

# EUMETNET ECSN Annual Report 2008

Prepared by the ECSN Manager and the Project Leaders



Per 31 December 2008, 25 European NMHS's participate in the EUMETNET Programme ECSN



Participants 13th EAC meeting, Longyearbyen, Norway, 16-19 June 2008

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## Introduction

The Annual report 2008 includes the reporting of the 4<sup>th</sup> Quarter. In the first paragraph, *context*, the playing field and role of ECSN is depicted. In *governance*, not only the governance of the ECSN community but also the attuning with the EUMETNET Council is reflected. Acknowledgement and thus the relevance of the work of ECSN is fostered by **strategic collaborations** as presented in this paragraph. In *issues* other relevant topics for 2008 are discussed. The core paragraph of this report is *progress of projects* – core business of ECSN. In *meetings* an overview is given of all meetings – especially relevant for our internal and external communication. The last paragraph, *outlook*, contains the planning and goals for 2009. The appendix is an updated list of the participants of ECSN per 1 January 2009.

## Context

Especially after the launch of IPCC 4AR in 2007 there has arisen a strong societal commitment to take appropriate steps – to cope with climate variability and to be ready to adapt to climate change. Climatologists need to provide society with state of the art knowledge of the changing climate and related new services, focussing on climate proofing of Europe's society and so serving especially the users whose activities are climate-sensitive.

The European Climate Support network, ECSN, addresses this increasing important issue by supporting its 25 members (24 also EUMETNET members) in their climate practices in order to *“better serve the European user community with climate products and services for the benefit of environment, safety, economy and health”*.

ECSN is traditionally focusing on sustainable monitoring of Europe's past present and future climate by applying the best observing practices and the provision of high resolution climate data sets and related assessments and mappings, as established by the ECSN projects.

Collaboration with and attuning to other players in the international field of climate (EMI, EU Research, EEA, GMES, WMO) supports the profile of ECSN as liable and useful EUMETNET partner. Next the organization of the ECAC (in

2008 with adaptation as theme) and next year the climate programme of ECAM (theme: *“new services responding to climate change”*) attributes to the visibility of ECSN and involvement in various user and research networks.

## Governance

Once a year the plenary EAC (ECSN Advisory Committee) takes place, generally attended by the delegates of the majority of the ECSN members and the EUMETNET Executive Director, Mr. Steve Noyes. This year's 13<sup>th</sup> EAC was hosted by met.no in Longyearbyen (Spitsbergen, Norway) from 16-19 June. Chair of EAC is Mr. Claus Kern Hansen (DMI).

The EAB (ECSN Advisory Board), convene on special issues as the preparation of the major conferences and reviewing project proposals. Its empanelling is dependent on the concerned issue. For the review of the (S)-EUROGRID proposal the EAB was composed by the delegates of DMI, DWD, MeteoSwiss, MétéoFrance and KNMI. Chair of EAB is the ECSN Programme Manager (PM), Mr. Aryan van Engelen (KNMI).

ECSN Quarterly and Annual reports and the project deliverables are available on the EUMETNET/ECSN (old) web portal and will be made available (2009) on the new EUMETNET Web portal (Intranet+Extranet+Public Web Portal)

### Mission statement ECSN as established on EAC13; we manifest as:

*Liable and acknowledged providers of sustainable high quality and climate reference services, tailored to the users needs, thereby acting as interface between research and users and bridging the national to the European scope. We exploit our most important skill; the production of high quality observational climate data sets to be used for climate monitoring and modelling*

The governance is according to the *“Programme Decision for the Optional Programme ECSN (EMN/Dec/C307, April 2007)”* and follows the agreed strategy as discussed in the EAC meetings in 2007 and 2008. The ECSN strategy has been reported to the Council (on its 35<sup>th</sup> meeting,

November 2008) in the document “*Report from ECSN AC (EMN/C35/Doc6)*”, including strategic reflections from the ED (Mr. Steve Noyes). It is noted here that EUMETNET is in a transformation phase (EIG) and developing a new strategy. ECSN is keen to monitor these evolutions and attune accordingly its strategy and governance.

### Strategic collaborations

The CO contributed actively to raise the visibility of and involvement in other EUMETNET related bodies. So cooperation was initiated with EMMA, PbOBS and C-SRNWP and the ECSN Programme was promoted on the 35<sup>th</sup> meeting of the EUMETNET Council. This will foster further embedding of ECSN in EUMETNET and EMI.

