CITEL/RES. 33 (III-02)

IMPLEMENTATION OF THE AGENDA FOR CONNECTIVITY IN THE AMERICAS

The Third Regular Meeting of the Assembly of the Inter-American Telecommunication Commission, CITEL,

CONSIDERING:

a) That the Heads of State and Government of the Americas, in fulfillment of the Plan of Action of the Quebec City Summit, instructed the telecommunications authorities and the relevant regulatory bodies, working within the regional and sub-regional agencies and organizations to develop and implement before the next Summit of the Americas a cooperative and collaborative program to support a connectivity agenda for the Hemisphere; and

b) That CITEL has developed a draft *Agenda for Connectivity in the Americas and Plan of Action of Quito* as its contribution to the countries of the Americas, to act as a guide for the development of individual Connectivity Agendas and Plans of Action for countries which may find it appropriate; and

c) That the draft CITEL *Agenda for Connectivity in the Americas and Plan of Action of Quito* represents a significant and positive contribution to efforts underway in a number of forums to bridge the digital divide as a precursor to realizing the benefits of the information society; and

d) That the draft CITEL *Agenda for Connectivity in the Americas and Plan of Action of Quito* was presented to the ITU World Telecommunication Development Conference (WTDC) by the Chair of COM/CITEL and also a Common Inter-American Proposal, subscribed to by 19 OAS Member States seeking support for its implementation; and

e) That the WTDC agreed to include among the high priorities of ITU support for initiatives under the *Agenda for Connectivity in the Americas and Plan of Action of Quito*, recommending the use of mechanisms to help to achieve the necessary results for each country and region, and promote the exchange of information on the development of connectivity activities globally,

RECOGNIZING:

a) That further development of the draft *Agenda for Connectivity and the Plan of Action of Quito* is necessary and contains elements that are beyond the scope and mandate of CITEL activities, and require the collaboration of the governments of the hemisphere, of regional, sub-regional and multinational agencies, of civil society and of the private sector, to achieve connectivity in the region;

b) That continued participation by the telecommunication sector is of critical importance to implementation of an Agenda for Connectivity;

c) That Telecommunications Authorities of the Hemisphere must also contribute actively in the implementation process to ensure the success of connectivity in the Americas; and

d) The importance of the work done by CITEL in developing an Agenda for Connectivity in the Americas,

RESOLVES:

1. To circulate the Agenda for Connectivity in the Americas and Plan of Action of Quito that is attached to this resolution, taking into account the provisions of Resolution 133 of the XI Meeting of COM/CITEL, within the OAS Member States for further consideration, without having its content create any obligations for any Member State;

2. To undertake further consultations within CITEL via the CITEL Electronic Forum to permit COM/CITEL to update the Agenda at its XII Meeting.

3. To charge COM/CITEL to develop the Plan of Action identifying areas within the competence of CITEL based on the results of the XII Meeting of COM/CITEL.

INSTRUCTS:

1. The Executive Secretary of CITEL to convey the text of this resolution and the *Agenda for Connectivity and the Action Plan of Quito* to the OAS Executive Secretariat for the Summit Process, with a request that it be distributed to the OAS Member States.

2. COM/CITEL to continue the work by identifying areas of action to be undertaken by CITEL and monitoring progress.

3. The Executive Secretary of CITEL to establish a Discussion Group on Connectivity to serve the purposes described above, using the resources available on the CITEL Electronic Forum.

ANNEX

PRESENTATION OF THE
"AGENDA FOR CONNECTIVITY IN THE AMERICAS AND PLAN OF ACTION OF QUITO"

It has been a great pleasure and honor for me to represent the Government of Ecuador as chairman of the Permanent Executive Committee (COM/CITEL) and, especially, to preside over what the CITEL Member States have set as a primary goal: the implementation and widespread use of information and communication technologies in support of basic development programs with participation from all sectors of society.

One of CITEL's chief accomplishments has been its proposal to heads of state and government at the Third Summit of the Americas (Quebec City, April 2001) on the need for an action plan for cooperation in this regard among all Member States, and the drafting of this important document in accordance with its mandate. The drafting was done in Quito, and for that reason the Tenth Meeting of COM/CITEL held in Salinas, Ecuador, in December 2001 accepted the working group's recommendation to call the document the "Agenda for Connectivity in the Americas and Plan of Action of Quito."

Shortly thereafter, on the initiative of the Working Group to prepare for the ITU World Telecommunication Development Conference in Istanbul, and with strong support from the many participating Member States at the ITU Conference held in Istanbul, I had the honor of presenting the Agenda on CITEL's behalf at that important event. With the adoption of Resolution 39, the Conference decided to include support for this initiative among the high priorities for the ITU. This and other CITEL initiatives relating to the Telecommunication Development Plan for Indigenous Peoples and the development of national tele-health programs, the Inter-American Tele-Health Network and regional tele-education programs were major accomplishments. After review by this Third Regular Meeting of the Assembly, countries across the Americas must direct their efforts towards adoption and implementation of the "Agenda for Connectivity in the Americas and Plan of Action of Quito," as the best avenue for the collective development of their peoples, in time for the Fourth Summit of the Americas of Heads of State and government.

I want to recognize the fine work done by the group coordinated by Bill Graham of Canada and by all those working with him, especially Santiago Reyes Borda of Canada, Martha Rodríguez of Colombia, Enrique Díaz Cerón of Mexico, José Vivanco Arias and other CONATEL Ecuador staff. Substantial support was also provided by the COM/CITEL ad-hoc group chaired ably by Félix Castro of Colombia. All contributed significantly to the telecommunications initiatives that led to such great responsibility being placed upon our organization by the heads of state and government at the Summit of the Americas.

I also want to thank the Permanent Council of the OAS for enthusiastically supporting this initiative when we presented it in 2000 and 2001.

On behalf of all the Member States, the CITEL Secretariat and the Associate Members which contributed to its preparation, I submit this Agenda for the Assembly's consideration at its Third Regular Meeting, and have the honor of asking you to support this initiative.

Quito, July 29, 2002

JOSÉ PILEGGI VÉLIZ
Chairman, COM/CITEL

AGENDA FOR CONNECTIVITY IN THE AMERICAS

PLAN OF ACTION OF QUITO

July, 2002
FINAL DRAFT FOR CONSIDERATION
BY THE III CITEL ASSEMBLY

EXECUTIVE SUMMARY

The Heads of State and Government present at the Summit of the Americas held in Quebec City in April 2001 recognized that the technological revolution taking place has profound social, economic and political consequences, and that a new economy and society are being defined by an increasing capacity to access and disseminate information, and by the need and challenge of transforming such information into knowledge for the benefit of all citizens of the Americas.

In this context the Heads of State recognized the urgency of closing the Digital Divide, both between and within nations of the Americas.

As expressed by the Statement on Connectivity, the promotion of an Agenda for Connectivity in the form of national, regional and sub-regional strategies will facilitate the process of addressing and closing the digital divide and accelerate the integration of the hemisphere into a knowledge-based society, particularly in developing countries, smaller economies, and among rural and disadvantaged groups. In fulfillment of the Plan of Action of the Quebec Summit, the Inter-American Telecommunication Commission (CITEL) was instructed to work with regional organizations and agencies to develop a cooperative and collaborative program to support an Agenda for Connectivity in the Americas.

There are three fundamental components of an Agenda for Connectivity addressed in this document: infrastructure, utilization and content. There are also three basic premises for success outlined: first and foremost, that the agenda must be designed and implemented with an active participation of civil society including the private sector; second, that it must be based on principles of equity, universality and affordability, and third, that it must be geared to stimulate the production and availability of relevant content in critical areas addressing the fundamental needs of the citizens of the Americas.

This document provides a conceptual framework, outlines a set of general guidelines as a Plan of Action to design and implement a connectivity strategy, and includes an annex section offering detailed suggestions to Administrations in several critical areas.

The document calls for all countries of the Americas to formulate a vision statement of their own Agendas. However, in defining such a national vision, each country is encouraged to establish realistic objectives, goals and deadlines.

The Plan of Action provides a general framework and outlines a three step process for countries willing to design and implement a connectivity strategy appropriate to their circumstances. The three basic steps are: assessment and planning, implementation (including infrastructure, utilization, content, legal and regulatory framework and financing), and evaluation.

To facilitate the development and guarantee the continuity of national agendas, it is proposed that they be directed by a working group at the highest possible level, under the guidance and direction of the respective government, and with an active participation by civil society including the private sector. To maintain the autonomy necessary for the successful design and implementation of the respective agendas, the working group should be established as a Secretariat or National Coordination Office. Given connectivity's "horizontal" nature and multi-sectoral application, it is recommended that such Secretariats or National Coordination Offices not be assigned or subordinated to any particular ministry, department, or agency. These secretariats or national coordination offices should report directly to the Head of State.

AGENDA FOR CONNECTIVITY IN THE AMERICAS
AND
PLAN OF ACTION OF QUITO

1. Rationale

The Heads of State and Government of the Americas, gathered at the Summit of the Americas held in Quebec City, in April 2001, recognized that an extraordinary technological revolution of profound social, cultural, political, and economic consequence is under way, and that the region is entering a new economy and society defined by its vastly enhanced capacity to access and disseminate information and to transform that information into knowledge.

The Summit expressed its firm conviction that promotion of an Agenda for Connectivity in the Americas, in the form of national agendas or strategies, would facilitate the integration of the Hemisphere into an increasingly knowledge-based society, particularly in developing countries, smaller economies, and among rural and disadvantaged groups. The aim is to provide the citizens of the Americas with opportunities to develop and use knowledge so as to profit fully from opportunities to strengthen democracy, generate prosperity, and fulfill their human potential.

The Quebec City Summit instructed telecommunications authorities and the pertinent regulatory agencies to work with regional and subregional organizations and agencies to develop and execute, prior to the Fourth Summit of the Americas, a cooperative and collaborative program to support an Agenda for Connectivity in the Americas.

To carry out this task, the Inter-American Telecommunication Commission (CITEL) has coordinated the preparation of the document attached hereto. CITEL has undertaken this task in full recognition that the scope of an Agenda for Connectivity in the Americas necessarily extends far beyond its mandate and its authority to implement it, and indeed far beyond the ability of telecommunications authorities to implement on their own. CITEL also recognizes its limitations in developing an Agenda for Connectivity that is to cover all aspects society. For this reason, CITEL invites other regional and subregional organizations, including the other Partner Institutions to the Summit (Pan-American Health Organization, the Economic Commission for Latin America and the Caribbean, the Inter-American Development Bank and the World Bank) to join forces in establishing an Agenda for Connectivity in the Americas. In this context, it is envisaged that the Institute for Connectivity in the Americas (ICA) created at the Quebec City Summit could be instrumental in promoting and advancing the guidelines, principles and action items set out in this document.

2. Objectives of this document

The objectives of this document are:

- To provide a conceptual frame of reference and general guidelines to facilitate the assessment of a country's current state of connectivity, and the design, implementation, evaluation, and integration of national connectivity agendas.

- To highlight the importance for connectivity agendas to be understood, conceived, and executed as broadly conceived national state policy.

