Guyana Information and Communications Technology for Development Strategy

Discussion Paper

This brief document is intended to be used as the basis for discussions at the March 28, 2006 `ICT Guyana Workshop' at the Guyana International Convention Centre hosted by His Excellency President Bharrat Jagdeo.

"Information and communications technology offers tremendous promise. With liberalization of the telecommunication sector, information technology can make a significant contribution in improving communication, providing new and improved goods and services, as well as creating thousands of jobs for our young people. I would like to see telephones, computers and broadband access in every school and household in our country."

– President Jagdeo, January 2006.

ICT Definition

Information and Communications Technology (ICT) covers any communication device or application, encompassing: multi-media, cellular phones, computer and network hardware and software, satellite systems and other similar devices as well as the various services and applications associated with them such as videoconferencing and distance learning platforms.

ICT's are now widely accepted by developing countries as critical tools in their efforts to eradicate poverty, enhance human development and achieve the Millennium Development Goals (MDGs).

The National Development Strategy (NDS), which was crafted by local experts and tabled in the National Assembly, views Information and Communications Technology as one of the important means of improving Guyana's capacity to diversify the economy, increase competitiveness, attract investors, create jobs and opportunities, market local products and enhance the efficient delivery of services including health, education, and environmental protection. Most importantly, it holds the key to acquire knowledge and further develop our human capital. This position has been reinforced by the Poverty Reduction Strategy Paper supported by the international financial institutions.

Vision

All citizens, businesses and public institutions in Guyana will have the opportunity to participate in the information and knowledge society in order to accelerate national development and prosperity

Objectives

- To ensure access to reliable ICTs at the lowest sustainable cost so that all Guyanese have the opportunity of participating in the information and knowledge society.
- To create a new generation of citizens that can use ICTs to leapfrog Guyana's development.
- To develop and approve the necessary policies and regulations that support the sustainable development of the ICT sector.
- To promote the development of ICT services and businesses to increase job opportunities and generally to improve the economic and social well being of Guyanese.
- To modernize Guyana's Public Administration, Industry, Commerce and Communications sectors.
- To support initiatives to encourage innovation and creation in the ICT sector.
- To encourage the development of pertinent, strategic and focused network infrastructure for key sectors of the economy enabling them access to the information society.
- To improve the delivery of, and access to, Governmental services.
- To improve the competitiveness of existing Industries and to facilitate the sustainable development of new enterprises, thereby supporting economic diversification.

Thematic areas

Theme 1: Human capacity

In 2003, the declaration of the United Nations World Summit on the Information Society (WSIS) established "... Everyone should have the necessary skills to benefit fully from the Information Society. Therefore, capacity building and ICT literacy are essential. ICTs can contribute to achieving universal education worldwide, through delivery of education and training of teachers, and offering improved conditions for lifelong learning, encompassing people that are outside the formal education process, and improving professional skills."

The Guyana ICT4D Strategy necessarily should address the demand not only for a wide range of ICT skills (including systems engineering and analysis, software development, network engineering, maintenance skills of all kinds, design and development of data

bases, systems for quality control, and data input, etc.) but also skills for project design and management.

Central weakness: Inadequate levels of relevant human capacity.

Possible actions

- Develop and implement policies to ensure that ICTs are fully integrated into the education and training system at all levels.
- Develop and implement an effective scheme for skills retention.
- Encourage partnership programmes in both the public and private sectors to facilitate effective knowledge management.
- Develop programmes designed to strengthen and empower the human capacity of the broader society, through the use of ICTs.
- Facilitate the training of a critical group of skilled ICT professionals and experts to sustain Guyana's use of ICTs for development.
- Effectively monitor and measure ICT development through the use of relevant statistics

Theme 2: Content and Applications

There is a need to develop content and applications that are focused on achieving development goals. These range from those that enhance e-government and e-governance processes, to those that apply ICTs to achieve specific development goals in the areas of health, business, education and training, environmental sustainability, agriculture and science among others.

Central weakness: Limited production of local content and ICT applications.

Possible actions

Encourage and promote the development and dissemination of content suited to Guyanese

- Encourage partnerships among community networks (public, private and citizens in diaspora) in order to facilitate bottom-up approaches and inclusiveness
- Develop and implement an appropriate e-government strategy, which will increase efficiency, eliminate duplication of effort, support sharing of resources and provide for sustainability

- Encourage the public and private sectors to use ICTs
- Promote the development and use of e-Commerce and e-Banking platforms
- Develop and implement programmes geared to enhance delivery of health, education, tourism, environmental services etc. using ICTs
- Enhance Guyana's Disaster preparedness and mitigation capabilities through the application of ICTs

Theme 3: Infrastructure

The 2003 declaration of WSIS established that "... infrastructure is central in achieving the goal of digital inclusion, enabling universal, sustainable, ubiquitous and affordable access to ICTs by all, taking into account relevant solutions already in place in developing countries and countries with economies in transition, to provide sustainable connectivity and access to remote and marginalized areas at national and regional levels..."

Today, except for cellular, the telecommunications infrastructure in Guyana is largely owned by the Guyana Telephone &Telegraph Company (GT&T), and operated by that company on a monopoly basis.

Compared with other countries, there has been limited introduction of competitive and redundant telecommunication services in Guyana. There is a small number of Internet Service Providers (ISPs) who provide services both directly to end users and through public venues, such as internet cafes. There are three Cellular Service Providers.

Central weakness: Inadequate and unreliable infrastructure for the development, generation, and reception of information and knowledge. Low penetration levels of internet access services and other value-added services provided to the general public and to schools and other public institutions. Inadequate tele-density has exacerbated this weakness.

Possible actions

- Promote the competitive provision of Internet access services in order to bridge the Digital Divide
- Promote access to reliable and advanced information infrastructure and services at the lowest sustainable prices in all regions of Guyana
- Ensure the provision of adequate and redundant Internet bandwidth
- Reform of the telecommunications sector in keeping with international best practices

• Develop adequate infrastructure for Disaster Preparedness, Mitigation and Recovery

Theme 4: Legislative Regulatory Regime; Management of the ICT sector

The legal and regulatory framework for the ICT sector is still in a state of evolution globally. Even as the Internet and ICT applications develop and mature, new uses and abuses of the Internet and ICTs continue to develop. As such many industrialised countries and some with emerging economies, like Guyana, are still constructing the legal and regulatory framework for the Internet and ICTs.

Central weakness: Inadequate Regulatory regime to support the growth and development of the ICT sector.

Possible actions

- Establish and implement appropriate legal and regulatory regime to encourage and sustain the orderly development of ICTs including measures to address privacy, data protection, electronic/cyber crime, e-Commerce, spamming
- Promote the participation of the different stakeholders in developing the appropriate legal and regulatory regime through the sharing of best practices and expertise
- Establish a national ICT Authority with a mandate for coordinating, managing and developing the sector

Theme 5: ICT enterprise development

There is huge potential for leveraging Guyana's sustainable competitive advantages in the global ICT outsourcing industry; to improve the competitiveness of existing industries and to facilitate the sustainable development of new enterprises, thereby promoting job creation and economic diversification.

Central weakness: Inadequate infrastructure, human capacity and legislation to promote the development of ICT enterprises

Possible actions

- Establish IT Parks with adequate, robust and redundant Infrastructure
- Encourage IT Firms to establish presence in Guyana with a view of boosting Technology transfer
- Develop requisite human capacity and regulatory regime
- Expand incentives for IT activities so as to enhance the investment climate

- Develop and execute appropriate marketing strategy for the country's IT enterprise potentials
- Use of current IT technology platform for niche enterprises
- Promote the development of software