IICWG-XIX Ranking Exercise

This exercise should not take more than 10 minutes.

Email address *

Name

Please select the area that best fits your primary activity:

- Arctic/Antarctic Planning
- Ship / Offshore Platform Operator
- National Ice Service
- Private / Commercial Ice Information Provider
- Research
- Other:

DIAMOND RANKING

Assign a level of importance to each of the following issues where the most important is considered "Very High Priority" and the least important is considered to be "Very Low Priority." Please note that each issue must be assigned a unique rank - you can only select one column per row and one row per column.

- Blending data sources:
  - Providing cohesive product that takes into account different times for observation, delivery and observation capabilities
  - How to efficiently (timeliness) blend data sources - Automation of blending data sources in a timely manner
  - How to effectively (accuracy/quality) blend data sources - Creating a product that optimizes sensor strengths and augments the weaknesses
- Image Analysis:
  - How to gain the greatest advantage from automated tools
  - Trust in an automated 'black-box' solution. e.g., Machine Learning based output
- Roles and Responsibilities of National and Commercial Ice Information Providers:
  - How can they best work in concert for the greatest benefit to end users
- Visualizing Uncertainty:
  - Convey confidence information to end users
  - How to prioritize/contextualize high resolution monitoring resources on critical areas.
- Understanding what satellite information is available:
  - How to be efficient in how we determine what the appropriate information is for the users in a timely manner (e.g. Search and rescue)
- Preserving the continuity of ice expertise:
  - Maintenance and training
- Availability and access to sea ice and iceberg climatology:
  - Use of data for re-analysis

- o Ice climatology for planning of maritime operations
- Standard format:
  - o Use of standard image formats (e.g. JPG, PNG or PDF, SIGRID-3, S-411, NetCDF)
  - o The need for "Sub-Polar" Code addendum to the IMO Polar Code
- Educating users
  - o Providing training on how to use and interpret products.

Ranking Exercise Outcome

Type of Respondent
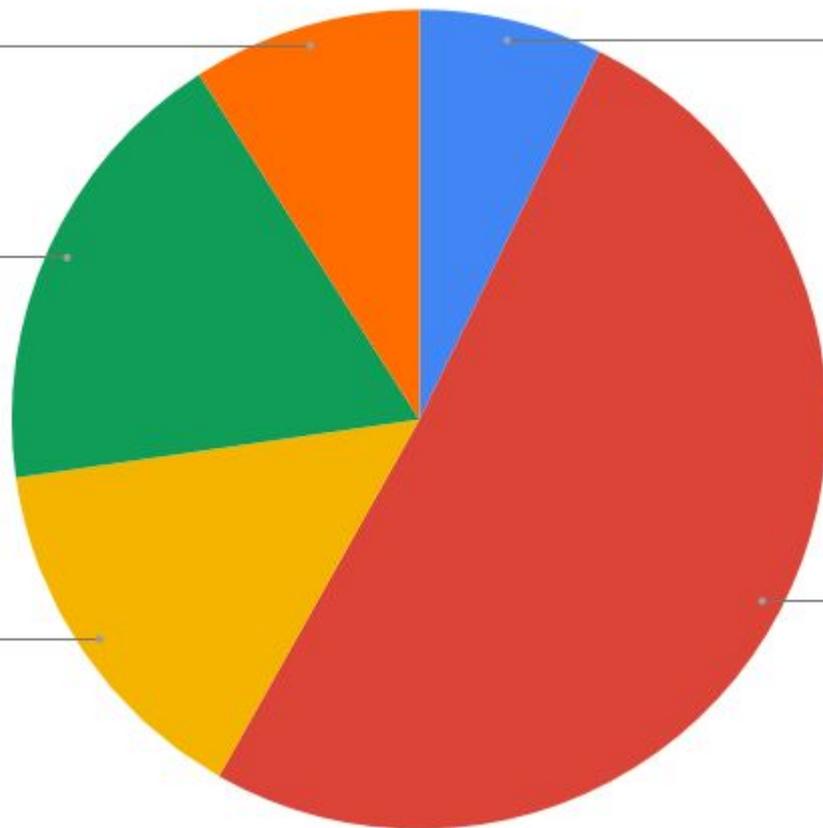
Ship / Offshore Platform Operator — 9.1%
Research — 18.2%
Private/Commercial Ice Information Provider — 14.5%
Arctic/Antarctic Planning — 7.3%
National Ice Service — 50.9%

Priority	Overall	Ice Services	Private/ Commercial	Research	End-Users
Very High	Blending Data Sources	Blending Data Sources	Understanding where to find satellite data	Blending Data Sources	Standard Format
High	Image Analysis	Image Analysis	Image Analysis	Standard Format	Image Analysis
	Preserving the Continuity of Local Ice Expertise	Preserving the Continuity of Local Ice Expertise	Visualizing Uncertainty	Educating Users	Availability and access to sea ice and iceberg climatology
Middle	Visualizing Uncertainty	Visualizing Uncertainty	Blending Data Sources	Visualizing Uncertainty	Blending Data Sources
	Understanding where to find satellite data	Understanding where to find satellite data	Preserving the Continuity of Local Ice Expertise	Preserving the Continuity of Local Ice Expertise	Visualizing Uncertainty
	Availability and access to sea ice and iceberg climatology	Availability and access to sea ice and iceberg climatology	Educating Users	Availability and access to sea ice and iceberg climatology	Educating Users
Low	Standard Format	Standard Format	Standard Format	Image Analysis	Understanding where to find satellite data
	Educating Users	Educating Users	Roles and Responsibilities	Understanding where to find satellite data	Preserving the Continuity of Local Ice Expertise
Very Low	Roles and Responsibilities	Roles and Responsibilities	Availability and access to sea ice and iceberg climatology	Roles and Responsibilities	Roles and Responsibilities

Blending data sources: Highest priority except for private/commercial and end-users. Suggestion is that the end-user is interested in the product whereas this is the greatest challenge for producers because they are the ones dealing with the "big data" issue.

Image Analysis: High priority except for research. Suggestion that there may be a disconnect on understanding of the importance of geophysical limitations of sea ice detection from satellites and the reliance on QC from human input.

Continuity of Local Expertise: Middle to high except for end-users (low).

Visualizing Uncertainty: Overall middle priority except high for private/commercial:Suggestion is that the end-user is interested in the outcome whereas the other sectors understand how differences of input analysis can change the interpretation of information from satellites

Understanding where to find satellite data: Middle priority for Ice Services and lower for everyone except Private/Commercial who rank it Very High. Does this mean these users want to access satellite data but don't know how to?

Standard Format: Highest for end-users and research: Is this a matter of research not developing operational products into formats used by end-users or lack of understanding from the end-user?

Educating Users: Higher priority with research and private/commercial and end-users consider it somewhat important

Roles and Responsibilities: Lowest priority. Does this suggest most people think the roles are already well established? Why do the national ice centers think this way?

Availability and access to sea ice data/climatology: End Users rank it High suggesting that this data is important for their operations. Other users have mixed need for climatological data..