Caribbean Regional Digital Infrastructure Plan

Rationale for a Caribbean Regional Digital Infrastructure Plan

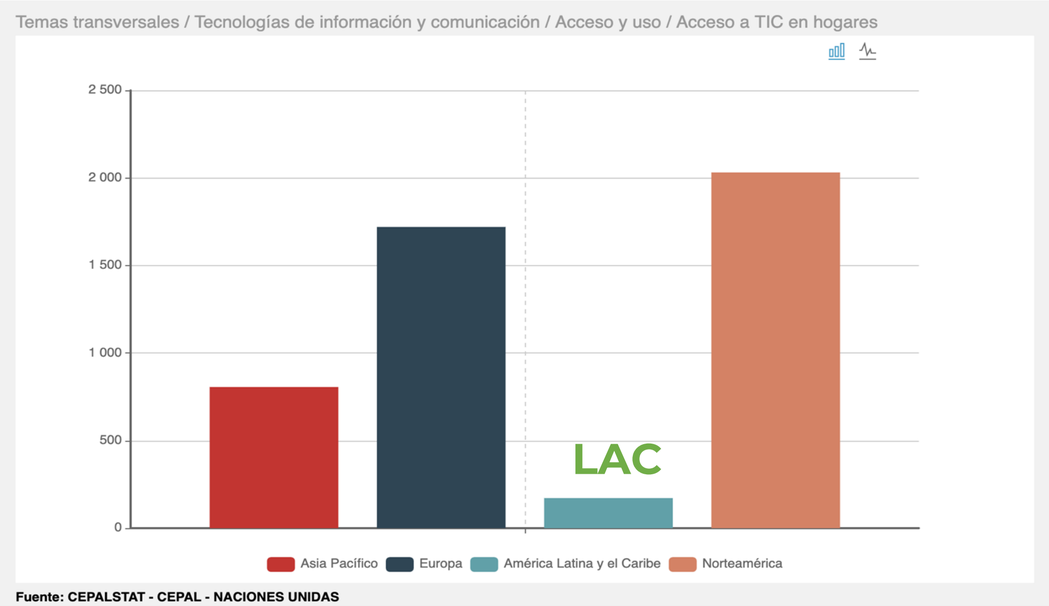
Digital infrastructure — data centers, submarine cables, terrestrial fiber networks- underpins the **digital economy, AI deployment, public digital services,** and **sustainable economic development.**

Now is the time to build **resilient**, **inclusive infrastructure** to foster **regional innovation**, **economic transformation**, and active participation in the **global digital economy**.

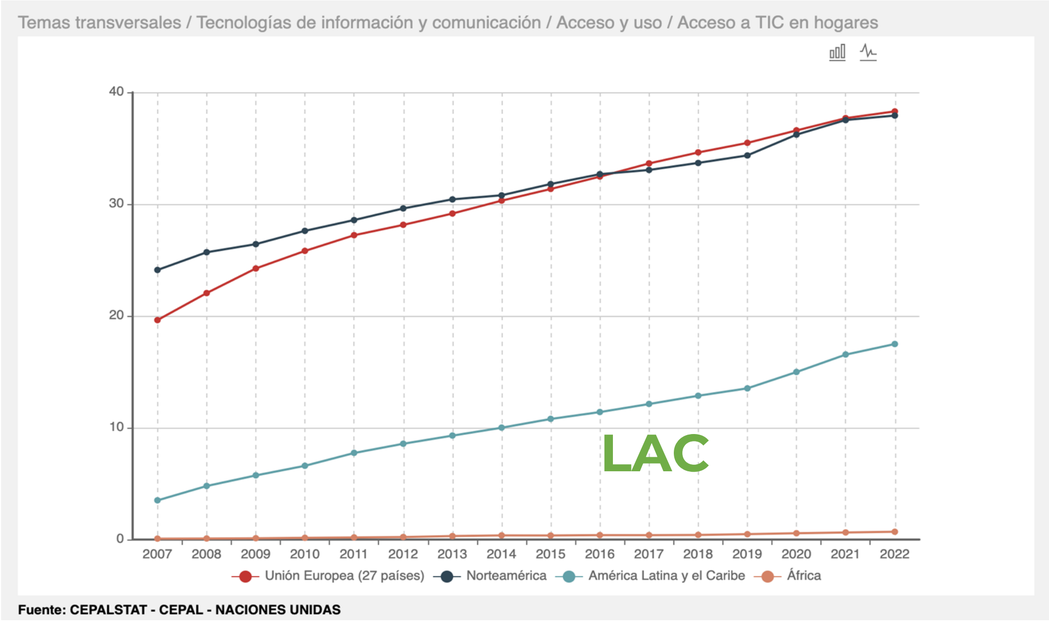
Without coordinated action, the Caribbean risks **technological dependency**, **reduced competitiveness**, and **digital exclusion.**

Aligned with both **national and regional priorities**.

