

# **Digital Policies Programme – Resensitizing Government Officials to the Appropriate Use of Information and Communication Technologies (ICTs)**

## **Description**

Leaders worldwide increasingly acknowledge that Information and Communication Technologies (ICTs) offer significant opportunities for socio-economic development. The World Summit on the Information Society (WSIS) recognized that “governments should take action in the framework of national policies, in order to support an enabling and competitive environment for the necessary investment in ICT infrastructure and for the development of new services...”. It is essential that they keep abreast of the rapidly changing ICT environment in order for government services to meet expectations and to ensure that ICTs deliver socio-economic gains to their countries.

Like the rest of the world, most Caribbean governments have developed national ICT strategies, as part of their national agenda, to transition to knowledge-based societies using ICTs. In this regard e-government has become a familiar form of service delivery to citizens, businesses and other key stakeholders. Expectations are high and citizens are also now expecting their public services to be eminently accessible and convenient. Even so, do senior public servants really understand the many functions and roles of ICTs?

The International Telecommunication Union (ITU) and the Technology and Society Center of the Getulio Vargas Foundation (FGV) in Brazil have jointly developed the Digital Policies Programme (EPD) – Re-Sensitizing Government Officials to the Use of ICTs. The programme was first offered in 2019 and participants felt strongly that the course material and activities were logically sequenced, relevant to their job functions, provided valuable information about current global developments, and that the facilitators were knowledgeable about the subject material.

## **Target Participants**

The programme is aimed at senior public servants as well as other public servants involved in any form of public service delivery. Although the key target participants are Caribbean public servants, the programme is applicable to all regions as it emphasizes best international practices in which e-government services have been delivered successfully.

## **Timetable**

The next offering of this programme runs from April 2020 - October 2020 in two phases. Phase I (April 2020 - May 2020) will expose participants to key concepts and issues, requiring approximately 3 - 6 hours of engagement per week. Phase II (June 2020 - October 2020) will allow participants to deep-dive into how these concepts and issues are, and can be, effectively addressed in their own national contexts. In order to proceed to Phase II participants will need to meet specific tasks and goals during Phase I.

Phase II is limited to sixty persons in total; a maximum of two persons per country, will be allocated on a first-qualified basis, unless otherwise advised.

## **Certificate**

Certificates will be issued to all persons who successfully complete Phase II. To receive the certification, it is essential that the participants meet all programme requirements. This includes receiving a passing grade (> 60%) in each of the assignments.

## **Phase I Objectives**

The Phase I objectives of this programme are to:

1. Sensitize senior government officials to the importance of ICTs as a key pillar for national development, for improved public governance, improved public service engagement and delivery; and ultimately, for socio-economic development;
2. Establish some of the important elements of a national ICT strategy; and key challenges involved in implementing structures to support such a strategy;
3. Establish some of the key ICT challenges in e-government service delivery from a public governance perspective;
4. Identify and examine a sample of successful e-government projects and components; and examine the criteria and conditions that made them successful;
5. Identify some of the most important legislative, policy and regulatory strategies that stimulate investment and growth in the ICT sector, and the enhancement of lives.

## **Phase II Objectives**

The Phase II objectives of this programme are to:

1. Empower senior government officials to communicate their understanding of the importance of ICTs as a key pillar for national development, for improved public governance, improved public service engagement and delivery, and ultimately, for socio-economic development, within their own national context;
2. Identify the important elements of a specific national ICT strategy; and key challenges involved in implementing structures to support such a strategy, based on context-related resources;
3. Identify the key ICT challenges in e-government service delivery from a public governance perspective, based on context-related resources;
4. Describe and examine specific e-government projects and components; to identify the criteria and conditions that made them successful, based on context-related resources;
5. Identify legislative, policy and regulatory strategies that stimulate investment and growth in the ICT sector, and the enhancement of lives, based on context-related resources.

