

The Short Range Numerical Weather Prediction Network (SRNWP) of EUMETNET



A status report

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based on material from A. Horanyi



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History

- EWGLAM (European Working Group on Limited Area Modelling) was established in 1979 (Norrköping)
- SRNWP (Short Range Numerical Weather Prediction Network) was established in Toulouse in 1993 (Toulouse)
- Since 2000 : EUMETNET Programme with participation from EUMETNET and non-EUMETNET countries
- Programme Manager : Andras Horanyi (OMSZ) – 2008/2011



Summary of main objectives

- Improved **scientific cooperation** between the 5 LAM consortia (ALADIN, COSMO, HIRLAM, LACE, MetOffice) in Europe for Numerical Weather Prediction (NWP) through the initiation and execution of joint projects
- Enhanced **operational cooperation** through harmonisation of standards and increased interoperability between models
- Effective **diffusion of NWP knowledge** and enhanced practical cooperation in NWP through efficient information exchange (means : organisation of workshops, thematic projects, SRNWP web site – srnwp.met.hu)



SRNWP Consortia in Europe



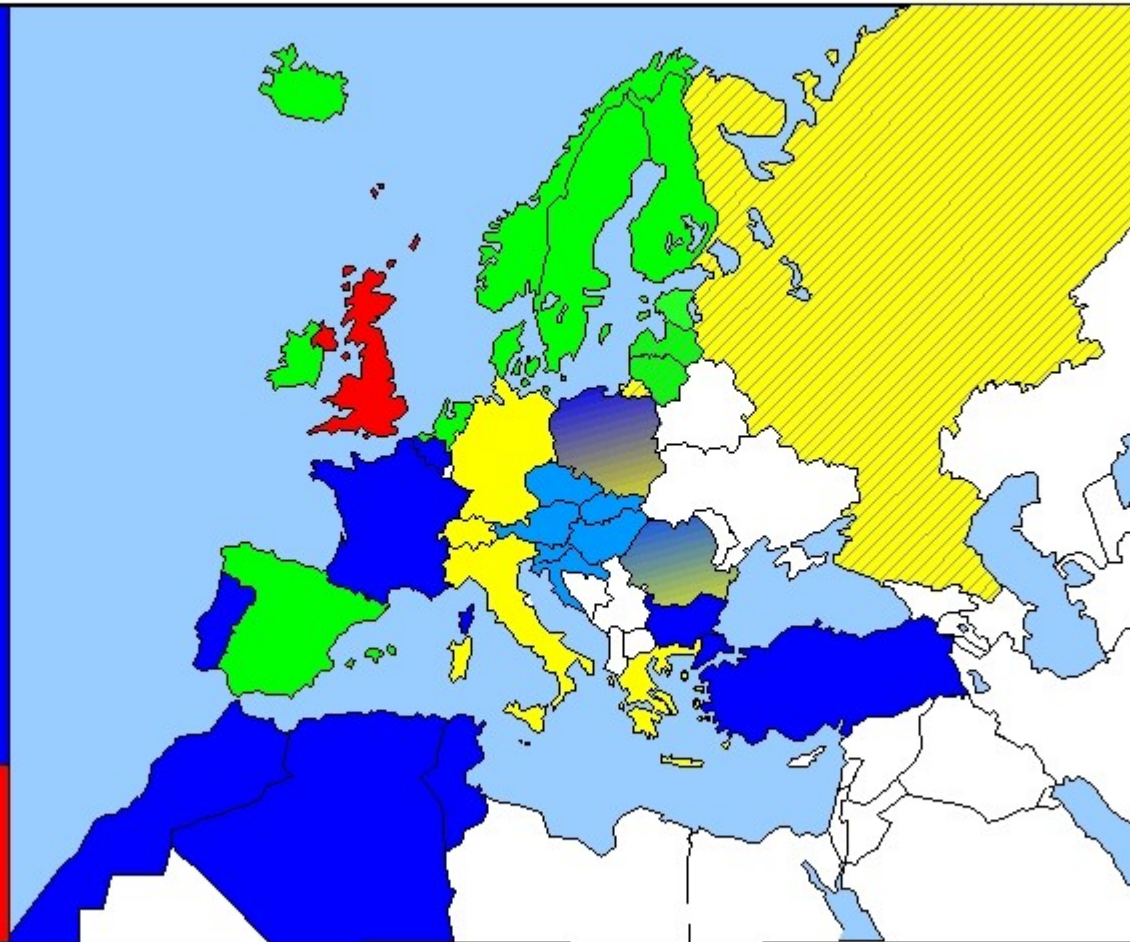
ALADIN

Algeria
Belgium
Bulgaria
France
Morocco
Poland
Portugal
Tunisia
Turkey

Austria
Croatia
Czech Rep.
Hungary
Romania
Slovakia
Slovenia



UKMO
United Kingdom



HIRLAM

Denmark
Estonia
Finland
Iceland
Ireland
Netherlands
Norway
Spain
Sweden
(Latvia)
(Lithuania)