- To suggest some mechanisms to ensure the continuity of a country's connectivity agenda, and to underscore the need for active ongoing participation by representatives of civil society, the private and public sectors, regional, subregional and related public bodies, and international organizations in the life cycles of such agendas, that is, the assessment, design, implementation, evaluation, and integration phases.

- To underscore the urgency of establishing autonomous working teams at the highest possible level, under the guidance and direction of the respective governments, and with active participation by civil society including the private sector. To maintain the autonomy necessary for the successful design and execution of the respective agendas, such teams should be established as secretariats or national coordination offices.

- Given the "horizontal" nature and multisectoral application of connectivity agendas, the Connectivity secretariats or national coordinating offices should not be assigned or subordinate to any particular ministry, department, or agency. It is unnecessary to create new bureaucratic entities; these secretariats or national coordination offices ideally might report directly to the head of state.

3. Fundamental Elements an Agenda for Connectivity

3.1. Definition of connectivity

Connectivity is a society's internal capacity for communication with its global environment through the use of telecommunications, information technologies, and through the products of its content industries. The purpose of connectivity is to enable each country of the hemisphere to evolve towards the information and knowledge-based society.

3.2. Definition of Agenda for Connectivity.

An Agenda for Connectivity should be a national consensus document which sets out a series of interrelated strategies to enable full advantage to be taken of communications, information technologies, and content in the economic, social, cultural, and political development of a country, with the ultimate aim of preparing it to evolve towards the information and knowledge-based society.

3.3. Players

Each Agenda for Connectivity must be conceived and executed with ongoing active participation by society's fundamental elements: civil society including the private sector, and their respective governments. Participation by these players must be reflected in the entire life cycle of the connectivity process, that is, assessment, design, implementation, evaluation, and integration of the respective agendas.

3.4. Vision

All the countries of the Americas should formulate a statement of their vision of their own Agendas for Connectivity, and for them to implement their Agenda prior to the Fourth Summit of the Americas.

In formulating that national vision, each country should establish a target date and realistic goals to be attained within that timeframe.

A successful connectivity agenda should adhere to three premises.

The first premise is that it must be conceived and executed with the active and ongoing participation of society's fundamental players -- civil society including the private sector, and the respective governments -- and must be developed around three fundamental components: infrastructure and access to it, utilization of that infrastructure, and the quantity and quality of the content available on the information superhighway.

The second premise is that the design and implementation of a connectivity agenda must be guided by principles of equity and universality, that is, access for everyone everywhere, at a cost truly within the reach of most of the public, while preserving incentives for private sector investment.

The third premise is promotion of the use of infrastructure, and development of national and regional content to promote countries' respective cultural identities. The use of all languages within each country, including indigenous languages, without excluding or restricting access to international content is encouraged.

3.5. Components

Similarly, three components are essential to developing connectivity. These are:

- **Infrastructure**: a combination of hardware, software, human resources, and telecommunications networks including the audio visual services sector that facilitate a society's access to digital information and services.

- **Utilization**: the added value of the use and application of digital information and services for the purpose of generating knowledge to enhance the population's quality of life.

- **Content**: the availability of pertinent high-quality digital information and services for the region's people and communities.

Any country developing its Connectivity Agenda should take a comprehensive approach to these components together, and must take into account the needs and aspirations of each of the fundamental players described above and its socio-economic approach for the Information Society and approaches to hemispheric and global ICT initiatives.

3.6. Principles

The design and implementation of an Agenda for Connectivity must be guided by principles of equity and universality, while preserving incentives for private sector investment. Connectivity must enable trade expansion including the trading systems under regional trade agreements. Simply, all citizens must have access at a cost truly within their reach. But access is not enough. It is equally important to ensure that citizens have the skills necessary to make use of infrastructure, and an understanding of how it can improve their lives. Thus attractive national and regional content should be developed to promote cultural identities, enable the use of all languages within each country, including indigenous languages, without excluding or restricting access to international content.

A modern national regulatory framework plays a key role to support and sustain the development of the Agenda for Connectivity. It should be based upon the following principles:

- Equitable, universal and affordable access to information
- Transparency
- Technological neutrality
- A competitive ICT industry
- Effective civil society participation in the development of the regulatory framework
- Information protection mechanisms
- Training in the use of ICT services
- Protection the new information society's intellectual property
- Coordination of legislation governing the information and communications sectors

3.7. Strategies

For each country in the Hemisphere, linking the interests of the players, components, and guiding principles should lead to the design and implementation of specific national strategies. Those strategies should ultimately aim to promote major increases in citizen access to the global information infrastructure and to produce on-line communities (e-communities), on-line companies (e-business), and on-line government (e-government). To reach their goal, national strategies for connectivity should addresses a wide range of topics and priorities related to, *inter alia*, education, health, generation of employment, economic opportunities, investment strategies, democratic participation and protection of human rights, gender equality, economic development, particularly small and medium-size industry, commerce and services, tourism, the agricultural and export sectors, culture and recreation. Strategies should also be designed to accommodate periodic review and revision to ensure that they continue to be meaningful and to provide useful guidance to the players working to achieve connectivity.

4. PLAN OF ACTION OF QUITO

The Plan of Action of Quito outlines a three-step procedure for countries wishing to design and implement connectivity appropriate to their circumstances. The procedure is structured around the perspectives of the three fundamental players (government, the private sector and civil society). The three steps are:

- assessment and planning;
- execution (including infrastructure, utilization, content, regulatory framework, and financing); and
- evaluation.

4.1. Assessment and Planning

4.1.1. Assessment

In developing an Agenda for Connectivity, it would be beneficial for each country to carry out a national assessment to help define appropriate strategies, policies, and procedures. An assessment phase is important particularly because many actors in each country need to be engaged in developing connectivity. Participation in the assessment will help to show interrelationships and to avoid duplication of effort.

Annex I provides detailed examples of elements that should be considered for inclusion in a national assessment. The Annex follows the same topics as the recommended actions in the

execution section. The scope and scale of the assessment suggested in the Annex should not discourage countries from undertaking work on the Agenda for Connectivity. While in an ideal world, governments would have all necessary information, but that is not usually the case. The recommendations in the Annex describe an ideal assessment of a country's readiness to develop an Action Plan: such a comprehensive study is not necessary at the outset.

4.1.2. Planning

Successful implementation of the Agenda for Connectivity within a country requires the support and participation of civil society including the private sector, and the public sector, working in collaboration with the relevant international organizations. It is essential to establish a forum where the players participate in formulating policies, defining priorities, strategies, and plans of action, and in the nomination of a high-level government entity to coordinate the activities and ensure that these activities are carried out in the short, medium, and long-term.

Within each government, the planning, executing, and financing processes should also be defined, under the leadership of a high-level champion having overall responsibility. The process should involve the entities responsible for defining economic policy and budgetary allocation at the applicable central, regional and sub-regional levels. A long-term commitment –extending a minimum of ten years – is essential. Annex 2 provides additional suggestions of the elements most likely to result a successful planning process.

4.2. Execution of the Agenda for Connectivity

While the assessment and planning stages are vital, the essence of the Agenda is that the fundamental players in each society are involved in executing the plan. Action should be undertaken simultaneously on five fronts: infrastructure, utilization, content, regulatory framework, and financing.

4.2.1. Infrastructure

The Plan of Action for infrastructure is central for the success of an Agenda for Connectivity and is, perhaps, the step in the national connectivity process that is most critical, requiring participation by the regulatory bodies and the private sector for implementation. Annex 3 offers more detailed suggestions for potential action items to encourage infrastructure development in support of connectivity. The key items are outlined below.

Chances of success in achieving a coordinated approach to developing infrastructure will be greatly improved by establishing a high-level working group, comprising representatives of the private sector, government and civil society. The group should draw on the results of the nation's connectivity assessment to develop infrastructure-related plans in three areas: telecommunications, information technologies, and human resources.

A vital element of an infrastructure plan is likely to be the establishment by the telecommunications regulatory agencies, with private sector support, of policies or programs to promote wide connectivity in the country. These policies and programs should include a plan for universal access to infrastructure, including the Internet, and to essential social applications. The infrastructure plan should find innovative means of extending access, including identifying locations suitable for public access. Those might include schools, government offices, post offices, barracks, or dedicated telecenters, etc. Appropriate resources will have to be found to ensure ongoing

development of community access points, telecenters, etc., and for providing more, and more sophisticated, services to citizens.

Plans for infrastructure should consider the attributes of all technologies, and strive to be technologically neutral. For example, land-line's traditional dominance for personal communications and as an Internet access technology is increasingly being supplemented by wireless solutions. Community radio and community based broadcast can provide an appropriate and high quality channel for accessing information.

Those engaged in infrastructure planning should also consider the benefits to be obtained through regional and sub-regional cooperation, for example, by encouraging the development of "hubs" or network access points (NAPs) to aggregate demand and thus strengthen the business case and incentives for investment. In this regard MRA's in prescribing Certification Process, should establish opportunities for awareness-building in and technology transfer to the smaller economies of the Americas.

Governments must remember to plan any necessary legislative and regulatory changes to provide an ongoing guarantee of legal certainty to companies developing infrastructure for connectivity. Legal certainty will encourage firms to increase investment and expand their businesses to the benefit the connectivity agenda of each country.

4.2.2. Utilization

The Plan of Action for utilization should focus on addressing key sectors identified in the assessment phase by the stakeholders. Within civil society, and as detailed in Annex 4, the Plan of Action should focus on addressing the needs in education, health, employment, culture and recreation. A program of public education/sensitization to the importance and benefits of connectivity may also be useful to build support and demand for the full range of activities. At the level of the private sector, the Plan of Action should provide an effective framework that builds trust in the digital marketplace, clarifies rules, and encourages the adoption of electronic commerce, specially by SME's. It should be stressed that the adoption and/or expansion of e-commerce is a critical factor of social importance for economic development. At the level of the Public Sector, the Plan of Action should be oriented to create a culture of Government as a model user and develop a strategy that focuses on providing Government services on-line that address the needs of civil society including the private sector and stimulates the development of new applications.

4.2.3. Content

The Plan of Action should focus on the development of relevant content based on the needs and issues identified by stakeholders. For that purpose, the establishment of a high-level working group is suggested, composed of representatives of civil society, the private sector, and government, with the mandate to study the results of the corresponding assessment and determine the details of programs and projects in the framework of the national Agenda for Connectivity. This working group should be coordinated by the national entity responsible for the Agenda. It should be stressed that relevant content has to be developed for and by all groups, including linguistic, aboriginal, gender, and those with other special interests. It should also be stressed that private sector organizations often serve as leaders in content development that reflects local interests. Specific measures should be included to provide training at community levels enabling the production of content both to meet the community's needs and to develop a presence in the global information society. Further specific possibilities are suggested in Annex 5.

4.2.4. Regulatory framework

All governments of the region are faced with the challenge of creating a modern regulatory framework that supports and sustains the development of the Agenda for Connectivity. Most governments recognize that they cannot achieve the goals of the Agenda for Connectivity on their own. To encourage domestic and international partners to engage, governments must provide assurance of a competitive environment and a climate of confidence for investment that provides security to private investors.

