

Project information

Keywords

A-LEX

Project title

Regulating Arctic Shipping: Political, legal, technological and environmental challenges

Year

2015

Project leader

Tore Henriksen

Participants

National partners:

- Marintek – Sintef, Trondheim
- Akvaplan-niva AS, Tromsø

International partners:

- Maritime Law Faculty, State Maritime University, St. Petersburg.
- Institute of Legislation and Comparative Law under the Government of the Russian Federation, Moskva.
- Utrecht University, NILOS, Nederland.
- Moscow State Institute of International Relations.
- Vrije University Brussels, Belgia
- Dalhousie University, Canada

Flagship

Arctic Ocean

Funding Source

Ministry of Foreign Affairs

Norwegian Research Council

Fram Centre

Summary of Results

The project consists of several activities:

WPI Supporting technologies and infrastructure:

Completed activities:

- Participation 1st Industry Seminar CHNL's Arctic 2030 project, 25 June, Oslo, Norway.
- Participation in the international conference "Transport and logistics in the Arctic", 12 March 2015, Moscow, Russia.
- Participation in the 12th International Conference for Oil and Gas Resources Development of the Russian Arctic and CIS Continental Shelf, 15 - 18 September, St. Petersburg, Russia.
- Participation in the 7th Arctic Shipping Summit 2015, 11 - 12 November 2015, London, UK.

WP II Environmental Aspects

The project seeks to study effects of discharges from Arctic Shipping. The current project will use larvae stages of blue mussels and a common cargo hazardous and noxious chemical study for the Arctic marine environment. The test is planned to be done in October 2015 at the Barents Eco-toxic lab in Tromsø. October were chosen as the blue mussels needs to rebuilt gonads during the summer (they spawn in June in Tromsø).

The project is delayed due to work with live animals. The original plan was to expose mussel eggs and larvae, but the blue mussels did not spawn. We therefore developed an alternative plan. The project will expose the cargo chemical (2,4,5-Trifluorobenzoic acid) to fertilized egg of lumpfish and study the effects until hatching. The lumpfish is a sub-arctic fish spawning in shallow water, thereby fitting scenario of the project perfectly. The experiment is at the moment detail planned and we are waiting for the next spawning lumpfish. Hopefully, this will happen the next few days. Data will be generated in December.

WP III Regulating Shipping

This WP is planning a joint seminar with the Centre on International Law at the National University in Singapore in December 2015. The seminar will be on: "Governance of Arctic Shipping. Balancing Rights and Interests of Arctic States and User States", 9 - 11 December 2015, Singapore. The papers from the conference will be published in a book project with Edward Elgar Publishing.

A Professor from one of our partners will come to Tromsø during fall as a guest researcher to work on joint projects with the associates of the WP.

WP IV Shipping and Arctic Governance

Travels to London and IMO.

Conference on the Polar Code will be arranged fall 2015.

WP V Interdisciplinary activities

An interdisciplinary seminar will be held in late October - beginning of November.

For the Management

The research on the Northern Sea Route is obviously of relevance to management as well as to the shipping industry. It provides information on Russian legislation and the development of regulations through IMO and other bodies, as well as their inter-relationship. This represents the conditions under which the company must operate, important for assessing the feasibility of these routes. Regarding maritime authorities of Norway, this legal development may both affect the Norwegian legislation and be of interest for how Norway should ensure its interests in Arctic Shipping and that the development is within the framework of the law of the sea.

Published Results/Planned Publications

Erik J. Molenaar and M. Chantal Ribiero (co-editors): *Maritime Safety and Environmental Protection in Europe. Multiple Layers in Regulation and Compliance* (Gråfica Ediliber: 2015), www.marsafenet.org, 2015.

Erik J. Molenaar, J. Rochette, R. Bille, P. Drankier and L. Chabason: *Regional Oceans Governance Mechanisms: A review*, 60 *Marine Policy*, pp. 9-19, 2015.

Erik J. Molenaar: *Port and Coastal States*, *Oxford Handbook on the Law of the Sea.*, 2015.

Graczyk, Piotr, Solski, Jan et al: *Commercial Shipping through the Northeast Passage: routes, resources, governance, technology and infrastructure*. *Polar Geography* 2014: volum 37 (4), pp. 298 -324.

Larsen, L-H., B. Kvamstad-Lervold, K. Sagerup, V. Gribkovskaia, A. Bambulyak, R. Rautio & T. E. Berg (in press): *Technological and environmental challenges of Arctic shipping: - A case study of a fictional voyage in the Arctic*. *Journal: Polar Research*.

Larsen, L-H., K. Sagerup & S. Ramsvatn (in press): *The Mussel Path - Using the contaminant tracer, Ecotracer, in Ecopath to model the spread of pollutants in an Arctic marine foodweb*. *Journal: Ecological Modelling*.

Sagerup, K., L-H. Larsen, J. Nahrgang, M. Frantzen & P. Geraudie. (In Prep) *Biological effects of marine diesel on red king crab (Paralithodes camtschaticus) through water- and foodborne exposure experiment*. *Target Journal: Marine Pollution Bulletin*

Storhaug, E., K. Sagerup, P. Geraudie, J. Nahrgang, M. Frantzen & L_H. Larsen (In Prep) *Biological effects of the Skjervøy diesel oil spill: a sub-Arctic real case study*. *Target Journal: Marine Pollution Bulletin*

Graczyk, Piotr and Timo Koivurova: "Arctic Council". In L.Ch. Jensen and G. Hønneland (eds) *Handbook of the Politics of the Arctic* (Edward Elgar, 2015)

Graczyk, Piotr: "Arctic Council's impact on member states' policies. Arctic Council and Norwegian shipping policy" (paper). Arctic Science Summit Week, Toyama, Japan 28. april 2015.

Graczyk, Piotr and Hans-Kristian Hernes "Shipping in the Arctic as a major factor in Arctic politics". *ShipArc*, Malmø 25.-27. august.

Henriksen, Tore: "Protecting Polar Environments: Coherency in Regulating Arctic Shipping", *Research Handbook on International Marine Environmental Law*, 2015, ISBN 9781781004760

Communicated Results

Participation in the international conference "Transport and logistics in the Arctic", 12 March 2015, Moscow, Russia.

Graczyk, Piotr: "Arctic Council's impact on member states' policies. Arctic Council and Norwegian shipping policy" (paper). Arctic Science Summit Week, Toyama, Japan 28 April 2015.

Participation 1st Industry Seminar CHNL's Arctic 2030 project, 25 June, Oslo, Norway.

Graczyk, Piotr and Hans-Kristian Hernes "Shipping in the Arctic as a major factor in Arctic politics". ShipArc, Malmø 25-27 August.

Participation in the 12th International Conference for Oil and Gas Resources Development of the Russian Arctic and CIS Continental Shelf, 15 - 18 September, St. Petersburg, Russia.

Participation in the 2nd Industry Seminar CHNL's Arctic 2030 project, 15 October 2015, Oslo, Norway.

Interdisciplinary Cooperation

Alex is an interdisciplinary project: technology, natural science, social science and law.

We will arrange an interdisciplinary workshop this fall and the planned outcome is joint publications.

Budget in accordance to results

The Fram Centre funding has been important supplementing other funding enabling us to carry out planned research activities.

Could results from the project be subject for any commercial utilization

No

If Yes

Indirectly, more information and knowledge about Russian viewpoints and law relating to the Northern Sea Route will be important element for the shipping industry and others in evaluating this alternative route between Europe and Asia.