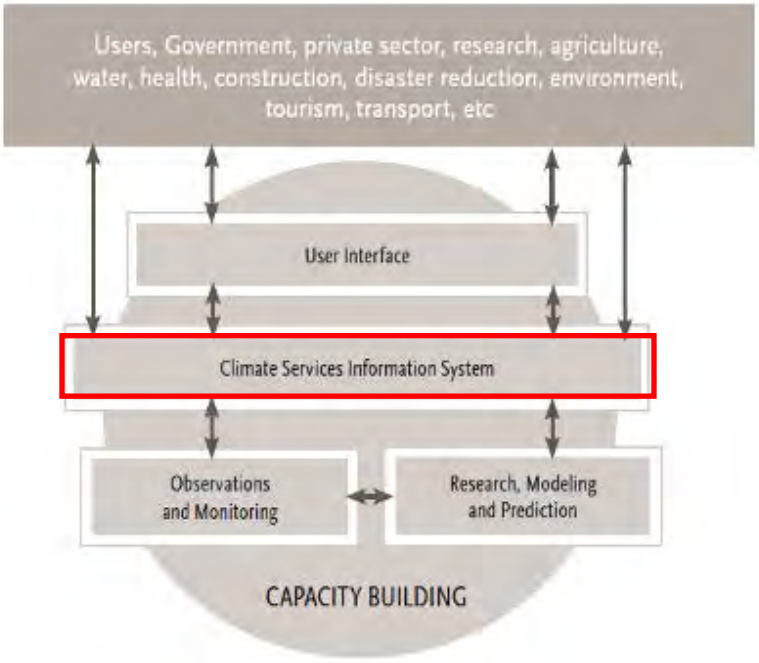
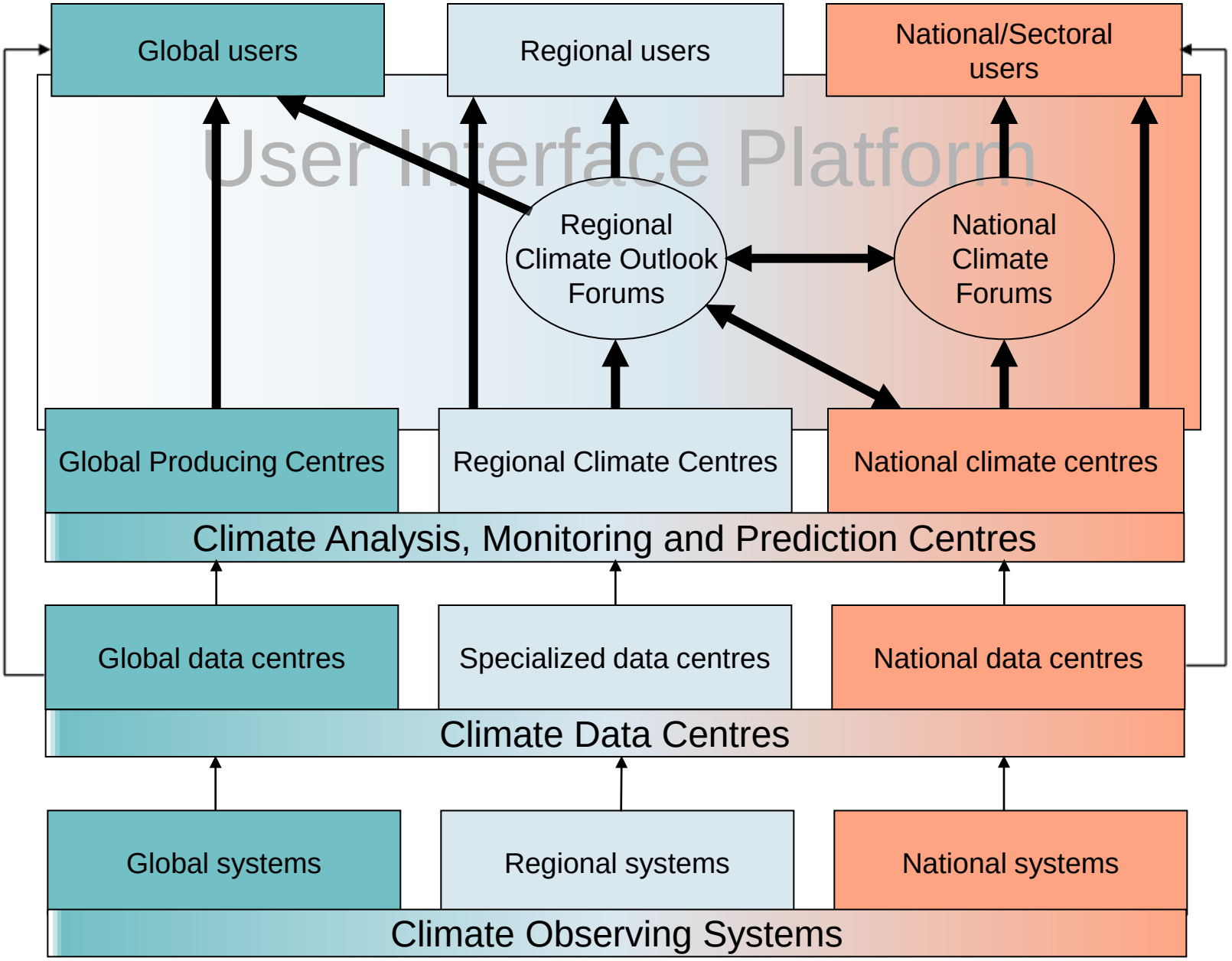
Climate Services Information System

