

14th S-123 Marine Radio Services Task Group (S-123TG) Meeting March 23, 2023 – Worldwide

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[Annex B: List of Attendees](#)

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[Web Resources](#)

[NIPWG Wiki: S-123](#)

[NIPWG Product Specifications Website](#)

1.0 Opening Remarks

BG opened the meeting and welcomed the participants.

2.0 Approval of Agenda

The agenda was adopted with no modifications.

3.0 Approval of S-123TG13 Minutes

The group approved the first draft of the meeting minutes as the final version.

Action Item 01: BG to send finalized S-123TG13 minutes to the group.

Action Item 02: RM to upload finalized S-123TG13 minutes to the NIPWG Wiki.

Action Item 03: BG to send finalized S-123TG13 minutes to be uploaded to the NIPWG website.

4.0 Follow-Up on NIPWG VTC Meeting

JP mentioned during the meeting that S-123 datasets will most likely be part of Phase 2 of the S-164WG work.

BG mentioned during the meeting that the S-123TG plans to have at least one (1) proposal ready to present at the next VTC meeting in June 2023.

The S-122 and S-127 task groups had a list of work items, which could be good to reference to make sure all the elements to produce a new version of the S-123 Product Specification are accounted for.

Action Item 04: JP to send list of work items as presented in the S-122 and S-127 task groups' updates during NIPWG 2023 VTC 1 to BG.

Action Item 05: BG to bring up the list of work items at a future S-123TG meeting to make sure that all the elements to produce a new version of the S-123 Product Specification are accounted for.

5.0 Review of Action Items from S-123TG13

Action Item	Action Description	Status
TG9/04	JP to provide an updated description for the DCEG regarding GMDSSArea (emphasis on administrative boundaries) (Wait for discussion at S-100WG in regard to overlapping coverage issue)	Ongoing
TG11/02	RM to upload finalized S-123TG10 minutes to the NIPWG Wiki.	Ongoing
TG12/02	RM to upload finalized S-123TG11 minutes to the NIPWG Wiki.	Ongoing
TG12/07	JP to follow-up with S-164WG regarding where S-123 test datasets fall in their work/timeline.	Completed 2023-03-02

Action Item	Action Description	Status
TG12/08	JP to mention at the next NIPWG VTC about having dedicated sessions regarding portrayal and interoperability to help move S-123 into Edition 2.0.0 development.	Completed 2023-03-02 (Mentioned by BG in the S-123TG updates presentation at NIPWG 2023 VTC 1)
TG13/01	BG to send finalized S-123TG12 minutes to the group.	Completed 2023-02-15
TG13/02	RM to upload finalized S-123TG12 minutes to the NIPWG Wiki.	Ongoing
TG13/03	BG to send finalized S-123TG12 minutes to be uploaded to the NIPWG website.	Completed 2023-03-15
TG13/04	SJC to send presentation of updated proposal to the group.	Completed 2023-02-09
TG13/05	Everyone to review SJC's presentation and to send any comments via correspondence.	Completed 2023-03-23
TG13/06	SJC to review feedback document to make sure all feedback regarding NAVAREA and METAREA is incorporated into the proposal.	Completed 2023-03-23
TG13/07	SJC to review feedback document to make sure all feedback regarding WeatherForecastWarningArea is incorporated into the proposal to be presented at the next meeting (S-123TG14).	Completed 2023-03-23
TG13/08	BG to send latest version of the cumulative feedback document to the group.	Completed 2023-02-15
TG13/09	BG to create S-123 update presentation for NIPWG VTC and send to group for feedback.	Completed 2023-02-23
TG13/10	BG to send email to the task group to schedule S-123TG14.	Completed 2023-03-07
TG13/11	BG to send draft of S-123TG13 minutes to the group for review.	Completed 2023-02-15

6.0 Proposal Regarding the WeatherForecastWarningArea (SJC)

SJC presented her proposal regarding the remodelling of the **WeatherForecastWarningArea**.

- SafetyNET and SafetyCast (under the **CommunicationStandard** attribute) is transmitted via satellites, which may not be related to a **RadioStation**.
 - o SJC said that there should be no issue as this information would be encoded in the proposed **TransmissionMethod** (which is separate from the **RadioMethod**).
- NAVTEX areas of neighbouring authorities can overlap with one another, e.g. United Kingdom and France have overlapping NAVTEX areas and the subdivision of that particular area is different for the two (2) authorities.
- Example demonstrated that it can be unclear how to encode certain areas e.g. choosing between WMO or one of the national options.

