Database & Online Data Collection Portal

15th Meeting of the Expert Group on Telecommunication/ICT Indicators (EGTI)

September 26th, 2024



AGENDA

- Who is ECTEL
- Previous Data Collection Process
- Challenges with the Data Collection Process
- The Project
- Our Improved Process
- How the Portal Works
- Benefits of the Portal
- Next Steps for Portal Enhancement



Who is ECTEL?

- The Eastern Caribbean Telecommunications Authority (ECTEL) is a regional organisation, established by Treaty in 2000 to regulate and promote the telecommunications sector in the Eastern Caribbean.
- ECTEL provides advice to the National Telecommunications Regulatory Commissions (NTRCs) on electronic communications matters in its five (5) Contracting States:
 - ☐ Commonwealth of Dominica
 - ☐ Grenada
 - ☐ The Federation of St. Kitts and Nevis
 - Saint Lucia
 - ☐ St. Vincent and the Grenadines
- ECTEL collaborates with the NTRCs to promote consumer rights and harmonised benefits in the electronic communications sector in its Contracting States.
- The ECTEL Directorate is headquartered in Saint Lucia.





Role of ECTEL & NTRCs in Data Collection

- Coordination with NTRCs: ECTEL collaborates with NTRCs annually to collect ICT data from licensed electronic communications providers in the Contracting States.
- ICT Database: ECTEL maintains a comprehensive database to monitor and report on the electronic communications sector.
- The Telecommunications Act mandates:
 - One of the functions of the NTRC is to report to and advise the Minister on the legal, technical, and economic aspects of telecommunications, and the social impact of telecommunications.
 - The NTRC shall submit to the Minister annually at the end of each calendar year, a report which includes an assessment of the state of telecommunications and its impact and significance for the development of the state.



The Previous Data Collection Process

Annually, data collection forms were sent to the licensees in all the Contracting States through the NTRCs, using Excel Spreadsheets.

Licensees were required to provide revenue, capital expenditure, details of investments, coverage, details on plans and services, employment, prices, traffic and subscription data for the various categories of services they provide.

The manual collection and review process was extremely time consuming, often taking months to complete, requiring frequent follow-ups by NTRC and ECTEL staff.

The submitted data was reviewed by ECTEL for inconsistencies and then entered into a comprehensive Excel database.

This data was used to prepare the Annual Electronic Communications Sector Review Report, develop ICT indicators, and used for reporting to ECTEL Contracting States, regional organisations and international bodies such as the ITU.



Challenges

- Manual Data Collection: Excel spreadsheets for data exchange led to inefficiencies.
- Time-Consuming Process: The data collection, verification, and review process often took months to be completed.
- Data Inconsistencies: Inconsistencies in submitted data required extensive review by NTRCs and ECTEL.
- Frequent Follow-Ups: Staff needed to follow up with licensees repeatedly to ensure timely and accurate data submissions.
- Labour-Intensive Entry: Manual data entry into Excel was labour-intensive and increased the risk of human error eg. transcription and transposition.
- **Dependence on Excel**: Excel is not ideal for large-scale data management and tracking ICT indicators across multiple states.



The Project

- In 2019, ECTEL in collaboration with the NTRCs in an effort to simplify and modernise the process for the collection and dissemination of data, embarked on the project to develop and implement the **Database, Data Collection Portal and Visualisation Solution Project for ECTEL Contracting States**. The project included:
- A database to house and simplify the management of ICT data collected from licensed electronic communications service operators.
- An online portal for collection of ICT indicators from licensed electronic communications service operators.



The Project

Establishment of Technical Working Group (TWG) comprising ECTEL and NTRCs to develop the technical specifications of the project and to provide support to the consultant.

The award of the contract to Canadian consulting IT services company, Compusult Limited for development of the portal.

Development of the application including the preparation of user manuals and administrative guides.

Testing and validation of the various components of the database, data collection portal and data visualization platform.

Training of the staff of the ECTEL and the NTRCs on the software and the various components of the database and portal.

Training of licensed electronic communications providers in the ECTEL Contracting States in the use of the portal for data entry.

The engagement of a Data Entry Intern for input of historic ICT Data in the portal.

Commencement of the hosting and maintenance agreement with Compusult Limited.

Issuance of credentials to licensed electronic communications providers for input of 2020/2021 ICT Data.



Our Improved Process

ICT data submission requests are sent to the Licensees electronically via Email.

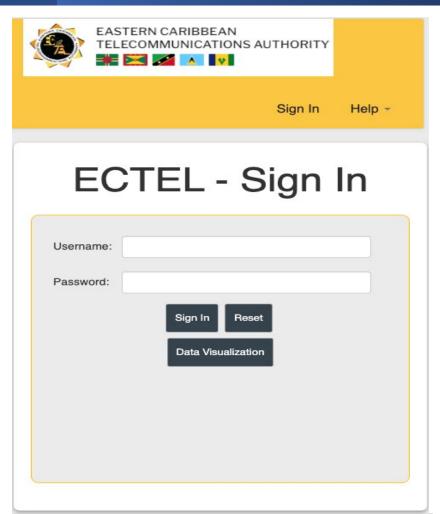
Licensees are now required to enter and submit their annual ICT data directly through the Data Collection Portal.

ECTEL and the NTRC have immediate access to submitted information once the licensed service provider clicks submits.

To date, most licensees have successfully submitted their ICT data through the portal, streamlining the data entry collection process.

