

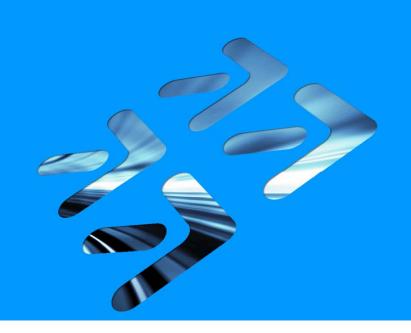
Fostering Innovation to Accelerate Telecommunications and ICT Development in the Caribbean

ITU Regional Development Forum for the Americas (RDF-AMS)

Centro de Eventos, Brasil 21, Brasilla, Brazil 15 Jun 2016

#### Presented by:

Nigel Cassimire
Telecommunications Specialist
<nigel.cassimire@ctu.int>



#### About the CTU

- Established in 1989 by Caribbean Community (CARICOM) to be the inter-governmental telecommunications policy instrument for the Caribbean
- 2003: Defined a new strategic direction to address issues of information and communications technologies (ICT)
- 2004: Expanded Membership to include Private sector organisations
- Sector Member of ITU; Observer status at CITEL, ICANN GAC
- CTU fosters and works in strategic partnerships



## **CTU Members**



Bureau Telecommunicatie en Post (Curacao)

Digicel (Trinidad & Tobago)

Eastern Caribbean Telecommunications Authority

LACNIC, LIME (Barbados), ISOC

International Amateur Radio Union (Region2)

Telecommunications Authority of Trinidad and Tobago

### **CTU Core Activities**



**ICT Harmonised Policy Formulation** 

Capacity Development



•

**Regional ICT Project Coordination** 

• Caribbean Representation





**Industry Watch** 

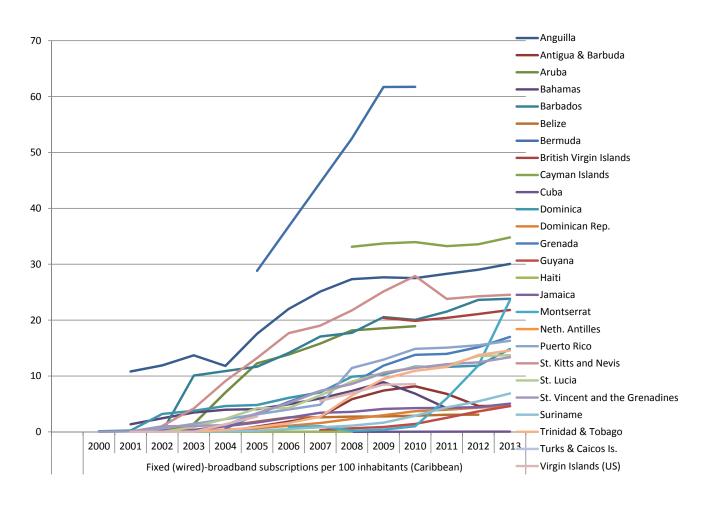
#### The "Caribbean" is ...



- Diverse: languages (4), geography (islands and mainland), sizes, cultures
- International and regional (States; Dependencies; Sub-regions)
- Complex at many levels

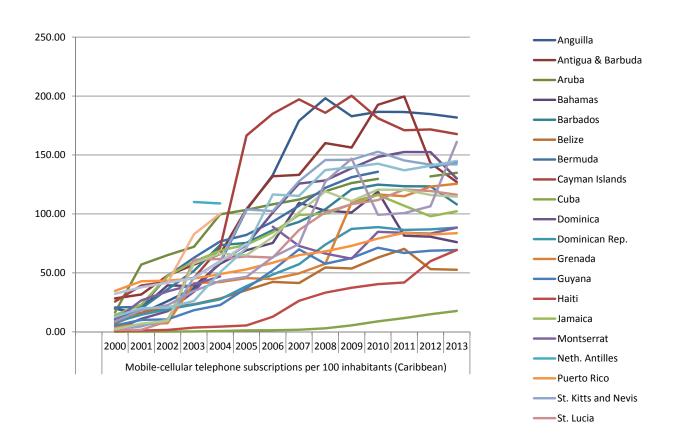


## Fixed Broadband per 100 source: ITU





## Mobile Subs per 100 source: ITU





#### Caribbean Market Characteristics

Major Services / Players	Digicel	LIME/Columbus/ Liberty	Other
Landline	X	X	
Mobile (Cellular)	Χ	X	
Internet (Fixed)	Χ	X	X
Internet (Mobile BB)	Χ	X	
TV / Entertainment	Χ	X	X
International Capacity	Х	X	

Typically duopolies in each territory for each service, with few exceptions.

4G LTE mobile is largely standard now.



#### Caribbean Market Characteristics

- Internet access offerings typically 2 to 100 Mbps download speeds
- Usually independent regulatory agencies (exceptions are Barbados, Antigua)
- Single or multiple regulatory agencies (depending on the country)



## Caribbean Market Challenges

- Insufficient vibrancy of market competition
- Market consolidation (suppliers LIME and Columbus recently merged and acquired)
- Broadband access prices not sufficiently affordable in many countries
- Resource / Capacity limitations (especially on a per country basis)
- ICT industries still nascent; minor contributions to overall GDP



## ICT Market Objectives

- Increased service penetration
- Improved diversity of available services
- Improved affordability of diverse services
- Digital economy development

#### Via:

- Vibrant competitive markets
- Regional collaboration for economies of scale
- Increased percentage of empowered users through awareness and capacity building
- Secure, robust network and commercial services
- Data literacy, availability and management



# Scope for Innovation

• Supply & Demand Side Stimulation:

In What Areas?	Possible Strategies
Approaches	<ul> <li>More effective Collaborations</li> <li>Curricula for digital literacy</li> <li>Multi-stakeholder mechanisms</li> <li>Motivated Governments</li> </ul>
Technology / Infrastructure	<ul> <li>Leverage high mobile penetration</li> <li>Spectrum harmonization</li> <li>Judicious use of municipal wi-fi</li> </ul>
Financing	<ul> <li>CariSou; flexible use of USFs</li> <li>Digital currencies</li> <li>Coordination of donor financing</li> </ul>
Digital Economy Growth	<ul><li>Open Data / Open source</li><li>Incentives for local developers</li></ul>



## Some Key Initiatives



- CARICOM Single ICT Space
- ICT-enabled borderless space
  - Harmonised policies, laws, regulations, technical standards
  - Equitable and affordable access
  - Regional frameworks for robust, secure ICT networks and services
  - Rapid, secure, real-time acquisition, processing and dissemination of information



## Some Key Initiatives (Cont'd)

- IG & Critical Internet Infrastructure
  - Collaborations with regional stakeholders and international Internet organisations re:
    - IXP proliferation
    - Regional peering (CarPIF)
    - Cyber-security
    - Local content development
  - Continuing work towards facilitating establishment of appropriate policy frameworks and regional capacity building e.g. CIGF, CaribNOG, relevant workshops / seminars





# Thank you!







