



WMO RA VI RCC Network

REGIONAL CLIMATE CENTRES' NETWORK

**Second Coordination Meeting
October 28, 2013
Moscow, Russian Federation**

MEETING REPORT

The Table of Contents:**Executive Summary****I. Introduction**

- I.1 Background
- I.2 Date and venue
- I.3 Participants
- I.4 Meeting Agenda and Programme

II. Description of the meeting

- II.1 Opening
- II.2 Report on the Outcomes from XVI RA VI Session
- II.3 Report of the RCC Network Node on Climate Data
- II.4 Report of the RCC Network Node on Climate Monitoring
- II.5 Report of the RCC Network Node on Long-Range Forecasting
- II.6 Technical & Operational Interfaces amongst RCC Nodes & with NMHSs
- II.7 Discussion on how to improve the User's feedback and/ or to demonstrate the User's uptake
- II.8 Upcoming developments

III. Conclusions and recommendations**IV. Annexes**

Executive Summary

The second Coordination meeting of the RA VI Network of Regional Climate Centers (RA VI RCC Network) was held on 28 October 2013, in Moscow, Russian Federation.

While each node is continuously improving its operations and products to better meet the users' requirements, the communication with the users and namely the users' feedback can still be improved. Better, more frequent and regular communication among the members of the RCC Network Consortium was considered important in order to catch up on a fully functional RCC. Participants also discussed the need to update the RCC Implementation Plan.

I. Introduction

I.1 Background

Regional Climate Centers Network is a regional element of the Climate Services Information System of the Global Framework for Climate Services.

The RCC system in WMO RA VI is being established as network of centers, which provide regional level services according to their individual strengths, while making use of as many national level data and products as possible. Up to date three Nodes have been established as follows:

- [RCC Node on Data Services \(lead: The Netherlands\)](#)
- [RCC Node on Climate Monitoring \(lead: Germany\)](#)
- [RCC Node on Long-range Forecasting \(lead: Russia and France\)](#)

Each of these nodes is supported by a consortium of NMHSs of the region.

The network approach has been chosen to ensure incorporation of as much competence and know-how as possible of the 50 RA VI Members.

The first meeting of the RCC Network of the WMO Regional Association VI was held from 28 to 29 October 2010, in Deutscher Wetterdienst, Offenbach, Germany. The documents are available in the meetings section of the RCC Network home page (www.rccra6.org).

I.2 Date and venue

The Focal Points of the RA VI Network of Regional Climate Centers (RA VI RCC Network) convened on 28 October 2013, in Moscow, Russian Federation, for the second coordination meeting. The Meeting was kindly hosted by the Russian Federal Service for Hydrometeorology and Environmental Monitoring.

I.3 Participants

There were eleven participants at the meeting. Besides the Focal Points of the RCC Nodes, the meeting was attended by the representatives of the WMO Global Producing Centre in Exeter (UK), the Italian NMS and of the Tokyo Climate Center, as well as the representative of the WMO Secretariat. The List of participants is attached as Annex I.

I.4 Agenda and Programme

The meeting discussed the issues related to the individual RCC Network Nodes, the relationship with its users, the NMHSs in the Region, as well as the ways and the means to improve the communication among the members of the RCC Network Consortium. The Programme is attached as Annex II.

II. Description of the meeting

II.1 Opening

A. Makosko, the Deputy Head of Roshydromet welcomed the participants on behalf of Roshydromet. He noted that the RA VI RCC Network has 13 years-old history and the time arrived for it to become really operational. The tasks of the Regional Climate Centers' Network are closely linked with the Global Framework for Climate Services (GFCSs); therefore, the work of the RA VI RCC Network would be the contribution to the GFCS activities. He wished to the participants of the meeting a fruitful and successive work with the hope that in the future the RCC Network in RA VI would work as an integrated body.

S. Rösner, the Coordinator of the RA VI RCC Network welcomed the participants of the meeting. He noted that the previous meeting of RCC Network was held in 2010 and that now we have to assess and review what has been done since 2010.

II.2 Report on the outcomes from XVI RA VI Session

S. Rösner reported on the relevant outcomes of the 16th RA VI Session, held in Helsinki, in September 2013.

During the discussion G. Verver asked when the RA VI Task Teams' Working Plans for the next inter-sessional period of RA VI would be ready. N. Berghi, the representative of the WMO Secretariat noted that the Working Plans of the RA VI Working Groups are supposed to be approved by the Management Group (MG) at its next meeting, based on the drafts from the Chairs and the Co-chairs of the established Working Groups. Up to now, there is only a basic composition of the Working Groups with the RA VI Working Groups' chairs and co-chairs, who have been elected during the 16th RA VI Session. The final working structure will be approved at the next MG meeting, based on the RA VI Members' Nominations of experts.