The region lags behind in digital infrastructure

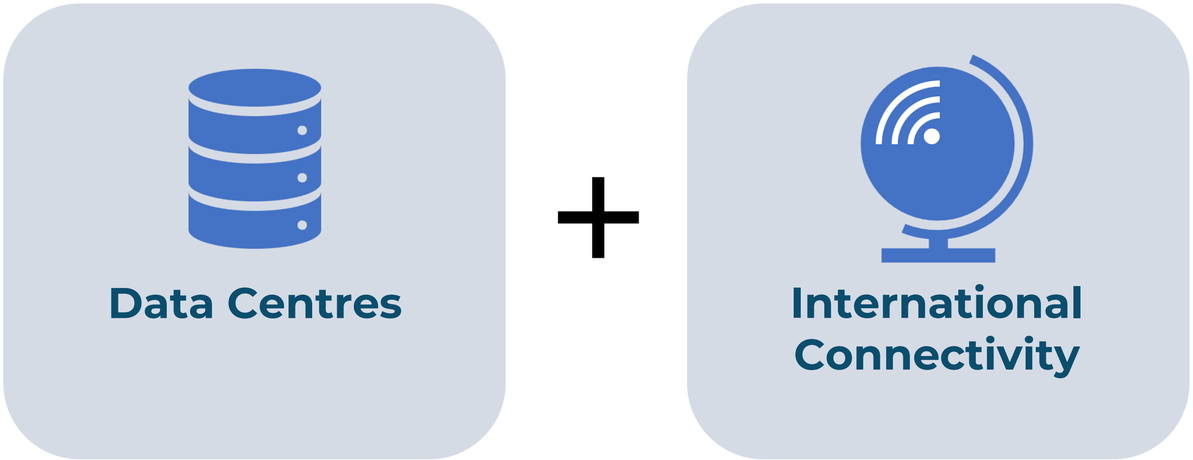


Data centers in the world
(per region)



Fixed high-speed internet penetration,
in the world (per region)

