

**Arctic Council Kicks-Off Task Force
to Examine State of Telecommunications in the Arctic**

by

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Ambitious. That is the word to describe the work of the Task Force on Telecommunications Infrastructure in the Arctic. On 23-24 September, 2015, the United States hosted the first meeting of the Arctic Council's Task Force on Telecommunications Infrastructure in the Arctic (TFTIA) in Chicago.

The Task Force charge is to coordinate a circumpolar assessment of telecommunications infrastructure and networks and deliver a completed assessment and recommendations for public-private partnerships to enhance telecommunications access and service in the Arctic to the Arctic Council by the end of the U.S. Chairmanship in 2017.

The Task Force co-chairs, Norway representative, Bo Andersen, and the Kingdom of Denmark, representative Niels Andersen share a common view that the main driver for an assessment of the current infrastructure and potential future infrastructure "must be wholly based on the user needs" as they put it.

Representatives from all Arctic Council Member States attended the meeting, as did representatives of Permanent Participants the Aleut International Association (AIA), the Inuit Circumpolar Council (ICC) and the Saami Council. Accredited Observers Germany and UArctic were also present, as were several invited experts. Karl Kowalski, of the University of Alaska Fairbanks, serves as the UArctic representative.

The members of the delegation discussed their common challenges, making an effort to identify those that might contribute to a common understanding and deliver the best pan-Arctic solutions. They also considered the best process for the Task Force to take towards fulfilling its mandate, discussing the challenges of delivering a product that addresses both the circumpolar Arctic and that does not repeat prior work in the timeframe allotted.

Existing studies such as "*A Matter of Survival: Arctic Communications Infrastructure in the 21st Century*" (www.aciareport.ca), produced by Imaikut, Inc. for the Canadian Northern Economic Development Agency and "*On Top of It: Overcoming the Challenges of ICT and Distance Education in the Arctic*" by Pekkala, et. al., a publication of the University of the Arctic Press have the potential to serve as models to address the TFTIA mandate through the lens of "user needs."

Presentations by member states, permanent participants and observers could be classified into three categories: issues and concerns of State, issues and concerns of community and technological solutions.

Common issues of State included topics such as collaborative search and rescue, national security, aeronautical and marine navigation, and resource and environmental monitoring. Issues of community of included telemedicine, access to education, cultural preservation and economic development. Discussion among the members culminated in a profound statement by Finland representative Juha Ala-Mursula who described Internet access as a basic human right for all to participate as an active citizenry in education, economy and government regardless of their location or economic status.

Defining and Serving User Needs

Defining exactly what user groups are and what user needs are is a topic that will need further discussion, however, it is essential that there be focus on the realistic user needs across the Arctic and on the extent to which existing infrastructure meets those needs and to the extent that new investment will be necessary to fill any gaps.

User needs are vast and will need to be defined both in relation to geographical position and to the users' roles within each category of user identified. Groups identified thus far include:

- Local Communities
- Science
- Maritime
- Oil and Gas
- Aeronautical
- Surveillance
- Search and Rescue
- Other Public

At lower latitudes of the Arctic, telecommunications access and user needs be covered with existing infrastructure be it terrestrial-based or by geostationary (GEO) satellites. Existing GEO satellites can provide service and may cover user needs up to a latitude of about 74 degrees in general and even up to 79 degrees in special cases. However, many areas of the Arctic are without adequate service to deliver services comparable to those available in sub-Arctic and urban areas.

Dan Gager of Iridium Communications, Inc. focused on low earth orbit satellite technology and worldwide upgrade to Iridium's system that is to begin in December of 2015 and is planned to provide telecommunications coverage to all areas of the Globe Pole to Pole.

Content of the Task Force Assessment

As a common understanding of user needs at different latitudes and geographical positions develops, the task force assessment shall include:

- an overview of existing infrastructure and gaps in relation to expected developments in the Arctic;
- an overview and preliminary evaluation of future concepts for telecommunications infrastructure which may fill these gaps, building on circumpolar collaboration;
- a quantitative assessment of the potential for the different concepts for telecommunications infrastructure to provide a societal return-on-investment seen in a global context;
- an analysis of possible business cases for the establishment of telecommunications infrastructure in the Arctic on a purely commercial basis and on the basis of public-private partnerships; and
- concrete recommendations for a road-map which builds on circumpolar collaboration.

Next Steps

In the months ahead, States, Permanent Participants and Observers will provide information on current telecommunications coverage within their region, provide a more detailed analysis of user needs, create a more detailed work plan and schedule for further task force meetings, and gather concrete examples of public-private partnerships supporting telecommunications whether successful or unsuccessful. Norway and the Kingdom of Denmark have agreed to provide leadership and support in gathering this information.

UARctic members may contribute their thoughts and ideas on user needs related to telecommunications, broadband and Internet by taking a brief survey at the following link:
<http://goo.gl/forms/wy92myTbyl>

The dates and time of the next task force meeting is still to be determined.

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