



Is the Caribbean ready for the IoT?

Select findings from Study on Conformance and Interoperability in the Caribbean

Forum on the Internet of Things: Smarter Living in the Caribbean

Trinidad and Tobago

26 April 2017

What is the state of C&I for ICT in the Caribbean?

- Through ITU, two studies have been conducted
 - 2014: an initial (baseline) study of C&I with respect to ICT and telecoms
 - 2016: a demand risk study
 - To begin to determine how best to advance C&I assessment in the region
- Both assignments required surveys be conducted, to secure firsthand information

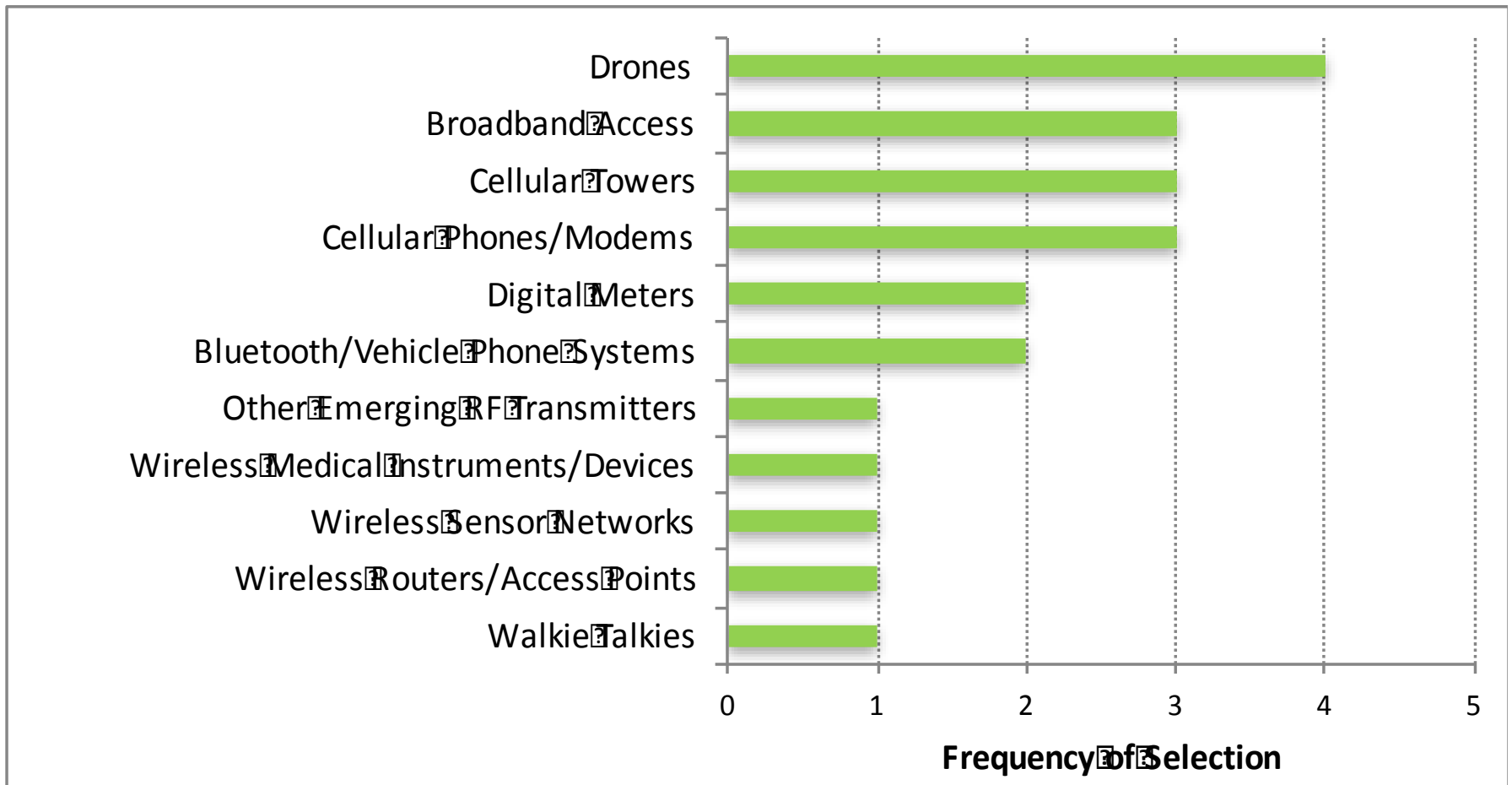
14 out of 22 countries responded to 2016 survey

