs examine this situation. We just know that the action occurred, that it was legal and there were amounts used or not used.

Reporting process. It should be expeditious and transparent. Everyone should know what to do, how to do it, and to whom one should report. Recently we had an experience. A mid-level director was called and asked, "Why is this happening?" The answer was, "I don't know." Why didn't he know? Because they had generated a direct channel. The last employee had a direct relationship with the person way up, and they bypassed the mid-level director. Every echelon must be respected.

The vision and the mission of the municipality should establish the institutional values that the employee is to abide by. What is the punishment if he does not comply? It should be clear to everyone that works in the municipality that if they don't comply, something is going to happen to them.

Any institution has relationships. We have an economic relationship. Municipalities, on the other hand, are independent and autonomous entities and they generate indebtedness and sometimes they commit their future revenues for 10 or 15 years and the next mayor has nothing to spend because everything has been committed.

Who looks after institutional image? No one, right? Much less internal auditors. They are bent on looking at paper. And when we talk about institutional image, we mean that the action of the internal auditor must go beyond the limits of the institution. We must look for an administrative culture.

An ethics code must be drawn up. We drafted an ethics code that contains eight items. It doesn't take up a whole page. Usually codes of ethics take up 20 or 30 pages. Who reads them? Right? Large companies just have five or six items that are the commerce of the company.

When we talk about the legal and political areas, we have to set up alliances. It occurs to me that GAOs could set up strategic alliances for a whole host of institutions

In the past, thieves were hung from crosses and now crosses are hung from the necks of thieves. How many big fish do we have in Miami that have honesty hanging from their necks? Not just in Miami, but in other municipalities. What should we do with them? Because the initial orientation of union is lost. Now they fight so that they can work instead of getting better benefits. As far as benefits are concerned, how will the people become familiar with the benefits to which they are entitled? Who are the spokespeople with this information? Who is going to open the doors of the institution so that there can be knowledge?

In order to do all of this, we require support for internal audit of these municipalities. I tell you that many don't want to understand, so we must educate them. In this case we are conducting a program so that the GAO speaks to them. They are going to speak to them about the benefits of internal audit and how to use internal audit. How can quality control help the top executive? This doesn't happen often. Many people, after they design the systems, send over the internal auditor to evaluate. What can he evaluate if he has no knowledge? He had no access to technology. He does not know the details of those systems. So they should be there at the beginning.

Permanent training. I don't know how many internal auditors that we have here. Anyone who is an internal auditor, please raise your hand. There are a few of you. Permanent training does not have to happen each year. They don't have to come here every year. But we must have internal training—training so that each general auditor becomes an institutional specialist who is familiar with his municipality and knows what he must do. And this extends to the institutions also.

Hire auditors with specific characteristics. We must create parameters to hire people. Take a look at some countries. They say that internal audit is the valley of the dead. We have found that when specialists in karate or soccer players are about to retire, they send them to the internal audit department. These people should have special characteristics—people who see beyond just paper.

Disseminate the role of the internal auditor to everyone. The manager should know the attributes of the journal entry and know the requirements for each user so that he can abide by what the internal auditor says.

There should be a requirement to follow the recommendations of the internal auditor. It should require that within so many days, actions taken by the person affected should be reported.

Support by controlling organizations. When they do the job right, the major findings don't come out because auditors are asked to cover things up. Right? The upper control organizations must support the internal auditor and provide access to technology which is extremely important.

In Guatemala, we have a central database in which the finance ministry has all the information concerning the entire public sector. But in each one of the institutions there is a unit called "internal auditing" which is connected to the local database, in this case to a ministry. Here they can do many things online. Here they have the necessary technology. In this case, it is not a matter of technology; it is a matter of changing the attitude—changing their situation. At the same time, this internal auditing station is connected to a database that is being designed, in this case, at the general accounting office to do strategic planning. And look what they have. For example, they have strategic planning execution, communication of results, administration of human resources rules and a methodology report of internal auditing. They have external auditing, management indicators and the possibility of hiring private firms.

What does the system do? The system looks at the totality of the institution to be audited using certain parameters. It could be the volume of the budget, the volume of personnel, the volume of transactions, and the problems that they may have had to correct, turnover in personnel. Then the dimension of the auditing plan is born. For example, let's talk about social security. The module for social security identifies who the auditor is that has the pertinent experience and they assign that task to that auditor. If they don't have people on-board, the module identifies three private firms so that they can hire the appropriate firm to do the auditing of the social security institute.

Then they generate the annual plans for auditing and the auditing report. There is a cloud here where all these reports come in. They are held to the light to see the different characteristics, and then they appraise. This is also another parameter to select the institution that should be audited.

What are the tools that internal auditing needs? In this case they are integrated systems and auditors should have the same technology because otherwise they will not be able to evaluate anything. Besides having the technology they have to have the knowledge.

They say that the moment that they implement all the different computer systems, the internal auditor and the external auditor will not have any work to do. Perhaps from the computer point of

view, maybe he is right. There are a lot of processes that are done so fast that we do not need a lot of people. Maybe so. But who makes those systems work? It is the people who run the computer and use the computer who see how they do everything. Then they know how to violate a certain rule. The auditor's job will never end.

