

The role of the European National Meteorological Services in the playing field of climate (change) services

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Climate change has become a prominent issue on the political and public agenda's; especially since the foundation of the IPCC in 1988. Today, on national and European scale, explicit climate policies are adopted, addressing both adaptation and mitigation issues. This sorted in an increasing demand for climate data, information and expertise. In September 2009, at the Third World Climate Conference (WCC-3) in Geneva, the overarching organization of the National Meteorological and Hydrological Services (NMHS's), the World Meteorological Organization (WMO), established the "Global Framework for Climate Services" (GFCS) to address those needs. The GFCS will coordinate and orchestrate climate services in general, also building on existing regional practices and plans for climate services. Considering the playing field for these climate (change) services, we note that Europe is a patchwork quilt of some 50 nations, of which the NMHS's started to find its role as a common player in the near future European component of GFCS. A major track is followed by GIE-EUMETNET, the collaborative network of 29 European NMHS's. Recently they completed a survey, exploring the playing field for climate change services from the viewpoint of EUMETNET. As a follow up action a roadmap is now developed for a major EUMETNET programme (Capability Climate, 2012-2020), addressing the climate services EUMETNET can offer. It is foreseen that these services cover the time domains from past (climate detection and climate monitoring) via present (long range or seasonal forecasting) to future (climate projections). A second major track is followed by WMO, by means of the establishment of Regional Climate Centers in Regional Association VI, with all European NMHS's as member. The RCC's have been recognized as a suitable platform for shared climate services. RCC's on climate data and on climate monitoring are now operational and will soon get its official (WMO) designation. An RCC on long range forecasting is under development. The EU Global Monitoring for Environment and Security (GMES) programme aims at establishing sustainable and operational Earth observation services, providing policy supporting information on environment and security. It has adopted climate services as one of its six themes. It is expected that the operational phase will be in the 2011-2014 time frame. The European NMHS's, owners of Europe's most sustainable meteorological network, aim to develop a there on based GMES Climate service on in situ climate data. This data service will provide data sets, and there on based assessments, that will serve as a baseline input for GMES climate services, developed by or in collaboration with Europe's research community as in the EU framework projects ENSEMBLES, ECLISE and EURO4M. Major issues identified in the playing field are the identification of pan European and national users and user needs, easier access to the observational datasets as they are "owned" by more than 50 NMHS's with generally incongruent data policies and to attain a more open and outward attitude of the traditionally introspective and operational orientated NMHS's towards the research community. Both communities can profit from each other: research from the high quality data sets from the NMHS's - including related expertise - and vice versa the NMHS's from the research capability, needed for improved assessments and climate modeling. Key success factor is collaboration and synergy in identifying, developing and delivery of the new climate change services to the European user community.