With EMMA the possibilities have been inventoried of using European wide climatology’s to harmonize threshold values on weather extremes for Metealarm.

Collaboration with WMO has been formalized by appointing a rapporteur on ECSN (Mrs. Tanja Cegnar, EARS, Slovenia) in the Working Group on Climate Related Matters of RAVI (WG-CRM-RAVI). Also the ECSN delegate of DWD (Mr. Peer Hechler) is chair of this Working Group and the PM-ECSN is rapporteur on DARE (Data Rescue). The ECSN projects EuCLIS and ECA&D will serve as nuclei for two out of three Regional Climate Centre’s (on monitoring resp. data), of which the establishment is managed by the WG-CRM RAVI. As the participants of ECA&D (almost all European NMHS’s) have a great interest in long observational series they serve as focal points for DARE activities.

Collaboration with the EU research community has been established with the EU FP6 projects ENSEMBLES and MILLENNIUM, by attuning the EU FP7 (Space Call) proposal “*European Reanalysis and Observations for Monitoring (EURO4M)*” with the upcoming EUROGRID proposal with similar aims; the generation of time series of observational gridded data sets and re-analyses of past observational data.

Collaboration with the European Environment Agency (EEA) was materialized by taking into account in the (S) EUROGRID and the EURO4M

proposal the needs of EEA (as expressed in their EURRA initiative – a very high resolution re-analysis over Europe), and by contributing to “*EEA’s 2008 indicator report.*”



Together with the European Meteorological Society (EMS) ECSN organized the 2008 “*European Conference on Climatology (ECAC)*” and “*EMS Annual Meeting*” (Amsterdam 29 September-3 October). This conference offered a good platform where professional meteorologists and climatologists met the research and user communities that were all strongly represented and communicated to each other their specific needs and skills.

ECSN was represented on the GMES forum 2008 (Lille, 16-17 September) in an EMI stand, coordinated by the EUMETrep Office. A growing interest to in situ observations (matching the satellite observations) was observed. EEA is coordinating the in situ observations. EUMETNET was approached by EEA to offer a proposal for a joint EU/EUMETNET/EEA project. For this purpose a EUMETNET team has been established (Steve Noyes, Christophe Jacob and Marja-Liisa Tuomola) that will have monthly project meetings with the GMES Bureau and EEA. The proposed work packages (as: support to in situ observations, potentials for (project) funding and data policy issues) are strongly related to the collaboration of ECSN with PB-Obs.

#### Other issues 2008

Next to an enhanced visibility, collaboration, new strategy and strongly improved attuning with EUMETNET as discussed in the previous paragraphs, data policy, funding and new members were major issues in 2008 - and still are in 2009.

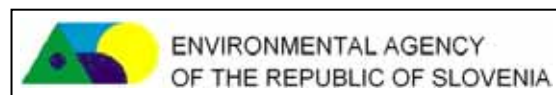
**Data policy:** a restrictive factor in developing and keeping a strong position in sustainable climate monitoring – core business of ECSN - can be non congruent national data policies that hampers access to and dissemination of European wide climate data sets. It was expressed to the council (in the document “*Report from ECSN AC (EMN/C35/Doc6)*”, submitted to the 35<sup>th</sup> Council meeting, November 2008) that ECSN is looking forward to the EUMETNET data policy that is now under development and it was pointed out that the new policy should cover a good access to long series of daily observations with a high geographical density. We feel that we should ultimately strive to the ultimate open data policy model as that is now in use at met.no (all data on almost all resolutions available via web). However, this might be experienced as a bridge too far. As a starting point we plead that all NMHS's should make their daily series of all observed elements of their complete network available for internal facing ECSN projects (as EUROGRID, HRT-GAR, ECAD etc). There should be availability restrictions for certain users. As a first order approach the data should be fully available and accessible for non commercial users (NMHS's,

EEA, etc.) and restricted for commercial users. To overcome barriers in data exchange – either for organizational or policy reasons, the full scale EUROGRID proposal, as recommended in the final S-EUROGRID report, will be based on a distributed and user protected access to the data via “*tiling*” of the national datasets.