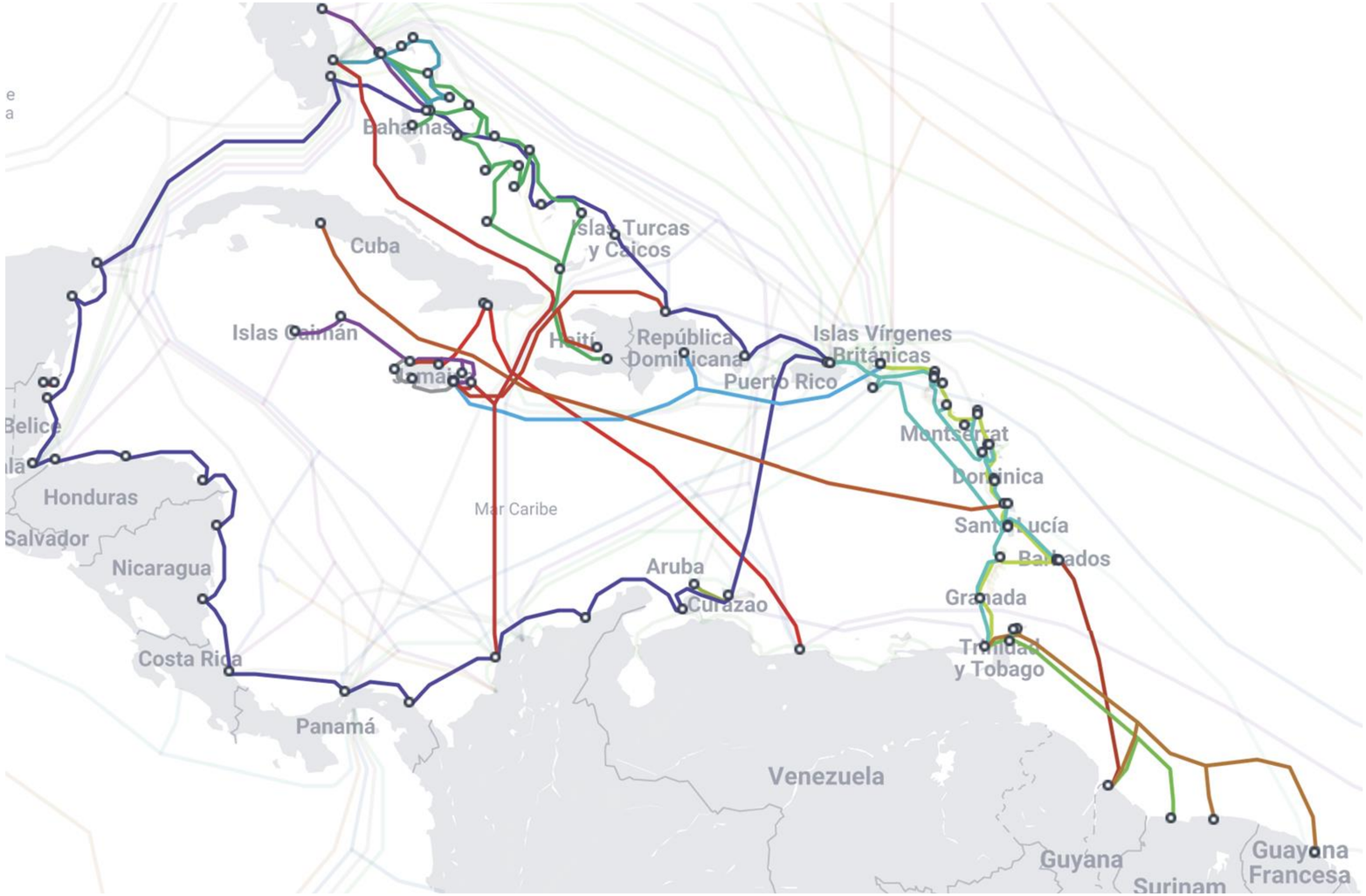
Building blocks of the Caribbean Regional Digital Infrastructure Plan



Building blocks of the Caribbean Regional Digital Infrastructure Plan

International Connectivity

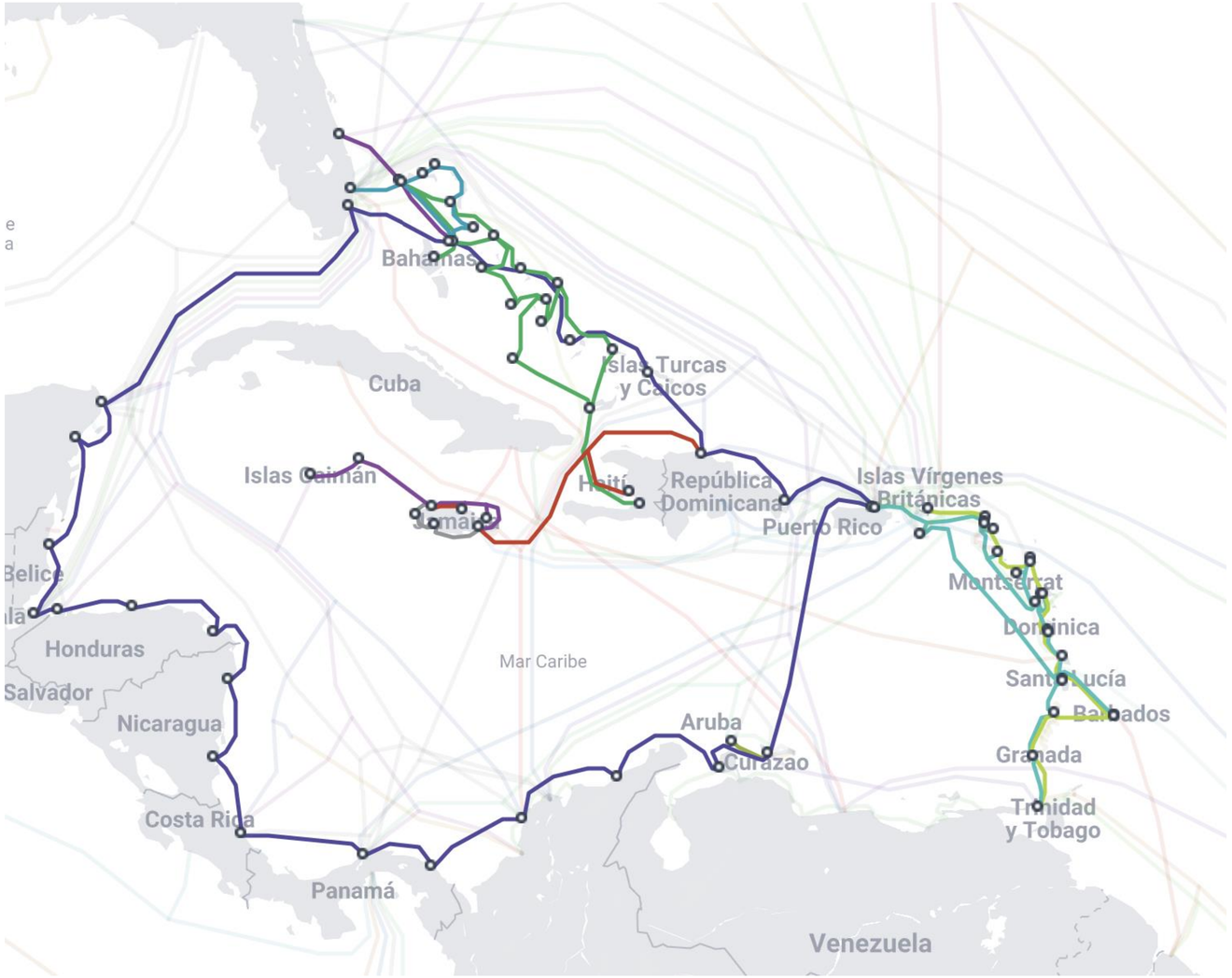
Submarine Cables in the Caribbean: Challenges