Action Item 06: SJC to send presentation of the WeatherForecastWarningArea remodelling proposal to the group.

7.0 Review of S-123 Feedback Submitted to Date

Goal is to go over the task group members' comments received via correspondence regarding the feedback received.

- Page 46: informationConfidence
 - The original comment was that the DCEG explained the statistical confidence in percentages (6.2.1.2) and in qualitative terms (6.2.1.3). However, the FC does not include the percentages, so this appeared to be an inconsistency between these Product Specification documents.
 - RM suggested that this could be resolved by adding remarks to the GI Registry so that the information would appear in the FC regarding the different attributes.
 - The group put it to question whether 6.2.1.2 and 6.2.1.3 should be kept as described.
 - Concerns from SJC and JY were that there are so many factors that could affect a radio signal that including the predicted coverage percentage would not be particularly useful.
 - SJC brought up PS 6.2.1.10 "Fuzzy areas in the S-123 application schema" and an excerpt from PS 6.2.1.9 regarding fuzzy areas.
 - From PS 6.2.1.10: "S-123 modeling of fuzzy areas is used for radio service area and weather forecast and warning area features."
 - From PS 6.2.1.9: "Areas of uncertainty are modeled by an IndeterminateZone geographic feature. A 'fuzzy area' will therefore consist of a 'core' feature of the appropriate geographic feature type and the appropriate geometry (e.g., a RadioServiceArea area feature) and one or more 'fuzzy' Indeterminate Zone features (with surface geometry)."
 - JY provided information regarding HF Propagation for Taupu Maritime Radio published in the New Zealand Hydrographic Office Bulletin each month. The predictions are generated by the Australian Bureau for Meteorology and there is no mention of any percentage likelihoods of receipt of info, just the best HF frequencies to use in different areas.
 - Example #1: [Recommended frequency bands for communication with Taupu](#)
 - Example #2: [Local Area Mobile Predictions - NAVAREA XIV](#)
 - There is also the possibility that a data producer may have a different definition related to the different levels of confidence, e.g. a producer may consider a particular coverage to be "virtuallyCertain," but that coverage may not correspond to the 95% or higher threshold as described in DCEG 6.2.1.2.
 - There is also the concern that if the percentages are kept in the DCEG as described, then it might become an issue of data quality, which could in turn involve the DQWG.
 - There were two (2) points of emphasis brought up by the group in this discussion: (1) what information does the mariner need, and (2) the informationConfidence is used for portrayal.
 - The group is leaning towards the option of merging 6.2.1.2 and 6.2.1.3 and removing the mention of the percentages. The producer would still have the possibility of indicating the percentage in the textContent with a note to keep in mind the effects of adverse weather, etc.

Action Item 07: BG to include in the next S-123TG update presentation the recommendation from the group regarding informationConfidence.

Action Item 08: BG to send the latest version of the cumulative feedback document to the group.

(Additional examples provided by the group after the meeting are in [Annex D: Related Documents](#).)

8.0 Next Meeting

8.1 Actions to be Taken by Next Meeting

- None noted.

8.2 Meeting Time

- Changed back to 12:00 p.m. UTC

8.3 Next Meeting Dates:

- Potential dates for S-123TG15 and S-123TG16
- **Holidays:**
 - o April 1 to 5 (TWN), 7 & 10 (CAN, DEU, GBR)
 - o May 1 (DEU, GBR, TWN), 8 (GRB), 18 (DEU), 22 (CAN), 29 (DEU, GBR, USA)
- Check IHO calendar: <https://iho.int/en/iho-meetings-and-events-calendar>
 - o NIPWG VTC: Gap Analysis (2nd dedicated meeting): April 17, 2023
 - o Singapore Maritime Week: April 24 to 28, 2023 (EM)
 - o 3rd Session of the IHO Assembly: May 2 to 5, 2023 (SJC)
 - o IALA20 Conference: May 29 to June 2, 2023 (EM, NS)
 - o NIPWG 2023 VTC 2: June 20, 2023

April 2023						
Su	Mo	Tu	We	Th	Fr	Sa
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

May 2023						
Su	Mo	Tu	We	Th	Fr	Sa
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

Action Item 09: BG to send an email to the task group to schedule S-123TG15.

