

# Data Extent vs Responsibility

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#### Overview

- While encoding S-123 data for Canadian Coast Guard the Radio Coverage extent raised a question of data extent versus area of responsibility.
- If there is data beyond the area of responsibility, should it be included or truncated?
- If it is included how should the metadata describe this situation?





### Canadian Example



Toronto
Mississaugao

Rochester
OBuffalo

NEW YORK

Detroit

Toledo

Cleveland

From CCG RAMN figure 4.5 Radio Coverage Prediction

Similar area from Google Maps with National boundary

 The blue radio coverage areas (left image) exist beyond the international limits.





#### Discussion

- Truncation of actual coverage may not be optimal.
  - Finding available services (weather reports) for a given location.
- How should it be described in the metadata?
  - Geographic extent exceeds area of responsibility.
  - Data Discovery Area of responsibility or area of coverage?
  - Data loading use actual coverage?
- Carriage requirements
  - Whether a product needs to be carried and maintained?
  - Should S-128 carry information about actual coverage versus official coverage?





#### Discussion

- How does this affect Portrayal and Alerts?
  - Area that may overlap (such as Radio Coverage) should not use solid fill.
  - Can priority be assigned based on area of responsibility?





## Metadata handling, possible options

- 1. Include MD\_Constraints-> MD\_LegalConstraints from ISO 19115 to define the area of responsibility separate from the actual data coverage.
- 2. Limit the **DataCoverage** areas to the area of responsibility but allow the actual data to extend beyond.
- 3. Extend the **DataCoverage** attributes to indicate authoritative or official coverage versus physical coverage.





# Action Required

- Note this paper and consider potential support of the underlying requirements in future S-100 versions.
- Suggest a way forward for S-123 project team and others with similar product data coverage situations.
- If appropriate present this situation to WENDWG or IMO for consideration.
- Add to next TSM agenda for further consideration.



# Thank You