**Funding:** up to now, EUMETNET/ECSN was not accepted as partner for EU funding as it had no legal status. For the ECSN collaborative (with EU) project ENSEMBLES the construction was applied that EU funding was obtained for ECSN members MeteoSwiss and KNMI only to “work” on the ECA&D database. A legal status of EUMETNET could be beneficial for a co-funding mechanism on a fifty-fifty base and/or EUMETNET funding for the ECSN members that are not partner of the EU proposal (the number of partners in an EU proposal is limited and also encompasses non EUMETNET partners). A construction to which is strived in the tandem EURO4M - (full scale) EUROGRID proposal as discussed before.

It was recognized by the ED that perhaps more than any other area of EUMETNET activity, it is the ECSN (data) area that has greatest potential for 3rd party funding from the EU. This is because climate and near real time information and services, on a European scale, are often more relevant to the policy makers and agencies of the EU than operational in-situ data. ED noted also that there is no activity gathering these growing EU requirements and designing a coherent strategic response from the EMI.

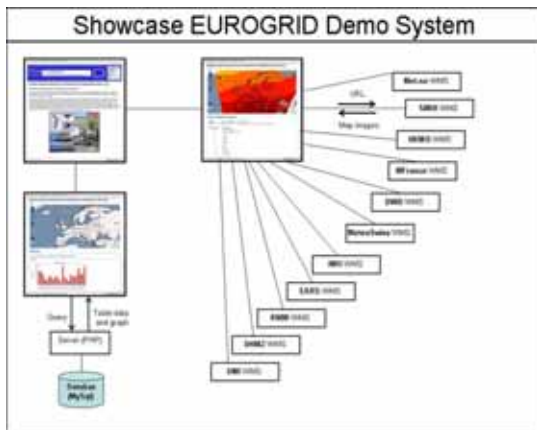
**New members:** as the majority of ECSN activities cover the whole of Europe, new members are very welcome. In 2008 Slovenia (EARS, Mojca Dolinar) joined and Romania (NMA-RO) agreed to become member from January 2009 onwards. With NMA-RO an ECSN member was introduced that is not EUMETNET member.



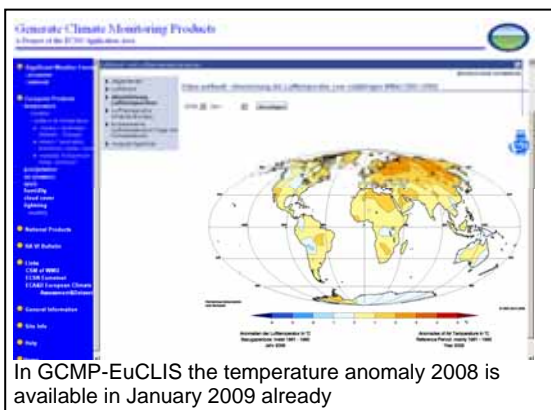
**Progress of projects**

In this paragraph a short description of the projects and the progress in 2008 is given. For more extensive descriptions reference is made to the minutes of the 13<sup>th</sup> EAC meeting and the quarterly reports.

**S-EUROGRID (SMHI):** Showcase EUROGRID demonstrates the potential of the full-scale EUROGRID concept that will be the future European central resource for gridded climate, meteorological, hydrological and environmental products. The final report is envisaged for the first quarter of 2009 and will include recommendations for the design of a future full scale EUROGRID that will be submitted to the EUMETNET Council in 2009.

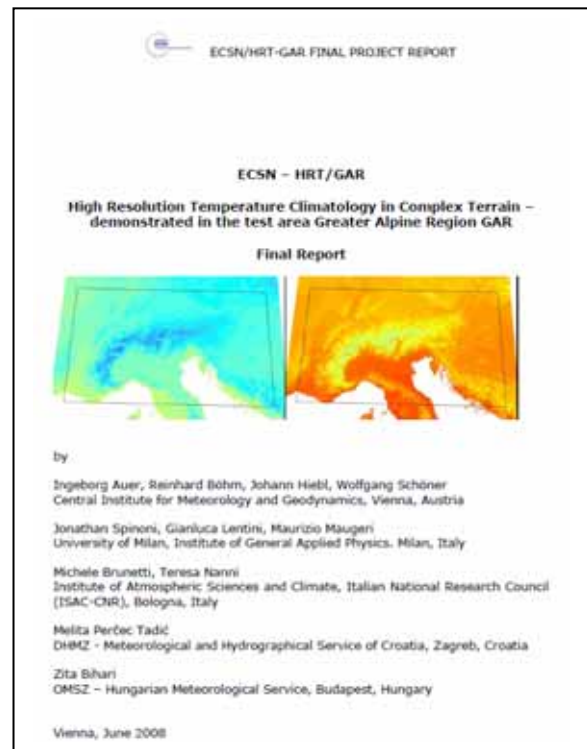


**EuCLIS (DWD):** the European Climate Information System gives access to European national and regional climate monitoring products as generated by ECSN projects like maps, graphs and assessments. The provision of descriptions and analyses of (recent) extreme weather events in Europe can serve as the climatological complementary of the EUMETNET warning system