These elements are essential in implementing the Agenda for Connectivity, but a full treatment of this complex subject is beyond the scope of this document. Fortunately, in recent years, governments worldwide have reached high-level agreements on the elements of such a framework. For example, in the telecommunications area, most countries of the region have recognized the need for a set of principles that have been defined in the Basic Telecommunications Agreement of the World Trade Organization (WTO), specifically in the reference paper incorporated in the various countries' commitments in the General Agreement on Trade in Services (GATS). As well, regional organizations, such as the Free Trade Area of the Americas, and sub-regonal organizations, such as CARICOM, which are engaged in developing strategies to advance liberalization. The national Action Plan should include a section incorporating the elements outlined in Annex 6 of this document.

4.2.5. Financing schemes

In the countries of the region connectivity is a national priority and the respective Agendas are state policy. These fact must therefore be reflected in the development plans of the region's governments. It is essential that the importance assigned to connectivity be reflected in the design of the countries' respective macroeconomic policies and, in particular, in allocating public expenditures. It is also essential for governments to remember the importance of creating a secure regulatory environment for investment, because it is recognized that financing follows reform, and not the other way around.

But governments are by no means solely responsible for financing connectivity. The responsibility, and the benefits, of investment in connectivity should be shared by all three sectors of society. To direct private equity investment toward achieving the Agenda for Connectivity, it is important for national governments to consider developing mechanisms to increase investment in connectivity including, for example, encouraging the development of an Americas Connectivity Venture Fund to promote and invest in innovative connectivity initiatives, projects and companies.

Creative project financing alternatives that benefit principally the Hemisphere's smallest economies must be developed in consultation and with the active participation of international financial institutions, regional and sub-regional development aid organizations, and the region's private sector.

5. Performance Measurement

A critical aspect of each country's Agenda for Connectivity and the associated Action Plan is the inclusion of a performance measurement mechanism. Adequate planning at the outset for how performance will be measured permits all sectors involved with the Agenda to monitor progress against agreed goals and to adjust their activities to ensure that goals are met. By developing appropriate

performance indicators and measures, progress toward achieving desired results can be examined. Such measures will allow those responsible to evaluate which direction an initiative is going – up or down, forward or backward, getting better or worse or staying the same.

Ideally, performance measures should be developed by those responsible for a particular program. They are likely to be the resident experts and in the best position to say what constitutes good performance. Secondly, if the measure is intended to convey meaningful information and to motivate those delivering the program, the measure should be something that they can identify with and something that has meaning for them.

Getting the measures "right" is important. Choosing the wrong measures may lead those engaged in implementing the Agenda to try to optimize the wrong results. Annex 7 outlines a method which could be used to develop effective measures and identifying sources of information.

6. CITEL commitments

In addition to the development of draft Connectivity Agenda for the Americas and Quito Plan of Action, CITEL intends to contribute actively in the implementation process. CITEL invites and looks forward to collaboration with the governments of the hemisphere, and with regional, subregional and multinational agencies, civil society including the private sector to see the document develop into the reality of connectivity in the region.

As part of its ongoing work, CITEL will work within the structure of its permanent consultative committees by holding workshops that will lead, at the end of each meeting of the relevant consultative committee, to formulate work plans and specific resolutions to advance connectivity in the Americas within its area of competence.

In addition, CITEL will work with partners to organize regional or sub-regional workshops to assist telecommunications officials to understand and collaborate with others interested in the development of national Agendas for Connectivity in the Americas. Reflecting the main point of this document, participants from civil society, the private sector and governments will be invited to participate, along with international agencies.

Internally, CITEL will, on a regular basis, hold forums of the Permanent Consultative Committees focusing on understanding and contributing to the agendas for connectivity of the countries of the Americas. These forums will enable Administration officials and associate members of CITEL to exchange experiences and establish alliances to further develop actions of common interest.

CITEL will create and contribute to benchmarking regulatory practice and current liberalization in the Americas via ITU/CITEL collaboration in a post-Blue Book exercise.

Finally, CITEL commits to creation of a Forum on Connectivity on the CITEL web site to facilitate an exchange between interested parties and the development of a storehouse of information related to Connectivity. This store of information should be updated regularly and provide links, insofar as possible, to information on connectivity activities worldwide.

ANNEX 1

ASSESSMENT

In developing the Agenda for Connectivity in the Americas, it would be beneficial to carry out a national assessment that will help to define appropriate strategies, policies, and procedures, both those applying exclusively to each country and those for more general application, and whose results it is suggested are valid for all countries of the region in achieving an information and knowledge-based society. This section provides examples of elements which might be included in such an assessment, recognizing that the assessment will vary from country to country, and that these examples only address some of the sectors of society which should ultimately be examined. To the extent possible, statistical data should be obtained from recognized and reliable sources.

It is acknowledged that undertaking a national assessment of the scope and scale outlined in this Annex might seem intimidating and discourage countries from undertaking work on the Agenda for Connectivity. It must therefore be remembered that the recommendations in this Annex describe an ideal assessment of a country's readiness to develop an Action Plan; and that such a comprehensive study is not strictly necessary at the outset. Nor would the data to conduct such an assessment usually be readily available.

Many countries which have begun to walk down the road to connectivity have learned one vital lesson: in theory it is important to begin by thinking big, but in practice it is important to begin by taking small steps. This lesson is equally relevant to remember when planning a national assessment.

1. Inventory of national initiatives and assessment of country status

As noted above there is agreement among governments which have started down the road to connectivity that there is a need to develop national initiatives to facilitate country's entry into the information society for the general purpose of stimulating socioeconomic development and, in particular, enhancing the quality of life of citizens. By referring to these national initiatives as an Agenda for Connectivity in each country, they may be consolidated within the Agenda for Connectivity in the Americas for presentation to Leaders at the Fourth Summit of the Americas.

Moreover, there are various initiatives within each country, at both the private and the public level, and at both central level and within the lower tiers which, in some cases, have not been coordinated and of which the community may not be fully aware.

Considering that there is a sense of urgency to close the digital gap by extending the reach of information and communication technologies, and that advantages can be gained by coordinating and focusing efforts being made by different players, a valuable first step is to develop an inventory of national initiatives being planned or undertaken. The inventory should capture each initiative's objectives, institutions or players designing and implementing it, and should outline the initiatives' goals, strategies, and sources of financing.

It is suggested that this inventory be implemented by an entity designated in each country to lead and coordinate the Agenda for Connectivity.

Each country should determine for itself how best to assess its readiness to develop an Agenda for Connectivity, and the level of analytical detail needed for its ongoing work. An assessment should be done by each country independently, suitable to its own conceptual framework and based on sufficient existing and newly-gathered information to provide confidence in the planning process.

There are various methods for building an inventory of initiatives, of establishing the readiness of a country to build the information society, and assessing the status of its existing Internet connections.

What is most important for the development of an Agenda for Connectivity, is to understand well the status of development and use of information and communications technologies in the three key sectors of this new model of society: civil society, the private sector, and government.

To that end, each country should develop its own analytical plan, adapted to its national realities and ensuring, insofar as possible, a process of ongoing and regular review, monitoring progress and implementation of its plans of action under the Agenda for Connectivity.

This Annex offers general guidelines to be used in assessing the status of development of information and communication technologies, the availability of access, their application, utilization, and impact in each country.

2. Infrastructure

The objective of this section is to suggest some indicators which could be used to assess the existing and available infrastructure which forms the starting point to implement national Agendas for Connectivity.

As with each of the following sections, the infrastructure assessment focuses sequentially on civil society at large, the private sector portion of civil society, and government**.** Once again, it should be remembered that the indicators proposed here are intended to serve as examples, and should not be viewed either as being definitive, nor as being essential for every country.

2.1 Civil society

To assess the current availability of technological infrastructure needed by civil society to engage in the framework of the Agenda for Connectivity, it is suggested that several aspects be taken into account: availability of human resources; the existing telecommunications networks; extent of development of information technologies and computer science; and the availability and means of access to technology.

2.1.1 Assessment of human resources for connectivity.

This part of the assessment will help a country to understand the capacity of its human resources to respond to the requirement to implement the Agenda for Connectivity. To assist in developing this understanding, an attempt could be made to gather, insofar as possible, information on the number of experts in telecommunications, information technologies, computer science, multimedia, and content in a given country, and data on the national student population, curricula and programs of study in these areas, and those for user training. This may possibly be expanded to include more specific and detailed points, as required.

2.1.2 Assessment of telecommunications and related infrastructure

As telecommunications is one of the main vehicles for connectivity, various parameters concerning its level of development at the national level should be understood. This assessment should strive to develop an understanding of the extent to which current telecommunications infrastructure is able to meet the requirements of the Agenda for Connectivity, and how it must evolve to improve its capacity to do so. Among the most important aspects to be assessed in this section might be a country's teledensity, cellular penetration, a geographic description of the telephone network both wireline and wireless, and availability of Internet service providers. It is also relevant to inventory the availability of broadband networks. Countries should also identify any universal access programs or funds that may support the development of widely available communications networks within the country. And finally, the inventory should review

availability of alternative, low-cost terminal equipment and programs such as microcomputer refurbishing/recycling to reduce connectivity costs for civil society.

2.1.3 Assessment of information technologies and computer science

Because of the difficulty likely to be encountered in conducting this portion of the inventory, assessment efforts may need to be limited to four types of establishment: educational institutions, health centers, libraries, and, where they exist, community Internet access centers. Some of the most pertinent points to be assessed would include developing a rough estimate of the number of PCs available to civil society in the country, an estimate of the portion of those nationwide having Internet connections, and a rough idea of where PCs and Internet access is most likely to be available to civil society, for example, in community Internet access centers (telecenters), educational and health centers, libraries, or other suitable establishments.

2.1.4 Assessment of available access

One of the priority aspects of infrastructure for civil society connectivity is the availability of access on a universal, equitable, and affordable basis, including an acceptable quality of services for the general public nationwide. This need is often addressed through the establishment of community access points, which provide essential telecommunications, applications and content services to the public. Access points provide a viable solution for all sorts of communities. The current status of this connectivity alternative for civil society should also be understood. An assessment of current status might include an inventory of available capacity in the country, including number, type, capacity, geographical location and information on the type of entity operating and maintaining community access points (government, company, or educational or social institution), and an understanding of present use of community access points by citizens.

2.2 Private sector

This part of the assessment is intended essentially to determine the potential private sector contribution to the Agenda for Connectivity. As reiterated throughout this document, the private sector is one of the most important players in implementing an Agenda for Connectivity as, in addition to serving as the force driving modern economies, it has a capacity to create and develop infrastructure for connectivity. Minimally, the items which should be considered in an inventory would include an assessment of trained human resources, the number of telecommunications service operators, distinguishing between wired, wireless, cable, and satellite, and their respective coverage, and, in terms of ICTs, whether there are sufficient firms marketing hardware and software throughout the country. Each country should also work with the private sector to understand what plans exist related to items on the Agenda for Connectivity, so as to understand the extent of their contribution to its implementation. In addition, the average business teledensity (wired and wireless, and broadband) should be understood, as well as how widely computers and data networks are used by various subsectors, and to what extent the Internet is used. It would also be useful to understand to what extent information technology is used by the private sector to conduct e-business, either with consumers or with other businesses. Working with private sector partners, an understanding of other aspects of private sector uses can provide ideas and even inspirations for business' contributions to connectivity.