We are studying different packages to review the data of the general accounting office. We had a program called IDEA, and now we have seen another dimension. In this data warehouse, for example, you double the data and therefore we can do all kinds of analysis. In other words, we are going to the paperless office. The auditor will not have any workpapers. He will have it in diskette probably. But this is the culture. You have to change the culture.

You have to analyze the value added of the different processes. One has to do the analysis, the value added or the pluses. Which steps get value added to it and which steps do not? And in this, we have not yet been involved. The institutional environment has to have this internal strength in terms of strategic planning in order to reduce the danger or eliminate the threats that might occur. The auditor should determine for each client, its strengths, its weaknesses, its opportunities and its threats. If internal auditors are not familiarized with total quality, they will not be able to evaluate these processes to see whether they are beneficial to the institution.

The auditor has to change his point of view. He has to change his attitude. He has to be an internal auditor who is well trained in the new computer technology. He has to talk about the environment—what is happening there. He should be supportive of the institution in the first place.

He must be confident in his strengths. Otherwise he will not be able to function. He should have confidence in his knowledge and in how he handles the technology. If they don't give him technology, what confidence can he have? If he doesn't have confidence, the executive will not back him up. If he doesn't have confidence in the technology, how can he advise the mayor? Therefore it is essential that he has the necessary training and experience.

The development of internal auditing at the municipalities needs training and technology. It is not possible to change if we do not have the technology, if we do not have the training of these people. They should not only be checking papers. They should also go out into the processes, to see the processes, and then go see the products of those processes in the population. Internal auditing should participate in the changes that occur in the municipality so that they understand what is happening, so that they know when to go in, who to go to, what technology they should utilize.

The supreme auditing authority should develop strategic alliances with the press, with the ministry of finance, with the internal auditors themselves. It should form a national commission of auditing. I believe that this is something that will eventually make the criteria uniform. Uniform evaluation criteria would make the results more concrete and you can really change things.

So what is it that we need? We need a change of attitude on the part of the auditor. This means a change in his culture. He should evaluate the complete process. It should not be only a transaction, but the process itself. He should use existing technology. In other words, if there is

the latest version of technology on the market, the internal auditor should be familiar with that. He has that technology within his reach. Then he should identify the causes for the problems so that he can improve the municipalities.

I saw a report the other day; they had not paid the payments according to the law. Recommendation: All of the payments should be paid according to law. What a great contribution the internal auditor made in that case. That's all he said. He has to investigate why the payments were not paid according to the law, and if they were not paid according to the law, who was hurt? The government is the employer. And how do we counteract this situation?

Somebody said here before that the integrated systems give you certain conditions for security. One of them said the consistency of the information on the report reflects the process. Who will watch over that? Who will tell you, "Hey, you are entering something here that is wrong."? There has to be an internal auditor close to the situation. The internal auditor should be a promoter in the fight against corruption. We have not discussed this nor have we said what it is that we do as auditors. When we do not plan things well, there is a moral-ethical implication. We have not gotten into this part. We are talking, but we are not seeing ourselves in this. I believe in that sense that the internal auditors have to change.

We have to give him training—all of the training that is necessary to give him all of the mechanisms to convince him of the necessity for change, and this is the change of attitude.

We have to give him confidence in the technology and his knowledge. With experience he will have quality and this means a change in his culture.

In some cases they say that the auditors in general, the accountants in general, are in the sixth place. We have the teacher and the engineer. We have the doctors. In the fourth place we have—who was it—the lawyers? In fifth place we have the priests, and in the sixth place we have the accountants. They say the architect designs and the auditors don't design. But we design systems. We design controls. Of course we do. The engineer builds something, right. And the auditor, doesn't he build things also? We give them the financial statement through a number of different processes.

The teacher teaches. The auditor also teaches when he says we have to change this or that. We are also teachers. The priests? They give a blessing. Don't we, as auditors? I know there is someone here who has given the blessing to some company and made it go bankrupt. Why is it that we are in the sixth place? I'm sure all of you share my opinion.

Thank you very much.

Closing Remarks

Eric Harid, Comptroller and Auditor-General, Zimbabwe

I have attended most of the conferences, as Jim mentioned, in Washington and Miami since 1987. Last year I was a speaker.

One observation, on which I think you will agree, is that the conferences have been an important factor for us in our various fields of operation either in accounting or auditing. In my case what I found was each time I came I was grappling with ideas on what I should do in my office, but someone came, talked about it, and more or less helped me out with those problems. When I went back, I was able to tackle those problems better. So it has been an important aspect in that area.

Above all, you make friends. When you've got problems you know you've got someone you can phone at any time, fax at any time and today you can e-mail so that your problems are solved.

So if I may, on behalf of all the participants, we give our thanks to those people who prepared papers as speakers and delivered them to us. We thank also the organizers of the conference who contributed so much to its success. Thank you very much.