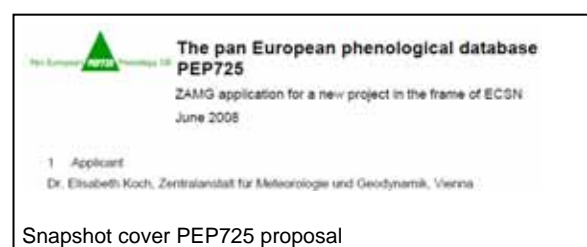


for hazardous weather EMMA. EuCLIS will be transferred from project into operations in 2009 and serve as a platform for a RAVI Regional Climate Centre on Monitoring.

**HRT-GAR (ZAMG):** produced High Resolution Temperature climatology for the Greater Alpine Region in the form of climate maps, based on high quality observational series from more than 1700 stations. The project has been completed in April 2008. The final report has been submitted to the Council (C35, Nov. 2008) and was received with appreciation.



**PEP725 (ZAMG):** Under Cost Action 725 a prototype database of European phenological records was set up. An ECSN project proposal under the name PEP725 aims at the establishment and sustainable management of a full scale phenological database. The proposal will be submitted to the EUMETNET Council in spring 2009



**ECA&D (KNMI):** The European Climate Assessment and Data set aims to create and maintain a European data set of daily high quality observational series and, on the basis of derived indices, produce assessments of Europe's climate. In April 2007 the EUMETNET council agreed to continue ECA&D as EUMETNET project for a period of 4 years, without additional financial contributions from the members (only in kind contributions). In 2008 ECA&D was transferred from a project base into sustainable operations. ECA&D offered the platform for so collaborations with the EU research Community, being in EU-FP6 ENSEMBLES (KNMI and MeteoSwiss) and EU-FP6 MILLENNIUM (KNMI). As EuCLIS it will serve as a platform for a RAVI Regional Centre on Climate Data.



In ECA& for an increasing number of stations metadata on site and history is available. Example: Vienna, Austria

**European approach on Climate Change scenarios (MeteoSwiss):** this project aims at providing an overview on European activities related to the development of climate change scenarios. The outcomes of a related questionnaire are now published on the EUMETNET-ECSN Web portal.

**Treatment of observations of dew and rime/hoar frost in the ECSN countries (met.no):** it appeared from a survey that in various ECSN countries different procedures are applied wrt the statistical

treatment of observations of dew and rime/hoar frost. The outcomes of this completed project will be made available on the EUMETNET-ECSN Web portal.

**The 7<sup>th</sup> European Conference on Applied Climatology (ECAC, Amsterdam 29 September-3 October 2008),** held together with the **8<sup>th</sup> EMS Annual Meeting** was organised by the ECSN EAB together with the EMS. Theme of ECAC was *“tools for understanding of and adaptation to current and future climate”*.

The conference served as a platform where experts and scientists of the EMI and the research community meet private and public stakeholders. The session programme was organised by some 90 convenors.

The conference was attended by 625 registered visitors. The incomes (fees + 20k€ funding from KNMI) covered the expenses. The total turnover amounted to ca. 150 k€. The conference was rated by Neuwirth, president of EMS, as very successful.



The Secretary-General WMO, Michel Jarraud, gave a strategic lecture on the opening of the EMS/ECAC conference 2008

**Meetings, conferences and representations Meetings**

- 13<sup>th</sup> Annual plenary EAC (ECSN Advisory Committee) meeting, Svalbard, Norway, 16-19 June 2008.
- HRT-GAR workshop, Vienna, Austria, 24-25 January 2008. Final Conference, Vienna, Austria, 10-11 April 2008.
- S-EUROGRID project meetings, Gothenburg, Sweden, 22-23 April 2008, Amsterdam, Netherlands, 29 September 2008. Final pro-

ject meeting, Toulouse, France, 3-4 December 2008.