R. Kolli
World Meteorological Organization
RKolli@wmo.int

Role of CSIS within the GFCS

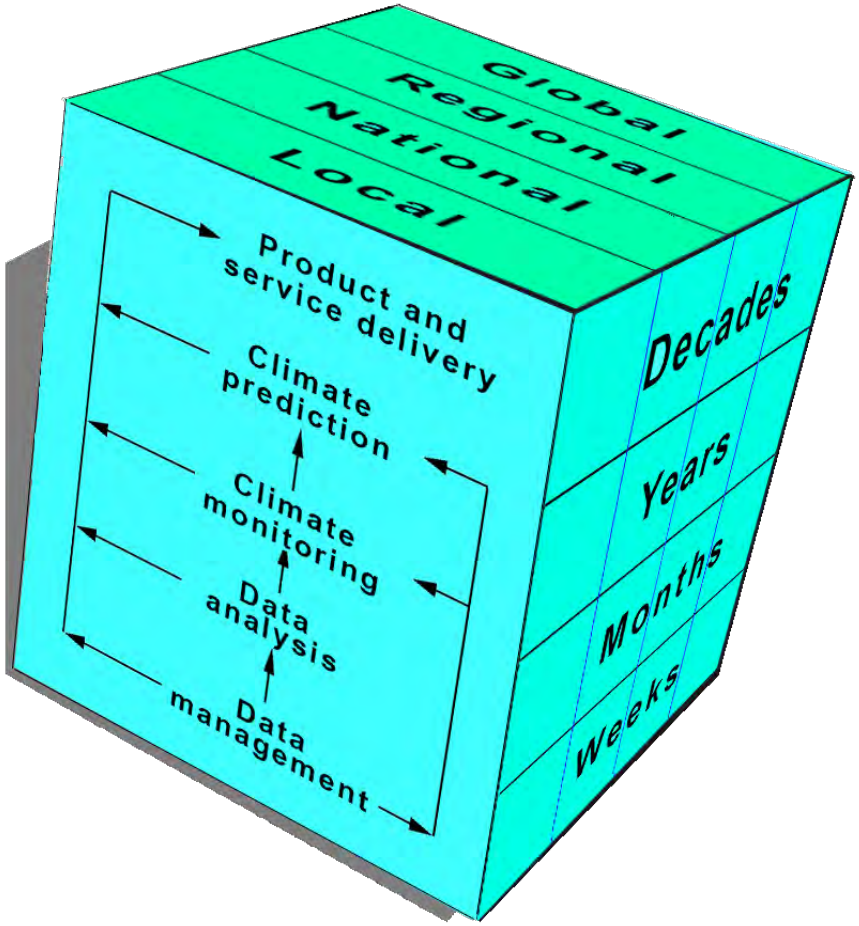
- The CSIS is the means of delivery of climate data and products.
- It comprises global, regional and national centres and entities that generate/process climate information (observations and predictions), and the exchange of data and products to agreed standards and protocols.
- It must be supported by observation and research programmes (e.g. GCOS, WCRP). With 'pull through' facilitated by strong links.
- Capacity building initiatives will increase 'conductivity' of data flow
- Part of the CSIS is in place, but new infrastructure is needed to fullfil the GFCS vision.