J.-P. Céron wished to clarify the relations between the RA VI Working Group on Climate and Hydrology (WG CH) and the RA VI RCC Network. S. Rösner noted that the composition of the new Task Team on RCC of the WG CH could include the

representatives of the RA VI RCC Network Nodes plus a hydrological expert. It is expected to be a good liaison between the climate and hydrological communities at the regional level. However, this decision has to be made by the Management Group of RA VI. D. Kiktev pointed to the fact that it might not be evident for the people outside of the WG CH, whether it is an advisory or a decision making body, so its status should be made clear. S. Rösner noted that this issue should be discussed during the next inter-sessional period, though, as a general rule, the RA VI Working Groups are advisory bodies to the RA VI plenary, which takes the final decisions. J.-P. Céron noted that this issue should be reflected in the WGs' action plans.

II.3. Report of the RCC Network Node on Climate Data

G. Verver reported on the RCC-CD Node's activity.

In his presentation, G. Verver touched the issues related to the fully functional components of the RCC on climate data, which include: The European Climate Assessment and Dataset (station data and station indices, tools), the Climate Monitoring SAF (ECV's observed by satellite), the E-Obs dataset (gridded ECV's), and the Climate Explorer (global datasets and statistical tools).

He also pointed out that some elements are mentioned in the RA VI RCC Network Implementation Plan, but not implemented to date. It includes: The SE-European gridded model dataset (downscaled regional re-analyses), the Eastern Mediterranean dataset (ERA40 re-reanalyses for the Eastern Mediterranean), the BALTEX (Oceanographic, Hydrological, Radar and Meteorological data for the Baltic Sea), and the SHARK dataset (Oceanographic monitoring data, biological, chemical, and physical records).

G. Verver stressed that the needs of the Members should be assessed to select the datasets, which will then become part of an improved RCC, including the type of the required access. The future consortium of the RCC-CD should be in line with these data requirements and with the efforts needed for the implementation. The updated Implementation Plan should contain concrete actions and should take into account the developments around the Copernicus Climate Service, which most likely will be set up in the coming years.

During the discussion on the data sets related issues, C. Viel, the representative of the RCC Toulouse Node on LRF, asked whether the ECA&D station series are homogenized or not. G. Verver replied that three tests are used to check for the homogeneity, but the time series are not homogenized. The results of the homogeneity tests are provided to the user when time series are plotted. S. Rösner asked if the Node provides a feedback to the data providers. G. Verver answered that the Node provides such a feedback on-line in the 'country pages' of ECA&D. J.-P. Céron noted that it would be useful to discuss what kind of the gridded data is needed. D. Kiktev wondered what kind of the radar data was archived - so called "raw data" or BUFR files. S. Rösner noted that the issues related to the data needs and other related issues could be discussed in the course of the update of the Implementation Plan. He also emphasized that one of the RCC tasks is to assist NMHSs to deliver the climate information. At the first coordination meeting, the participants were interested in different climate tools, such as downscaling software or tools for extraction of data subsets from climate data archives, etc. Another role of the RCC is to collect data sets developed during various projects and to serve as a repository for the different data sets. J.-P. Céron noted that the RA VI RCC Network should be more flexible and proactive to

fulfil the needs of the meteorological services. A. Brookshaw, the representative of the WMO Global Producing Centre (Exeter, UK) was interested in the existing mechanisms to collect the information on the needs of the meteorological services. S. Rösner replied that there was no such a mechanism, but there were relevant Task Teams within the RA VI WG on Climate and Hydrology (RA VI WG-CH) that could serve as contact points for such an interaction. It was mentioned that the RA VI RCC Network should elaborate a mechanism for the feedback provision. It should help to identify the users' needs. The development of such a mechanism should be one of the tasks of the new WG CH.