## **Delivery Mode**

Phase I will be delivered online asynchronously in 5 modules over 2 months. Participants can expect to spend 3 - 6 hours per week in self-study. A new module will be released every 2 weeks. Each will be accompanied by a self-assessment exercise that must be completed within the relevant 2 week window. The facilitator will provide students with asynchronous support over Phase I and the participants will be issued reminders to remain on track. To be eligible for Phase II, participants must successfully complete all self-assessment exercises within the specified time-frame.

Phase II will involve a mix of synchronous and asynchronous activities in 5 modules over 5 months. Participants can expect to engage in active discussion with facilitators and their peers concerning successes and challenges associated with developing, deploying and maintaining ICT-services in their individual contexts. A facilitator-assessed exercise will be associated with each module - participants may wish to submit assessment to facilitators and peers at specified intervals to receive preliminary feedback.

## Further information

For further information or clarification, please contact: Cleveland Thomas [cleveland.thomas@itu.int](mailto:cleveland.thomas@itu.int) .

## Learning Methodology

You will learn via self-study of materials posted online as well as through asynchronous interaction with programme peers and the facilitator. As an adult learner your approach to learning will be different from that of your school days: you will choose what you want to study, you will have professional and/or personal motivation for doing so and you will most likely be accommodating your study activities around other professional and domestic responsibilities. Essentially you will be taking control of your learning environment. As a consequence, you will need to consider performance issues related to time management, goal setting, stress management, etc. Perhaps you will also need to reacquaint yourself with areas such as essay planning, and using the web as a learning resource.

Your most significant considerations will be *time* and *space*, that is to say, the time you dedicate to your learning and the environment in which you engage in that learning. We recommend that you take time now—before starting your self-study—to carefully consider these issues. There are a number of excellent resources on the web. A few suggested links are:

- <http://www.how-to-study.com/>

The “How to study” website is dedicated to study skills resources. You will find links to study preparation (a list of nine essentials for a good study place), taking notes, strategies for reading text-books, using reference sources and treating with assessment anxiety.

- <http://www.ucc.vt.edu/stdysk/stdyhlp.html>

This is a website resource from Virginia Tech’s Division of Student Affairs. You will find links to time scheduling (including a “where does time go?” link), a study skill checklist, basic concentration techniques, control of the study environment, note taking, how to read essays for analysis and memory skills.

- <http://www.howtostudy.org/resources.php>

Another “How to study” website with useful links to time management, efficient reading, questioning/listening/observing skills, getting the most out of doing (“hands-on” learning), memory building, tips for staying motivated, developing a learning plan.

The links above are our suggestions to start you on your way. At the time of writing these web links were active. If you want to look for more, go to [www.google.com](http://www.google.com) and type “self-study basics”, “self-study tips”, “self-study skills” or similar.

Module 0 will provide the opportunity for persons who are not familiar with the platform to practice using the quiz and discussion facilities.

## **Programme**

### **Learning Outcomes**

Upon completion of *Digital Policies Programme – Resensitizing Government Officials to the Use of ICTS*, participants will be able to:

- LO1. Explain how ICTs have been and can be used to enhance public service governance, public service delivery, and socio-economic development;
- LO2. Identify important elements of a national ICT strategy; including key performance metrics for public service governance and public service delivery;
- LO3. Identify gaps, and misalignments, in structures intended to support a national ICT strategy, and recommend mechanisms to overcome deficiencies in the structures;
- LO4. Identify, as applicable to their sector, department or ministry, ICT-related human and other resource requirements that will support effective and efficient public service governance and public service delivery;
- LO5. Identify, and explain, some of the most important legislative, policy and regulatory strategies that stimulate investment and growth in the ICT sector, and socioeconomic development;
- LO6. Follow and participate in the discourse on ICT trends as applicable to their sector, department or ministry, in the context of public service governance and public service delivery.

The programme comprises five modules, covered in Phases I and II in turn, as well as a preliminary Module 0 to familiarise those who are not au fait with the platform.