- ECSN Consultancy meeting, Copenhagen Denmark, 22 May 2008.

#### Conferences

- 7<sup>th</sup> ECAC (European Conference on Applied Climatology) together with the 8<sup>th</sup> EMS Annual Meeting, Amsterdam, Netherlands, 29 September-3 October 2008.

#### Representations

- 3<sup>rd</sup> General Assembly MILLENNIUM, Mallorca, Spain, 10-15 March 2008.
- Meeting WMO-ET on the Rescue, Preservation and Digitization of Climate Records, Bamako, Mali, 13-15 May 2008.
- GMES Forum, Lille, France, 16-17 September 2008
- RAVI RCC (Regional Climate Centre) Implementation Meeting, Geneva, Switzerland, 20-21 October 2008.
- 5<sup>th</sup> General Assembly ENSEMBLES, Santander, Spain, 20-23 October 2008.
- EMMA Expert Meeting, London, 28-29 October 2008.
- Intersessional Meeting WMO-CCl14 Working Group on Climate-Related Matters (WG CRM), Bucharest, Romania, 3-6 November 2008.
- 18<sup>th</sup> PB-OBS Meeting, Cascais, Portugal, 10-11 November 2008.

#### Outlook 2009

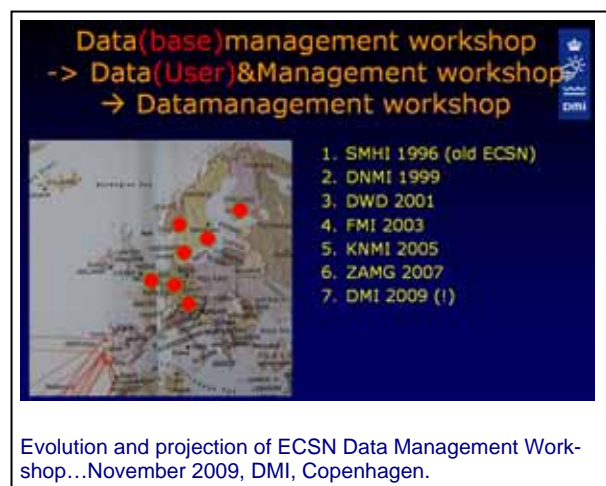
**EUROGRID:** the most important goal for 2009 is to run the full scale EUROGRID project (ECSN community) in conjunction with the European Reanalysis and Observations for Monitoring (EURO4M) EU Fp7 project (NMHS's and Universities). This tandem aims to develop a future GMES service on climate change monitoring by further developing, integrating and analyzing of existing datasets, thereby building on the deliverables of ongoing ECSN projects as ECA&D/ENSEMBLES, S-EUROGRID, EuCLIS and HRT-GAR. ECSN will ask for commitment and financial support from EUMETNET for EUROGRID that will contribute to a strong position of the Council in operational and sustainable monitoring of Europe's climate on the basis of the EMI infrastructure. *It is pointed out here that might the EURO4M proposal not be approved for funding, ECSN will keep on supporting the full execution of the EUROGRID project.*

**PEP725:** This project aims at the establishment and sustainable management of a full scale phenological database. This is considered by ECSN as a meaningful extension of the EUMETNET datasets and therefore ECSN recommends the proposal to the Council for funding.

**RCC:** ECSN supports the establishment and formal designation of WMO RAVI Regional Climate Centre's (RCC) on the basis of the ECSN projects EuCLIS (DWD) and ECA&D (KNMI). Next ECSN will support the designation of a RCC on LRF (MétéoFrance and Roshydromet/Russian federation)

**RBCN-EUCOS:** As the quality of climate monitoring is strongly dependent on the quality of the observing network, ECSN will come up with a draft of the climate requirements and specifications of a redesigned Regional Baseline Climatological Network (RBCN) to be brought to the attention of EUMETNET-EUCOS, based on analyses of the deliverables of ECSN projects as ECA&D, HRT-GAR. EUROGRID etc.

**Conferences:** organization of the Data management Workshop 2009 (DMI, Copenhagen, November 2009) and the climate sessions of EMS/ECAM 2009 (Météo-France, Toulouse, 28 September-2 October 2009)



Evolution and projection of ECSN Data Management Workshop...November 2009, DMI, Copenhagen.

**The EAC meeting 2009** will be hosted by Croatia (DMHZ) and is planned to take place in Dubrovnik in spring.

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