Status Report on SMTF Action Plan Initiative 3.5 of the Emergency Comms Working Group: Baseline Data Gathering on Emergency Comms in the Maritime Bands

Spectrum Management Task Force Meeting | 20-22 Feb 2024
Smart Seas Toolkit for Disaster Resilience Project

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Agenda

1. MRCC Survey Update

2. Smart Seas An Agenda for Accessible Comms@Sea for Small-scale Fishers Overview
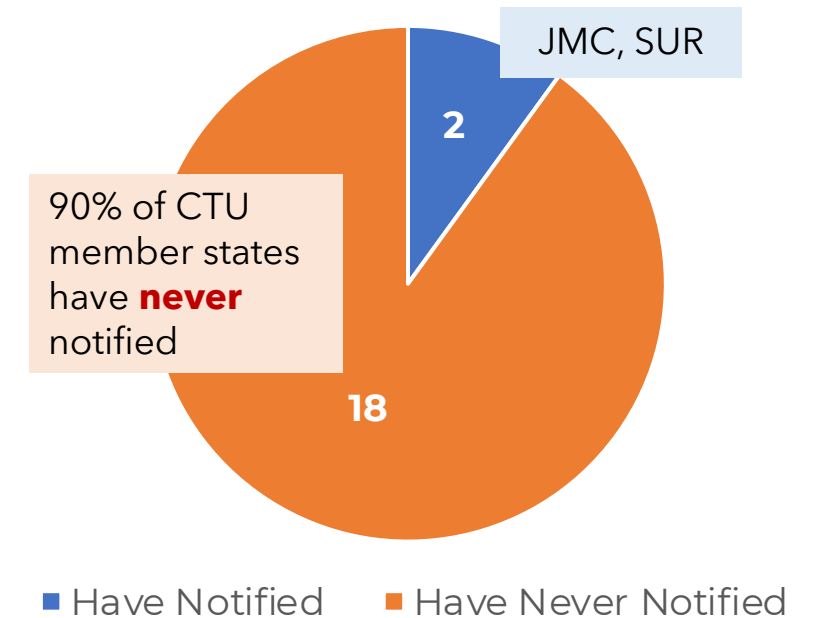
3. Q&A

Background

No. **20.16** of the Radio Regulations (ITU 2020):

*"Administrations **shall** take all appropriate measures to **notify** the Radiocommunication Bureau immediately of any changes in the operational information contained in **Lists IV** and **V**, in view of the importance of this information, particularly with regard to safety."*

Country	Status	Country	Status
Anguilla	✕	Jamaica	✓
Antigua and Barbuda	✕	Montserrat	✕
Barbados	✕	St. Kitts and Nevis	✕
Belize	✕	Saint Lucia	✕
British Virgin Islands	✕	St. Maarten	✕
Cayman Islands	✕	St. Vincent and the Grenadines	✕
Cuba	✕	Suriname	✓
Dominica	✕	The Bahamas	✕
Grenada	✕	Trinidad and Tobago	✕
Guyana	✕	Turks and Caicos	✕

MARS Notification Status (List IV)

JMC, SUR

2

90% of CTU member states have **never** notified

18

■ Have Notified   ■ Have Never Notified

List IV: <u>Coast Stations</u> and Special Service Stations

List V: <u>Ship Stations</u> and Maritime Mobile Service Identity Assignments

Aims & Objectives

Aim: to gather baseline data on maritime emergency comms infrastructure in the Caribbean, with intentions of filling ITU List IV notification gaps within the region, as well as identify the state of and gaps in policy, regulatory, capacity and operational provisions

Objectives:

1. Develop a survey instrument to collect data on maritime communications to include:
    i. infrastructure and national MRCC arrangements
    ii. relevant national policy and regulatory provisions
    iii. channel use
    iv. operations and associated capacity

2. Engage each of the four Smart Seas countries to complete the MRCC Survey

3. Analyze survey results & develop appropriate data products for the maritime telecomms sector

Survey Artefacts

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METHODOLOGICAL GUIDEBOOK FOR MRCC & COAST STATION EMERGENCY TELECOMMUNICATIONS SURVEY

UNDER THE SMART SEAS TOOLKIT FOR DISASTER RESILIENCE PROJECT

23 FEBRUARY 2022

MARITIME RESCUE COORDINATION CENTRE (MRCC) & COAST STATION SURVEY

PRE-SURVEY INFORMATION & CONSENT FORM

OVERVIEW
The Spectrum Management Task Force ("SMTF") provides key input into the development of regionally harmonized policies for the planning and management of the radio-communication spectrum. As a technical group convened by the Caribbean Telecommunications Union, SMTF's work contributes to ICT-enabled cooperation and development in the Caribbean. This survey on national coast stations and maritime rescue coordination centres (MRCCs) sets out to gather key data to ultimately strengthen communications resilience in the marine environment for improved safety at sea.