II.4. Report of the RCC Network Node on Climate Monitoring

S. Rösner reported on the technical status and outstanding issues of the RCC-CM.

In his presentation, S. Rösner informed the participants that all mandatory functions of the RCC Node on Climate Monitoring (RCC-CM) are listed on the RCC-CM' web site. He also discussed the options to meet the training function required from each RCC Node. N. Berghi noted that if assistance of the WMO Regional Training Centers would be needed, the representatives of the RA VI Regional Training Centres could be invited to serve to the RCC Task Team. It might be one of the goals for the next inter-sessional period to develop the training curricula and materials. S. Rosner mentioned a lack of feedback on the training needs. N. Berghi noted the role of the WG CH in collecting the feedback and in formulating the requirements to the RCC Network services. The language problem was also discussed. In many RA VI countries of the Eastern Europe, Russian is one of the most widely spoken language and one of the most commonly used language for conducting business, the participants agreed to make the product catalogues available also in Russian.

II.5 Report of the RCC Network Node on Long-Range Forecasting

D. Kiktev and J.-P. Céron reported on the current status of the Long-Range Forecasting Node of the RCC Network.

A. Brookshaw was interested in the downscaling procedure mentioned in the presentation. D. Kiktev noted that he was skeptical about the today's efficiency of dynamical downscaling for seasonal forecasts due to the low skill of global background forecasts. He considered statistical downscaling to be more practical in this respect. The presented results were obtained using statistical downscaling of predicted tercile probabilities. J.-P. Céron informed the participants that next year Météo France would develop some downscaling products for the RCC activities.

The participants discussed the possibility of RCC services for the EU entities and programs. S. Rosner noted that WMO, EUMETNET and EU were different political groupings of the countries and there were still no links between RA VI and the European entities. D. Kiktev said that for him this looked natural, as the original design of RCCs targeted their services at NMHSs. J.-P. Céron noted that the RA VI RCC Network could provide the European entities with some products, once these products were already provided at the regional and sub-regional level.

The participants discussed some other LRF-related needs, such as the unified boxes for the aggregation of the LRF and climate monitoring data, the new tools for the

assignment of the domains (e.g., river catchments) and for the forecast data aggregation, and others.

II.6 Technical & Operational Interfaces amongst RCC Nodes & with NMHSs

S. Rösner stressed the importance of more active communication and regular video conferences between the RA VI RCC Network participants (e.g. operational bulletins could be prepared off-line and discussed afterwards in video conferences).

Participants discussed an idea to establish a common platform for the exchange of relevant information within the RA VI RCC Network to enhance the internal communication (this could be a common server for exchange of documents, bulletins, presentations, for discussion forums, archives etc. This idea was considered to be worth trying.

II.7 Discussion on how to improve the User's feedback and/ or to demonstrate the User's uptake

S. Rösner raised the issue of better understanding of RCC user needs. D. Kiktev noted that considering the RCC services delivery we should think about the transition to WIS and this transition should be part of the Implementation Plan. S. Rösner expressed his opinion that WIS interface could not be convenient enough for individual users and that the users might need tools of the better information presentation, navigation etc. Besides this, WIS might not be convenient enough for monitoring of the users audience and its needs. D. Kiktev noted that the RCC web-sites themselves could be useful for collecting the users' feedback (e.g. via web-questionnaires). S. Rösner pointed out that an online feedback form is available on the RCC-CM web site, but is not frequently used.

Other mechanisms to collect the user feedback were discussed. N. Berghi mentioned that the questionnaires to the concerned NMHSs could be distributed via the WMO RA VI Network of International Advisers.

S. Rösner raised the issue of language in the improving of the user feedback. It was noted that the RCC products should be translated at least into the WMO official languages related to the region. D. Kiktev noted that it was not easy to organize such a process in the centralized way, because e.g. operational bulletins might contain sections with analysis of the current situation that is different from month to month. S. Rösner considered that at least the RCC product catalog with products descriptions need to be translated. A. Brookshaw commented that the operational bulletins did not contain much text information and a major part of the content consists of figures and graphs.

D. Kiktev supposed that the lack of user feedback was partly explained by the gap between user requirements and the today's possibilities of LRF. It was also mentioned that the majority of the small countries of the Region were interested in seasonal forecasts, but don't issue these forecasts themselves.

The participants asked S. Tanaka about the Tokyo Climate Centre (TCC) experience in collecting the feedback from the users. S. Tanaka answered that each year the TCC holds one week- trainings for about 15 trainees from the countries of the Region. The TCC uses this opportunity to get the users' feedback via questionnaires. S. Rösner

noted that perhaps it would be an opportunity to organize a meeting with the representatives of the WMO Training Centers to discuss the potential joint activities.