source: Telegeography

SUBSEA CABLE	RFS	EST END OF LIFE
ECFS	1995	2020
CJFS	1997	2022
JSCFS	1997	2022
Bahamas 2	1997	2022
Alonso de Ojeda	1999	2024
ARCOS	2001	2026
BDSNi	2001	2026
BICS	2001	2026
FibraLink	2006	2031
Southern Caribbean Fiber	2006	2031
CFX-1	2008	2033
SG-SCS	2010	2035
East-West	2011	2036
ALBA-1	2012	2037
TT-1	2012	2037
SEUL	2017	2042
XLink	2019	2044
ARIMAO	2023	2048
Deep Blue One	2024	2049

Active submarine systems reaching its theoretical “End of Life” within the next 7 years



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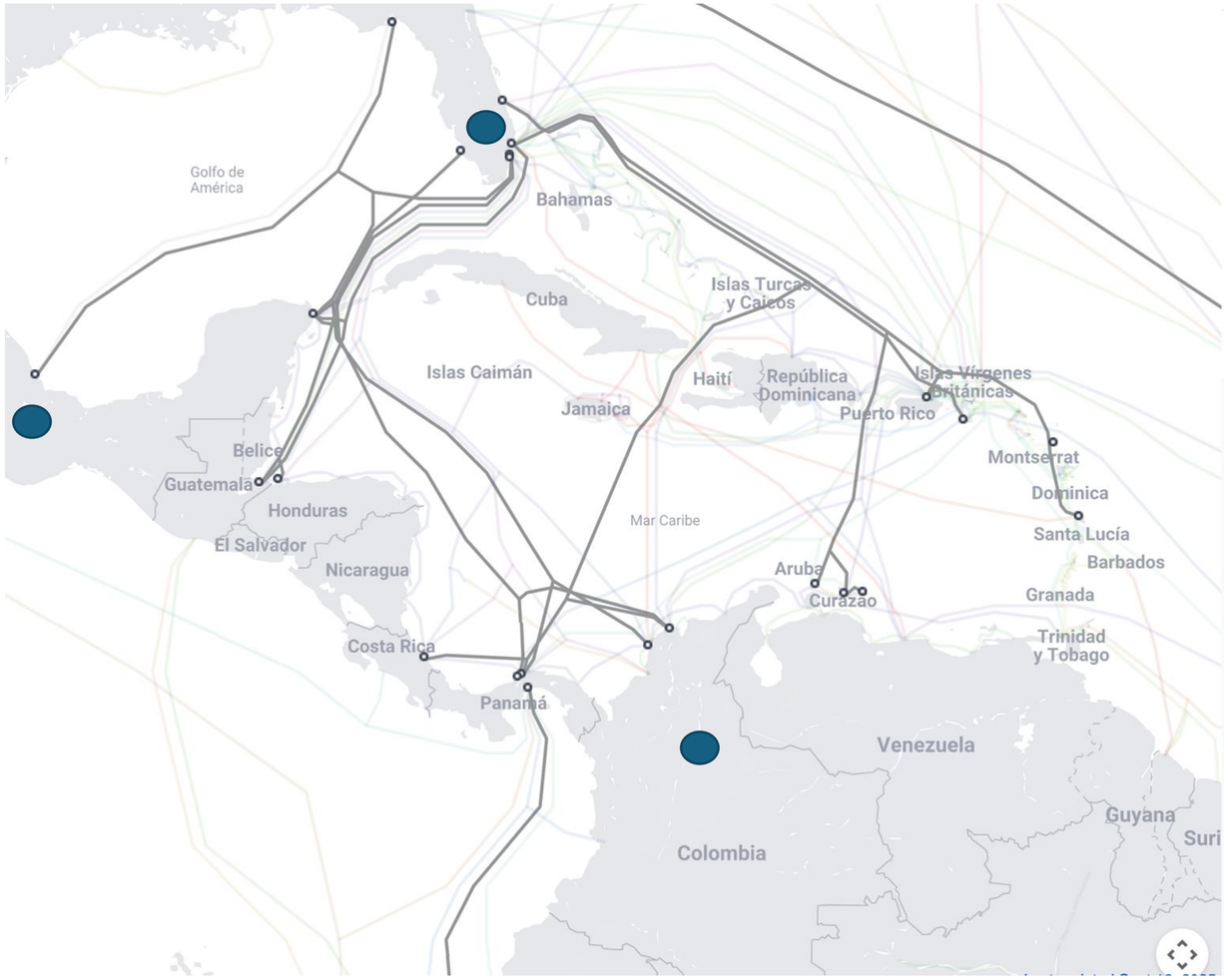
Submarine Cables in the Caribbean: Opportunities



Cloud Regions / Availability Zone

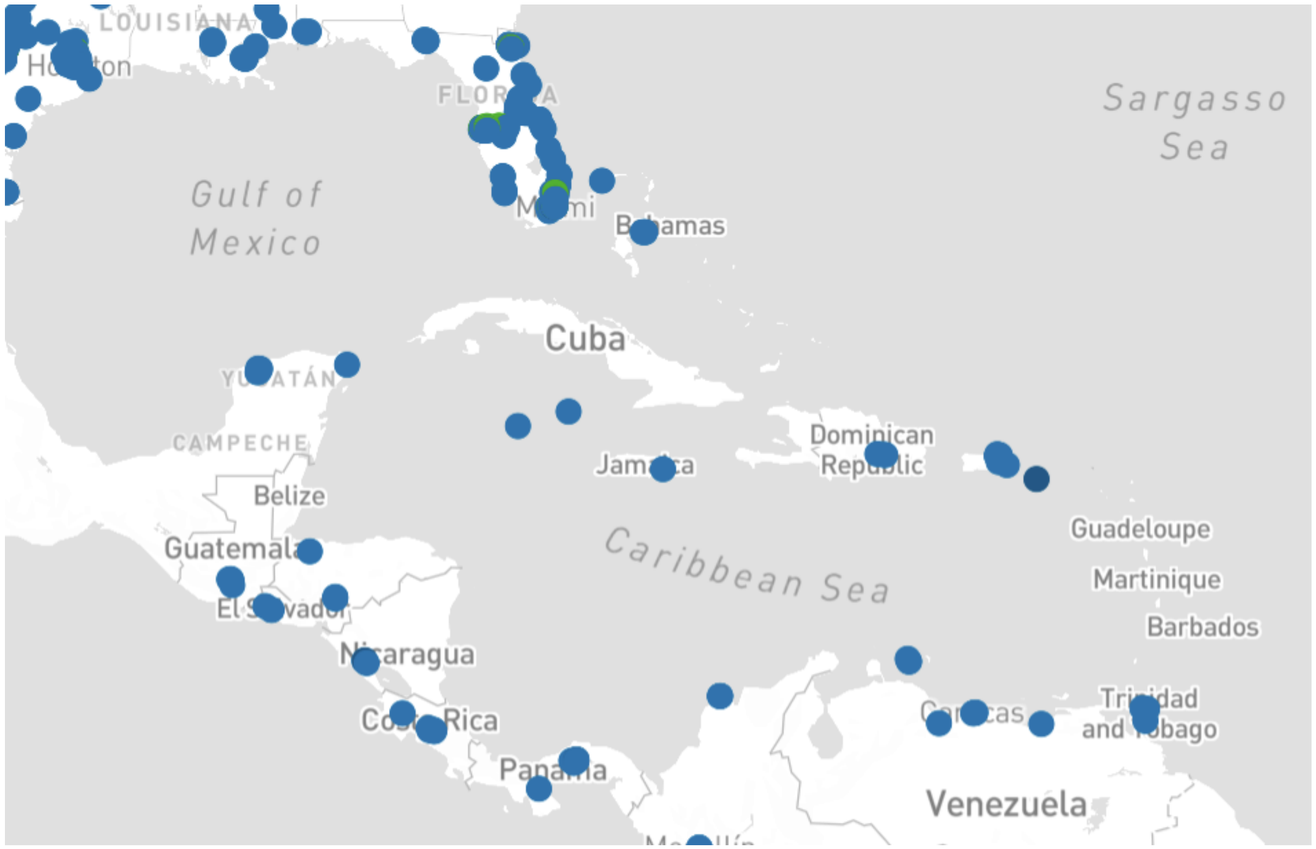
The announced submarine cable systems configure a **trunk meshed network** that will be the future highways that connect every single country in the region to the closest point of Digital Services Delivery HUB.