2.3 Government

Government plays three roles in realization of an Agenda for Connectivity: it contributes, with resources and exercise of its authority, to connectivity's success; it can act as a stimulus by becoming a model user of ICTs; and it must assume responsibility for directing and supervising the Agenda.

An assessment of technological infrastructure in the government sector in developing a nation's framework of the Agenda for Connectivity should include an inventory of average teledensity (in lines) within the different government agencies at all levels of government; the number and use of computers in government agencies, again at different levels; the number of computers connected to the Internet or to dedicated government communications networks (and their features), as well as the existence of any plans by governments to refurbish and make redundant computers available to civil society.

3. Utilization

3.1 Civil society.

3.1.1 Education

Reaffirming the commitments made at the Quebec City Summit, it is important to formulate a strategy and implement policies to promote the principles of equity, quality, relevance and efficiency in education through ICT at all levels of the education system (school, college and/or university) and foster life-long learning opportunities (job re-training, education for work and other forms of learning outside a classroom) for all citizens.

As noted in section 13 of the 2001 Plan of Action, it is important to support and promote teacher's training and more generally life-long learning for all citizens of the Americas, including girls, women, rural inhabitants, persons with disabilities, indigenous peoples and persons belonging to minorities. This is especially crucial as we are increasingly moving towards a new information age society.

To ensure citizens develop their full potential in light of emerging innovative technologies, adequate training on how to use ICTs and actively seek information via the Internet is essential; Processes designed to create a national culture of ICT use, which show individuals the potential of the use of these technologies for their own development are also key.

To make a full assessment of a country's status in terms of its preparedness to provide citizens with the skills necessary to make appropriate use of ITCs, and the use of these new technologies in educational processes, it is suggested that the following items, linked to 2001 Summit initiatives, be studied, in addition to others deemed appropriate:

- Percentage of schools, colleges, and universities with teaching staff trained in ICT and Internet use, and percentage of all teachers trained in ICT and Internet use
- Percentage of schools, colleges, and universities providing tools to teachers to produce and make educational content available to their students via the Internet
- Percentage of schools, colleges, and universities providing tools to teachers to offer and administer classes that utilize ICTs and the Internet
- Percentage of institutions with ICT-based curricula
- Number and percentage of virtual education programs within schools, colleges, and universities
- Percentage of schools, colleges, and universities offering regular courses to their students for the development of ICT and Internet skills
- Number of institutions providing non-formal education that offer regular courses to students for the development of ICT and Internet skills
- Installed capacity within non-formal educational institutions in relation to the economically-active population in large, medium-sized, and small cities

- Number of national institutions and programs devoted to research and development of technological applications for the education-learning processes
- Number and subject area of public Web portals or sites with tools for content production and with content on the country's curricula and study programs

3.1.2 Health

One of the areas in a country's Agenda for Connectivity of greatest importance to society is the provision of broadly based public telehealth services. Technological convergence has gradually enabled affordable services to be made available, which have the potential to revolutionize health care. Although this is the application most slowly becoming viable as a service, telehealth is now beginning to show modest, but evident, results in many countries. One such result is the possibility of decentralizing health services, and expanding their coverage to populations that previously did not have access to them because they lived in remote areas, where medical staff and facilities were unavailable.

The introduction of ICTs and improved information resources can also make working conditions of health professionals in remote areas more bearable, so that they stay longer, and sometimes don't leave the village as soon as they become skilled enough or can find a better job in town or capital. These benefits can result from the nation-wide extension and use of very simple ICTs (even phone and fax), using basic levels of infrastructure, combined with training, funding and improved organizational management.

One of the services of the information and knowledge-based society of greatest social importance is known as interactive telehealth.

This is the use, to the greatest extent possible, of new technologies in national public health care through multiple applications, including provision of health information to citizens, as well as diagnosis, teleconsultation and teleintervention by specialists, remote interactive management of clinical records and other patient information, database administration of equipment, facilities, and medications, medical training, and general administration of services.

Although it has been noted that in some countries telehealth has thus far been assigned secondary importance as opposed to the development of distance learning, telehealth is perhaps the second application to generate multiple public services.

In countries most evolved towards the information and knowledge-based society, telehealth has been identified as one of the factors essential to attaining high quality public health care services, including care for a nation's community of senior citizens.

It is a fact that health services in most countries of the region are concentrated in the urban areas, and that there are far fewer in rural, remote or poor areas. The concentration of specialists and facilities and advanced medical equipment is particularly marked. This represents a profound imbalance between urban-rural and rich-poor areas, in terms of availability, quality, and density of medical care. Such imbalances are even marked within large cities between the developed districts and the peripheral areas, and between one city an another.

As reaffirmed at the Third Summit of the Americas, ICT should be used to provide sound, scientific, and technical information to health workers and the public, utilizing innovations such as the Virtual Health Library of the Americas; encouraging the use of telehealth as a means to connect remote populations and to provide health services and information to under-served groups, as a complement to the provision of existing health care services. To assess governments progress in developing the Connectivity agenda in the area of health, the following could be considered, among others:

- Total number of health establishments. Studies should be broken down geographically by metropolitan, urban, suburban, and rural areas.

- Total number of health establishments with Internet connection. Studies should give the same details as those mentioned above.

- Number of health centers with databases to be used by employees to support the dissemination of telemedicine.

- On-line clinical, hospital management, and health center information systems.

- Publicly-available telehealth information services.

- Number of existing telehealth/telemedicine service centers.

- Characteristics of telehealth-based health services decentralization programs.

3.1.3 Employment

The portion of a country's population which has the potential to be economically-active and, in particular, that part of the population whose access to the labor market is restricted owing to unemployment, underemployment, age, health, or social status can greatly benefit from the potential of connectivity to improve or resolve its situation. Facilitating and streamlining the interface between potential employers and potential employees, or between those seeking and those offering personal services is, without doubt, one of connectivity's most important missions. The Agenda for Connectivity should therefore include an assessment to focus its efforts in this area. An assessment of the status of the labor sector included on the Agenda for Connectivity should take account, *inter alia*, of:

- Data on the labor market and the economically-active population

- Data on the proportion of the population with special needs (e.g., those with disabilities or with problems of displacement, or senior citizens) that is potentially economically-active

- Existence and characteristics of private or government on-line systems to provide employment services

- Existence of national public and private sector telecommuting systems

- Other aspects of employment that would benefit from application of an Agenda for Connectivity

3.1.4 Indigenous Peoples

The situation of the indigenous peoples of the region requires special attention in nations which have indigenous populations. Their situation should be singled out for attention in the assessment of all factors set out in this Annex, when developing an national Agenda for Connectivity. The following aspects should take account, *inter alia,* of the following:

- The teledensity, cellular penetration, and access to telecommunications, Internet and other essential infrastructure
- The degree of success in developing infrastructure to indigenous peoples, including impacts on economic and social development
- Any existing experience in addressing special needs for telecentres or communications facilities, including organizational models, sustainability, training, content development, etc.
- Availability of trained personnel, technologies and tools to create relevant content
- Cataloguing firms, national and international agencies and non-governmental organizations which are available to assist indigenous peoples to undertake connectivity projects
- Analysis of legislative issues which can impact on the ability of indigenous peoples to engage in the national Agenda for Connectivity.

3.1.5 Recreation

Utilization of the Internet to access recreational information can provide a useful informal indicator of a society's maturity in accessing goods and services via the new channel of the Internet. For the most part, suppliers of such goods and services are the community and the private sector, though may also in some cases be the government. In this area, an assessment could include items such as the following, although it may be difficult to gather such data:

- Number of national Internet sites that focus on recreational information and/or services
- Number of national recreational entities, agents, events, and projects promoted via the Internet
- Approximate number of different users regularly accessing each of these sites
- Approximate number of recreational communities, real and virtual, utilizing the Internet as a means of communication among themselves and with other groups at the national or international level

3.1.6 Culture

To promote cultural diversity in the Americas, Leaders in Quebec City agreed to enhance partnerships and exchange information, including through the use of information and communications technologies. Leaders also agreed to create an environment to foster awareness and understanding of cultural and linguistic diversity of countries in the Americas, through a variety of means, including the use of new communications technologies as well as the Internet. As a first step towards fulfilling these mandates, it will be important to develop an understanding of the availability of cultural information. Key areas for consideration could include, among others:

- Whether there is a national policy to promote digitization , dissemination, and mass access to a country's cultural heritage via the Internet?

- The availability Internet sites focusing on a country's or nation's culture

- Percentage of national cultural entities, agents, events, and projects which have an Internet presence

- Percentage of real and virtual communities offering cultural information via the Internet

- Percentage of museums, monuments, and/or national treasures promoted via or having a presence on the Internet

- Number of different users regularly accessing Internet sites of cultural interests

- Percentage of indigenous communities utilizing ICTs and the Internet as a means of communication among themselves and with other groups or governments at different national or international levels, and for cultural purposes.

3.2 Private sector

3.2.1 Electronic commerce

Electronic commerce is now established as a key factor in the development of the information society, and as a fundamental economic force driving the need for connectivity. The ongoing growth of the Internet continues to fuel the expansion of electronic commerce. At the same time, the globalization of markets and trade opens new opportunities, extends business' ability to reach new markets, and creates new challenges for governments. Through connectivity, these benefits can extend far beyond the group of large companies, allowing small and medium-sized enterprises, and even individuals to sell products and services in a previously-unimaginable global marketplace. New communities of interest can be created, allowing users of native languages and other previously-marginalized communities to communicate and do business with one another.

Electronic commerce is more than just selling consumer goods on the Internet. It is the transformation of business systems and processes, and the creation of a networked economy. Networks are likely to play as important a transformative role in the economies of the current century as railways and electricity did in the 19th and 20th centuries. The "new" economy is essentially and primarily a "networked economy," where the capacity to deploy and use electronic networks will determine absolutely the competitive positions of firms, industries and national economies. Businesses of all sizes must assess their readiness to engage in electronic commerce, by conducting an e-readiness assessment.

In parallel, the continued development of new access technologies in conjunction with the creation of more, and more varied, services emphasize the increased need for government to create an e-commerce friendly environment to benefit both business and users – a demand which forms an essential part of the connectivity agenda. Governments must also analyze how prepared they are to undertake this task.

Because the decision to engage in electronic commerce is fundamental for anyone involved in business, there are many factors that should be considered before beginning. In addition to ensuring that a business has adequate access to infrastructure, management must determine at what level they want to engage in electronic commerce. An e-readiness assessment will help to accomplish that goal. Many resources are available on-line at no cost to help business with self-assessment, complementing the individualized services available from governments and business experts. The Internet addresses of several such resources are presented in Annex 6.3. In general, a business will want to consider items such as the following: assessing the readiness of the company and its customers to make the transition to e-commerce; how well your firm's strategy fits with e-commerce; and what approach to e-commerce best suits your capabilities, products and clients.

3.3 Government

Governments, too, should conduct an e-readiness assessment. Such an assessment should have two parts, one considering government's role with regard to e-commerce, and a second assessing government's readiness to make the transition to e-government.

