## WMO OMM



World Meteorological Organization Organisation météorologique mondiale Organización Meteorológica Mundial Всемирная метеорологическая организация المنظمة العالمية للأرصاد الجوية 世界气象组织

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Annexes: 2

Secrétariat

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24 July 2019

Subject: WMO Contribution to Arctic Council Sustaining Arctic Observing Networks (SAON) at National Level

Action required: To nominate National Focal Point for acting as liaison with SAON Board member(s) at national level.

Dear Dr Uccellini,

As you will recall, the World Meteorological Organization (WMO) received Observer status in the Arctic Council in 2017 and, since then, has engaged at a high level with the Arctic Council and its Working Groups. The Eighteenth World Meteorological Congress (Cg-18) also recognized the excellent contribution by Finland to WMO in promoting meteorological cooperation as one of the four priority areas during its period as Chair of the Arctic Council. Congress also adopted Resolution 48 (Cg-18) on key directions of the polar and high-mountain agenda for the next WMO financial period (2020–2023), whereby it is requesting the Executive Council to ensure close collaboration with the Arctic Council Panel of Experts on Polar and High Mountain Observations, Research and Services (EC-PHORS) through Resolution 6 (EC-71). One of the Tasks of EC-PHORS as per its new Terms of Reference is to promote WMO engagement with the Arctic Council and its Working Groups, in particular for providing appropriate observations and Earth system modelling frameworks in the Arctic region, supporting climate resilience and adaptation policies, advancing hydrology and water resources services, and understanding changes in the oceans.

At its ninth Session (Geneva, Switzerland, 27 - 29 March 2019), EC-PHORS recognized the importance of WMO engagement with the Arctic Council and its Sustaining Arctic Observing Networks (SAON) and that EC-PHORS WMO should play a stronger role in SAON. Indeed, groups like the International Arctic Science Committee (IASC) and SAON are opportunities to coordinate the observation framework in the polar regions and develop stronger links with the social sciences and the Arctic Societal Benefit Areas (see annex 1). To address the risks associated to weather, water and a changing environment and climate in the Arctic region, and considering the role of Polar regions in the Earth System, there is a critical need of improving cryospheric, hydrological and oceanographic observations in the Arctic region, in support of Earth system modelling, prediction and services.

cc: Mr David Grimes and Dr Sue Barrell, EC-PHORS co-Chairs Dr Arni Snorrason, GCW co-Chair Mr Thorsteinn Gunnarsson, SAON Board Chair Mr Jan Rene Larsen, SAON Secretariat EC-PHORS also agreed that WMO should support its Members in contributing to the implementation of the SAON Strategy 2018-2028<sup>1</sup> for WMO relevant activities and to deliver the components under SAON's mandate, which are well aligned with the scope of Members within the WMO framework.

Typically, WMO can offer its infrastructure, such as the WMO Integrated Global Observing System (WIGOS), the WMO Information System (WIS), and the Arctic Regional Climate Centre Network (ArcRCC-Network), with concrete engagement of WMO Members. Satellite agencies involved in the Polar Space Task Group (PSTG) can also play a role in fostering relevant satellite missions. This is particularly relevant to observing networks within the scope of WMO activities (weather, water, cryosphere, ocean, climate), with the goal of (i) assisting SAON to link observing networks in the Arctic with societal benefits areas (Annex 1) and decision making requirements (e.g. information and services to transportation, environmental risk, adaptation and resilience in the Arctic); and (ii) facilitating the provision of third party data to WMO and the larger community.

Taking into account EC-PHORS and Congress guidance expressed in Resolution 48 (Cg-18), WMO's approach with SAON was discussed at the SAON Board meeting in Arkhangelsk, Russian Federation, on 26 May 2019, and is provided in Annex 2. In particular, together with SAON, WMO is taking steps to propose mechanisms and guidance for improving the links at the national level between SAON national representatives and National Meteorological and Hydrological Services. In this context, the meteorological priority of Finland, and now Iceland, which introduced a priority on the Arctic Ocean as a component of the climate and the ecological Arctic and Global system, in their leadership of the Arctic Council, will facilitate the implementation. The goal is to identify opportunities for enhanced collaboration at the national level and facilitate engagement of NMHSs in SAON, aligned with the SAON Strategy and WMO Strategic Plan 2020-2023 and the Arctic Council meteorological activity, which, hopefully, will be sustained into the future, thanks to the legacy of Finland's recent chairpersonship of the Arctic Council.