## Module 1 – Overview: ICTs in the Public Service and National Interest

Associated LO(s): 1,2

### Suggested Assessment:

- **Phase I: MCQ's with feedback for self-assessment of vocabulary and concepts**
  - **Phase I: SAQ's for responses to targeted questions re: vocabulary and concepts**
  - **Phase II: Discussion Forums for responses to targeted questions**
    - Critical review of national ICT infrastructure and legislation in context
    - Critical review of national ICT indicators in context
- What is ICT and what are its components?
- **T**: What is a “technology”?
    - (i) Is it hardware? Software? Algorithm?
    - (ii) Internet Technology: Overview of basic concepts, main elements and how the Internet is integrated into our day-to-day lives.
  
  - **I**: General overview of information, privacy, ownership and security
    - (i) What is information? How is it stored? Which information requires restricted access vs. public visibility vs reliable validation?
    - (ii) What is privacy? What are the consequences of a breach of privacy?
    - (iii) Who owns information? What are the responsibilities of data owners to the persons whom the data describes?
    - (iv) How can we be assured that data is not accessed in an unintended manner?
  
  - **C**: General overview of telecommunication network architecture and infrastructure
    - (i) The means of transmission used in telecommunication networks and their evolution towards the Internet.
    - (ii) The evolution of mobile networks from the 2nd to the 4th generation and the main Internet access technologies
    - (iii) The infrastructural transformation that follows the development of the Internet represented by the exponential increase in the data-flow between countries, a portrait of development and the profile of companies,
    - (iv) the role and importance of governments in the development of the network.
- ICT as a key component of a national strategic agenda Part – I
- Role and use of performance metrics (UN indicators)
    - ICT Development Index
    - e-Government Development Index
    - e-participation Index
    - International Digital Government Ranking

## Module 2 – National ICT Strategies - e-Governance, e-Government & e-Service

Associated LO(s): 2,3

Suggested Assessment:

- **Phase I: MCQ's with feedback for self-assessment of vocabulary and concepts**
  - **Phase I: Discussion Forums for responses to targeted questions**
    - Critical review of case studies from top-5 countries, and top-5 SIDS in context
      - Why are they considered successful or not successful?
      - What are the metrics?
      - What (missing) underpinning support structures contributed to (lack of) success?
  - **Phase II: Discussion Forums for responses to targeted questions**
    - Critical review of national case studies in context
      - Why are they considered successful or not successful?
      - What are the metrics?
      - What (missing) underpinning support structures contributed to (lack of) success?
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- ❑ E-Governance
    - Models of governance
    - Good governance
    - ICTs for governance
    - Governance issues specific to ICT's
    - Role of public servants in e-governance
    - Successful e-governance implementations - why they are considered successful?
  - ❑ E-Government
    - Government systems & processes
      - Tender submission and tracking
      - Process audit
      - Document archives
    - What is e-government? Do we really need the e?
    - Role of public servants in e-government
    - Successful e-government implementations - why are they considered successful?
  - ❑ E-Services
    - Public service provision
    - What is an e-service? Do we really need the e?
    - Public uptake and participation in e-services
    - Role of public servants in e-service provision
    - Successful e-service implementations - why are they considered successful?

## Module 3 – ICT & Human Resource Requirements for e-Service Administration and Delivery

Associated LO(s): 3,4

### Suggested Assessment:

- **Phase I: MCQ's with feedback for self-assessment of vocabulary and concepts**
- **Phase I/II: Discussion Forums for responses to targeted questions**
  - Review of participants' National ICT strategy, and existing or proposed e-service(s)
- **Phase II: Written PDF essay assignment**
  - Review of participants' National ICT strategy, and existing or proposed e-service(s)
  
- From ICT strategy to e-service
  - Underpinning support structures
    - Linkage to the National ICT strategy
    - Fitness for purpose
    - Designated goals & metrics
    - Examples from successful cases [Module 3]
      - Observed issues and remediating mechanisms
  - Identification of **need** for e-Service
    - Access, timeliness, integrity, and transparency
  