Action Item 10: BG to send a first draft of the S-123TG14 minutes to the group for review.

8.4 Topics to Discuss

- None noted.

8.5 Additional Comments

- Current plan for next NIPWG VTC in June is for SJC to prepare an input paper and presentation regarding the proposed remodelling of the radiocommunications complex attribute with the WeatherForecastWarningArea as an example.
 - o If not enough time to go through the presentation at the next NIPWG VTC in June, then the S-123TG will request for a separate NIPWG VTC meeting, inviting interested members to participate.

ANNEX A: AGENDA

- 1.0 Opening Remarks
- 2.0 Approval of Agenda
- 3.0 Approval of S-123TG13 Minutes
- 4.0 Follow-Up on NIPWG VTC Meeting
- 5.0 Review of Action Items from S-123TG13
- 6.0 Proposal Regarding the WeatherForecastWarningArea (SJC)
- 7.0 Review of S-123 Feedback Submitted to Date
- 8.0 Next Meeting

ANNEX B: LIST OF ATTENDEES

Country / Organization	Participant	Initials
Canada	Bridget Gagné (CCG)	BG
Canada	Eivind Mong (CCG) Regrets	EM
Canada	Quinn Arruda (CCG)	QA
Germany	Philipp Schwedas (BSH)	PS
United Kingdom of Great Britain and Northern Ireland	Jason Youé (UKHO)	JY
United Kingdom of Great Britain and Northern Ireland	Neil Salter (UKHO)	NS
Caris (Teledyne)	Hugh Astle	HA
IIC Technologies	Jonathan Pritchard	JP
National Taiwan Ocean University (NTOU)	Shwu-Jing Chang	SJC
Portolan Sciences	Raphael Malyankar	RM

ANNEX C: LIST OF ACTION ITEMS

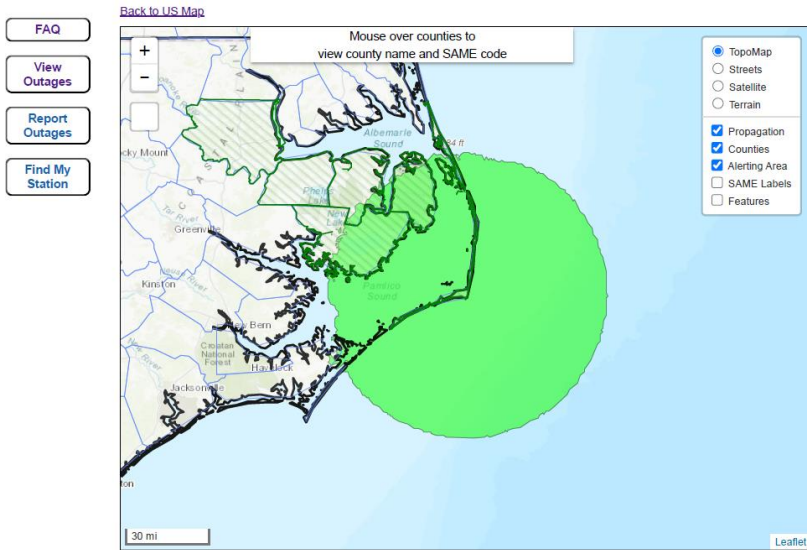
Action Item	Action Description
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TG14/10	BG to send a first draft of the S-123TG14 minutes to the group for review.

ANNEX D: RELATED DOCUMENTS

Provided by SJC: <https://www.weather.gov/nwr/sites?site=KIG77>

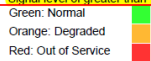
Note: “Regarding the radio coverage statistics, the attached file is extracted from the web site of NOAA National Weather Service, for your information. In this case, the radio is in VHF band.”