I am, therefore, inviting you to nominate a Focal Point, preferably from your operational hydrometeorological service component located in the Arctic region, to act as a liaison at the national level with the SAON Board member(s) of your Country. The Focal Point will also assist the WMO Secretariat to compile the inventory of WMO relevant infrastructure elements to be communicated to SAON. The name of your nominated focal point will be communicated to the SAON Secretariat and dialogue encouraged.

I would like to use this opportunity to thank you and your Country's engagement in WMO Polar and High Mountain Activities.

Yours sincerely,

(E. Manaenkova) for the Secretary-General

<sup>&</sup>lt;sup>1</sup> SAON Strategy 2018-2028 is available at: <u>https://www.arcticobserving.org/strategy</u>. It includes three Strategic Goals: (1) to create a roadmap to a well-integrated Arctic Observing System, (2) to promote free and ethically open access to all Arctic observational data, and (3) to ensure sustainability of Arctic observing.

## Arctic Social Benefit Areas (SBAs)

(per International Arctic Observations Assessment Framework, SAON)

- 1. Disaster Preparedness
- 2. Environmental Quality
- 3. Food Security
- 4. Fundamental Understanding of Arctic Systems
- 5. Human Health
- 6. Infrastructure and Operations
- 7. Marine and Coastal Ecosystems and Processes
- 8. Natural Resources
- 9. Resilient Communities
- 10. Sociocultural Services
- 11. Terrestrial and Freshwater Ecosystems and Processes
- 12. Weather and Climate

## WMO approach with SAON:

- 1. WMO and the Arctic Council member states operational infrastructure and activities relevant to the Arctic (meteorological, cryosphere and hydrological observations, data exchange facilities, data processing and forecasting systems) to be seen as part of the SAON portfolio.
- 2. WMO to provide an inventory of operational infrastructure elements of WMO and Arctic Council member states that are relevant to SAON, which should be listed in the SAON inventory of national observational capacities (SAON Strategic Objective 1.1).
- 3. To map SAON Strategy with WMO Strategic Plan 2020-2023, and propose and provide details on how collaboration between WMO and SAON could be strengthened and potential synergies realized. Such document ought to be reviewed by EC-PHORS and the SAON Board for their consideration on how to strengthen collaboration. It will also provide elements of sustainability of the meteorological priorities of Arctic Council in to the future.
- 4. WMO to assist SAON with regard to demonstrating how some of the WMO relevant socio-economic benefits identified by SAON for the Arctic (Annex 1) can be realized by using WMO and Arctic Council members state infrastructure across the whole value chain.
- 5. Together with SAON, WMO to propose mechanisms and guidance for improving the links at the national level between SAON national representatives and National Meteorological and Hydrological Services. In this context the meteorological priority of Finland and now Iceland in their leadership of the AC will facilitate the implementation. The goal is to identify opportunities of collaboration at the national level and facilitate engagement of NMHSs in SAON, aligned with SAON Strategy and WMO Strategic Plan 2020-2023 and the Arctic Council meteorological priority which hopefully will be sustained into the future.
- 6. WMO is reinforcing its collaboration with the IOC of UNESCO with regard to joint activities related to the role of the ocean in Earth System Prediction. It is foreseen that a Joint WMO-IOC Collaborative Board will be established, and proposals made on how to enhance functional connections between the IOC-WMO-UNEP-ICS Global Ocean Observing System (GOOS) and the WMO Integrated Global Observing System (WIGOS). The role of the Arctic Ocean being critical in the Earth System, WMO is willing to collaborate with the IOC on common solutions towards improving Earth System prediction. The priority on the Arctic Ocean during the leadership of Iceland of Arctic Council 2019-2021 can facilitate this collaboration.