Source: Telegeography

Building blocks of the Caribbean Regional Digital Infrastructure Plan

Data Centres

Data centers in the Caribbean: Challenges



source: datacentermap.com

COUNTRY	# of Data Centers	TIER
Barbados	-	-
Belize	-	-
Jamaica	3	III, N/A
Guyana	-	-
Suriname	2	N/A
The Bahamas	6	III, N/A
Trinidad and Tobago	4	III

The data presented in this report is based on information gathered from seven countries: Barbados, Belize, Guyana, Jamaica, Suriname, The Bahamas, and Trinidad and Tobago. Source: datacentermap

Each Caribbean country will need to build its resilient edge Data Center

- **Secure land** site
- 24/7 green **energy** supply
- **2+ connectivity to CLS** with access to regional submarine highways
- **Submarine connectivity to Cloud Regions** with minimum latency characteristics
- Comply with **international technical standards** and international best practices of the data center Industry

Data centers in the Caribbean: Opportunities

Drive **Foreign Direct Investment** and Commercial Synergies

Develop a Regional **Digital Hub**

Enable Digital **Sovereignty**

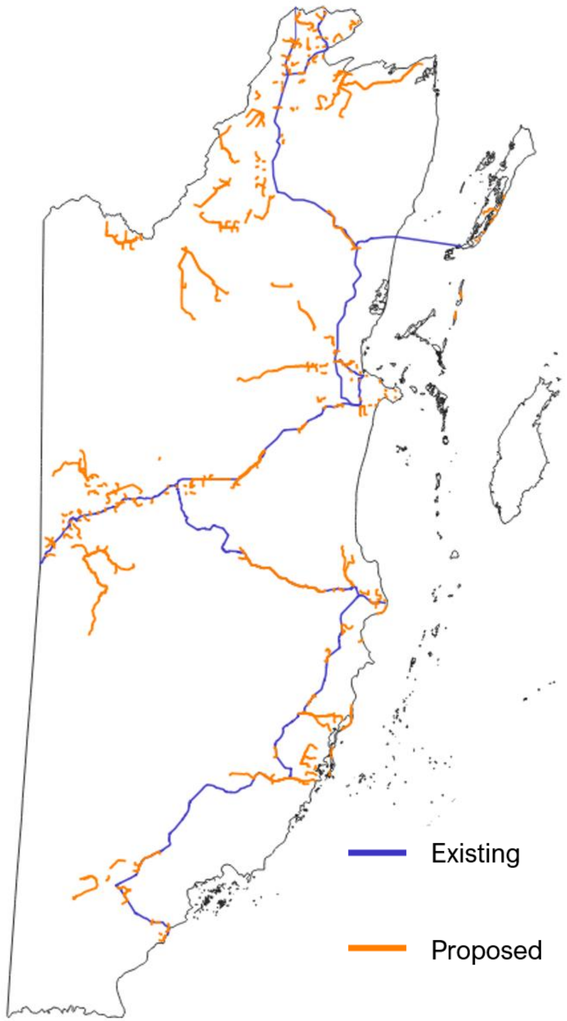
Belize’s National Digital Infrastructure Plan