2.8. Upcoming Developments

2.8.1 MedCOF

J.-P. Céron presented a report on MedCOF activities and the state of the art. N. Berghi asked Mr Céron to inform the participants on the meeting decisions regarding the strategy of communication with the users. J.-P. Céron said that it was agreed that MedCOF would not communicate with the users directly and the communication with the users should be kept on the national level.

F. Maimone mentioned that LRF should be accompanied by the relevant monitoring activities. Besides, he informed the participants that Italy was progressing in the direction to meet the GFCS requirements: two weeks earlier a decision to establish a National Climate Services Network of Italy was taken, while the idea of the Mediterranean Climate Centre is still being discussed.

2.8.2 Updating the RCC Implementation Plan

D. Kiktev noted that some points in the acting (up to 2015) Implementation Plan need updating. In particular, the links to the Global Framework for Climate Services (GFCS) concept should be added. New milestones and timelines should be considered. The list of the products and services of the RA VI RCC Network should be reviewed. Some changes in the Plan general structure might be relevant (e.g., new section "Governance"). The latest related decisions of the constituent WMO bodies are to be mentioned.

G. Verver stressed the need for a more anticipatory and provocative Plan, that implies its more frequent update (ideally, once a year). After a subsequent discussion splitting the Implementation Plan into Strategic Plan with a 4-years updated cycle and Action Plan with 2-years updated period was considered to be a potential option. S. Tanaka informed the participants that the Tokyo Climate Centre (TCC) updates its Implementation Plan on a yearly basis. It was decided that the appropriate way for the Plan update is via the newly established RA VI WG CH reporting to the RA VI Management Group.

S. Rösner mentioned the need to update the users' requirements to the RA VI RCC Network products. Various options to obtain the revised users' requirements were considered. It was noted that a letter from the RA VI President to the NMHSs of the Region might be a good option to initiate the necessary feedback.

The participants discussed the potential changes in the composition of the RA VI RCC Network. It was noted that a more formalized procedure might be needed for the admission of the new members and for the revision of the existing membership.

S. Rösner said that he did not think that the meeting had a mandate to change the Implementation Plan and the interaction with users was needed before the changes (along with other aspects). N. Berghi noted that the procedure for amending the Plan is dependent on the nature of the changes (e.g. an official letter to the RAVI President requesting for the endorsement of the amendments might be needed). S. Rösner noted

that the update process was guided by the WG CH, so it should be reported to the WG CH and the decision should be coordinated with this group and/or the Management Group. N. Berghi suggested to get first the inputs of the members of the WG CH and afterwards to consider the need for the reorganization of the RA VI RCC Network. WG CH is in charge to contact the National Meteorological Services for any feedback. S. Rösner considered that it would be useful to circulate the Implementation Plan among the NMHSs and ask them for necessary changes along with review of the WG CH.

2.8.3. Facilitating collaboration with RA II

Taking the opportunity of the participation in the meeting of S. Tanaka, the representative of the Tokyo Climate Centre (TCC), the issue of closer collaboration with RA II RCCs was discussed. The list of potential areas of collaboration including the training, the climate watch, and the development of climate-related tools and the exchange of data was identified. As a first step, the RA VI product catalogues should be provided to the TCC.

III. Conclusions and recommendations

S. Rösner thanked the host for the great hospitality and for the opportunity to exchange the information and to discuss the operational issues. The meeting was closed at 18:30.

III.1 Conclusions & Recommendations:

- The RA VI RCC Network should elaborate a mechanism for the feedback provision. It should help to identify the users' needs. The development of such a mechanism should be one of the tasks of the new WG CH; however, the distribution of the questionnaires could be also done through INTAD-6.
- To improve the coordination between the RA VI Working Group on Climate and Hydrology (WG CH) and the RA VI RCC Network, the composition of the new Task Team on RCC of the WG CH should include the representatives of the RA VI RCC Network Nodes plus a hydrological expert.
- The advisory status of the WGs to the RA VI Plenary should be reflected in the WGs' action plans.
- The RCC products catalog with the products descriptions should be translated at least into the WMO official languages related to the region VI.
- One of the goals for the next inter-session period to develop the training curricula and materials. It would be an opportunity to organize a meeting with the representatives of the WMO Training Centers to discuss the potential joint activities.
- The existing Implementation Plan should be updated in coordination with the RA VI WG CH, to also include the most recent developments, like the GFCS, the updated feedback from NMHSs, a long-term perspective, and probably a section on governance. Also, the list of the products and services of the RA VI RCC Network should be reviewed.
- The needs of the Members should be assessed to select the datasets, which will then become part of an improved RCC, including the type of the required access. The future consortium of the RCC-CD should be in line with these data

requirements and with the efforts needed for the implementation. The updated Implementation Plan should contain concrete actions and should take into account the developments around the Copernicus Climate Service, which most likely will be set up in the coming years.