Global users
Regional users
National/Sectoral users
User Interface Platform
Regional Climate Outlook Forums
National Climate Forums
Global Producing Centres
Regional Climate Centres
National climate centres
Climate Analysis, Monitoring and Prediction Centres
Global data centres
Specialized data centres
National data centres
Climate Data Centres
Global systems
Regional systems
National systems
Climate Observing Systems

CSIS Implementation Strategy

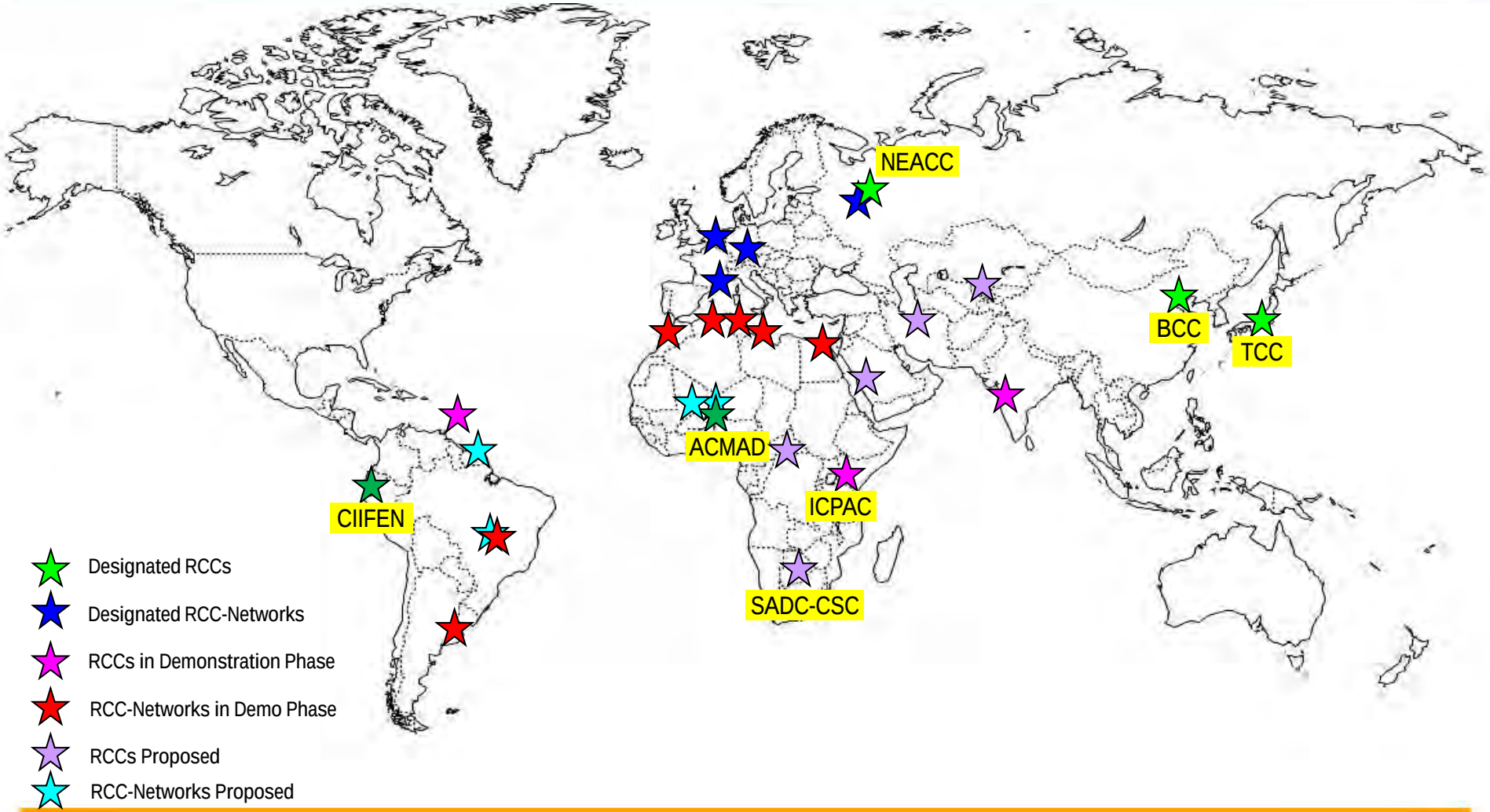
- Developing and implementing CSIS architecture
  - Functional descriptions and product development (Data/Monitoring/Prediction/Projection)
  - Operational infrastructure: GPCs, RCCs, RCOFs, NMHSs, NCOFs/NCFs
  - Climate Services Toolkit
  - Capacity Development



