

## Program for “Session 1”, Tokyo, June 2-3 «Arctic Maritime Operations and Societal Needs»

### OVERALL PROGRAM – JUNE 2

**Plenary session:** 10:00-12:30  
**Lunch:** 12:30-13.30  
**Vertical sessions:** 13:30-18:00  
**Seafood reception:** 19:00-21:00

**Venue:** [Plaza Heisei, Tokyo International Exchange Center](#)  
**Room:** 3F Main Hall  
**Contact persons Session 1:**  
 Takeshi Kawano, JAMSTEC, [kawanot@jamstec.go.jp](mailto:kawanot@jamstec.go.jp)  
 Svein Grandum, Norwegian Embassy, [svgra@innovationnorway.no](mailto:svgra@innovationnorway.no)

#### Background:

With decreasing sea ice in the Arctic region, opportunities for human activities trigger important discussions on how to utilize an increasingly available ocean space in the right way. As an Arctic state with an active maritime territory in the High North, Norway participates in developing the required basis for increased maritime operations. Japan, as an Arctic Council observer considers these developments, including the Northern Sea Route from Europe to Asia as an opportunity for international cooperation and participation. There is a unified understanding for zero tolerance for accidents and pollution vulnerable for the marine ecosystems, and hence there is a need to identify which knowledge gaps that needs to be filled to serve the technology development, the management and the necessary regulation of international economic development. Both countries possess competence and capabilities in terms of science broadly, but also industrial capacities and interests supported through national policies. This session will focus on the implications of increased maritime operations in the Arctic, addressing several key points:

- Technological and engineering challenges for ships and maritime infrastructure in the harsh Arctic climate with the presence of sea ice
- Development of precise and reliable observation and forecast systems to predict sea ice and weather conditions, space weather conditions for navigation and communications systems, that are essential support systems to prevent accidents and to safeguard rescue operations
- Development of a policy framework as basis for the increased maritime activities founded in the international law of the seas

#### Objectives:

To utilize the various ongoing Japan-Norway collaboration activities to address key issues for the development of the maritime operations in the Arctic through an interdisciplinary approach.

The session will look at how Japan and Norway can benefit from closer collaboration by connecting natural sciences, engineering and social sciences where research, education and business developments are 3 important pillars.

#### Co-chairs:

*Dr. Takeshi Kawano, Japan Agency for Marine-Earth Science and Technology (JAMSTEC), Japan (June 2)*  
*Dr. Svein Grandum, Innovation Norway/Royal Norwegian Embassy, Norway*

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- 13:30-13:50      **Outlook for the Arctic shipping from the Japanese ship owners' perspective - 2016 summer**  
Dr. Hiroyuki Goda  
Nippon Yusen Kabushiki Kaisha (NYK LINE)
- 13:50-14:10      **Future Development Strategy for the Northern Sea Route**  
Dr. Bjørn Gunnarsson  
Centre for High North Logistics (CHNL), Business School, Nord University
- 14:10-14:30      **Northern Sea Route from the Perspective of Japan's Arctic Policy**  
Prof. Fujio Ohnishi  
Nihon University
- 14:30-14:50      **Two cases of Arctic marine governance in the international system: The Barents Sea and the Pacific Arctic**  
Prof. Rasmus Gjedssø Bertelsen  
UiT – The Arctic University of Norway
- 14:50-15:10      **Coffee and tea break**
- 15:10-15:30      **The Arctic Observation Using JAXA's Satellites**  
Dr. Shuji Shimizu  
Japan Aerospace Exploration Agency - JAXA
- 15:30-15:50      **Monitoring and forecasting of ice conditions**  
Dr. Stein Sandven  
Nansen Environmental and Remote Sensing Center
- 15:50-16:10      **Training and Support Facilities for Ship Officers working in the Arctic**  
Prof. Etsuro Shimizu  
Tokyo University of Marine Science and Technology
- 16:10-16:30      **Impacts from SAMCoT on Marine operations in the Arctic**  
Prof. Sveinung Løset  
Norwegian University of Science and Technology (NTNU), Sustainable Arctic Marine and Coastal Technology (SAMCoT)
- 16:30-16:50      **Coffee and tea break**
- 16:50-17:10      **Forecast of the summer Arctic sea-ice cover**  
Dr. Noriaki Kimura  
Atmosphere and Ocean Research Institute, The University of Tokyo
- 17:10-17:30      **Ionosphere space weather and its effects on satellite navigation and communication systems**  
Prof. Jøran Moen  
University of Oslo
- 17:30-18:00      **Discussion and summary Day 1**

## Program for “Session 1”, Tokyo, June 2-3 «Arctic Maritime Operations and Societal Needs»

### OVERALL PROGRAM – JUNE 3

**Vertical sessions:** 10:00-12:00  
**Lunch:** 12:00-13:00  
**Plenary session:** 13:00-14:00  
**Horizontal sessions:** 14:15-15:45  
**Plenary session:** 16:00-17:00  
**Networking event:** 17:00-18:30

**Venue:** [Plaza Heisei, Tokyo International Exchange Center](#)  
**Room:** 3F Main Hall  
**Contact persons Session 1:**  
 Takeshi Kawano, JAMSTEC, [kawanot@jamstec.go.jp](mailto:kawanot@jamstec.go.jp)  
 Svein Grandum, Norwegian Embassy, [svgra@innovationnorway.no](mailto:svgra@innovationnorway.no)

**Co-chairs:** *Dr. Takashi Kikuchi, Japan Agency for Marine-Earth Science and Technology (JAMSTEC), Japan (June 3)*  
*Dr. Svein Grandum, Innovation Norway/Royal Norwegian Embassy, Norway*

10:00-10:20 **Navigability and Economic Feasibility of the Northern Sea Route**  
 Dr. Natsuhiko Otsuka  
 North Japan Port Consultants Co.,Ltd.

10:20-10:40 **Drivers for Arctic Shipping**  
 Dr. Eirik Mikkelsen  
 Norut – Northern Research Institute

10:40-11:00 **Monitoring sea ice thickness in the Arctic using satellite microwave sensors**  
 Prof. Kazutaka Tateyama  
 Kitami Institute of Technology

11:00-11:20 **Integrated remote sensing in an operational context**  
 Prof. Torbjørn Eltoft  
 Centre for integrated remote sensing and forecasting for arctic operations  
 UiT – The Arctic University of Norway

11:20-11:40 **The Northern Sea Route and the Law of the Sea: Some Legal Issues**  
 Prof. Taisaku Ikeshima  
 Waseda University

11:40-12:00 **Braving law and climate – navigating the Arctic**  
 Prof. Knut Einar Skodvin  
 University of Bergen

12:00 **Closing session**