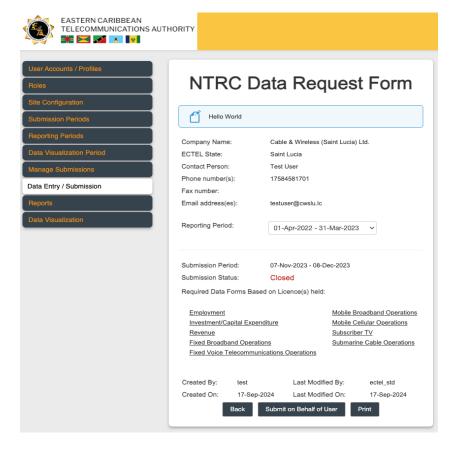
The Portal

- The Web-Based Portal features a comprehensive Database, Data Collection, and Visualisation Solution Platform for ICT data from licensed electronic communications service providers in ECTEL Contracting States.
- Portal Users:
 - Licensed service providers- Submit data via online forms and have access to their own submitted data for review and verification.
 - The NTRCs- Access to submitted data from licensed service providers and reports specific to their respective Contracting State.
 - **ECTEL** Access to all data and reports across all Contracting States.
 - **General Public** *(upcoming feature)* Explore insights through interactive data visualization tools for better understanding of ICT trends.





The Data Entry Form



Investment/Capital Expenditure

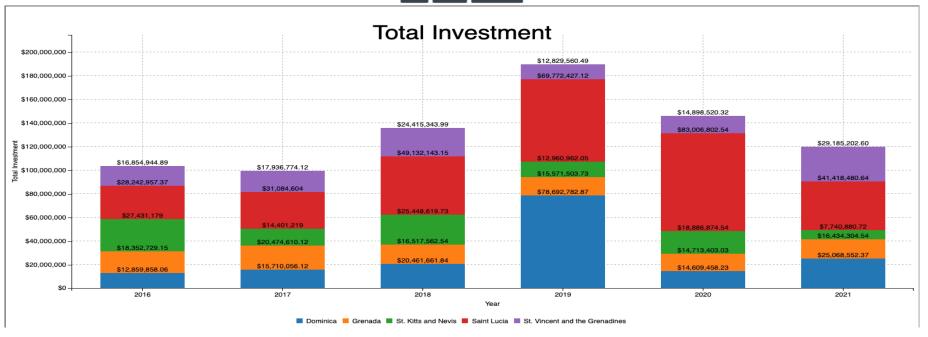
Reporting Period: April 01, 2022 to March 31, 2023

Back	Save Changes	Reset Form	Print	Compare Other Submissions
	Investment			
	Licence Type		Capital Expend	diture (EC\$)
	Fixed Public Telecommunications			
	Internet Network/Serv	rices		
	Public Mobile Telecor	mmunications		
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Back	Save Changes	Reset Form	Print	Compare Other Submissions



Data Visualisation

Indicators:		States:	Chart Type:	Colours:	Font:	Other:
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Reports

- Employment
- Revenue
- Investments
- Subscriptions
- Traffic
- Prices
- Coverage

Administration - Reports

Time Frame:	From:	To:				
State/ECTEL:	ECTEL (ECTEL-Wide Sur Dominica Grenada St. Kitts and Nevis Saint Lucia St. Vincent and the Grena	,	Licensee:	All Licensees 21st Century Telecom Network (Domi 21st Century Telecom Network (Grena 21st Century Telecoms (Saint Lucia) 21st Century Telecoms (St. Vincent) 21st Century Telecoms (St.Kitts) A&M Telecoms Inc. AT&T Singular Wireless (DOM)		
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Revenue		Subscrib	er TV Subsc	riptions		
		Reset	Submit			



Benefits

Direct Data Entry:	Replaces annual data collection forms, enabling licensees to enter data directly into the online portal.
Simplified Data Management:	Streamlines the management of collected data, making it easier to handle and process.
Enhanced Access and Usability:	ECTEL and the NTRCs can easily access and utilize the collected ICT data for more effective oversight.
Real-Time Data Access:	Provides immediate access to data, allowing policymakers to respond swiftly to emerging trends and issues.
Operation Operation	Ensures decisions are based on the most current data, leading to more accurate and relevant policies.

Benefits



Comprehensive Data Analysis:

Facilitates **in-depth analysis** of ICT data, enhancing decision-making and strategic planning.



Continuous Monitoring:

Enables **ongoing monitoring** of policy implementation and outcomes, ensuring effective evaluation and adjustments.



Improved Data Sharing:

Simplifies **data sharing** across departments and agencies, fostering **collaboration** and coordination.



Rapid Report Generation:

Allows for **quick generation of reports** that can be customized for ECTEL as a whole, individual Contracting States, or specific Licensees.



Advanced Data Visualisation:

The visualisation component will display **summarized and analysed data**, including ICT indicators, on the websites of ECTEL and NTRCs, providing valuable insights to local, regional, and international stakeholders.



Next Steps for Portal Enhancement

- Incorporate User Feedback:
 Consistently gather and integrate user suggestions to enhance portal functionality and improve overall user experience.
- Leverage Data Analytics Tools:
 Utilise advanced analytics platforms such as Power BI and Tableau to create more detailed reports and interactive dashboards, offering deeper insights into the data.
- Launch Public Data Visualisation:
 Introduce a public-facing visualisation platform on the ECTEL and NTRCs websites, allowing public access to interactive visualisations of sector performance metrics.
- Continuous Innovation:
 Commit to ongoing development, introducing new features, enhancing analytics capabilities, and improved usability to meet evolving stakeholder needs.



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Grenada

St. Kitts & Nevis

Saint Lucia

St. Vincent & the Grenadines