- The RA VI RCC Network should be more flexible and proactive to fulfil the needs of the Meteorological services.
- A more active communication, including the regular video conferences are recommended between the RA VI RCC Network participants (e.g. operational bulletins could be prepared off-line and discussed afterwards in video conferences).
- A common platform for the exchange of relevant information should be established within the RA VI RCC Network to enhance the internal communication (this could be a common server for exchange of documents, bulletins, presentations, for discussion forums, archives etc).
- The contact between the WMO RA VI Task Team on RCC and the corresponding RA II Working Group should be established. The list of potential areas of collaboration with RA II including training, climate watch, and development of climate-related tools and exchange of data was identified. The RA VI product catalogues should be provided to the Tokyo Climate Center. The training efforts could be supported through the secondment of experts.
- The WMO RA VI Task Team on Regional Climate Centers should be re-established under the WMO RA VI WG-CH, with the following core-membership: representatives of RCC Nodes and of one or two hydrological experts.
- The next RCC Coordination meeting should be held in late September or early October 2015.
- The RA VI product catalogues should be provided to the Tokyo Climate Centre.

III. Annexes

The report has 2 annexes as follows:

Annex I - List of participants,

Annex II - Programme.

LIST OF PARTICIPANTS

Members of the RCC Network:

1. Stefan Rösner, Coordinator of the RCC Network, Deutscher Wetterdienst, Germany
2. Dmitry Kiktev, Focal Point of Node on Long-range Forecasting, Russian Federation
3. Gé Verver, Focal Point of Node on Climate Data Services, the Netherlands
4. Jean-Pierre Céron, Focal Point of Node on Long-range Forecasting, France
5. Christian Viel, Node on Long-range Forecasting, Toulouse, Meteo-France

Others:

6. Anca Brookshaw, UK MetOffice
7. Filippo Maimone, CNMCA - Italian Air Force Met Service
8. Hui Wang, National Oceanic and Atmospheric Administration
9. Shotaro Tanaka, Tokyo Climate Center, Japan Meteorological Administration
10. Valentina Khan, Hydrometeorological Centre, Russian Federation
11. Natalia Berghi, Regional Office for Europe, WMO Development and Regional Activities Department

WMO RA VI RCC Network Coordination Meeting

28 October 2013

Moscow, Russian Federation

Hydrometeorological Research Centre

AGENDA

10:00–10:15	Opening Welcome address by R. Vifand (Director of Hydrometeorological Centre of Russian Federation) <i>S. Rösner</i> , Division Regional Climate Monitoring, Coordinator WMO RA VI RCC-Network
10:15-10:30	Report on outcomes from 16th WMO RA VI <i>S. Rösner</i> , Division Regional Climate Monitoring, Coordinator WMO RA VI RCC-Network
10:30-11:10	The RA VI RCC Network Node on Climate Data: Technical status reports of the Consortium members, open issues, discussion <i>Royal Netherlands Meteorological Institute</i>
11:10-11:35	Coffee break
11:35-12:15	The RA VI RCC Network Node on climate monitoring: technical status reports of the consortium members, open issues, discussion <i>Deutscher Wetterdienst</i>
12:15-12:55	THE RA VI RCC Network Node on LRF: technical status reports of the consortium members, open issues, discussion <i>Météo France/ Roshydromet</i>
12:55-13:30	Technical and operational interfaces amongst RCC Nodes and with NMHSs <i>WMO, all</i>
13:30-14:30	Lunch
14:30-15:10	Discussion on how to improve the user's feedback and demonstrate the user's uptake <i>S. Rösner</i> , Division Regional Climate Monitoring, Coordinator WMO RA VI RCC-Network
15:10-15:40	Coffee break
15:40-17:20	Upcoming developments* -MedCOF** - Updating the RCC Implementation Plan*** <i>*D. Kiktev (chair), **J-P. Céron, ***WMO, all</i>
17:20-17:35	Conclusions
17:35-18:00	Closure <i>S. Rösner</i> , Division Regional Climate Monitoring, Coordinator WMO RA VI RCC-Network