- 13 regulatory organisations
 - Anguilla, Bahamas, Belize, Bermuda, Cayman Islands, Guyana, Jamaica, Montserrat, Saint Lucia, St Vincent & Grenadines, Suriname, Trinidad & Tobago, Turks & Caicos Islands
- 1 national bureau of standards
 - St Kitts & Nevis

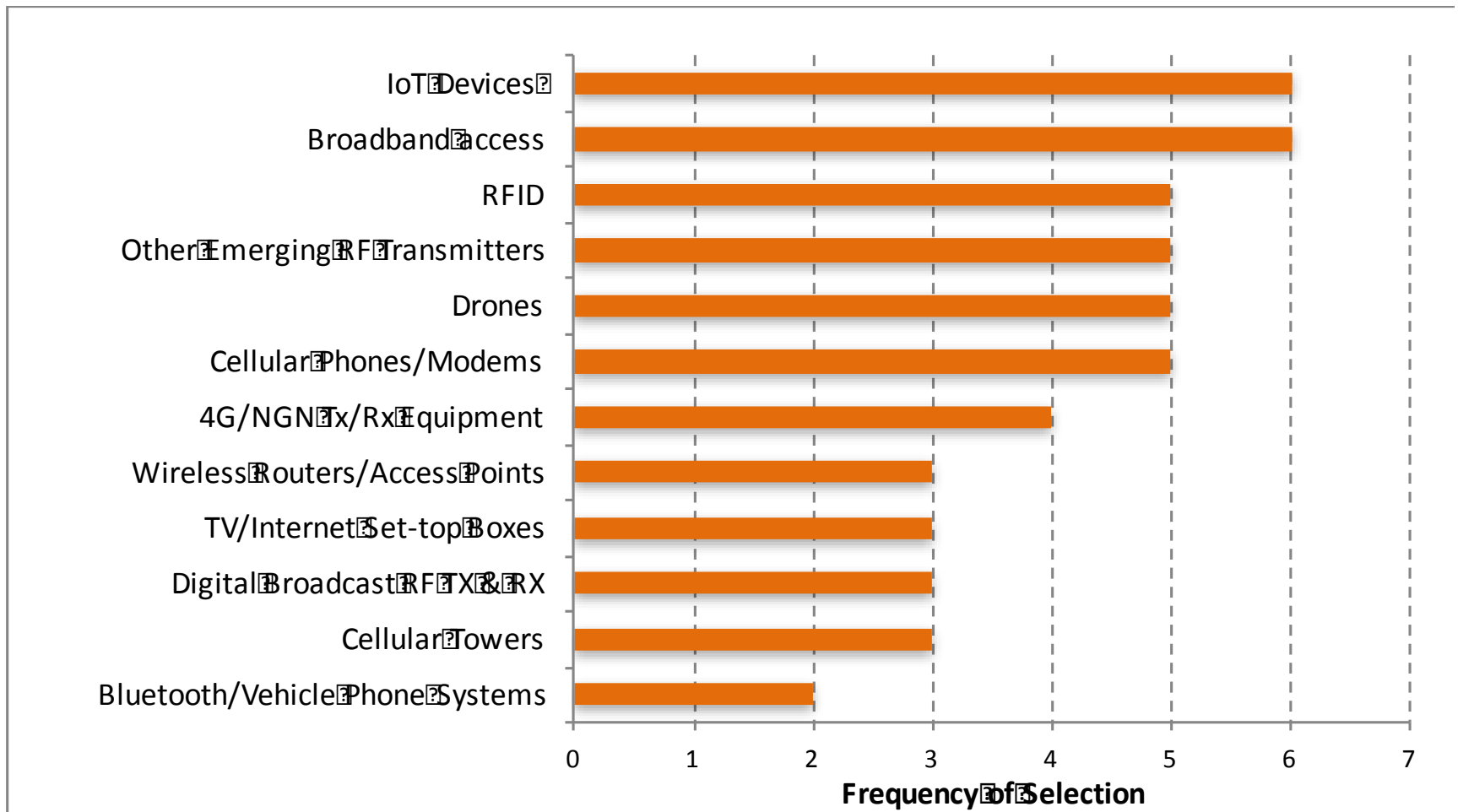
Product/product areas list

- 4G/NGN transmitters/receivers
- Bluetooth headsets/automotive phone systems
- Broadband access
- Cellular phones/modems
- Cellular towers
- Digital broadcast RF transmitters and receivers
- Digital meters (e.g. for electricity, gas, water)
- Digital TV
- Drones (unmanned aerial vehicles)
- Dynamic spectrum access
- Internet of Things (IoT) devices
- Radio-frequency identification (RFID)
- Other emerging RF transmitter devices
- Set-top boxes (digital TV/Internet access)
- Walkie-talkies
- Wireless medical instruments and devices
- Wireless routers/access points
- Wireless sensor networks (Body Area Networks/SCADA)

Current areas needing greater C&I scrutiny



Future areas of demand for C&I services



C&I assessment frameworks are underdeveloped in Caribbean

- Most countries offer certification/Type Approval services
- Great reliance on certificates issued, from e.g. ETSI, FCC, and Industry Canada, as basis for Conformity Assessment
- Very few offer accreditation, instrumentation/ metrology or laboratory testing services for telecoms & ICT products
 - None certified to the relevant ISO/CASCO guidelines or standards
- Most Caribbean regulators operate with very limited budgets and resources
- Policy and legal frameworks for C&I for telecoms/ICT underdeveloped
 - Frequently, no improvements/changes since initial laws

Limited resources available for C&I Assessments

