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Arctic Region Space Weather Customers and SSA Services

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Arctic inhabitants, authorities, and companies rely strongly on precise localization information and communication covering vast areas with low infrastructure and population density. Thus modern technology is crucial for establishing knowledge that can lead to growth in the region.

At the same time it is crucial for the development of the industrial sectors and transportation systems in the Arctic that the digital infrastructure for higher-level information are operating at the standards for modern industrial societies. This can only be done if the precision of the localization information and communication can be established without errors resulting from Space Weather effects.

An ESA project have identified and clarified, how the products of the four ESA Space Weather Expert Service Centres (SWE) in the ESA Space Situational Awareness Programme (SSA), can contribute to the requirements of SSA services in Arctic, and how new products and services need to be developed and implemented in the roadmap of SWE for Arctic region network services.

An important element in the project is the end-user requirements and needs in the public and commercial sector. A detailed user-survey and interviews with key-companies in the region have been performed. The outcome has been analysed in view of the present SWE system, and products and suggestions to a roadmap for the development of coming Arctic region SSA services, have been established.