The survey findings will be used to:
- Identify gaps within existing policy, regulatory and capacity provisions and to formulate gap-filling measures.
- Gather the data required to populate a registry of, and map, the coast stations and MRCCs, as emergency contacts for Caribbean seafarers
- Gather the data required to simulate and estimate radio coverage by the coast stations and MRCCs within the region
- Identify the resources (human, infrastructure, policy and regulatory) used to operate and maintain coast stations and MRCCs within the region
- Identify, after analysis of the survey's results, the baseline resources required to operate and maintain Caribbean coast stations and MRCCs
- Identifying key areas for research, and inform future decisions and spectral planning by regulators and policy makers

SCOPE
This survey therefore sets out to gather the following data from national coast stations and MRCCs within CTU member states:
1. General coast station/MRCC information
2. Station personnel
3. RF equipment
4. Operations
5. National maritime communications policy and regulatory provisions

PARTICIPANTS
National coast stations and MRCCs within the Caribbean. Station managers may be able to complete the form, but may require support from technical staff to complete Sections 3 - 5.

COUNTRIES SURVEYED
CTU member states

INSTRUCTIONS
Please:
1. enter all responses in English (in BLOCK LETTERS if handwritten)
2. provide all positions in degrees, minutes, decimal-minutes notation
3. email Nigel.Cassimire@ctu.int for additional questions and concerns

CONSENT FORM
Participation:
Participation in this study is voluntary, and may be refused or terminated at any point, by the respondents. Any further questions, concerns and recommendations can be posed to Mr. Nigel Cassimire of the CTU, at: nigel.cassimire@ctu.int.

Benefits:
This survey will benefit all respondents, seafarers, regulators and policy makers, by producing a resource pack, which include but are not limited to:
- A registry of coast stations and MRCCs within the Caribbean
- A simulated coverage map of coast stations and MRCCs within the Caribbean
- A registry of channel usage within the marine band, including primary working channels for all coast stations (other than VHF channel 16)
- An inspection checklist, for coast station and MRCC equipment
- A policy brief, with recommendations to improve the state of emergency communications provisions offered by existing coast stations and MRCCs within the Caribbean
- Print-ready, wallet-sized call card design with MRCC and coast station contact details by country, for printing and distribution by fisherfolk organizations, ports, etc.
- An output report, which includes the above artefacts, along with a coverage analysis and recommendations to fill any uncovered gaps based on the responses

Risks:
This survey poses minimal risks to the parties involved, as the data collected should not pose any threats to the participants' operations.
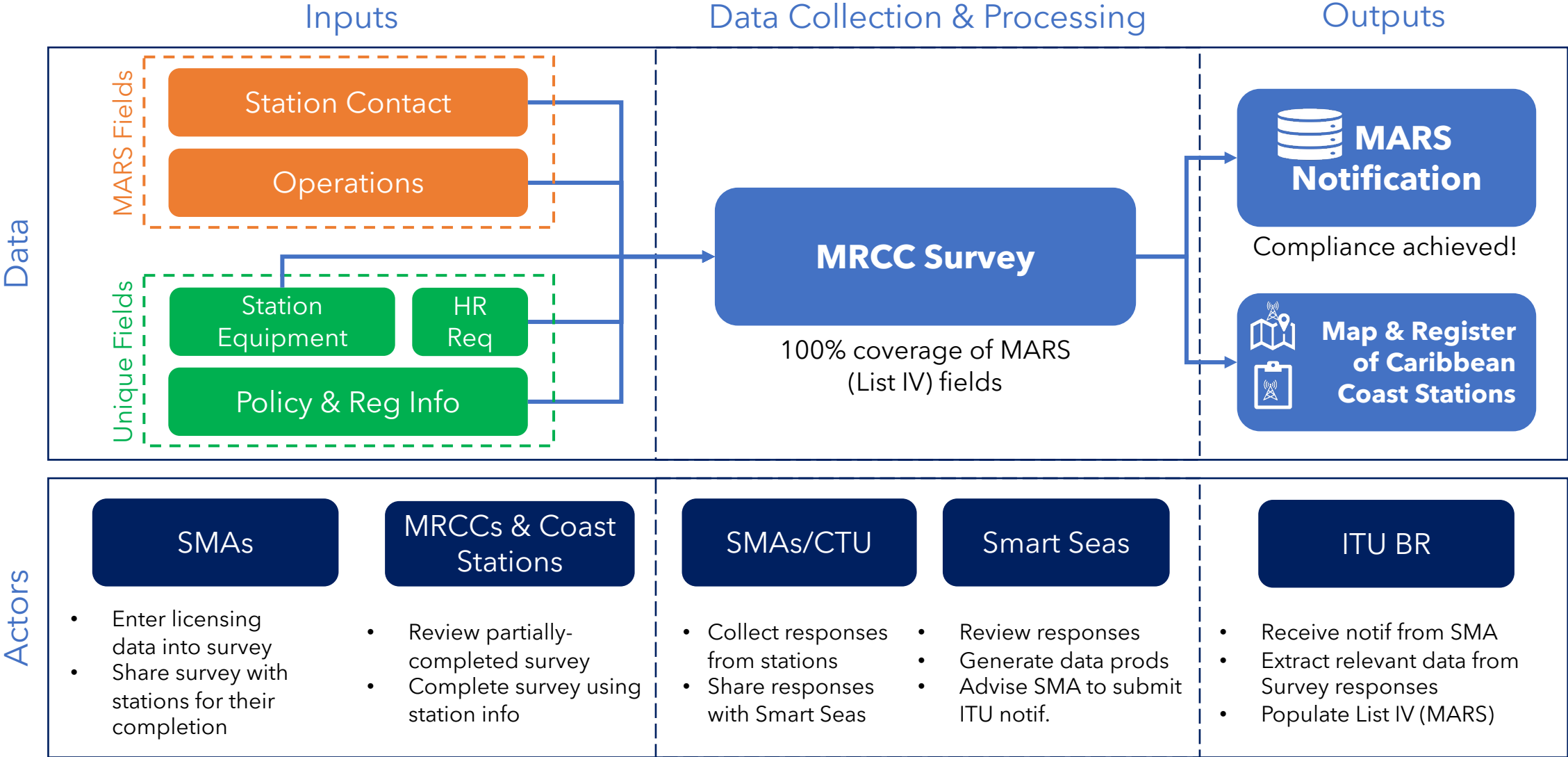

