

Breakout Session #5 – Synthesis and Prioritization  
Wednesday a.m., 9 October 2013  
Group 5

Changing future climate will require improvements in observations and monitoring across the Arctic. We will need integrated logistics for integrated arctic science fostered by international and interagency coordination. We have to be cognizant that other factors will affect the region such as industrialization and mineral extraction, geopolitics, increased transportation access in the Arctic , fisheries, subsistence, and governmental changes. These could present large opportunities or obstacles for science in the future.

The logistics should be agile and forward-looking to meet changing challenges in terms of natural environment, political environment, competition/cooperation from industry and changing reliance on long-standing partnerships with US and international military sectors.

Funding should be allocated to infrastructure and logistics that are scalable, efficient and smart. Smart can mean low-maintenance and flexible to meet changing needs including more bandwidth for smart technology or autonomous systems. Scalable can mean such things as a varied fleet with both small and large vessels or scalable platforms for airborne sensors as well as scalable facilities for housing, labs or traversing.

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- Current gaps in logistics support
- Increased Access
  - International Cooperation
  - Interagency cooperation
- Scalable, sustainable, mobile infrastructure
  - Agile infrastructure for evolving needs
  - Existing and new locations
  - Decommissioning
- Increased communication bandwidth
  - Support next-generation autonomous instrumentation
  - Taking advantage of emerging industry opportunities (satellites, cables)
  - Support of global communication and collaboration

- Increased Capacity building
  - Next generation of scientists/engineers/logistics providers (training)
  - interdisciplinary
  - Community (integration between stakeholder communities including research, local, industry)
  - Information sharing (logistics and science)
- Navigation of regulations and politics (US and International)
  - FAA
  - Environmental
  - Permitting
- New technology development
  - Infrastructure
  - Autonomous systems
  - Transportation
  - Better tools for data management/sharing
  - Safety and risk management