

## **Submission of the Scottish Arctic Network to the UK Parliament Inquiry “The UK and the Arctic Environment”**

This submission is made on behalf of the Scottish Arctic Network (ScAN). ScAN is an interdisciplinary network of Scotland-based scientists and academics whose expertise and research interests revolve around Arctic matters and Scottish-Arctic collaboration. We are submitting this response to highlight the contribution to the Arctic made by Scotland-based researchers.

### **What is ScAN?**

Established in 2022, ScAN currently brings together over 130 members and its objectives include the improvement of inter-institutional collaboration and communication on Arctic research in Scotland; and facilitating increased international and domestic awareness of Scotland’s contribution to Arctic research. Its foundation is the Scottish Government Arctic Policy Framework – [Arctic Connections](#) – which was launched in 2019. Scotland is the world's most northerly non-Arctic nation and shares a close connection to the region, going back to the Nordic heritage of place names, polar exploration, migration, and research. Supported by Scottish Government funding, ScAN is focused on building and strengthening collective resources across a number of areas from education, research and innovation to clean energy, sustainable economic development and rural connections. ScAN supports joint funding applications, promotes Arctic-relevant research of its members, holds webinars, and supports early career researchers in attending relevant conferences and more.

## **ScAN composition**

ScAn brings together over 130 members from thirteen Scottish universities, as well as the Scottish Association of Marine Science (SAMS) Scottish Alliance for Geoscience and Society (SAGES). ScAN is run by a Steering Group which comprises of representatives of the nine Scottish universities who are members of the [UArctic](#) (Robert Gordon University, St Andrews University, Glasgow Caledonian University, Strathclyde University, University of Edinburgh, University of Aberdeen, University of the Highlands and Islands, Heriot-Watt University, and the Glasgow School of Art); as well as an early career researcher and a representative of the Scottish Government Nordic and Arctic Unit.

ScAN is working on expanding the network and ensuring that all the interested researchers benefit from knowledge exchange and support of the network.

## **ScAN's institutional connections**

In March 2023, ScAN signed a Memorandum of Understanding with the University of the Arctic (UArctic), establishing the Scottish Arctic Network as a [UArctic Regional Centre](#), the first for the UK. The purpose of the MOU is to establish a working relationship of mutual collaboration between the Parties for a long-term collaboration, and to define the responsibilities and functions of the Scottish Arctic Network in the role of a Regional Centre.

ScAN is one of the organisers of the Arctic Science Summit Week 2024, which will take place in Edinburgh in March 2024.

## **ScAN's contribution to Arctic research**

Scotland-based researchers have been contributing to the Arctic through research activity across a number of disciplines from geoscience, microbiology, engineering, nutrition to anthropology, law, literature, museum studies, and visual art. Our members

have completed and are involved in numerous Arctic-relevant projects and events. These include:

**1) 2023-2026 Arts and Humanities Research Council: JPI Arctic Heritage**

(total UK budget GBP £170,875 over 3 years)      Lead: David Aderson (University of Aberdeen)

This newly awarded grant is part of a network of grants coordinated by NordForsk (Oslo) studying the changes and commodification of indigenous material culture. The UK project involves a co-investigator and PhD student in a network of 15 researchers across Europe. <https://gtr.ukri.org/projects?ref=AH%2FY000161%2F1>

**2) Developing Small Satellites for Glaciology (2021-2023)**

Funder: European Space Agency (ESA) and SAGES      Lead: Dr William D. Harcourt (University of Aberdeen)

This project aims to develop an innovative approach to studying the stabilising effect of ice mélange, the mixture of icebergs and sea ice, on Greenland Ice Sheet (GrIS) outlet glaciers using high spatio-temporal resolution Synthetic Aperture Radar (SAR) imagery acquired from the ICEYE constellation.

**3) The Role of Territorial Cooperation in Supporting Just Transition**

Scottish Government, Arctic Connections Fund. Lead: Heidi Vironen (University of Strathclyde)

The project will explore the role of territorial cooperation in supporting the delivery of Just Transition in remote and sparsely-populated areas of the Arctic and near Arctic. A research paper will be produced to set out the key issues, innovative examples, and future

recommendations concerning Just Transition. The project will culminate in a workshop to exchange experiences, and a blog article will be written to facilitate the dissemination of results. The project is expected to inform future territorial cooperation partnerships. The project will be led by the European Policy Research Centre in partnership with the Arctic Centre and the Centre for Sustainable Development.