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USER GUIDEBOOK FOR MRCC & COAST STATION EMERGENCY TELECOMMUNICATIONS SURVEY

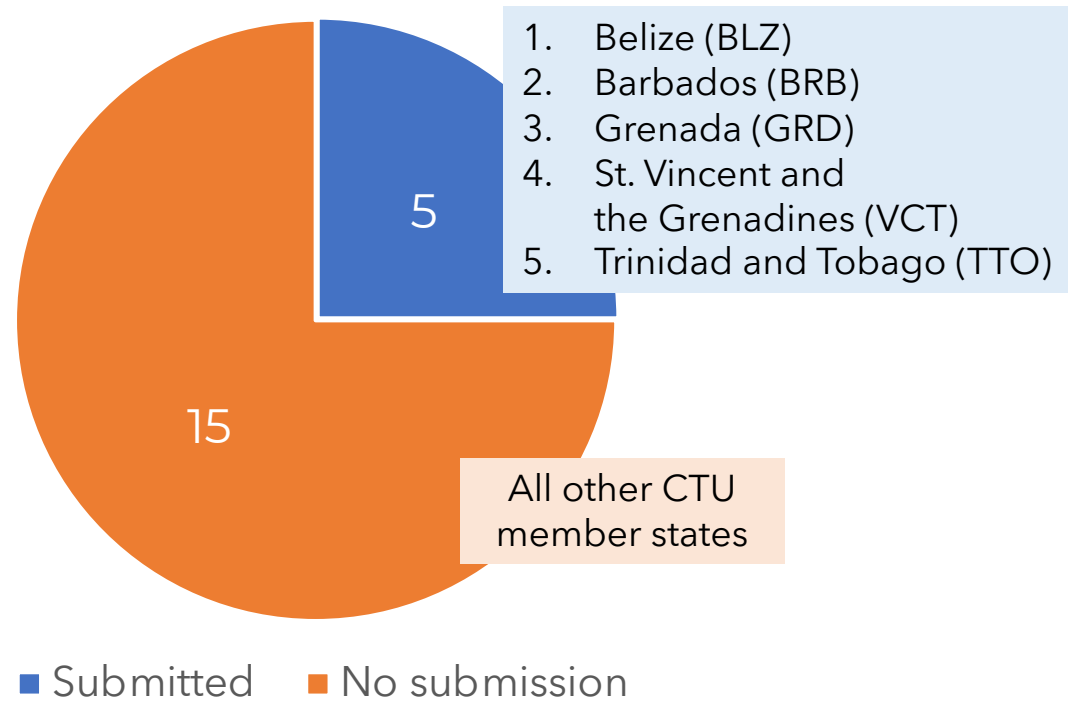**UNDER THE SMART SEAS TOOLKIT FOR DISASTER RESILIENCE PROJECT**
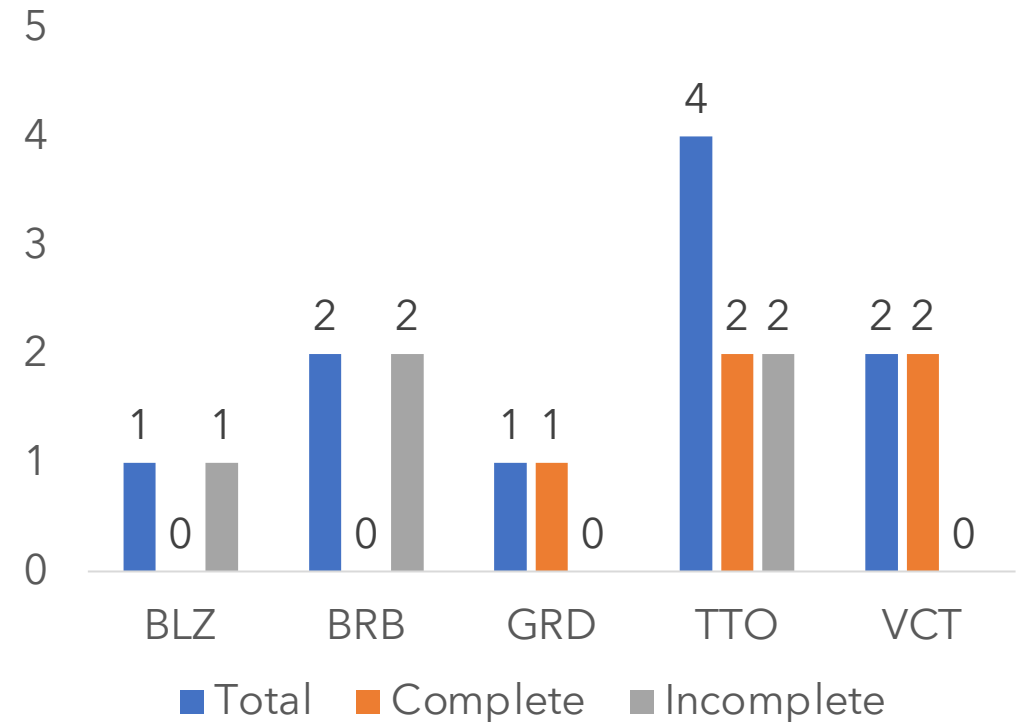
23 FEBRUARY 2022

