

# S-123 Task Group Update and Next Steps

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NIPWG9 (September 13 to 16, 2022)

Presented by Bridget Gagné, Canadian Coast Guard  
(S-123 Task Lead)

# S-123 Task Group Updates

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- Nine (9) task group meetings have been held to date.
- All technical feedback has been reviewed (41 out of 48 pages).
  - The last seven (7) pages were reviewed via correspondence.
- During the meetings, it was apparent that there were major remodelling considerations regarding key features and information types such as the **radiocommunications** complex attribute.
  - The task group is in agreement that the original **radiocommunications** complex attribute should be split into theme and method complex attributes.
  - However, more discussion and testing is required before presenting a proposal to NIPWG.

# Proposed Changes

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- In addition to the S-123 Product Specifications being in alignment with S-100 Edition 5.0.0, the task group proposes the following changes:
  1. Revise all terms, definitions and sub-attributes to conform with the IHO Geospatial Information (GI) Registry and S-101 Product Specifications such as:
    - **horizontalPositionUncertainty** vs **horizontalPositionalUncertainty**
    - **mMSI code** is defined as type “integer” in S-123, but should be a 9-digit code of type “text” as shown in S-101 FC and GI Registry.
  2. Revise the DCEG to make sure that the encoding guidelines are clear for all features and information types such as:
    - The encoding of an **IndeterminateZone** in relation to a **RadioServiceArea**
    - **GMDSSArea**, which is based on boundaries defined by each country, rather than an area of actual coverage
  3. Update definitions to reflect current technologies such as:
    - **Differential GNSS**: to cover technologies similar to DGPS being created
    - **GMDSSArea**: as Inmarsat is specifically mentioned, but Iridium is now also involved
  4. Proposal to change name of feature types such as:
    - **NavtexStationArea** to **NavtexServiceArea**

# Next Revision Cycle

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- The task group took into consideration that since the product specifications are to be reviewed every two (2) years, the review should account for:
  1. The latest technologies available
    - For example, NAVDAT and VDES are currently considered as experimental, but could be added during the next review of the product specifications.
  2. The latest definitions available
    - For example, the definition of GMDSS Areas will be ratified by IMO in January 2024.

# Challenges Regarding Coverage Beyond EEZ

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- The WEND principles indicate that products should only be created up to each country's EEZ boundaries.
- However, there are two (2) instances where coverage goes beyond each country's EEZ boundaries:
  1. Radio coverage
    - It was mentioned that ECDIS will have a problem to show this as there is currently no methodology to resolve how to show the coverages from multiple countries.
  2. National radio services
    - In Germany, national radio services are provided beyond the EEZ.
      - Suggestion to allow for overlapping information, but the user needs to be informed of this and be able to decide which source to use.

## Question for NIPWG:

- How can this coverage issue be resolved on a technical level for machine readability as to which country authority should be used as the source?

# Inmarsat Ocean Region Area

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- The **InmarsatOceanRegionArea** feature type also raises the issue of crossing national boundaries, as well as:
  1. Lack of distinction between similarly-described areas
    - For example, they appear to be overlapping with **GMDSSArea** A3 zones.
    - If this feature does offer a distinct and specific use, then it needs to be clearly defined with the appropriate encoding guidance.
  2. Name of this feature type
    - This feature type directly mentions “Inmarsat;” however, they are no longer the sole provider.
    - This feature type may need a new name with a new definition.

## Questions for NIPWG:

- What is the purpose and use of the feature type **InmarsatOceanRegionArea** in comparison to **GMDSSArea** A3?
- If this feature type remains, how should it be defined and does it need to be renamed?

# Next Steps

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- The task group will require a few more months of VTC meetings to prepare a formal change proposal to be presented to NIPWG.
  - Further discussion and testing required
- The task group noted that for the S-123 Product Specifications to reach Edition 2.0.0, the following would need to be completed:
  - Datasets that conform to the standard for testing purposes
    - These test datasets will be part of S-164.
  - Validation checks
  - Portrayal

# Recommendations

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- The task group recommends to NIPWG for the group to continue their work until a formal change proposal can be presented.
- The task group recommends to NIPWG that the change proposals to be presented at a future NIPWG meeting will increment the S-123 Product Specifications from Edition 1.0.0 to Edition 1.1.0.

# Actions Requested of NIPWG

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- NIPWG is invited to:
  - note this presentation and
  - take any actions as appropriate.