<https://eprc-strath.org/the-role-of-territorial-cooperation-in-supporting-just-transition-in-the-arctic/>

#### **4) Scotland Model Arctic Council 2 (SCOTMAC 2)**

Lead: Sennan Matar, (Glasgow Caledonian University on behalf of ScAN)

Scotland Model Arctic Council 2 (SCOTMAC 2) is an experiential learning event at which students play the roles of diplomats negotiating consensus on issues of Arctic sustainable development. Following on a successful SCOTMAC 1 in 2022, SCOTMAC 2 will continue to build connections between Scotland and the Arctic by promoting knowledge-exchange and mutual learning between Scottish and UArctic participants on issues such as just transitions, community resilience, rurality and remoteness, and Indigenous rights. It will also continue to link Scottish universities with UArctic counterparts, to embed Scotland in Circumpolar education, and to emphasise Scotland's Northern status.

<https://researchonline.gcu.ac.uk/en/projects/scotland-model-arctic-council-2-scotmac-2>

#### **5) Scanning the Horizon: identifying challenges, knowledge gaps and opportunities for sustainable development of port infrastructure for the Arctic's Shipping Routes**

Scottish Government Arctic Connections Fund, Leads: Dr Lauren McWhinnie (Heriot-Watt University)

Cooperation among the Arctic states, non-Arctic shipping states and the global maritime enterprise will be critical to developing sustainable shipping strategies that achieve effective protection of the marine environment while meeting the needs of Arctic communities. Associated expansion of port infrastructure is of particular importance. This

project utilises online tools and workshop activities including: interactive mapping exercises; virtual “World Café” style discussions; and real-time polling to explore some of the key challenges and opportunities from different stakeholder perspectives. Participants will consider knowledge gaps/data needs, technology innovations/limitations, environmental/socio-economic/policy drivers, opportunities, and recommendations for future shipping infrastructure within Arctic and sub-Arctic waters.

<https://experience.arcgis.com/experience/a6d64a54c5324f008da59b1c5601dc64>

#### **6) Arctic PRIZE: Arctic Productivity in the Seasonal Ice Zone**

Funder: NERC    Lead: Finlo Cottier, SAMS

The Arctic PRIZE project addresses the core objective of the NERC Changing Arctic Ocean Program by seeking to understand and predict how change in sea ice and ocean properties will affect the large-scale ecosystem structure of the Arctic Ocean. The project is embedded within international Arctic networks based in Norway and Canada and coordinated with ongoing US projects in the Pacific Arctic. Through these international research networks Arctic PRIZE strives for a legacy of cooperation far beyond the lifetime of the funding. A key objective of Arctic PRIZE is the forging of lasting engagement with the international Arctic research community. Through our established links with international institutes we will ensure that our project has appropriate scientific breadth, opportunities for additional sampling, significant pan-Arctic integration and longevity beyond the funded lifetime of the project. Of particular significance, we will work closely with the partner institutes within the Nansen Legacy – a leading Norwegian initiative focused on our study area, the Barents Sea.

<https://www.sams.ac.uk/science/projects/arctic-prize/>

7) In October 2022, ScAN organised and hosted a panel at the Arctic Circle Assembly 2022 in Reykjavik, Iceland. The panel focused on the Arctic Networks to enhance opportunities and Knowledge. The Arctic Circle Assembly is one of the largest Arctic-focused events globally, and brings together academics, politicians, and business leaders every year.

8) In March 2023, ScAN held its first in-person [meeting](#) at the University for Aberdeen, The meeting brought together members for a discussion on the future developments in ScAn and priorities for the network's development. The meeting was held in anticipation of the [Arctic Frontiers Abroad](#) conference which took place also in Aberdeen on 17 March, featuring representatives from Arctic States, the Scottish Government, academia, industry and third sector organisations. ScAN members, Dr Daria Shapovalova and Dr Lauren McWhinnie were among the panellists for this event.

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on behalf of the Scottish Arctic Network