MRCC Survey: Data Flow

Data

MARS Fields
- Station Contact
- Operations

Unique Fields
- Station Equipment
- HR Req
- Policy & Reg Info

MRCC Survey

100% coverage of MARS (List IV) fields

MARS Notification

Compliance achieved!

Map & Register of Caribbean Coast Stations

Actors

SMAs	MRCCs & Coast Stations	SMAs/CTU	Smart Seas	ITU BR
• Enter licensing data into survey • Share survey with stations for their completion	• Review partially-completed survey • Complete survey using station info	• Collect responses from stations • Share responses with Smart Seas	• Review responses • Generate data prods • Advise SMA to submit ITU notif.	• Receive notif from SMA • Extract relevant data from Survey responses • Populate List IV (MARS)

Status in Relation to Objectives

CTU Member State Submissions

1. Belize (BLZ)
2. Barbados (BRB)
3. Grenada (GRD)
4. St. Vincent and the Grenadines (VCT)
5. Trinidad and Tobago (TTO)

5

15

All other CTU member states

■ Submitted   ■ No submission

Completion Status of Responses

■ Total   ■ Complete   ■ Incomplete

Beyond the Objectives

1. Engage with the ITU's Radio Bureau (BR) on the possibility of using the MRCC Survey as a form of MARS notifications
    Status: BR will accept completed MRCC Survey Instruments as MARS notifications

2. Engage administrations within each of the four Smart Seas countries to submit the completed MRCC Survey instruments to the ITU's BR as a MARS notification
    Status: 2/4 of the Smart Seas Countries (TTO, VCT) submitted completed MRCC Survey Instruments to BR and are awaiting feedback; GRD is ready to submit but must get NTRC listed as the designated agency for List IV notifications on the MARS database

3. Assess findings to guide the preparation of key products to strengthen regulatory compliance and regional harmonization of maritime communications provisions in CTU member states
    Status: living data products available online: register and map of Caribbean Coast Stations

Submission & Completion Status

Country	# Submissions		Completion Rate (%)	Notes
	Total	Complete		
BLZ	1	0	0	• Survey instrument to be completed
BRB	2	0	0	• Only 2/5 of BRB stations have submitted survey instruments • 2/2 are incomplete and require further information
GRD	1	1	0	• GRD to list NTRC as the designated contact for List IV notifications on the ITU MARS database • 1 GRD station exists, completed survey instrument received • Completed instrument awaiting transmission to ITU BR following the listing of NTRC as the designated contact
TTO	4	2	50	• 4/9 of TTO stations have submitted survey instruments • 2/4 of TTO stations have completed survey instruments • 2/2 of the complete survey instruments have been submitted to ITU BR for their processing and inclusion on the MARS database
VCT	2	2	100	• 2/2 of VCT stations have submitted completed instruments • 2/2 of VCT stations have completed survey instruments • 2/2 of the complete survey instruments have been submitted to ITU BR for their processing and inclusion on the MARS database
Total % Completed			**50**	• **5/10 of received instruments considered complete** • **4/10 of the completed instruments have been submitted to ITU BR for processing and inclusion on the MARS database**