RCC Functions

- Mandatory Functions:
  - Operational Activities for LRF
  - Operational Activities for Climate Monitoring
  - Operational Data Services, to support operational LRF and climate monitoring
  - Training in the use of operational RCC products and services
- Highly Recommended Functions:
  - Climate prediction and projection
  - Non-operational data services
  - Coordination functions
  - Training and capacity building
  - Research and development

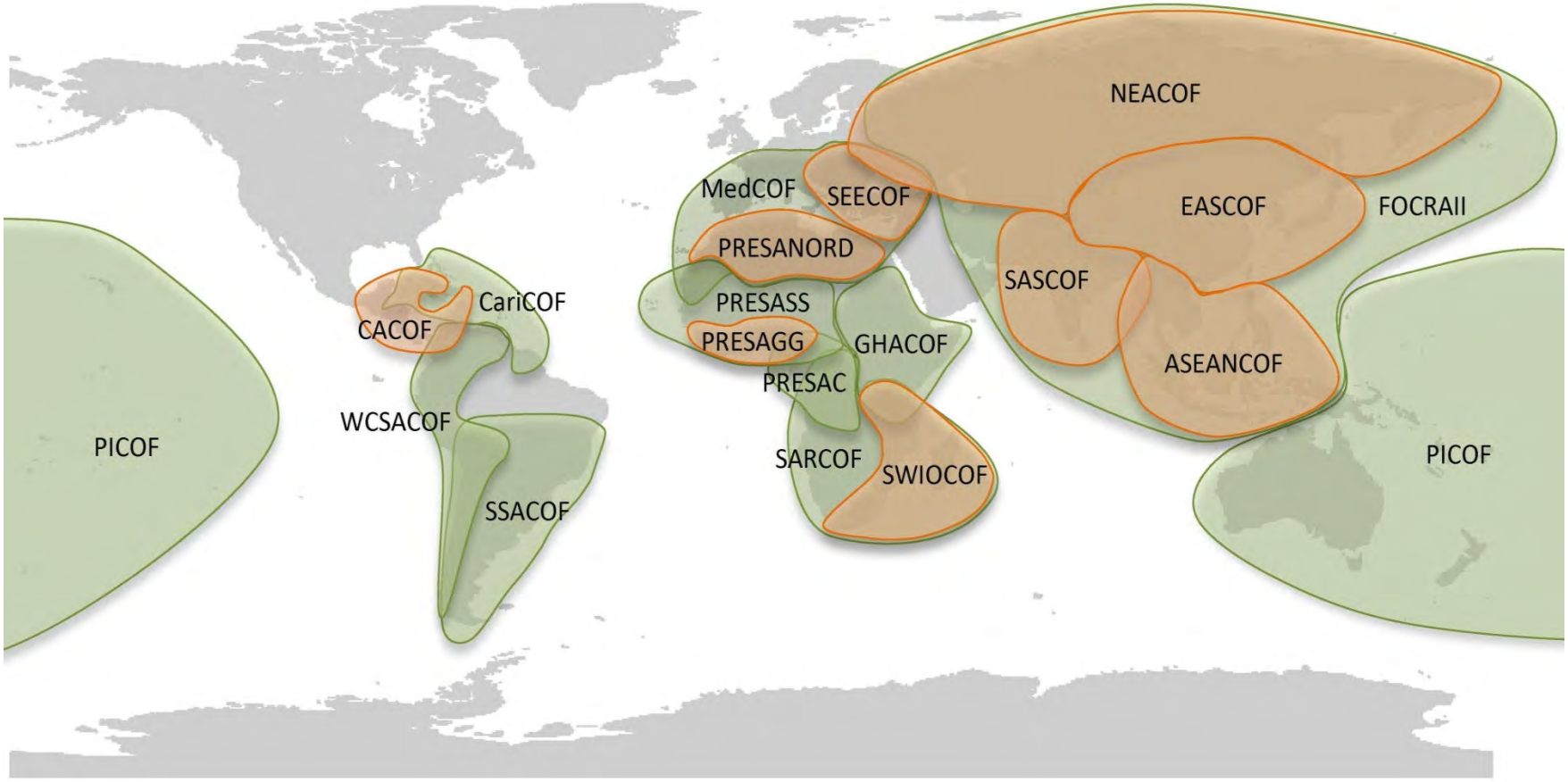
WMO RCC Status Worldwide



Regional Climate Outlook Forums (RCOFs)

- RCOFs provide platforms for Climate experts and climate information users to:
  - Discuss current climate status
  - Exchange views on scientific developments in climate prediction
  - Develop consensus-based regional climate outlooks that can feed into national climate outlooks produced by NMHSs
  - Engage in user-provider dialogue
- An important aspect of RCOFs is the facility to bring together experts in various fields, at regular intervals, operational climate providers and end users of forecasts in an environment that encourages interaction and learning.

RCOFs Worldwide



Potential National Mechanisms

- Framework for Climate Services at the national level
  - Similar to GFCS structure but involves practicalities and specifics for delivery of climate services at the national level.
  - Some countries may establish coordination mechanisms appropriate to their national context, largely as integral components of the NMHSs, to support/facilitate GFCS implementation at the national level
- National Climate Outlook Forums (NCOFs)
  - Adapting the Large and Regional scale forecasts to the national context
  - Tailoring products and translating key messages for users (Multidisciplinary Working Groups)
  - Evaluating the impact of expected conditions (with existing vulnerabilities)
- Coordination mechanisms at National level
  - Tailored to specific National context
  - Positioning of NMHS within the Framework at the national level
  - Strong and sustained users liaison