Cape Hatteras KIG77 162.475



The coverage statistics and maps are calculated using a computer model and station data assuming ideal conditions. Coverage may be 5 to 10 percent below the computer predicted coverage for the following reasons:

- The computer model is sensitive to antenna performance. Antenna performance is a function of local conditions, causing signals to be stronger signal level in some directions than others.
- Placement of NWR antennas is dictated by the tower owner, which may result in a less than ideal set up.
- The antenna may be affected by nearby structures or bodies of water.
- In some special instances, the antenna may have been intentionally adjusted to be "directional" and provide better coverage to a specific area to the detriment of other areas.
- Because of variations in local site conditions, the performance of an individual transmitter and antenna may be less than predicted or expected.
- Seasonal environmental conditions, such as icing or heavy rain, affect performance of a transmitter station and its various components, particularly those subject to continuous weather exposure.
- **The coverage maps are shown in a single color format, which relates to an estimated signal level.**
 - **Signal level of greater than 18dBuV. Reliable coverage.**



LEGEND

Normal █

Degraded █

Out of Service █

Transmitter Status

Operating Status for KIG77

NORMAL

Areas Receiving Alert Tones

Coverage Area

INFORMATION

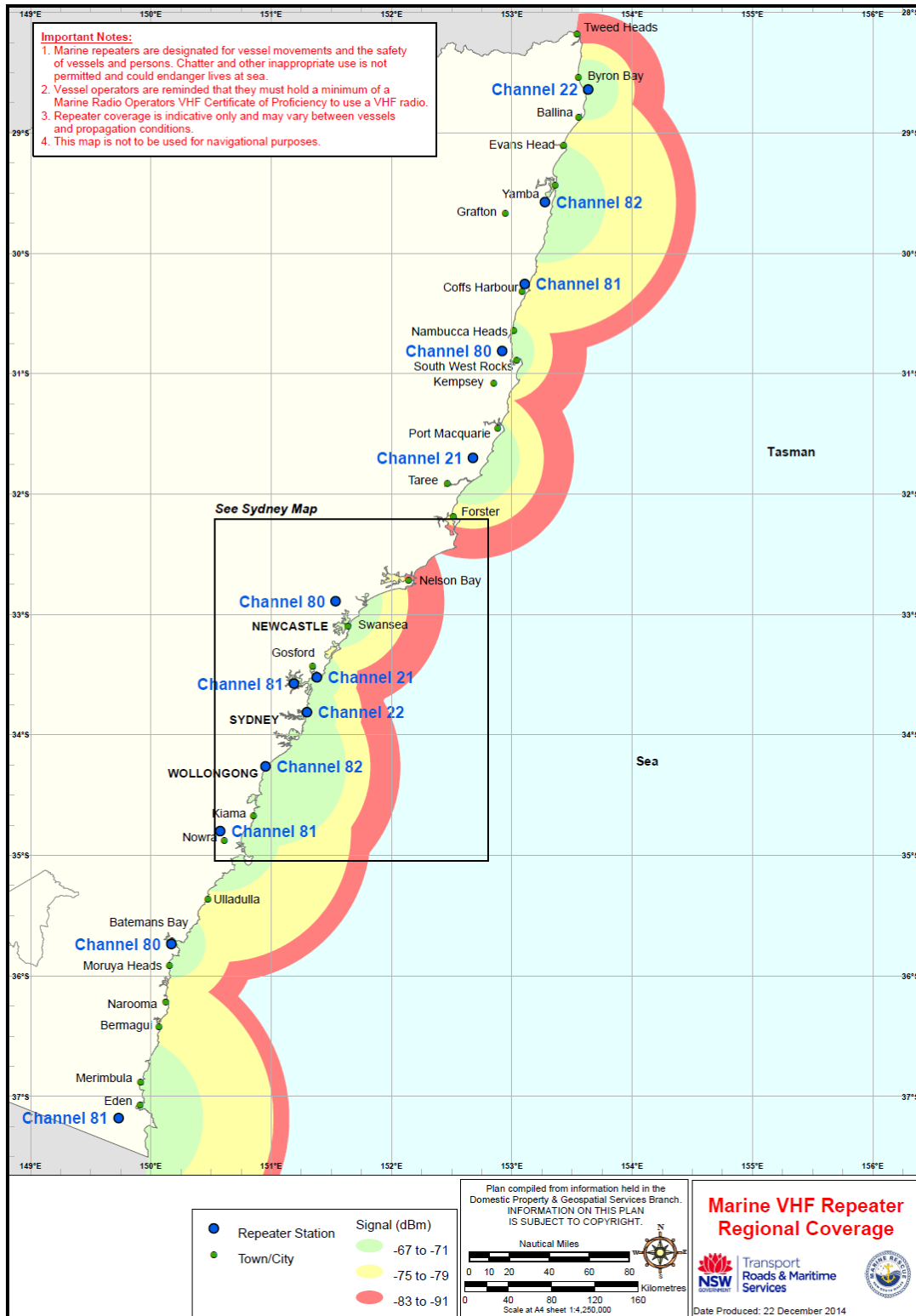
[Locate me!](#)