Summary of Findings by Country

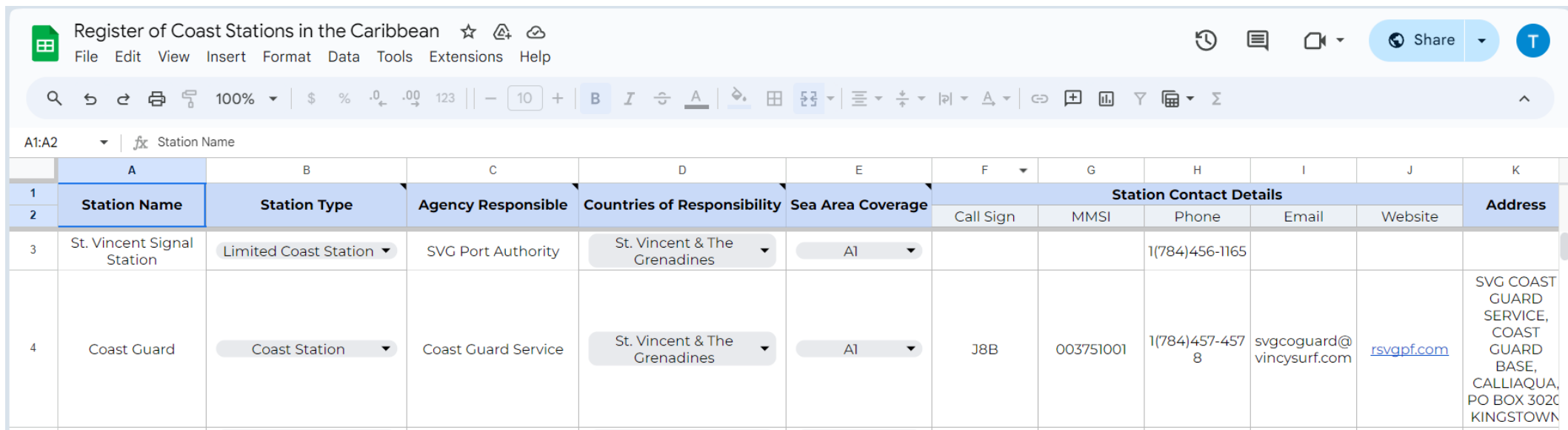| Country	Findings
BLZ	• 1 station operated by the Belize Port Authority, serves Sea Area A1 • 2 transceiver sites across the country • Disseminates weather forecast, sea state, wind, temperature, tide information received by the Belize Metrological Service, twice daily • Maintains 24/7 watch over VHF CH16
BRB	• 5 stations on the island: 1. Barbados Coast Guard: no survey response received 2. Barbados Police Force: no survey response received 3. The Harbour Master in Bridgetown: incomplete survey response received 4. The Dock Master at Port St. Charles: incomplete response received 5. Oistins Fisheries: no survey response received • Maintains watch over VHF CH70 (DSC) and 16 (voice)
GRD	• No designated contact listed for List IV notifications on the ITU MARS database • New GMDSS facility installed in 2023, comprising 2 sites • MRSC, which serves GRD's waters, established within the TTO MRCC • Maintains watch over VHF CH70 (DSC) and 16 (voice)
VCT	• 2 stations on the island: 1. Coast Guard: complete survey received and submitted to ITU BR for feedback 2. Signal Station: complete survey received and submitted to ITU BR for feedback • One station maintains watch over VHF CH 16 (voice)
TTO	• 9 stations in operation, mixture of MRCC, national coast station and limited coast stations • 4/9 have submitted responses thus far – 2/4 completed; 2/4 partially complete • North Post Radio Station performs MRCC comms operations on behalf of the Trinidad and Tobago Coast Guard • At least 1 limited coast station's callsign & MMSI not within TTO ITU assignments

Outputs to Date

1. Register of Caribbean Coast Stations: Google Sheet

2. Map of Caribbean Coast Stations:
   a. Online Map
   b. Google Earth (KMZ) File

Register of Caribbean Coast Stations

- Captures the contact information of Caribbean MRCCs, MRSCs and coast stations

- generated using data from MRCC survey's *Section 1: Station Information*

- Google Sheets file: https://docs.google.com/spreadsheets/d/1h1bS01VyzNqW99lH18qQOBVRpKF0DKpXyaPFx3GdIkw/edit?pli=1#gid=0

Register of Caribbean Coast Stations

Country	Station Name	Station Type	Countries of Responsibility	Agency Responsible	Sea Area	Station Contact Details		
						Phone No.	Callsign	MMSI
BLZ	National Maritime Comm Center	NCS	BLZ	Belize Port Authority	A1	+ (501) 222- 5666	TBD	TBD
BRB	Port St. Charles	LCS	BRB	Port St. Charles Development Ltd.	A1	(246) 419 - 1000	8PJX	TBD
	Barbados Signal Station	LCS	BRB	Barbados Port Inc.	A1	1(246) 434-6100 EXT 4301	8PB	TBD
GRD	Grenada GMDSS	MRSC	GRD	NTRC	A1	+(473) 405-2362	TBD	003301111 003301112
VCT	St. Vincent Signal Station	LCS	VCT	SVG Port Authority	TBD	+1(784) 456-1165	TBD	TBD
	Coast Guard	NCS	VCT	Coast Guard Service	A1, A2	+1(784) 457-4578	J8B	003751001
TTO	Coast Guard Control	MRCC	BRB, GRD, VCT, TTO	TTCG	A1, A2, A3	+1(868) 634-8824	9YA	003621111
	NPR	NCS	BRB, GRD, VCT, TTO	TSTT	A1, A2, A3	+1(868) 637-4474	9YL	003621001
	TBD	LCS	TTO	BHP	A1	TBD	TBD	TBD
	TBD	LCS	TTO	Oldendorff Carriers Trinidad & Tobago Ltd.	TBD	+1(868) 224-8506	D5IX5	636017017