- Framework for development of a national e-service
  - Review of existing processes
    - Information integrity
    - Responsibility chains
    - Time and communication constraints
    - Known problems and/ flaws
  - Planning for an e-Service
    - Opportunities and requirements for integration with other e-Governance and e-Government services
      - Examples from successful cases [Module 3]
        - Observed issues and remediating mechanisms
    - Identification of resource requirements
      - Infrastructure
      - Processes
      - Personnel ICT skills - critical levels in the public service
      - Examples from successful cases [Module 3]
        - Observed issues and remediating mechanisms
    - Constraints
      - Timeframe for deployment
      - Quality and audit issues
      - Severity of service failure
      - Examples from successful cases [Module 3]
        - Observed issues and remediating mechanisms
    - Deploying an e-service via Parallel Run
      - Pre-deployment, phased-deployment, post-deployment
      - Examples from successful cases [Module 3]
        - Observed issues and remediating mechanisms

## Module 4 – ICT Legislation, Policies and Regulations

Associated LO(s): 5

Suggested Assessment:

- **Phase I: MCQ's with feedback for self-assessment of vocabulary and concepts**
- **Phase I: SAQ's for responses to targeted questions**
  - Case study: alignment between Policies, regulations and legislation a National ICT Strategy
- **Phase II: Discussion Forums for responses to targeted questions**
  - Policies, regulations and legislation applicable in participants' own jurisdictions
  - How do these align with the National ICT Strategy?
  
- Introduction to and distinction between ICT legislation, policy and regulation
  - Why do we need all three?
    - What are their distinct roles and functions?
    - How do these mechanisms, singly and in conjunction, promote investment and growth in the ICT sector, and socioeconomic development
  - What are the unique challenges of operating in an ICT converged environment?
- Key Legislation:
  - Telecommunication or ICT Act
    - Objects and bestowed powers
  - Privacy and data protection legislation;
    - Location of data;
    - Jurisdiction;
    - Big Data
    - What data is to be governed, why, and how?
  - Competition law
  - Financial transactions Act
  - Electronic transactions Act
- Key Policies
  - Universal access
  - Socioeconomic growth and development
    - Trade Agreements/Common Markets
    - Mutual Recognition Agreements
    - Taxation
    - Innovation
- Key Regulation
  - Competition
  - Consumer protection
  - Fair and efficient use of national resources (spectrum, numbering etc.)
  - Conformance & Interoperability
  - Cryptocurrency
  - Content
- Reflective exercise on legislation, policy and regulation in participants' jurisdictions:
  - Good practice
  - Gaps
  - Priorities for action

## Module 5 – ICT Trends

### Associated LO(s): 6

#### Suggested Assessment:

- **Phase I: MCQ's with feedback for self-assessment of vocabulary**
- **Phase I: Discussion Forums for responses to targeted questions**
  - Peer-peer discourse on ICT trends as applicable to their sector, department or ministry, in the context of public service governance and public service delivery
- **Phase II: Discussion Forums for responses to targeted questions**
  - Peer-peer discourse on ICT trends as applicable to their sector, department or ministry, in the context of public service governance and public service delivery
  
- ICT as a key component of a national strategic agenda Part – II
  - Key Elements
    - Governance
    - Public Services Provision: Government Systems and Public Service Provision
    - Stimulation and facilitation of the ICT sector
    - Expanding access and use: Community networks
  - Main enabling ICT applications and platforms, and their respective advantages in the corporate, or government, environment
- e-Governance, e-Government & e-Service: ICT Trends and applications
  - Cloud services: hosted in-country, in-region, and extra-regional
    - Document Sharing
    - Digital Storage
    - Software as a service
    - Artificial intelligence
  - Internet of Things (IoT)
  - Cryptocurrency
  - Open Data
  - Smart Contracts
  - Tracking ICT trends world-wide: key contemporary resources
    - ICT in e-government: publications and e-publications
    - UN and regional reports (esp. annual surveys)
- Examination of emerging trends in participants' jurisdictions
  - Three specific trends to be identified by the facilitator for each offering – for example
    - Citizen Identification via unique Electronic ID
    - e-finance
    - Electronic Tax Administration
    - TV Whitespace Frequency Administration
    - Electronic Tendering Systems
- Reflective exercise on ICT interventions in participants' jurisdictions:
  - Good practice
  - Gaps
  - Priorities for action