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EXECUTIVE COUNCIL PANEL OF EXPERTS ON POLAR AND HIGH MOUNTAIN OBSERVATIONS, RESEARCH AND SERVICES

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Submitted by:
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TITLE

Development of Polar Regional Climate Centres (PRCCs) and Outlook Forums (PRCOFs), including broader relationship with the GFCS

SUMMARY

This document provides information on the process towards establishing Polar Regional Climate Centres.

DECISIONS/ACTIONS REQUIRED: see part 1

ISSUES TO BE DISCUSSED: see part 2

REFERENCES:

1. Minutes from Arctic Polar Regional Climate Centre (PRCC) Network Implementation Planning Meeting (7-9 November 2016, Geneva, Switzerland). **Draft v2 03.01.2017**
2. ARCTIC POLAR REGIONAL CLIMATE CENTRE NETWORK IMPLEMENTATION PLAN, **DRAFT v1 08.01.2017**
3. Draft Concept Paper:Development of a Polar Regional Clomate Centre (PRCC): Towards an Arctic PRCC-Network. June 2016

ANNEXES:

1. Milestones and meetings in the process of establishing Polar Regional Climate Centres
2. Modalities for Antarctica
3. Development of Polar Regional Climate Outlook Forum (RCOF)

1. DECISIONS/ACTIONS REQUIRED

The Panel is invited to decide on the following:

i. Action 1: EC-PHORS to endorse the implementation plan for an Arctic Polar RCC, alternatively point out needed changes in the plan before endorsement can be done***;*** during EC-PHORS 7th session;

The Panel is invited to make the following recommendations

i. Recommendation 1: EC-PHORS to submit the Implementation plan for an Arctic Polar RCC to EC-69; during EC-PHORS session 7 (after review of the plan during session)

ii. Recommendation 2: EC-PHORS to give guidelines for a process towards establishing an Antarctic PRCC-Network

2. ISSUES TO BE DISCUSSED

i. The implementation plan (IP) for an Arcitic RCC-Network has some points that need clarification, among them:

The goal of Arctic PRCC Network, as stated on page 8 in IP:

"with the goal that it will help them to provide effective, user-relevant, decision-support climate information needed by people, governments, businesses and other users at high northern latitudes"

is far-reaching and worthy of support.

However, a few comments and questions arise:

In this goal, climate is mentioned but elsewhere in the document also weather and marine services are also discussed. It is not fully clear what is the role of weather and marine services are in the Arctic PRCC-Network.

Clear definition of users, and thorough understanding of their needs is important. In both cases the current version of IP leaves a lot to be desired.

- EC-PHORS TT report 2015 "Services Requirement Paper" referred in the IP provides insight to user aspects, but a more thorough analysis of users and their needs is called for in order to have solid basis for planning of Arctic PRCC-Network functions and services. This study should be done before finalizing the Implementation Plan, and it should also analyze what is the added value of the planned PRCC compared with the current situation.
- The Arctic PRCC-Network would be different from existing RCCs in many ways. Therefore the WMO RCC concept should be thoroughly adjusted for the Arctic framework, e.g. criteria for mandatory and highly recommended functions should be thoroughly revised, e.g. to include marine and ice datasets. In doing so, the data policy could also be handled.

- How the WMO-approach and needs of business sector in the Arctic regions match? In the current IP the roles of weather and climate services are not clearly defined.

The role of WMO Arctic PRCC-Network in providing weather services in not clear with respect to the role NMHSs.

- Are the services to private sector users "free of charge" or "subject to a charge"? If the NMHSs are users of Arctic PRCC-Network, can a NMHS use or distribute the products further for commercial activities. Are the data and products freely available also for commercial use or only for operational use in the NMHS?

- There are several potential benefits foreseen. E.g. enhanced exchange of observations (e.g. marine, sea ice), climate outlooks/scenarios and related collaboration e.g. in regional climate modeling, monthly and seasonal forecasting, scientific collaboration etc. Therefore, my recommendation is to the develop further the Implementation Plan taking into account the comments above.

