



World Meteorological Organization

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# Potential Mapping of national capabilities for Arctic Regional Climate Centre-Network

Secretariat

# RCC mandatory functions – high-level overview

Function	Country	Remarks
LRF	Russian Federation Denmark/Greenland Nordic countries Canada USA	<i>Clarify areal coverage of products/services!</i> <i>Indicate parameters</i>
Monitoring	Russian Federation Denmark/Greenland Nordic countries Canada USA	<i>Clarify areal coverage of products/services!</i> <i>Indicate parameters</i> <i>?Integrated historical reference climatology?</i> <i>?Integrated Climate Watch system implementation?</i>
Data	Russian Federation Denmark/Greenland Nordic countries Canada USA	<i>Clarify areal coverage of products/services!</i> <i>Indicate parameters</i>
Training	Nordic countries Canada USA	<i>Clarify areal coverage of activities!</i> <i>Indicate thematic topics</i> <i>Canada: Polar Knowledge Canada</i>



# Indicated capabilities beyond RCC mandatory functions

Russian Federation	Monitoring of marine environment, sea ice climatology and monitoring, ?Iceberg services?
Nordic countries	Polar Portal, glacier and ice sheet monitoring, sea ice monitoring, climate projections, sea surface and ice surface temperatures, station-based time-series data; growing season, permafrost, ecosystem monitoring Climate projections, data rescue, greenhouse gas monitoring, sea ice services, ocean-wave-ice climatologies, hazard monitoring
Canada	Sea ice/Ice services (ice strength, ice pressure), Research activities on Climate Change (ArcticNet)
USA	Sea ice/Ice services, climate projection, Climate variability and change, Impact analysis



## Existing and future collaborations

A number of existing collaborations and relevant opportunities have been mentioned, such as YOPP, GCW, IICWG etc.

An Arctic-RCC-Network can largely benefit from this.

# HOW?



# Mapping of **specific proposals** for contributions to an Arctic-RCC-Network (mandatory functions)

Function	Country
LRF	Canada: PCOF + seamless LRF (for entire Arctic region)
Monitoring	Norway: distributed data management to link GCW and YOPP
Data	Denmark/Greenland: Greenland Climate Data Hub to be extended to an Arctic Data Hub (tbc)
Training	

Russian Federation,

Nordic countries:

Integrated contribution to all mandatory functions and beyond for their territories

USA: happy to contribute to PRCC, special interest: impact forecast, R&D, services beyond classic RCC



# Mapping of **specific proposals** for contributions to an Arctic-RCC-Network (highly recommended functions)

Function	Country
Climate Prediction/ Projection	
Non-op. Data Services	
Coordination	
Training	
R&D	



# Next steps

1. Seek formal endorsement of the implementation approach from RAs II, IV and VI as well as EC-PHORS;
2. Follow a well-planned timeline towards an implementation plan.
3. ?Seek formal expression of intent (of countries within the Arctic Polar Region?) to contribute to an Arctic-RCC-Network (gives also mandate to national experts to discuss technical implementation)?
4. Specify products/services for Arctic-RCC-Network (cf. RA VI RCC-Network Implementation Plan) – both mandatory and highly-recommended
5. Focal Point, Product/Service, Producer, Areal coverage, time of issuance, URL/access point, Remarks
6. Methodology, spatial resolution, temporal resolution, Quality indicators/Validation, References
7. Draft an Arctic-RCC-Network Implementation Plan (**who leads?**) (including identifying Node leads and consortia, Arctic-RCC-Network WebPortal, open vs restricted product access etc)
8. Seek commitment of contributing countries and start demonstration (follow WMO RCC Designation Process)



# Towards an Implementation Plan

- Write up a Concept Note on PRCC implementation including:
  - Governance (part of it will be informed by the descriptions of the core functions)
  - Available WMO products and how to manage them in a cost-effective manner in the PRCC context
  - Include products important for the stakeholders, but beyond the defined RCC products
  - A range of options for implementation
  - Capacities/capabilities
  - Other partners to be brought in
  - Outreach/communication to gauge the level of interest in the PRCC
  - Capture the issues and outcomes of the PRCC Scoping Workshop



# Immediate steps

1. Seek GPC inputs for PRCC operations in the LRF function (including through engagement with PTCs/PRA) – *starting with PTC/PRA meeting in January 2016*
2. Provide national contributions (countries represented in EC-PHORS) to the Secretariat, Specifying products/services for Arctic-RCC-Network, as well as areal coverage, temporal scale, their specific contributions and capabilities, and commitments in concrete terms; also other potential contributors (*by mid February 2016*) – *Formal letter from WMO with a template to be sent*
3. Secretariat to consolidate these inputs and elaborate the first draft of the Concept Paper, based on the national contributions (*by mid March 2016*)
4. Share the initial draft with EC-PHORS members, workshop participants and other interested PRs, including perspectives of potential non-NMHS contributors with help from EC-PHORS (*mid May 2016*)
5. Engage with the EC-PHORS STT to further elaborate the draft Concept Paper
6. Introduce the Concept Paper at the WMO Executive Council and seek guidance (*June, 2016*)
7. Develop an Arctic-RCC-Network Implementation Plan with contributions from experts (*by September 2016*)
8. Seek formal commitment of contributing countries and start a demonstration (follow WMO RCC Designation Process) (*early 2017*)





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Thank you for your attention

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