  - Research focus on national needs
  - Wide access to climate data and knowledge base

2016 Workplan for CSIS

- CSIS Workshop
  - Initial thrust on Climate Services Toolkit
- RCC Development
  - 5 RCCs expected to come up for designation
  - Operational Guidance
- Global Seasonal Climate Update (GSCU)
- Canada Project on GFCS Implementation on regional and national scales
- Strengthening RCOF/NCOF processes, including User Forums

Next steps for Arctic Polar RCC-Network

- Seek formal endorsement of the implementation approach from RAs II, IV and VI as well as EC-PHORS;
- Follow a well-planned timeline towards an implementation plan.
- 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)?
- Specify products/services for Arctic-RCC-Network (cf. RA VI RCC-Network Implementation Plan) – both mandatory and highly-recommended
- Focal Point, Product/Service, Producer, Areal coverage, time of issuance, URL/access point, Remarks
- Methodology, spatial resolution, temporal resolution, Quality indicators/Validation, References
- 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)
- 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

- Seek GPC inputs for PRCC operations in the LRF function (including through engagement with PTCs/PRAs) – starting with PTC/PRA meeting in January 2016
- 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
- Secretariat to consolidate these inputs and elaborate the first draft of the Concept Paper, based on the national contributions (by mid March 2016)
- 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)
- Engage with the EC-PHORS STT to further elaborate the draft Concept Paper
- Introduce the Concept Paper at the WMO Executive Council and seek guidance (June, 2016)
- Develop an Arctic-RCC-Network Implementation Plan with contributions from experts (by September 2016)
- Seek formal commitment of contributing countries and start a demonstration (follow WMO RCC Designation Process) (early 2017)

World Meteorological Organization

Weather · Climate · Water

Thank you for your attention

Rkolli@wmo.int