The need for clarification on the above listed items is suggested by the STT to be main work in the breakout session during EC-PHORS 7.

ii. The STT must have clarity in the expectations from WMO Secretariat for their contribution. A Steering Committee or reference group might be a relevant role.

iii. Also for the PCOF it is necessary to define an eventual role for the STT members.

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Annex 1

MILESTONES AND MEETINGS IN THE PROCESS OF ESTABLISHING POLAR REGIONAL CLIMATE CENTRES

1. PRCC Scoping Workshop for an Arctic Polar RCC was held in WMO Headquarters 17-19 November 2015. Present were interested countries with proposals for services.

2. A survey was presented by WMO Secretariat to Members the first months of 2016 in order to map the existing and potential contributions to an Arctic PRCC.

3. A concept paper for an Arctic PRCC was drafted during summer of 2016, by WMO Secretariat supported by STT.

4. An Arctic PRCC Implementation Meeting was held in Geneva November 7-9, 2016. The meeting was chaired by STT. Decisions were taken to establish a node-based Arctic PRCC Network. North American node headed by Canada, Nordic node headed by Norway and Eurasian node headed by Russia. The overall coordination function will be from one of the node leaders' countries. Discussions on this is ongoing and a decision is expected soon.

5. An Implementation Plan for an Arctic PRCC was drafted after the November 2016 meeting. (v1 in January 2016). The Implementation Plan is presented to EC-PHORS-7 for endorsement. It will then be sent to EC-69 for approval.

6. The Implementation Plan describes a demonstration phase for the PRCC Network to start in 2017. The STT must have clarity in the expectations from WMO Secretariat for their contribution. A Steering Committee or reference group might be a relevant role.

7. Canada has offered to host the first PCOF (Polar Climate Outlook Forum), in the fall of 2017 or early 2018. Also for the PCOF it is necessary to define an eventual role for the STT members.

Annex 2

MODALITIES FOR ANTARCTICA

The process towards establishing an Arctic Polar RCC Network has led to a node-based approach, with an overall coordination function, and nodes based on geographical clusters of Member countries. This might also be the approach for an Antarctic PRCC Network. (More on the process so far and ideas for the way forward…)

Annex 3

DEVELOPMENT OF POLAR REGIONAL CLIMATE OUTLOOK FORUM (RCOF)

Background on WMO's Regional Climate Outlook Forums (RCOFs) can be found at: https://public.wmo.int/en/our-mandate/climate/regional-climate-outlook-products
A WMO publication on RCOFs: Regional Climate Outlook Forums, WMO, 2016, in the form of a collection of fact sheets, can be found at: http://library.wmo.int/ (enter

'Regional Climate Outlook Forums' in the search field). Extracts from this publication:

"Concept:
An RCOF is a platform that brings together national, regional and international climate experts and stakeholders' representatives from countries in a climatologically homogeneous area to provide consensus-based climate predictions based on input from NMHSs, regional institutions, WMO Regional Climate Centres (RCCs), Global Producing Centres for Long Range Forecasts (GPCLRFs) and other climate prediction centers. Through interaction with sectoral users, extension agencies and policymakers, RCOFs assess the likely implications of the outlooks on the most pertinent socio-economic sectors in a given region, and explore the ways in which use can be made of them.

RCOFs strengthen regional networking of the climate service providers and user-sector representatives. Participating countries recognize the potential of climate prediction and seasonal forecasting as a powerful development tool to help populations and decision-makers face the challenges posed by climatic variability and change. One of the important components of RCOFs is development of existing capacities of NMHSs in seasonal forecasting and communication of climate information to user community."
In the GFCS framework, a RCC will learn from RCOFs to develop user-driven services and communicate and communicating these to users at regional and national scale. Canada has taken responsibility for hosting the first Polar RCOF - late 2017 or early 2018 - and the plan is to engage the research community that works on Arctic matters. A "work plan" for the RCOF is now being established By ECC Canada.

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