## Young Researcher Report: Open Assembly Panel: International law, "Soft Laws" and Governance on ice: Economic, Cultural and Political Implications

## **Presentations by NRF Young Researchers**

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Presentations by NRF Young Researchers during this session showcased the variety of challenges and opportunities the northern world now faces. Presenters focused on domestic governance and international cooperation while at the same time promoting themes of knowledge sharing and discourse. As the Arctic continues to become an economic and political hotspot, these issues will only increase in importance.

Mikhail Kalentchenko argued for a review of Russian institutional framework for participation in international environmental cooperation. International cooperation requires information exchange as well as implementation and enforcement of laws, policies, and protocols to achieve goals of environmental protection. Russia's Ministry for Natural Resources and Ecology sets environmental guidelines and participates in international environmental cooperation, but has no enforcement power of maritime activities. The agencies responsible for these activities do not participate in international environmental structures and do not have to collaborate with the Ministry for Natural Resources and Ecology. This lack of coordination on a national level hampers Russia's participation in international environmental structures.

Economic analysis by Tatiana Khomiakova predicts that the Northern Sea Route will soon have a greater role in international shipping. Nuclear ice breakers will provide crucial support as this occurs. Best economic practices to be considered include operational considerations such as technology and equipment needed for ice route optimization, while administrative factors include the regulation and fee structure for fleet operation and maintenance. The Russian state must also consider the burden of new nuclear ice breaker construction as well as the increased need of the nuclear icebreaker fleet by the

international community. Khomiakova also noted that the intensity of northern transportation will impact the prosperity of Arctic communities.

Lois Wardell observed that technological innovation is under-utilized in polar research and American small businesses are actively seeking users of their technology, giving examples of technology use in northern research and monitoring. For example, unmanned aerial vehicles (UAVs) have been used for whale avoidance by ships. In cases where human presence comes with elevated risk, such as measuring the volume of supra-glacial lakes or atmospheric profiling of volcanic eruptions, UAVs can be used for real-time assessment with no risk to human life. As the poles become increasingly important for research, economic, and geopolitical purposes, technology has the ability to play a greater role in data collection and research.

In the first of two presentations on northern microstates, Rasmus Bertelsen focused on security policy, remarking that microstates are often at the nexus of environmental and political processes. These interacting conditions include dynamic environments that are expensive to live and work in. For that reason, developmental progress and economic potential are best measured in relative, not absolute, terms. Microstates with large areas also have challenges such as few taxpayers and small organizational membership. By reviewing the history of Icelandic sovereignty, Bertelsen argued that Iceland's success has been due to an effective mix of domestic capabilities and foreign partnerships. This model could be used by other northern microstates such as Greenland and the Faroe Islands.

Damien Degeorges further elaborated on Greenland and its role northern and global geopolitics. Greenland is a working laboratory for climate scientists, a new and expanding source for natural resources such as petroleum, rare earth elements, and fresh water, and a geopolitical crossroads that bridges European and North American interests. Degeorges noted it also may be China's next stop for natural resources. Degeorges pointed to several challenges of Greenlandic independence. First, to experience full autonomy, Greenland must realize economic autonomy in the long term. Secondly, Greenland must meet the coming internationalization of the Arctic with a focus on education while encouraging its people to become global citizens.