Geolocation to get your browser location (if you grant permission)

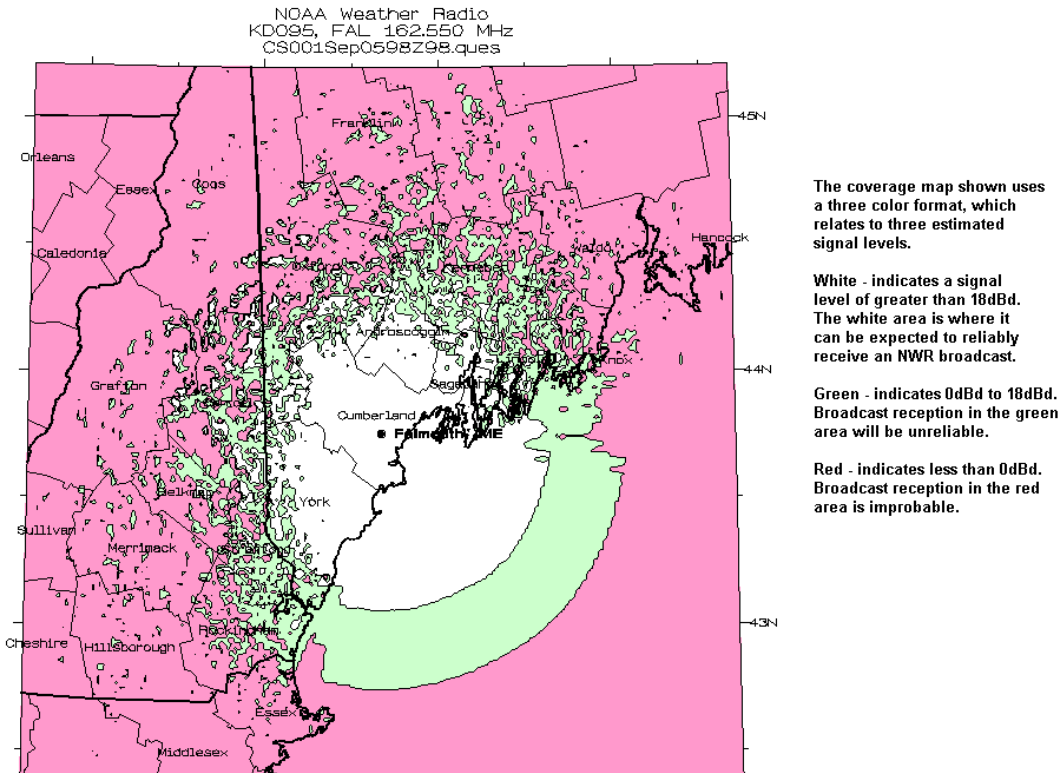
Transmitter Details	
Station ID	KIG77
Station Name	Cape Hatteras
Frequency	162.475
State	North Carolina
Station Location	Middletown, NC
Operating Status	NORMAL
Weather Forecast Office	Newport/Morehead City NC

KIG77 Areas Receiving Alert Tones			
County	State	SAME Location Code	Partial County Description
Bertie	North Carolina	037015	ALL
Dare	North Carolina	037055	ALL
Hyde	North Carolina	037095	ALL
Tyrrell	North Carolina	037177	ALL
Washington	North Carolina	037187	ALL

Provided by RM: Examples from Australia



Provided by RM: Example from United States



Comment from HA regarding the above example:

“This one has ‘reliable’, ‘unreliable’ and ‘improbable’ and additional information in units of dBd as opposed to percentages.

So the encoder would need to correlate that with the enum values for the ‘informationConfidence’ attribute. The text as seen on the legend with dBd or percentage information could be carried in the ‘textContent’ complex attribute.”

Link provided by BG related to the above example:

NOAA National Weather Service - NWR Transmitter Propagation: [Falmouth KDO95 162.550](https://www.weather.gov/fal/KDO95_162.550)