Acronyms: LSC: limited coast station; NCS – National Coast Station; MRCC – Maritime Rescue Co-ordination Centre; MRSC – Maritime Rescue Sub-centre   14
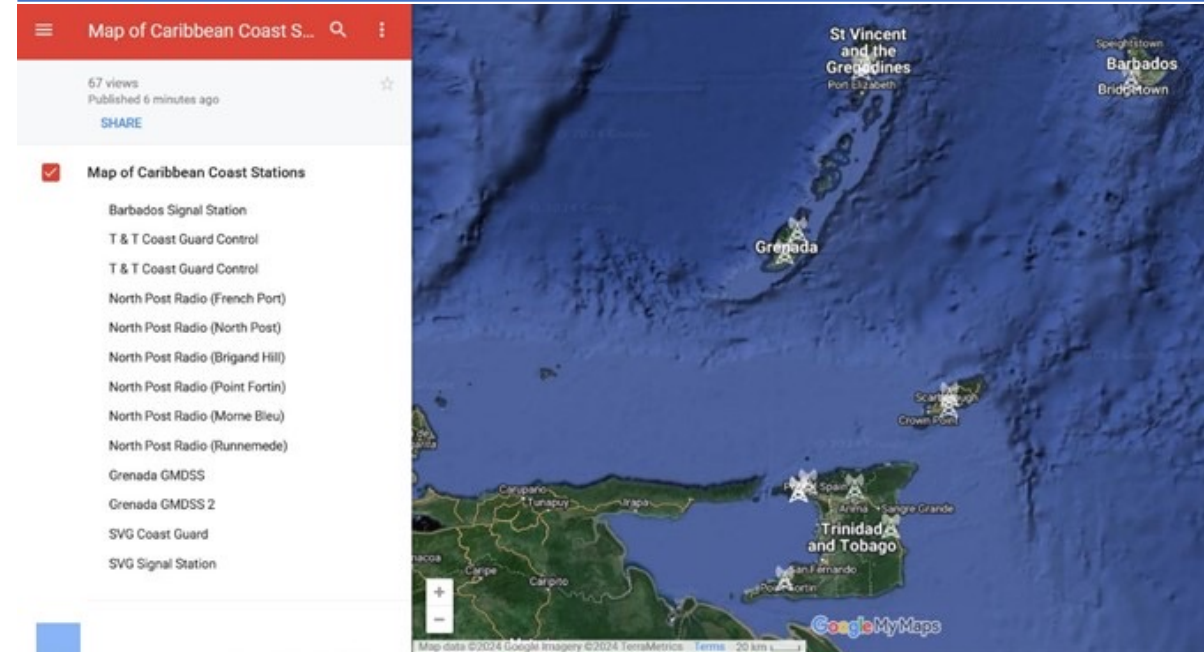
Map of Caribbean Coast Stations

- visualizes the locations of Caribbean MRCCs and coast stations

- generated using data from MRCC survey's *Section 3: Radio Equipment*

Google Earth KMZ File

Online Google My Maps

Next Steps

1. Continue engaging with spectrum management agencies within the 4 Smart Seas countries, for their support in completing the MRCC Survey Instruments for stations within their jurisdiction

2. Continue engaging with the ITU BR on filling gaps in maritime reporting with respect to List IV, through the MRCC Survey

3. Extend the data collection to non-Smart Seas CTU countries, to minimize gaps to in notification requirements to the ITU, with respect to List IV reporting

4. Support GRD's engagement with ITU BR in listing NTRC as a designated List IV contact

5. Continue populating data products: Map & Register of Caribbean Coast Stations

AN AGENDA FOR
ACCESSIBLE COMMS@SEA FOR SMALL-SCALE FISHERS (SSF)

International (UN) Agendas

SUSTAINABLE DEVELOPMENT GOALS

1 NO POVERTY

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

17 PARTNERSHIPS FOR THE GOALS

Common Agenda

1. Leave no one behind
7. Improve digital cooperation
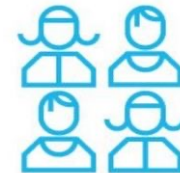10. Boost partnerships
12. Be prepared

ICT-Specific

Goals:

Connect 2030 - An agenda to connect all to a better world

Growth   Inclusiveness   Sustainability   Innovation   Partnership
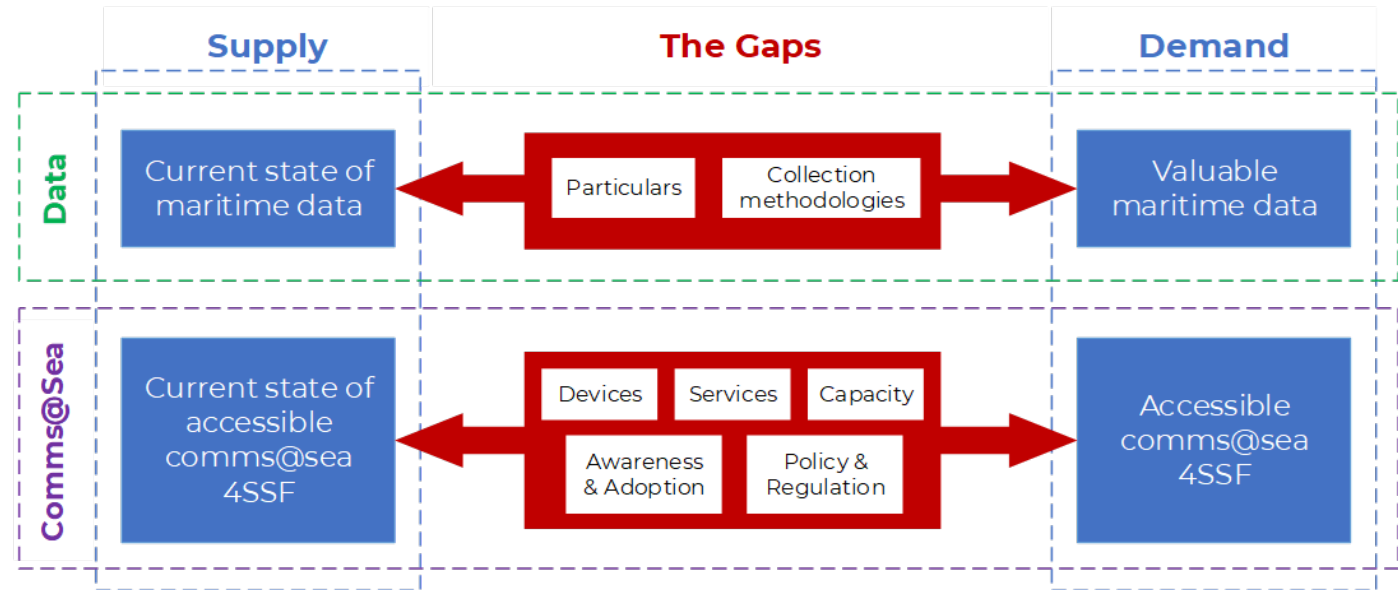
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Agenda for Accessible Comms@Sea 4 SSF

Aim:

To assemble a loose, global community to develop a tiered list of priorities across multiple stakeholder groups, to improve the accessibility of comms at sea for SSF

Objectives:

- Consult with multi-sectoral stakeholders on the issues, interests & possible solutions to increase the accessibility of comms@sea for SSF
- Identify priorities for accessible comms@sea for SSF
- Co-author & publish international Report for accessible comms@ sea for SSF, following 2-day hybrid workshop

Supply	The Gaps	Demand
Data Current state of maritime data	Particulars — Collection methodologies	Valuable maritime data
Comms@Sea Current state of accessible comms@sea 4SSF	Devices — Services — Capacity — Awareness & Adoption — Policy & Regulation	Accessible comms@sea 4SSF

SSF Fact Box:

- Fishing among the world's most dangerous jobs (≈ 32k fatalities/yr)
- Globally, 90% of fishers are SSF; 93% of Caribbean fishers are SSF
- ≈ 40% of the global fisheries catch comes from SSF
- ≈ 60.2 mil employed through SSF value chain
- ≈ 4/10 employed are women

Outcomes:

Community to address gaps to ICT accessibility for SSF

improved enabling environment; foster innovative & accessible comms to improve SSF's safety & livelihoods

Relevant Maritime Comms Agencies:

- Research institutions
- Standards bodies
- Manufacturers
- Service providers
- Policy makers & Regulators
- DMAs
- Fisheries authorities
- Fisheries orgs
- Coast stations
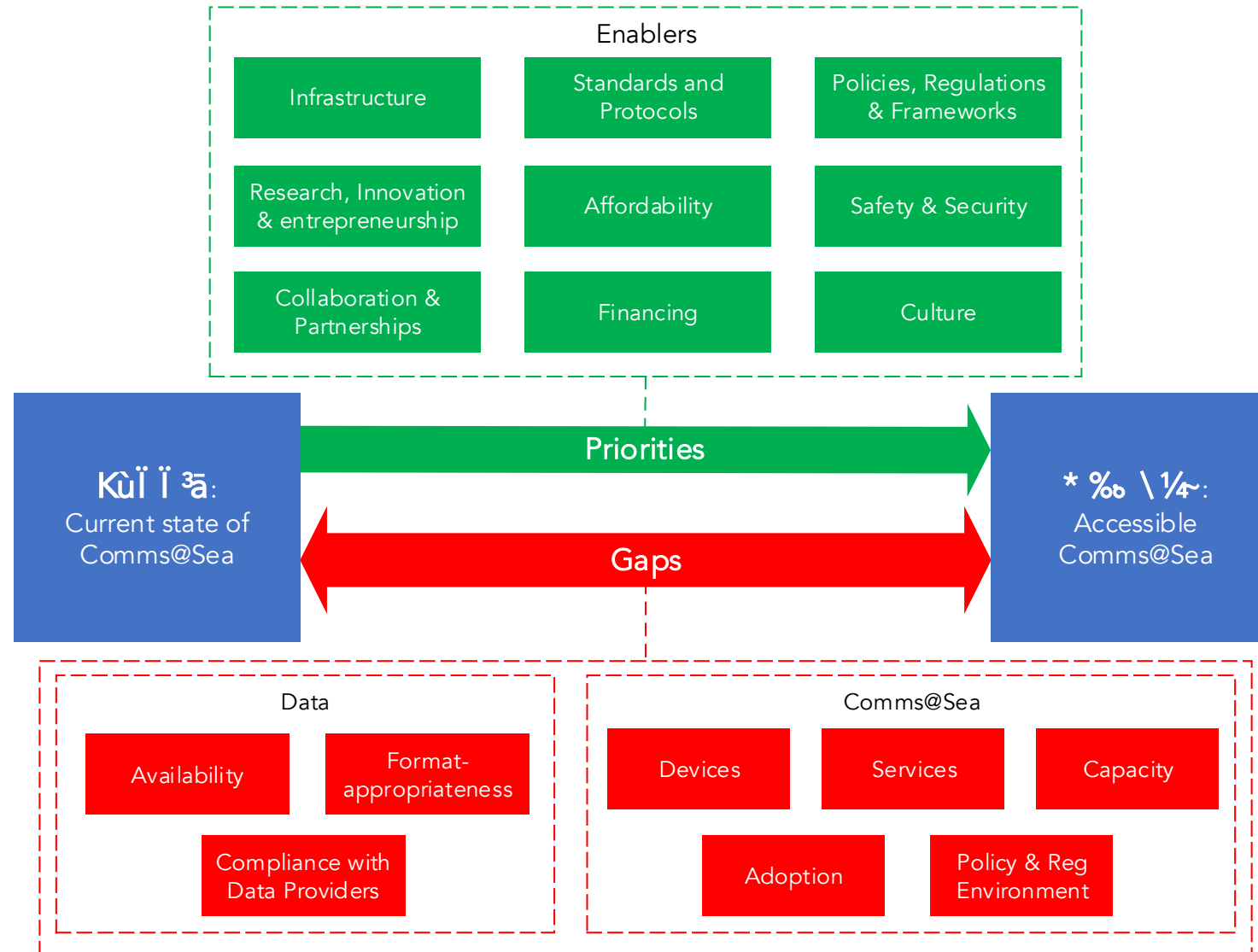- Entrepreneurs

Workshop Info:

11-12 Mar 2024   09:00 - 15:00 (AST)

Hyatt Regency, Trinidad & Tobago

For more info, contact us at sst@ctu.int

Identifying & Filling Gaps: Setting Priorities

Enablers

Infrastructure	Standards and Protocols	Policies, Regulations & Frameworks
Research, Innovation & entrepreneurship	Affordability	Safety & Security
Collaboration & Partnerships	Financing	Culture

Priorities →

Kûï ï ³ā̄:
Current state of Comms@Sea

← Gaps →

* ‰ \ ¼:
Accessible Comms@Sea

Data

Availability	Format-appropriateness
Compliance with Data Providers	

Comms@Sea

Devices	Services	Capacity
Adoption	Policy & Reg Environment	

Nominal Schedule

Jan 2024: Agenda Drafting & Participant Engagement

Mar 2024: Setting Priorities Workshop

We are here

1   2   3   4   5

Jan 2024: Agenda Activity Kickoff

Feb 2024: First Draft Completed

Apr/May 2024: Agenda Report Published

THANK YOU

For more info, email us at SST@ctu.int

References

CTU. N.D. "State Members and Associate State Members". Available at: https://ctu.int/state-members-and-associate-state-members/

Caribbean Telecommunications Union. 2023. "Spectrum Management Task Force (SMTF) Action Plan 2023" Available at: https://ctu.int/wp-content/uploads/2023/04/SMTF-Action-Plan-2023-endorsed-by-SMSC.pdf

ITU. 2020. "The Radio Regulations, Edition of 2020". Available at: https://www.itu.int/en/myitu/Publications/2020/09/02/14/23/Radio-Regulations-2020

ITU. 2020. "Radio Regulations". Available at: https://www.itu.int/pub/R-REG-RR-2020

Notifying Agencies within TTO MRCC

Member state	Notifying Agency	Point Contact Name	Point Contact Email	Agency Email	Agency Phone Contact
BRB	Telecom Unit, Ministry of Innovation Science and Smart Technology	George Foster	George.foster@barbados.gov.bb	-	1 (246) 310-1300
GRD	National Telecommunications Regulatory Commission (NTRC)	TBD	TBD	gntrc@ntrc.gd	1 (829) 732-5555
VCT	Maritime Affairs of St. Vincent and the Grenadines	TBD	TBD	ntrc@ntrc.vc	(784) 456-1378
TTO	Telecommunications Authority of Trinindad and Tobago	Cynthia Reddock-Downes	crdownes@tatt.org.tt	-	1 (868) 675-8288