COSMO

Germany
Greece
Italy
Poland
Romania
Switzerland
(Russia)





C-SRNWP governance

- Programme Manager (coordinator)
- SRNWP Advisory Committee : head of LAM consortia (5) and PM
- Expert Teams (ET)
- Annual business meeting (EWGLAM/SRNWP)
- Other SRNWP-related EUMETNET Programmes : interoperability (SRNWP-I), verification (SRNWP-V)



List of Expert Teams (cross-consortia working groups)

- Data assimilation and use of observations
- Diagnostics, validation and verification (-> SRNWP-V)
- Dynamics and lateral boundary conditions
- Link with applications
- Physical parameterizations (upper air)
- Predictability and EPS
- **Surface and soil processes (model and data assimilation)**
- System aspects (-> SRNWP-I)



Expert Teams : main tasks


- The members are nominated by the Consortia (2 members per Consortia in average), so they represent their respective LAM Consortia (chairperson are elected by the ET members)
- ETs prepare workplans for their area of interest
 - Specific areas of interest for cross-cooperation
 - Plans for workshops, meetings
- Help in the organisation of the annual EWGLAM/SRNWP meeting (specific sessions !)
- Execution of the workplans (frequent email exchanges: generic email addresses exist, informal meetings, research stays, projects, workshops, etc ...)



Annual EWGLAM/SRNWP

meeting : structure

- Consortia overview presentations (short ones)
- ECMWF presentation (as the essential partner for the LAM community; longer)
- Review talk from each ET (content discussed and agreed within the ET)
- Dedicated sessions on the main SRNWP areas of interests (ET topics; proposals from the ETs)
- EWGLAM final discussion
- SRNWP business meeting
- SRNWP Advisory Committee meeting



Other SRNWP programmes :

Interoperability (SRNWP-I)

- Main objectives : Increased interoperability between numerical forecasting systems of ALADIN, COSMO, HIRLAM and MetOffice (ECMWF also involved!)
- Responsible member : Met Office
- Programme Manager : Rachel North (Glenn Greed)
- 3 year programme : from September 2008



Interoperability (SRNWP-I) - Deliverables

- D1: report about the standard output format (+ parameters)
- D2: requirements and specifications of the adaptors
- D3: development of four 2-way adaptors (specific LAM format to standard format)
- D4: software for enabling any of the LAMs to use any of the global models as initial and lateral boundary conditions



Other SRNWP programmes : Verification (SRNWP-V)

- Main objectives : model intercomparison and verification of the European LAMs
- Responsible member : Met Office
- Programme Manager : Clive Wilson
(deputy: Marion Mittermaier)
- Two-year project (from beginning of 2009)



Verification (SRNWP-V) - deliverables

- D1: Operational verification comparison of one version of each of the 4 regional European LAM model (ALADIN, COSMO, HIRLAM, Unified Model)
- D2: Additional intercomparison of the other models of the Consortia (including high resolution ones)
- D3: Inventory and recommendations of new scale selective verification methods
- D4: Catalogue of sources of non-GTS data
- D5: Exchange methods and code for verification of severe weather forecasts



Additional information

- SRNWP webpage is operational : srnwp.met.hu (facts about ETs, including workplans, list of workshops, annual meeting presentations, etc...)
- 4th Workshop on Short Range Ensemble Prediction Systems, 23-25 June, Exeter
- COSMO general meeting, 7-11 September, Offenbach
- EWGLAM/SRNWP annual meeting, 28 September – 1 October, Greece
- 8th SRNWP workshop on non-hydrostatic modelling, 25-28 October, Bad Orb



Specificities of the ET on surface processes

- Increasing complexity of surface modelling and data assimilation at small scale – need to share expertise and research activities
- Increase usage of European initiatives (EUMETSAT SAFs, EUMETNET OPERA, ..)
- Share specific datasets for surface modelling and physiography databases (field experiments, national networks)



What has been achieved so far ?

- Workplan 2008-2009 : to be discussed
- Contribution to the organisation of the 15th SRNWP meeting (Madrid, 2008)
- Documentation of the surface modelling and assimilation systems in each consortium (including ECMWF)
- Draft of responses to the request from the SRNWP interoperability programme : to be discussed and finalised
- This working day !