



AEC Top of the World Arctic Broadband Summit

For three consecutive years, the AEC has organized Top of the World Arctic Broadband Summit (TOW Summit) to connect stakeholders for discussions on connectivity in the Arctic. The TOW Summit has been an important tool in the AEC's work to promote improved connectivity in the region. The TOW Summit has shed light on the challenges related to broadband development in the region, but also promoted the economic opportunities brought by improved connectivity across the pan-Arctic region.

The first TOW Summit was organized in 2016 by the AEC's Working Group on Telecommunications which was led by Robert McDowell (USA). The event gathered business leaders, tech industry experts, policy makers and pan-Arctic residents to Ukpeagvik (formerly known as Barrow) in northern Alaska, USA, for two days of discussions ranging from the challenges to bringing high-speed internet to the Arctic to the government's role in, and commitment to, broadband development and expansion.

By gathering a diverse group of experts and leaders to the remote location of Ukpeagvik, the AEC and the event co-hosts, Inuit Arctic Business Alliance (IABA) and the Arctic Slope Regional Corporation (ASRC), wanted the participants to experience first-hand how challenging connectivity in the Arctic can be.

The inaugural TOW Summit in Ukpeagvik was attended by over 100 participants. It was also open for local residents, which resulted in meaningful exchanges between the service users and providers. The event helped increase the understanding of the need to be connected as a precondition to success, and how this need only multiplies in the most remote parts of the world.

Based on the success of the inaugural TOW Summit in Ukpeagvik followed by a direct request from the business community, the AEC organized the second TOW Summit in Oulu, Finland in 2017. Oulu was a natural choice to host the Summit as it has long been a world-renowned hub of telecommunications and digital research, development, and business. The event was co-organized by the AEC and the City of Oulu. In addition to panel sessions and expert discussions, the event also provided networking opportunities and site visits to innovative Oulu companies working in the field of connectivity solutions.

The 2017 TOW Summit was attended by a wide range of representatives from business, technology, science and policy from 10 different countries. The topics included discussions on the role of connectivity and broadband infrastructure around the themes of safe, competent, and interconnected Arctic. In addition, the TOW Summit participants discussed the future of the Arctic in the light of an increased broadband development and its implications for the development of Arctic societies and businesses.

The 2017 TOW Summit brought together representatives of the major subsea fiberoptic cable projects planned across the Arctic. This provided a unique opportunity to discuss



the potential synergies in connecting the Arctic through North-East and North-West. Further, the participants also discussed how the development of connectivity links between the Arctic and the rest of the world can change the region's potential for business development.

The 2017 TOW Summit also shed light on the different technological solutions for connectivity and how these solutions can complement each other. By presenting practical examples of how improved connectivity has enabled better services e.g. within health care and education in remote areas of the Nordic Arctic, the event provided an opportunity to share lessons learned and best practices to participants from other parts of the Arctic. As the event was organized back-to-back with the European Union Arctic Stakeholder Conference, it provided the opportunity to present the policy decision-makers with a unified perspective from the Arctic businesses.

The Top of the World Arctic Broadband Summit was organized for the third time in 2018. Taking the third TOW Summit to Sapporo, Hokkaido, Japan moved the discussions on connectivity further, also emphasizing that the Arctic is a region of commercial opportunity. Fostering market connections within the Arctic and between the Arctic and the global value chains is at the core of the AEC's work. The 2018 TOW Summit in Sapporo provided an opportunity to underline that the Arctic business community is also interested in creating closer ties to stakeholders south of our region.

The discussions at the 2018 TOW Summit built upon the themes of the previous TOW Summit. The Arctic has a geographic advantage: uniting 3 continents, it provides the shortest link for data cables. The planned subsea cables can become a game-changer not just for the region, but also globally. By connecting the representatives of the major subsea cable projects being planned across the Arctic with representatives of the Hokkaido tech environment, the event provided an opportunity to business networking and new connections with potential business partners. As a potential landing site for subsea cables built along the North-East and North-West passages, Hokkaido has a strategic location.

According to an estimate, data centers alone accounted for 7% of electricity usage in the world in 2017. Data center building is forecasted to triple in the next 3 years, making the industry by far the single biggest user of electricity. The carbon footprint which follows is growing alarmingly. Hence the 2018 TOW Summit focused on the potential of the Arctic as a location for the data center industry. With abundance of energy and cold climate, the Arctic could potentially contribute to solving the increased demand for energy while simultaneously providing a less polluting means to drive the industry.

The third major theme of the 2018 TOW Summit focused on connectivity at Arctic seas. As commercial shipping activities in the Arctic are increasing, there is also an increased need for connectivity and situational awareness.

One of the major messages from the AEC Top of the World Arctic Broadband Summit was the need for an improved dialogue between businesses, decision-makers and regulators. Stable and predictable rules and regulations are the key to development. This is especially true in the Arctic where the markets are small. The technology industry



calls for joint standards for example in regulating subsea cables and in ensuring shared global standards in technology development.

The 2018 TOW Summit was organized in collaboration with the Hokkaido Government, the Hokkaido Committee for Economic Development as well as the Hokkaido University. The AEC is grateful to the Nordic Council of Ministers for project support for the 2018 TOW Summit.