Country	Organisation (No. of employees)	Responsible Unit (No. of employees)
Anguilla	< 10	2 – 5
Bahamas	20 -- 49	2 – 5
Belize	< 10	1
Bermuda	10 – 19	1
Cayman Islands	10 – 19	2 – 5
Guyana	10 – 19	2 – 5
Jamaica	50 – 99	1
Montserrat	< 10	2 – 5
St Kitts & Nevis	10 – 19	1
Saint Lucia	< 10	2 – 5
St Vincent & the Grenadines	10 – 19	2 – 5
Suriname	20 -- 49	1
Trinidad & Tobago	50 -- 99	2 – 5
Turks & Caicos Is	< 10	1

Key challenges, re IoT

- IoT ecosystems require interoperability
- IoT requires standards
 - To support conformance
 - Common standards crucial for interoperability
- Caribbean not as represented as it should be in the global IoT discussions that are occurring
 - Myriad of discussions occurring to address a broad range of issues, all relevant to IoT
- Lots of IoT discussions have been occurring across a several Caribbean groupings
 - Discussions occurring in silos
 - Critical mass/tipping point not yet achieved
 - Limited consensus on key issues

Issues for the Region

- Policy makers may be in favour of efforts to strengthen C&I in the region
 - So far little or no evidence of tangible improvements/changes
- Regulators recognise the importance of IoTs, but they have more urgent concerns
 - E.g. QoS, consumer protection, competition, cybersecurity, spectrum management
- There have been proposals for test labs in the region
 - But major viability and sustainability challenges likely
- Regionally, there is a focus on strengthening C&I assessment frameworks
 - ITU has funded 2 studies, with 3rd assignment to start soon
- However, any real progress is still some time away

Any Questions?

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