3.3.1 Electronic Commerce

There is broad international agreement that governments play an essential role in enabling and promoting electronic commerce. The following list summarizes the key points that should be assessed by governments in our region.

Building trust in the digital marketplace: governments should assess their policies on privacy, security, and consumer protection to determine whether their existing protection is sufficient, or whether new action will be needed.

Clarifying market rules in the new environment: Each government should consider whether its regime is adequate to promotion of e-commerce, for example by ensuring that the taxation regime does not penalize users of e-commerce (tax neutrality); recognizing the legal standing of electronic documents, and guaranteeing intellectual property rights in the digital environment.

Encouraging market development: Governments should assess the degree to which they are acting as a model user of electronic commerce, for example by engaging in e-procurement. They should examine their policy framework to ensure that they are encouraging small and medium-sized businesses to adopt electronic commerce. And in addition, when looking at other aspects of their domestic action plans for connectivity, governments need to ensure that strategies to provide access for the public take into account the interests of consumers and micro-enterprise in the design of access strategies such as telecenters or other community access points.

Providing targeted information to business: Governments own and generate much information which can improve business's understanding of their market and help them to become more competitive. Governments should conduct an inventory of the information they have which could be useful to businesses. For example, governments should assess their market information which could be used to inform participants in a sector of market conditions, current prices, export opportunities. This information can both lead to more profitable sales, and also draw businesses (especially SMEs and primary producers) to start to take part in electronic commerce. Secondly, governments may have information which would be useful to helping business partnerships to develop on line to the benefit of all partners. Governments should also consider whether they have, and make available, information on best practices and innovative offerings which can facilitate the growth of electronic commerce.

3.3.2 E-Government

Electronic government is often defined as the on-line delivery of information and services – including the provision of opportunities for citizens to express their views on policy and program decisions. Most often the driver for a government on-line initiative is the desire to improve the quality of service delivery and raise the level of users'[1] satisfaction with government services. But as in the case for businesses moving to electronic commerce, governments taking their business on line need to assess whether they are prepared for the task. Governments which have begun to go on line have often seen the task as having three important elements: becoming a model user as a means of encouraging other sectors of society to become connected; putting government information, transactions and services on line; and developing on-line procurement systems.

Government as model user: Government Internet presence can be a showcase of the potential and benefits of connectivity, providing an inspiration to others. To achieve these goals, they need to undertake a rigorous process similar to the one described in the previous section for businesses doing an e-readiness assessment. To take one example, they need to fully understand their businesses and their customers. For governments, their "customers" are certainly citizens and businesses in their own countries, but they can also be those outside the country who want or need to access information or services from the government. Each government should diagnose their products and processes with a view to meeting as many demands as possible. Governments also need to assess their service delivery channels, such as traditional face-to-face service, telephone access through telecenters, as well as new on-line service delivery channels.

Putting government information, transactions and services on line: The government's diagnosis should be undertaken at the widest possible level, to try to identify where the complex can be simplified, where similar systems can be combined, and where it might be possible to share common infrastructure among parts of government. Such a thorough exercise can result not only in finding better ways to interact with citizens, but also in identifying possibilities for savings. A careful and thorough approach in the analytical and planning stage is essential. When other sectors of the society are trying to come to grips with the concept of connectivity being promoted by their government, it is most often to government they will look for an example.

In going on-line, governments should analyze what information, services and transactions are the best candidates for providing improved access to users. If governments already have a web presence, they should analyze how it is used, whether it is designed to accommodate users with low-speed connections, whether their web pages are easy to use, and whether there could be improvements by combining individual departments' and agencies' web sites into more consistent government portals. This information, combined with other information gathered from existing business units, should be analyzed to identify the most commonly used information and transactions, which could become the first targets for going on line. Any analysis of government information, services and transactions should include an examination of organizational stovepipes and rivalries in the government. Identifying these potential dangers can motivate a further examination of government structure to determine where best to locate the responsibility for putting government on-line, and how best to provide the high level of leadership and authority which will be needed to overcome rigidity. As for the Agenda for Connectivity as a whole, t is an absolute prerequisite for success of e-government that the highest level of leadership is required to succeed – starting from the head of state if possible.

[1] The word "user" in this paper to refer to someone who uses the services of a national government. Most commonly, the user will be a citizen of the country in question, but a user may also be a person outside the country, or a representative of a business inside or outside the country, seeking information or engaged in a voluntary or required transaction with the government.

Developing on-line procurement systems: If governments wish to develop e-commerce within the government sector, a key application for many governments has been developing an effective e-procurement mechanism. An assessment of government's preparedness to move to on-line procurement closely resembles what a business needs to do when thinking about starting to do e-commerce. Elements to be considered should include developing an understanding of existing procurement procedures and where they could be improved in an on-line environment; an understanding of current and potential suppliers, especially SMEs which can benefit from the creation of new levels of transparency in the procurement process; and an assessment of the suitability of existing procurement policies and rules, including such issues as for example, the need for security, privacy, and a supportive market framework. Once again, government can use many of the same techniques described in the section on electronic commerce to diagnose requirements, but with the added advantage of being able to test the effectiveness of its actions internally to government.

3.3.3 E-Governance

As Leaders noted at the Summit of the Americas, connectivity has tremendous potential to strengthen democracy in the Hemisphere. According to the Inter-American Development Bank[2] E-governance is beyond the scope of e-government. While e-government usually means the delivery of government services and information to the public using electronic means, e-governance allows direct participation of constituents in government activities. Blake Harris summarizes the e-governance as the following; E-governance is not just about government web site and e-mail. It is not just about service delivery over the Internet. It is not just about digital access to government information or electronic payments. It will change how citizens relate to governments as much as it changes how citizens relate to each other. It will bring forth new concepts of citizenship, both in terms of needs and responsibilities. E-governance will allow citizens to communicate with government, participate in the governments' policy-making and citizens to communicate each other. The e-governance will truly allow citizens to participate in the government decision-making process, reflect their true needs and welfare by utilizing e-government as a tool.

Introduction of e-governance is a key to make information technology (IT) relevant to ordinary citizens in the countries of the hemisphere where a large numbers of population are poor and a digital divide is a significant problem. E-governance will allow ordinary people to constantly interface with the government in both local and central level on various matters.

While the field of e-governance is a new one, and is still in a developmental phase, it is clear that it will be an area of growing importance. Countries which wish to assess the current state of development of e-governance should consider factors such as whether all their citizens are allowed to access to information or services (any citizens should not be excluded), to articulate their needs and to participate in formulating policy and regulation that will improve their social welfare and well being. And because the ability of central governments to understand all needs from ordinary local citizens is often limited, it is of particular importance to consider the ability of citizens to participate in local levels of government. Thus an assessment should be made of citizens' ability to access documents related to issues currently being decided, to communicate with their democratically elected representatives as well as government bureaucrats, whether there is a mechanism to inform citizens of what governments are considering for policy, legislative or regulatory development, and whether they have adequate opportunities to comment. Each government should also consider whether there are other aspects related to e-governance which they should assess as part of the planning process. And, in addition, it should not be forgotten that many of the

[2] **See http://www.iadb.org/ict4dev/governance.htm**

requirements for e-government and e-commerce (privacy, security, trust in the safety of communications, etc.) are also pre-requisites for e-governance.

3.4 Content

Content is one of the key factors in producing the evolution of national civil, government, and business communities towards the information and knowledge-based society. Content is the "payload" of communications networks. For the general public, and the business and government communities to be able to obtain the benefits of that evolution, they must be provided with the essence of communication – content – in the language(s) spoken and understood by that population. In developing the Agenda for Connectivity, this is one of the most important items to be addressed. In most countries of the Americas, it is also important to include a broad program to promote the development of interactive multimedia content in the indigenous languages of each country.

Content industries and cultural industries interact intensively with other business subsectors, and it is thus advisable to study these relationships in the national and international context in order to understand the level of their development.

An assessment of content in the framework of the Agenda for Connectivity will address a broad range of content areas, assessing the availability of content in the following, among others: education, dissemination of culture, mass media, entertainment, government content, democratic expression of views, information services and advertising

The assessment of the current status of content by a country could include the following points in connection with civil society, and the private and public sectors:

3.4.1 Civil society

- Communities and organizations representing civil society in the country
- Assessment of which topics are of importance and pertinence to civil society organizations and communities
- Organizations producing on-line content for their own use or for dissemination to the rest of society
- Categories of content needed in civil society communities or organizations
- Access by civil society to technological tools for the production and use of content
- Status of national human resources in this area
- Study of the proportion of national content in relation to general content available in the country
- Problems of illegal or offensive content.

3.4.2 Private sector

- Companies established in the country involved in the production of Internet content (e.g.: mass communications and entertainment media, companies operating via the Internet, the publishing industry, multimedia content producers, creators & artists, etc.)
- Proportion of content marketed in the country originating in that country
- Private sector plans for the promotion and expansion of the national content market
- Growth prospects. Study of strengths and weaknesses, main challenges and opportunities, including the availability of financing

- Creation of joint ventures and alliances to produce content (perhaps including international co-productions and other ventures)
- Participation of local content producers in exports
- Assessment of the availability of skilled labor consistent with the needs of the content producing industry

3.4.3 Government

- Government agencies which have an Internet presence (by government level)
- Offices of the different government levels and departments that produce on-line content in the categories mentioned above
- Production, management, and distribution of content pertaining to state services
- Production and distribution of pertinent content for sufficient timely and appropriate public information
- Gathering, processing, and management of information obtained from feedback from the public
- Government production of educational and cultural content
- Government promotional activity for national cultural industries and the training of the corresponding human resources.

ANNEX 2

PLANNING

As mentioned throughout, successful implementation of an Agenda for Connectivity within a country absolutely requires the support and participation of that country's civil society including the private sector, and the public sector, possibly benefiting from collaboration with and the advice and support of one or more international organizations.

Thus it is essential to establish a forum for discussion and agreement where those essential players may participate to define policies, priorities, strategies, and plans of action, and to nominate a high-level government entity to coordinate such activities and ensure that they are carried out in the short, medium, and long-term.

Within each government, a planning, coordination, and activity financing process should also be defined, involving not only a high-level champion having overall responsibility, but also the entities with responsibility for defining economic policy and budgetary allocation at the central and regional levels.

Those elements are required to be successful in the process of planning and executing a Plan of Action for the Agenda for Connectivity, which must cover strategies based on programs and projects for a period of at least ten years. This Plan of Action must be based on the following aspects:

- Integration and unification of existing efforts.

- Analysis and adoption of the best national and international practices, adapted to each country's reality.

- Creation and reinforcement of alliances within which all national sectors can contribute to attaining specific results.

- Consolidation of a dynamic and evolving process of defining, redefining, implementing, executing, and controlling interrelated strategies based on a series of policies, programs, and projects that enable the objectives to be attained. There must be a party with responsibility for the execution of each objective within public sector agencies, private institutions, or organizations representing the community.

- Clearly defining and empowering the agency to coordinate the Agenda for Connectivity and to promote its explicit dissemination within the country.

