

DETAILED CRITERIA FOR MANDATORY FUNCTIONS OF WMO RCCs/RCC NETWORKS

From the Manual on the GDPFS, Part II, new APPENDIX II-11 (as of EC-LXI 2009)

Functions	Activities	Criteria
Operational Activities for LRF (both dynamical and statistical, within the range of 1 month to 2 year timescale, based on regional needs)	Interpret and assess relevant LRF products from Global Producing Centres (GPCs), distribute relevant information to RCC Users; and provide feedback to GPCs (see Attachment II-13)	Product: assessment of the reliability and outcomes of GPCs or LCs-LRFMME products including the reasoning (making use of LC SVSLRF), for the region of interest, in the form of texts, tables, figures, etc. Element: 2-m mean temperature, total precipitation Update frequency: monthly or at least quarterly
	Generate regional and sub-regional tailored products, relevant to RCC User needs, including seasonal outlooks etc.	Product: probabilities for tercile (or appropriate quantile) categories for the region or sub-region Element: 2-m mean temperature, total precipitation Output type: rendered images (maps, charts), text, tables, digital data Forecast period: one month up to 6 months Update frequency: 10 days to one month
	Generate consensus* statement on regional or sub-regional forecasts. <i>*NB: A collaborative process involves discussion with experts in the region (e.g. through Regional Climate Outlook Forums (RCOFs), teleconferencing, etc.).</i> <i>Consensus is both the agreed process, and its joint conclusion, and can be that there is limited skill in the prediction for a region or sub-region</i>	Product: consensus statement on regional or sub-regional forecast. Element: 2-m mean temperature, total precipitation Output type: report Forecast period: a climatologically significant period (from one month to one year) Update frequency: at least once per year (to be defined by the region)
	Perform verification of RCC quantitative LRF products, including the exchange of basic forecasts and hindcast data.	Products: verification datasets (e.g. SVS LRF scores, Brier Skill Score; ROC; Hit Rate Skill Score) Element: 2-m mean temperature, total precipitation
	Provide on-line access to RCC products/services to RCC Users.	Product: an on-line data/information portal
	Assess use of RCC products and services through feedback from RCC Users.	Product: analysis of feedback (which is made available using a template) Update frequency: annually, as part of a regular reporting of RCCs to WMO RAs

Operational Activities for Climate Monitoring	Perform climate diagnostics including analysis of climate variability and extremes, at regional and sub-regional scales	Products: climate diagnostics bulletin including tables, maps and related products Element: Mean, Max and Min temperatures, Total precipitation; other elements (esp. GCOS essential climate variables) to be determined by the region, Update frequency: monthly
	Establish an historical reference climatology for the region and/or sub-regions	Product: database of climatological means for various reference periods (e.g. 1931-60; 1951-80; 1961-90; 1971-2000; etc) Spatial resolution: by station Temporal resolution: monthly at a minimum Elements: Mean, Max and Min temperatures, Total precipitation; other elements (esp. GCOS essential climate variables) to be determined by the region, Update frequency: at least 30 years, preferably 10 years
	Implement a Regional Climate Watch	Products: climate advisories and information for RCC Users Update: whenever required, based on the forecast of significant regional climate anomalies.
Operational Data Services, to support operational LRF and climate monitoring	Develop quality controlled regional climate datasets, gridded where applicable	Products: regional, quality controlled climate datasets, gridded where applicable, following CCI guidance on QA/QC procedures Elements: Mean, Max and Min Temperature, and Precipitation, at a minimum Temporal resolution: daily Update: monthly
	Provide climate database and archiving services, at the request of NMHSs	Products: national databases with metadata, accessible to the NMHS in question (backup service, development site, etc). Elements: as determined by the NMHS Update: at the request of the NMHS
Training in the use of operational RCC products and services	Provide information on methodologies and product specifications for mandatory RCC products, and provide guidance on their use	Products: Manuals, guidance documents and information notes. Update frequency: when methods/products are revised or introduced or discontinued
	Coordinate training for RCC Users in interpretation and use of mandatory RCC products	Products: survey and analysis of regional training needs, and proposals for training activities.

NOTE: an RCC is expected to perform certain functions (e.g. for homogeneity testing; database management; metadata management, statistical evaluation of climate data, etc.) using procedures proposed in the WMO Guide to Climatological Practices and in other official Commission for Climatology Guidance documents.