Belize's National Digital Infrastructure Plan

April 2025

Building blocks of Belize’s National Digital Infrastructure Plan

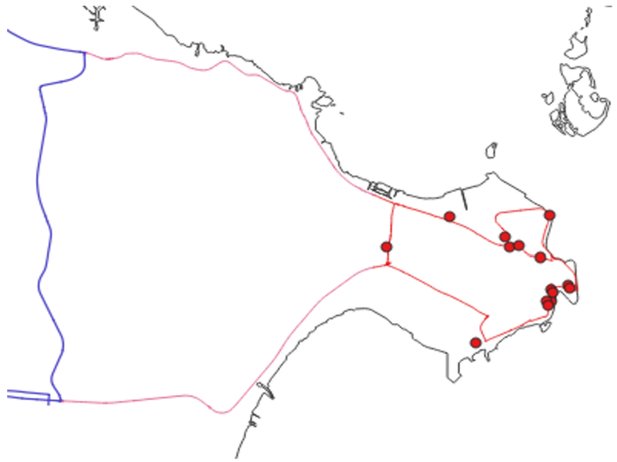
Building blocks of Belize's National Digital Infrastructure Plan



Proposed network.

+

Belmopan DPN Ring



Belize City DPN Ring

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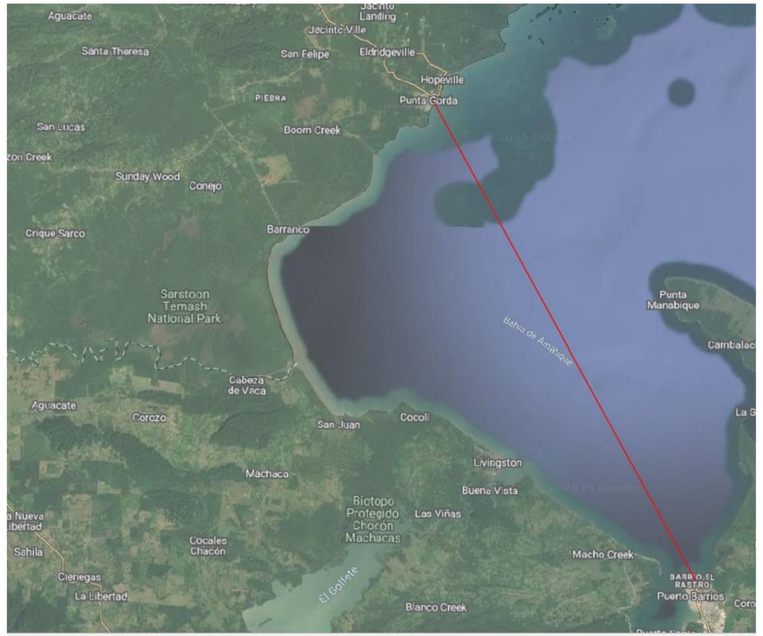


Proposed submarine fibre-optic cable

Investment Cost Estimate

The total estimated investment to implement the different components of this National Digital Infrastructure Plan is as follows*:

Building block	CAPEX USD, millions	Annual OPEX USD, millions
Fibre-optic Deployment	XX.X	X.X
Government-owned Data Centre	XX.X	X.X
International Connectivity	XX.X	X.X
Total	XX.X	X.X

* Initial estimate based on the implementation of the baseline scenario for each building block.

National Digital Infrastructure Plan
-executive summaries-

Barbados
Guyana
Jamaica
Suriname
The Bahamas
Trinidad and Tobago

National Digital Infrastructure Plan executive summaries

Two-pagers have been drafted and will be introduced to each of the following countries:

Barbados
Guyana
Jamaica
Suriname
The Bahamas
Trinidad and Tobago

They provide an **initial assessment of opportunities and alternatives** for the improvement of digital infrastructure.