The entity with responsibility for coordinating the Agenda for Connectivity should direct its activities so as to optimize the technological, financial, human, and legal resources necessary to execute the projects described above. In most countries of the region, such coordination will likely involve the following steps:

- Nomination and official establishment of the agency to coordinate the Agenda for Connectivity, with support from the highest possible level, ideally from the head of state.
- Creation of a nation-wide convening authority.
- Defining for that authority an organizational structure, mandate, authority, and the necessary budgetary resources for the successful performance of its functions
- Creating effective means to ensure full community and public and private sector participation
- Planning to ensure long-term continuity

Lastly, this entity should be charged with developing the necessary adjustment of the legislative and regulatory framework required to enable the successful implementation of the national Agenda for Connectivity. To that end, it should interact with and coordinate activities with the national and sub-national authorities responsible for developing policy, legislation and regulation.

ANNEX 3

INFRASTRUCTURE

Any Plan of Action for the underlying infrastructure will probably involve most if not all of the following basic steps. It is recommended that these steps be carried out by the entity with responsibility for the Agenda for Connectivity in the countries of the Americas:

- Establishment, under the direction of the agency coordinating the Agenda for Connectivity, of a high-level working group, comprising representatives of civil society, the private sector, and government, to study the results of the nation's connectivity assessment and to develop proposals for programs and projects for the architecture and expansion of the infrastructure needed to make the Agenda for Connectivity a reality. The working group could address infrastructure-related topics by dividing them into three subgroups:

    - Telecommunications (including broadcasting) infrastructure
    - Information technologies and computer science
    - Human resources

- Determination within the working group of the infrastructure strategy for connectivity in the short, medium, and long term. Care must be taken here. The first version should be completed and published as soon as possible after the group has been established. The strategy should be regularly reviewed, and later versions should be developed if and when necessary to promote or to take into account new developments which could affect national connectivity activities.

- Study, by the three sectors represented in the high-level working group, of existing policies, legislation, rules, and regulations in force which may have an impact upon the development of telecommunications infrastructure or ICTs (e.g.: investment restrictions, transparency, predictability, special obligations on carriers, technologically asymmetrical laws and regulations, etc.), or upon conditions of access and utilization of ICTs to determine their adequacy to meet present and future needs. These studies should be directed so as to produce clear recommendations to authorities. This task must be undertaken at the outset of any activities carried out by the entity for the Agenda for Connectivity and should be viewed as a task to be updated and revised on a regular basis, as required.

- If deemed necessary, establishment by the telecommunications regulatory agencies, with private sector support, of policies or programs to promote evolution towards connectivity in the country , which may include universal service or universal access funds. This should take place during the first effective year of the Agenda for Connectivity to ensure that resources are available.

- Review of the licensing frameworks for companies involved in the transmission, conveyance, storage, and distribution of information to develop incentives for fulfilling, in a timely manner, any national and/or regional coverage commitments which preserve incentives for investment may be established, so that teledensity or coverage objectives are met, thereby extending connectivity nationwide. A first joint review of those commitments and possible incentives might best be undertaken immediately after the launch of the connectivity agenda within the country, and subsequent reviews would be made each year.

- Study of the national financial model for connectivity access costs and, as needed, attempt to rationalize costs through specific activities and incentives given by the state to private individuals.

- Consideration of mechanisms to achieve truly affordable telecommunications rate schedules to promote mass access to the Internet and to facilitate use of ICTs and their applications and services in establishments of priority interest to society, such as schools, libraries, hospitals, small and medium-size business incubators.

- Determination of when connectivity processes will begin in the country, including identifying possible locations which could be developed for mass access to connectivity within the country (schools, government offices, post offices, barracks, etc.) and developing plans for their implementation. Planning should also involve identification of sources for appropriate resources to ensure ongoing development of community access points, telecenters, etc., providing increasingly sophisticated services to citizens.

- Development by the three sectors involved in the national connectivity process of viable plans for the timely installation of advanced infrastructure for the country, such as broadband networks and network access points (NAPs).

- When the use of technology and the sustainability of installed connectivity infrastructure has matured sufficiently to so justify, a more wide-ranging project should be considered, to provide the

country with "regional networks" to incorporate many telecenters and access points into high performance communications nodes in terms of broad band access, complexity of services, and ease of access. This more ambitious activity should be approached by determining the appropriate infrastructure strategy, and will constitute one of the most challenging goals from the point of view of technology, maturity of utilization, and quality and scope of services for the Agenda for Connectivity.

- Consider possible approaches to expand the utilization of a portion of idle capacity in telecommunications networks providing service to the public to expand the geographic coverage and services of the Agenda for Connectivity. This should encourage optimal utilization of these communications resources.

- Promotion, from the time of introduction of new technologies, of access to connectivity, with private sector participation. This activity must be carried out within a transparent regulatory regime supportive of competition.

- Study of potential methods to link isolated local networks to the broader network as a means of accelerating and enhancing connectivity processes in the country

- Study of means by which the state could promote ongoing expansion and renewal of national connectivity infrastructure by offering rational incentives to firms and productive entities involved. Any such mechanism should result from careful study by the working group recommended in this document, and will require that decisions be taken by senior government officials involved. This system of incentives will be reviewed at the end of each fiscal period, and adjusted as appropriate.

- Increasing on an ongoing basis the density of the national information technology network and updating it regularly with a view to connectivity in a joint effort by the three sectors with responsibility for national connectivity. This activity should commence as an early priority for establishment of the Agenda for Connectivity.

- Planning the necessary legislative and regulatory changes to provide an ongoing guarantee of legal certainty by the state to companies offering products and services related to connectivity infrastructure so that they may increase investment and expand their businesses to benefit the development of connectivity through proper operation of a transparent competitive system on the corresponding markets

- Coordination and promotion, with pertinent participation by the directly-involved private sector, of broader marketing and distribution of products and services facilitating connectivity in the country, especially in less served areas.

- Early establishment of an IT equipment rehabilitation and modernization program to meet connectivity equipment requirements of disadvantaged entities and areas.

- Study and, if deemed appropriate, early implementation of a program to finance procurement of PCs or terminal equipment for Internet access for communities where this is justified. This program might be the result of a joint private sector/government effort.

- Promotion of training of human resources specialized in infrastructure-related technological disciplines necessary for connectivity. The corresponding planning and programming should be

carried out as soon as possible after the launch of the Agenda for Connectivity, and this activity will be evaluated each year.

Each country of the hemisphere may identify other activities which it may see as necessary for the development of infrastructure required to advance connectivity in its particular circumstance.

ANNEX 4

UTILIZATION

Utilization is one of the three fundamental components of connectivity, and thus of any Agenda for Connectivity developed for the hemisphere and its nations. This annex provides an overview and suggestions of how utilization could be encouraged in each of the key sectors addressed in Annex 1 (Assessment). Nations of the hemisphere are encouraged to consider these items in developing their own Action Plans.

1. Civil society

1.1 Education

Plans of action to be developed in the education area must be designed to address three existing problems: inequity of access to the education system, poor quality, and lack of standardization of educational content and teaching methods for citizens in different geographical areas and regions within countries. In addition, it should also build on the full range of initiatives endorsed by the 2001 Summit of the Americas in Quebec City, as well as related work on-going in other regional and sub-regional organizations.

This then implies fulfilling three basic objectives in this area: first, ensuring universal and ongoing access to education in a context of equal opportunity to obtain knowledge via high quality education processes that are standardized for all citizens; secondly, skill development for citizens in active use of ICTs for their own benefit; and, third, creation of a culture for and awareness of the need to be involved in life-long learning, making appropriate use of ICTs.

To address this challenge effectively, clear and specific strategies must be developed in all countries, based on regional structures, with the aim of ensuring that all citizens have the knowledge necessary to live, work, and develop their potential in the new knowledge-based society, while understanding that the use of ICTs and, in particular, Internet access, are not luxuries, but tools and vehicles for mass access to high quality education.

For their part, the leading educational entities in each country should design and implement a package of national standards to support the new learning environments for teachers and students, with appropriate use of ICTs in the classroom, their support for curricula and study programs, and the establishment of goals and procedures for evaluating teachers and students in the use and mastery of technology, with practical performance indicators as a priority element to assess the quality of administration of educational establishments.

This process must be accompanied by guidelines, model curricula, and practical exercises for the various subjects studied by students in each grade. For this process to be conducted successfully, this activity must be carried out as a cooperative effort among the countries for their common benefit.

To achieve mass access and improvement of the quality of education through appropriate use of ICTs, each country should formulate a Plan of Action to be implemented over a minimum of ten (10) years, with seven (7) goals, with staggered target dates for each of the specific stages:

Goal 1: For all students and teachers to have access to ICTs in their classrooms, schools, libraries, and other learning environments.

Goal 2: For all teachers to utilize ICTs effectively in order to assist students to achieve adequate educational levels.

Goal 3: For all students to acquire skills and abilities in the use of ICTs during their formal education, starting with their first educational level.

Goal 4: For ongoing investment of resources to be made in research and development on technological applications for teaching-learning processes for the purpose of studying those developed around the world and to determine the advisability of adapting them and incorporating them into the local education process or developing specific local applications and making them available to each country's educational community, in keeping with their needs.

Research into education technologies should cover aspects such as:

- Local characteristics and each community's education system
- Dependence of local content on the technology itself
- Adjustment costs
- Efforts made to acquire and implement such technologies in each community's educational system
- Any others considered pertinent

Goal 5: For educational content and tools to be developed and made available on the Internet that may be used to support the transformation and evolution of the education system and to support national programs to combat unemployment and underemployment. To supplement local effort, educational content developed in other countries should be included and/or referred to in this process, which has been translated into the students' mother tongues. In addition, a public awareness campaign should be conducted so that the educational community (comprising students, teachers, and parents, among others) may acquire knowledge of the tools made available to them, learn to utilize them, and fully adopt their use.

Goal 6: For on-line training systems, and systems to provide equipment and access to training to be designed so that the unemployed or underemployed, house-bound and persons with any type of disability may be trained and integrated into work. Retired persons or senior citizens seeking to return to work may also be beneficiaries, in this case, through planning to take steps to ensure that their health and personal safety is protected.

Goal 7: For education and self-instruction requirements to be included in the program for ICT application development.

These seven goals are consistent with the 2001 Summit mandates as they aim to strengthen education systems; enhance the performance of teachers; support and promote life-long learning opportunities. These goals also help stimulate the development of science and technology for regional connectivity through information and communications technologies, in an effort to build knowledge-based societies.

1.2 Health

An Agenda for Connectivity in the health area should include government agencies at all levels, private institutions, and the activities of self-employed professionals. It should also build on the 2001 Summit initiatives endorsed in Quebec City.

In keeping with the foregoing, the following actions are recommended to the governments of the countries of the hemisphere, where appropriate to individual circumstances:

- Establishment of a high-level working group to include representatives of civil society, the private sector, and government to study the results of the assessment and determine details of health and telehealth programs and projects in keeping with the Agenda for Connectivity. This working group will be coordinated by the entity with responsibility for the Agenda.

- Preparation in the short term of a national health services decentralization program based on the provisions of the Agenda for Connectivity.

- Promotion of a joint effort by health institutions and professionals to fulfill the objectives of the Agenda for Connectivity.

- Work to ensure that, within five years, all health-care establishments have Internet connections.

- Establishment of at least one telehealth center in each geopolitical division of the country by a set deadline, for example, within two years of the date of adoption of an Agenda for Connectivity in the country.

- Promotion of the establishment of telehealth databases and content in the country. The first database of this type should be established within two years of the launch date of the Agenda for Connectivity and should include an informational and guidance module for the general public and another to support ongoing training in health centers.

- Promotion of the introduction of curricula and programs of study on telehealth in upper secondary and higher educational institutions.

- Each country of the hemisphere may identify other activities which it may see as necessary for the development the health sector in its particular circumstance.

1.3 Employment

Unemployment and underemployment are major social and economic problems for many countries of the Americas.

An Agenda for Connectivity in the Americas must therefore include measures to ensure that the benefits of connectivity are able to address these problems. It must also build on the 2001 Summit initiatives pertaining to labour and employment as endorsed by Leaders in Quebec City. The Plan of Action to support the employment area of an Agenda for Connectivity and the Summit of the Americas Quebec City Action Plan should include the following activities:

- Establishment, under the direction of the entity coordinating the national Agenda for Connectivity, of a high-level working group, to include representatives of civil society, the private sector, and government, which focuses its efforts on studying the results of the assessment and determining the details of programs and projects for the country's employment sector, in keeping with the national Agenda for Connectivity.

- Preparation and direction of unemployment and underemployment reduction programs in keeping with the national Agenda for Connectivity and the Summit of the Americas Quebec City Action Plan, a process which should begin immediately after the Agenda is launched, and should be evaluated regularly each year.

- Coordination of projects to incorporate and reinsert workers into the labor market with government agencies, private entities, and civil society working with communities of persons with disabilities and senior citizens, which would begin in the short term and would be evaluated each year.

- Each country of the hemisphere may identify other activities which it may see as necessary for the promotion of labor and employment issues in its particular circumstance.

One relevant measure, among others identified herein and by Leaders in Quebec City, could be the promotion of telework. This is not only a question of developing support systems for groups of executives or modernizing certain functions within companies, such as sales and distribution, but of re-engineering organizations as necessary so that the private sector and the corresponding government agencies may support the job creation process and the supply of personal services on the labor market, by installing access points, telecenters, and specialized on-line telecommuting services or telecommuting applications in telecenters.

Both companies and government entities will be able to install peripheral IT centers on the outskirts of urban areas, to be well-supplied with telecommunications and IT infrastructure, to solve problems of lack of space and the high costs of rent and maintenance of central offices.

It is also advisable for telecommuting activities to be combined with environmental improvement programs as there is obviously a positive relationship between the success of a telecommuting project and the improvement of the environment in the project's area of influence, as displacement of workers is reduced.

- Development, with the various government areas and levels, of a first telecommuting tier, seeking to reduce costs and problems of mass displacement in urban areas. Programming these activities on the basis of the geographic areas with most problems of this type.

- As a supplementary step, coordination, with authorities responsible for the environment, of joint projects for environmental improvement in urban areas where the workforce is concentrated. Consideration should be given to alternative work schedules, flexible workday lengths, transportation, relocation of offices and premises – both government and private – and the resulting urban planning considerations.

- Provision for any other activities deemed appropriate in this connection.

1.4 Indigenous Peoples

In those countries having indigenous peoples, the action plan should recognize that those populations may require special attention in the development of the Action Plan. For example, indigenous peoples bring a

tremendous cultural richness to societies, but on the other hand, they often live under conditions of economic, cultural and geographic marginalization. To benefit from their potential contribution and to address their special circumstances the following items could be considered for inclusion in the Action Plan of the impacted nations:

- Facilitate interaction with and among indigenous peoples to understand their cultural vision and experiences
- Take into account the particular needs of indigenous peoples when designing programs to facilitate infrastructure expansion, telecentres, human capacity building, etc.
- Institute special programs offering training and equipment for the production of relevant content
- Create a data base and appropriate information system

1.5 Recreation

Agenda for Connectivity activity in this area may choose to promote and encourage initiatives to promote the recreational use of the Internet, for example, as forces driving enhancement of the quality of life of users through daily activities and adjustment to the use of ICTs. Consideration may be given to, *inter alia*, the following types of activities:

- Promotion of the development of human capital and companies involved in development of attractive content of a recreational nature.

- Promotion of the creation of user-friendly virtual communities on the topic of recreation, with a view particularly to the development of a national culture of ICT use, starting with easily-accessed topics perceived as simple or not frightening, given the general public's limited knowledge.

1.6 Culture

At the Summit of the Americas in 2001, leaders agreed to use new communications technologies and the Internet as a means of creating an environment to foster awareness and understanding of the cultural and linguistic diversity of the countries of the Americas. The Internet is an enormously useful tool for the dissemination of content and the development of applications which will increasingly be of cultural interest in the countries of the hemisphere for the preservation of the cultural heritage of different peoples and regions, and for keeping alive communication among members of different ethnic groups that are geographically isolated.

So as to create equitable access to cultural information, governments should consider promoting and supporting the creation of technological platforms with the capacity to promote, *inter alia*, the cultures of the hemisphere:

- Consolidation of national cultural information so that it may be disseminated on a dynamic basis to the national and international communities, including cultural entities, agents, events, and projects

- Presentation on the Internet of national traits: the nation's culture, to include races, languages, folklore, history, music, festivals, customs, etc.

- Presentation via the Internet of each country's cultural heritage in electronic form, such as virtual museum collections held in the country, to include their inventories, records, and scientific cataloguing of collections

- Promotion of the creation of virtual communities among the diverse peoples of the hemisphere, according special priority to and especially promoting indigenous communities

- Promotion of nationwide cultural service networks

- Early consideration of issues such as standards (both in term of allowing the content to be used across various technological platforms, as well as ensuring that the content will remain accessible over time), long-term preservation (of both physical and digital cultural/heritage assets), and sustainability (what will happen to the content over time and across different economic cycles).

- Each country of the hemisphere may identify other activities which it may see as necessary for the promotion of the cultures of the hemisphere appropriate to its particular circumstance.

2. Private Sector

2.1 Electronic Commerce

Electronic commerce is acknowledged to be a key factor in the development of the information society, and as a fundamental force driving both business' and consumers' need for connectivity. After the private sector and national governments compete a diagnosis of their situations, much work will be needed to implant electronic commerce. Individual entrepreneurs, established firms and industry associations are best able to develop a plan to help them become established in the field of electronic commerce, and there are many resources available to help them in this task.

To facilitate the growth of e-commerce, the countries of the Americas need to adopt a Plan of Action comprising both domestic and multilateral elements. There are four essential elements to a policy framework which will enable and encourage electronic commerce. These are: building trust in the digital marketplace; clarifying marketplace rules; strengthening the information infrastructure (a topic addressed elsewhere in this Action Plan); and marketplace development.

Building Trust In The Digital Marketplace:
Government has a role to ensure that the conditions are in place to permit citizens and businesses to feel secure when they use electronic commerce. Security is a primary area of concern. Governments must establish clear rules permitting the use of cryptography and set policy concerning key recovery. E-commerce is encouraged by an environment where the availability of strong encryption and security of communications, data and transactions is assured. Privacy is a second key area where government must play a role. E-commerce benefits from the existence of strong, internationally agreed-upon, privacy protection standards, especially in an environment where barriers to cross-border transmission of information may be erected if privacy protection is not recognized by trading partners as being adequate. Finally, where they exist, consumer protection measures should be extended to the digital world affording a level of protection comparable to that expected for other forms of commerce. Whether consumer protection is currently in place or not, Governments can build trust by ensuring that consumers using electronic commerce have access to adequate dispute resolution mechanisms and, where required, redress.

Clarifying Marketplace Rules

Taxation has emerged as an area of sensitivity in the development of electronic commerce. Governments should take care that existing laws and tax treatments apply to electronic commerce, ensuring tax neutrality between paper and digital transactions. Any changes to the tax regime must be approached carefully to avoid creating a disincentive to electronic commerce. Significant effort may also be required to develop a legal framework that recognizes in law the status of "secure" electronic signatures and creates rules of evidence for electronic records. This requirement is vital, and must be developed in tandem with government policy on security and cryptography. A sound and e-commerce-ready legal framework is also a key enabling component of electronic government and other applications for the Information Society. A third role for governments is to create an intellectual property (IP) rights regime which adapts IP rules to the digital world, while balancing the needs of creators and users. A country's IP rules must be technologically neutral, to be able to accommodate a rapidly changing Internet environment where new applications challenge lawmakers ability to respond.

Marketplace Development

Governments may also choose to encourage the development of electronic commerce both by adopting a strategy to encourage use, and by acting as a model user. Policies and programs to encourage small and medium-sized enterprises (SMEs) to adopt e-commerce are particularly important in all countries. Marketplace development policies and programs such as promotion of investment in information infrastructure, electronic government, and methods of extending community access are discussed in more detail elsewhere in this Action Plan, but they are vital elements of an action plan to encourage the development of e-commerce, and a networked economy.

Addressing Critical "Cross-Sectoral" Issues

Another element that is critical to the development of electronic commerce on both a national and a regional level is the elimination of the logistical barriers that prevent e-commerce and e-business from operating efficiently. The entire e-commerce "supply chain" must be optimized if e-commerce is to reach its full potential. While governments recognize that a competitive telecommunications market is a critical underpinning of e-commerce, they also must recognize that ancillary services such as transportation, electronic payments, customs services, and package delivery services are equally vital if just-in-time logistics systems are to succeed.

In short, governments should take a holistic approach to e-commerce. Transportation services should be liberalized to make it easier to ship goods ordered electronically from one country to another. Goods should flow quickly and predictably through customs clearance. Companies and financial institutions should be able to establish swift and secure electronic payment options. Package delivery regimes should be reformed to permit goods to quickly and inexpensively traverse the "final mile" to the customer's doorstep or the factory gate.

Initiatives for the Americas

Electronic commerce is inherently global as well as local – for businesses and consumers to reap the maximum benefits they need to be able to access the international marketplace both as producers and consumers. Governments in the Americas must work together to promote a globally-compatible regional environment for global electronic commerce which facilitates economic growth, maximizes the social potential, while reflecting and supporting the needs of all countries. Regional, multilateral and bilateral agreements can help to create an environment of confidence to permit that to happen. Some important areas for regional cooperation should include: agreements about how to recognize electronic signatures in electronic documents, and agreeing upon compatible authentication and certification policies and procedures. In addition, existing regional and multilateral trade forums and rule-making bodies should be used to stimulate and enable world-wide electronic commerce and remove impediments to trade. Finally, governments of the region should develop or make use of existing forums to exchange information on best

practices and innovative applications which have the potential to speed or expand the growth of electronic commerce.

3. Government

3.1 Government On-Line

As with electronic commerce, an action plan to implant government on line in the region must include both domestic and regional initiatives, because even in the case of national governments, connectivity inevitably increases openness to the world. The actions presented here are based on an understanding of the best practices by governments around the world, but these must be adapted by individual governments taking into account the political, social and economic development of their respective societies.