The two-pagers **capture the essence** of what would be included in a **National Digital Infrastructure Plan**

Building blocks of the National Digital Infrastructure Plan

Opportunities and Alternatives to Improve Digital Infrastructure

Digital Infrastructure in [Country]

Opportunity Areas

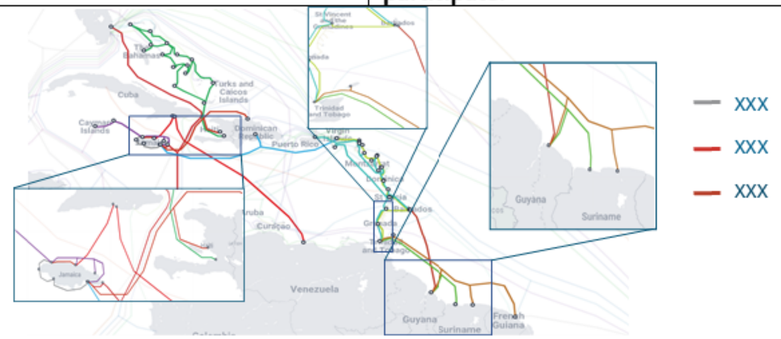
- In the 2022 Broadband Development Index (IDBA), **[Country] ranked XXth global place out of 65** countries (XXth place out of 26 LAC countries). The results by dimension for [Country] are as follows:

Dimension	Global Ranking (out of 65 countries)	LAC Ranking (out of 26 countries)
Public policy and strategic vision	XX	XX
Strategic regulation	XX	XX
Infrastructure	XX	XX
Applications and training	XX	XX

Opportunity	Alternatives
National digital connectivity	
• With a **household penetration of fixed broadband of XX.X%** as of 2025, [Country] has a higher penetration rate than the XX.1% average in the region. • While mobile penetration reaches XX.X% of the population, **wireless connectivity lacks the high capacity, stability, and scalability** that fibre optic provides. • The **strengthening of [Country]'s fibre optic infrastructure is required** to ensure the country's preparedness for current and future technologies.	Based on a geostatistical analysis of available broadband in [Country], the following elements are proposed to close the gap identified: • **Backbone**: XX km of fibre to deploy. • **Backhaul**: XX km of fibre to deploy. • **Satellite**: XX satellite connections to install. Estimated CAPEX: USD $XX million. This is component entails the installation of **XX points of presence**[1], and aims at bringing connectivity closer to **XX thousand people**, and **XX thousand households** in **all XX regions** across the country. Potential benefits include the creation of **X.X thousand employments**, and an increase of **X.X% of the GDP**, equal to **USD $XX million**.

Sample of the analysis conducted to propose last mile and backbone deployment in [Country].

International digital connectivity	
• XX submarine cable systems serve [Country]: ○ **XXX**: Links XX territories and countries in the Antilles (Ready For Service -RFS-: XXXX; Expected End of Life -EEOL-: XXXX) • Within the **next XX years, XX% of the subsea cables** serving the country will reach their **EEOL**.	Several submarine cables have been announced, representing **potential partnerships** to upgrade the country's international connectivity: • **XXX** (RFS: XXXX). • **XXX** (RFS: XXXX). • **XXX** (RFS: XXXX). Estimated CAPEX: USD $XX million. Given the importance of this component, it is deemed likely that it could **spark interest in the private sector to participate**.



Current submarine cables serving [Country] (Source: TeleGeography).

Data centre	
• [Country] currently **has some data infrastructure in place**, including Tier II and III certified data centres. • **Data infrastructure** in [Country] **needs to keep expanding** to meet the growing internet demand.	The following Tier-III certified scalable options are presented to address this opportunity: • **A XX-capacity data centre (XX kVA):** To provide additional capacity to the Government to support its digital transformation efforts. Estimated CAPEX: USD $X.X million. • **A XX-capacity data centre (XX kVA):** To provide additional capacity to address current and future needs the Government might have. Estimated CAPEX: USD $X.X million. This component could bring **economic benefits equivalent to USD $X.X million**.

Regulatory and Policy Framework

- [Country]'s telecommunications sector is governed by XXX and its subsequent amendments.

ITU Jamaica Partner to Connect Matchmaking Accelerator Workshop

THANK YOU