Many of the most challenging and important action items for governments planning to go on line naturally must take place at the level of individual governments, and individual government programs. It has already been mentioned that the driver for a government on-line initiative is often the desire to improve the quality of service delivery and raise the level of users' satisfaction with government services. Programs are redesigned from the needs and interests of the citizen and programs may be grouped or integrated where appropriate. Many governments are taking a "whole of government" approach to the setting of information management and technology standards, the provision of common infrastructure services and the use (or reuse) of common processes or systems, in order to capture economies of scope and scale as they move towards electronic services.

One of the first steps taken by many governments is to create or reorganize their web presence so as to increase the accessibility of government services and ease of navigation of their sites. Often this involves the creation of integrated portals which complement the traditional department-by-department or program-by-program listings by grouping information, forms and services according to subject or theme, user group or life-cycle stage. These sites may begin as simple listings of useful links, but evolve over time to provide content – delivering relevant and authoritative information organized in response to users' needs. These sites can evolve to become the platform for the delivery of interactive and transactional services. Governments may also set standards for the "look and feel" of these and other key sites, for user feedback and use metrics, and for metadata or indexing of information in order to make it easier for citizens to find what they are looking for.

Transforming services for on-line service delivery is a considerable challenge. Services should not be simply automated, but re-invented for the Internet – and many governments use their on-line strategies to simplify delivery processes and cut red-tape. The focus is often on the most commonly used and high transactional volume services, for which users are ready for on-line and self-service approaches. Pilot projects are often used to test concepts at lower overall risk.

The rethinking of services should also consider the opportunities to integrate information collection and processing, or to use common front-ends, forms, applications or back-end systems. The integration of services can offer significant savings in addition to service delivery mechanisms more focused on users' needs. A single site offering citizens a secure means for changing their address with multiple government departments, for example, could both appeal to clients and save each department the cost of developing this service.

In many instances, governments also invest in putting on-line horizontal enabling services which reach across departments and agencies. These include the ability for programs to receive and make payments electronically, and the entire supply chain or purchasing and procurement systems for government.

Many governments choose to invest in a common or shared infrastructure. Offering high capacity networks, network security, directories of users and employees, and security services as a common infrastructure is less expensive than requiring each department or agency to provide its own security solution program by program. The users also benefit from standardized protocols and seamless hand-off.

Citizens and businesses are often concerned about the privacy and security of their transactions and the provision of a common secure channel with government helps address some of these concerns. Many governments are also reviewing policy frameworks to ensure that these build citizen trust and confidence in electronic services. Privacy issues are often critical – and some governments may need to clarify the privacy rules which obtain in integrated service delivery situations. Often governments have also elected to pass legislation that provides a legal standing for electronic signatures and documents filed with them. Such legislation, and addressing privacy concerns, is central to the creation and promotion of other e-services, such as e-commerce, in an economy.

Most governments have also recognized the need to transform internal administrative services for on-line delivery, and to provide employees with the skills and tools they will need to effectively participate in an electronic service delivery environment. This might mean moving to single systems or shared service organizations for financial, human resource and materiel management. It can also mean e-recruitment of new government employees, and on-line self-service sites for training, travel authorization and expenditure claims, vacation and leave processes. These processes may require the equipping of employees with electronic signatures.

Moving to on-line services is a significant change management initiative. It requires sustained leadership at all levels, both political and bureaucratic. It is most successful when a vision and targets have been articulated at the highest levels – to define the end-state and what "success" would mean. In most cases, an organization has been funded to drive the government on-line agenda. The resources needed for service transformation and common infrastructure services are sometimes provided centrally, sometimes reallocated from existing department and agency IT budgets. It is often a challenge to articulate the "business case" (or logical/financial rationale) for putting services on-line, as costs are high initially and savings are difficult to quantify and do not appear immediately. A broad view is needed – governments should consider their strategy for service delivery across all channels as the take-up of the on-line channel may generate savings in in-person, mail or telephone channels. Some governments are offering explicit incentives to encourage the take-up of on-line services – in all cases, communications strategies are essential to build awareness, encourage take-up and reassure citizens of the safety and security of on-line delivery.

There are many approaches to electronic government, and in many instances the lack of a pre-existing legacy computer systems means that some governments can move ahead rapidly with innovative on-line services and systems.

With regard to e-governance it is vital that, as countries move to fuller and more inclusive models of democratization, they remain aware of opportunities to use the powers of connectivity to engage citizens directly in governance. As pointed out earlier, it may be best to begin at the local level, where decisions have an immediate impact on citizens. Governments should work particularly closely with civil society, including the private sector to develop an understanding of what parts of government decision making should most urgently be opened to the public, and to develop inclusive plans to begin to meet those needs. While the relationship between citizens and governments are in some ways unique to each country, it will still be possible to learn from each other and to share best practices as a means of making progress in the Americas as a whole.

Initiatives for the Americas

Participation in regional or international organizations provides an excellent means of sharing best practices, innovative approaches, and lessons learned. With appropriate agreements, it would also be possible to arrange for sharing of software solutions developed by individual governments. Common approaches to authenticating users authorized to engage in transactions, and protecting transactions would also simplify cross-border transactions involving governments.

ANNEX 5

CONTENT

A Plan of Action for content focusing on the development of relevant content based on the needs and issues identified by stakeholders could best be developed by a high-level working group, composed of representatives of civil society, the private sector, and government. Its work should encourage the development of relevant content for and by all groups in the society: linguistic, aboriginal, gender, and those with other special interests or needs. Specific measures should be included to provide training at community levels enabling the production of content both to meet the community's needs and to develop a presence in the global information society. The following elements could be considered for inclusion in a Plan of Action for the encouragement of content development:

- Establishment of a high-level working group, to include representatives of civil society, the private sector, and government, to study the results of the corresponding assessment and determine the details of programs and projects in the content area in the framework of the national Agenda for Connectivity. This working group will be coordinated by the national entity responsible for the Agenda.

- Promotion in the short term of an updated human resource training program, in national public and private educational institutions, specialized in technological fields essential to the production of content.

- Study the advisability of establishing a government incentive system to expand the content industry and other related industries within the country. If appropriate, it is suggested that the system be established as soon as possible, and that it be reviewed at the close of the fiscal period.

- Definition of the basic stock of content and of the corresponding projects to see that public administration evolves and to provide information services and other citizen-related services. This activity should be carried out shortly after the launch of the national Agenda for Connectivity.

- As suggested in the section on e-government, moving to integrate on-line content government services into Web portals. This process must be initiated by the different government levels and areas beginning in the first effective year of the national Agenda for Connectivity, and should be updated and enriched on an ongoing basis.

- Establishment of ongoing production of on-line content at the different government levels and areas for internal consumption and public information purposes. As this activity involves many activities, it will be considered a process for the medium to long-term.

- Study of how much national content is available via the Internet.

- Define in the short term, and with the pertinent private sector participation, the commercial on-line content services most appropriate to the national reality, and the multisectoral plans to make them feasible.

- Promote inter-American cooperative efforts for the exchange of content and its joint development.

- Based on the results of the assessment, establish a national strategy to address the lack of content in the three sectors.

- If necessary, coordinate joint activities among the three sectors included in the national Agenda for Connectivity to discourage offensive content, or prevent the dissemination of illegal on-line content.

- Each country of the hemisphere may identify other activities which it may see as necessary for the promotion of content production and use in its particular circumstance.

ANNEX 6

REGULATORY FRAMEWORK

In the telecommunications sector, most countries of the region have recognized the need for a series of commitments to an effective regulatory framework that have been defined in the Basic Telecommunications Agreement of the World Trade Organization (WTO)[3], and specifically in the reference paper incorporated in the various countries' commitments in the General Agreement on Trade in Services (GATS). This Annex summarizes aspects to be considered in each country in creating an appropriate modern regulatory framework for the development of the Agenda for Connectivity should include:

- Equitable, universal access to information

- Transparency

- A competitive ICT industry

- Effective participation in the development of the regulatory framework by civil society, including the private sector

- Information protection mechanisms

- Technological neutrality [equal opportunity for all access technologies]

- Training in the use of ICT services

- Protection of the new information society's intellectual property

- Coordination of legislation governing the information and communications sectors

The following activities are recommended as a means to achieve these goals:

- Organization of working meetings and workshops with the participation of members of civil society, private sector experts, and the public sector to share experiences and best practices for the

[3] See www.itu.ch/itudoc/osg/ptspeech/chron/1997/42248.html

development of solid regulatory frameworks that facilitate and promote the use and application of the ICTs in all sectors of society

- Identification of technical assistance mechanisms and opportunities existing or proposed by international organizations such as the IDB or the ILO, which may facilitate the process indicated above

- Each country of the hemisphere may identify other activities which it may see as necessary for the creation of a pro-competitive and transparent regulatory framework to promote connectivity in its particular circumstance.

ANNEX 7

PERFORMANCE MEASUREMENT

The key to developing and implementing a useful performance measurement system is selecting appropriate measurement criteria. Choosing the wrong measures could potentially lead those engaged in implementing the Agenda to try to optimize the wrong results. The most promising measures and sources of information may be determined by considering the issues suggested in the table below.

Performance Measure	Operationally define the measure (i.e. the number of, or percent of, [target group] which display a specific behavior or give a specific response).
Relevance and Validity of the Measure	Be certain that an indicator demonstrates the achievement of some aspect of a desired key result
Basic Strategy	Discuss the collection method, (design and source), frequency, process/system requirements, analysis and reporting required, roles and responsibilities of those involved, and resource costs.
Current Situation	Answer the following questions: 1. Do data for the measures currently exist? 2. What are the data sources? 3. Do the data really measure what we want to measure? 4. Is the data meaningful to all stakeholders 5. Are the messages to be provided by the data easy to communicate? 6. Has the data proven reliable in different situations and over time? 7. Can the data be collected and analyzed in a cost effective manner? 8. Do we need to establish a baseline? 9. Who needs to be involved in the collection and analysis? 10. How much interpretative information is required to make sense of the indicator chosen? 11. Other considerations?

The answers to these questions, combined with a clear understanding of the most important aspects of a country's Agenda for Connectivity is the first step in developing a performance measurement framework.

Once the performance measurement framework has laid out the full spectrum of performance for the program or operational section of the Agenda, those involved in implementing the Agenda should identify the most critical elements to focus on in understanding and measuring each part of the program's success. It is not practical nor reasonable to consider developing a performance measurement system addressing every single activity within an initiative as large as an Agenda for Connectivity. When considering key performance areas, managers should think about it not only from their own perspective, but also from the perspective of internal and external stakeholders, interest groups and clients.

While it is important to center attention on progress toward key outcomes, it is also important to monitor the performance of key processes (activities and outputs) which are vital for the success of the components of the Agenda. In other words, an important concept is ensuring attention is paid across the performance spectrum and not in isolated areas.

Analysis of relationships between categories may also be valuable; e.g., the relationship between resources and outputs (efficiency) or between resources and outcomes (cost-effectiveness). Looking at the relationships of results, resources and reach can also allow for an analysis of strategic trade-offs (e.g. wide reach versus high impact results).

It is clearly beyond the scope of this paper to offer a complete discussion of a well established field such as performance measurement. The countries of the hemisphere could benefit greatly, as would the Summit process, if a partner organization in the Agenda for Connectivity such as the IDB or other suitable agency were to offer a workshop to assist them in developing appropriate performance measurement frameworks suited to their own individual Agendas and Action Plans.