

C-SRNWP (SHORT RANGE NUMERICAL WEATHER PREDICTION NETWORK): ANNUAL C-SRNWP BUSINESS MEETING

Responsible member: Hungarian Meteorological Service

Period: 2008-2011

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USUAL BUSINESS MATTERS

C-SRNWP: MAIN OBJECTIVES

- Improved **scientific cooperation** between the 5 LAM Consortia (ALADIN, COSMO, HIRLAM, LACE, Met Office) in Europe for numerical weather prediction (NWP) through the initiation and execution of joint projects
 - Expert Teams and their workplans
- Enhanced **operational cooperation** through harmonisation of standards and increased interoperability between models
 - Interoperability (SRNWP-I) and verification (SRNWP-V) programmes
- Effective **diffusion of NWP knowledge** and enhanced practical cooperation in NWP
 - Thematic SRNWP workshops
 - Webpage: srnwp.met.hu

SRNWP CONSORTIA (5) and MODELS (4)

CONSORTIA	MODEL
ALADIN	ALADIN (ALARO, AROME, HARMONIE)
COSMO	COSMO
HIRLAM	HIRLAM, HARMONIE (ALADIN, ALARO, AROME)
LACE	ALADIN (ALARO, AROME, HARMONIE)
Met Office	Unified Model

Remark: ALADIN (LACE) and HIRLAM are working on code collaboration around the IFS/ARPEGE/ALADIN/ALARO/AROME (HARMONIE) code



SRNWP Consortia in Europe



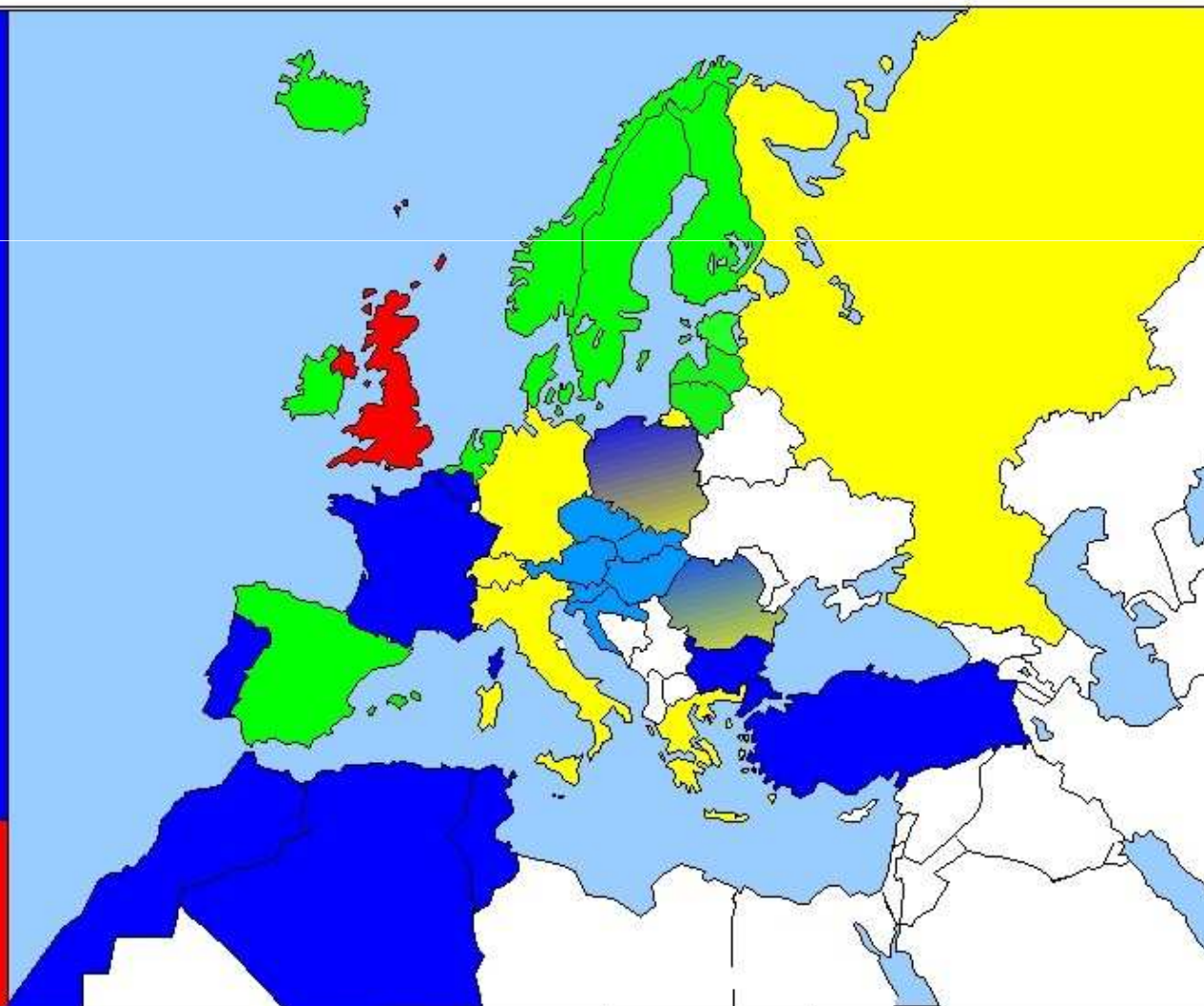
ALADIN

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
Russia
Switzerland

ANY CHANGES?





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

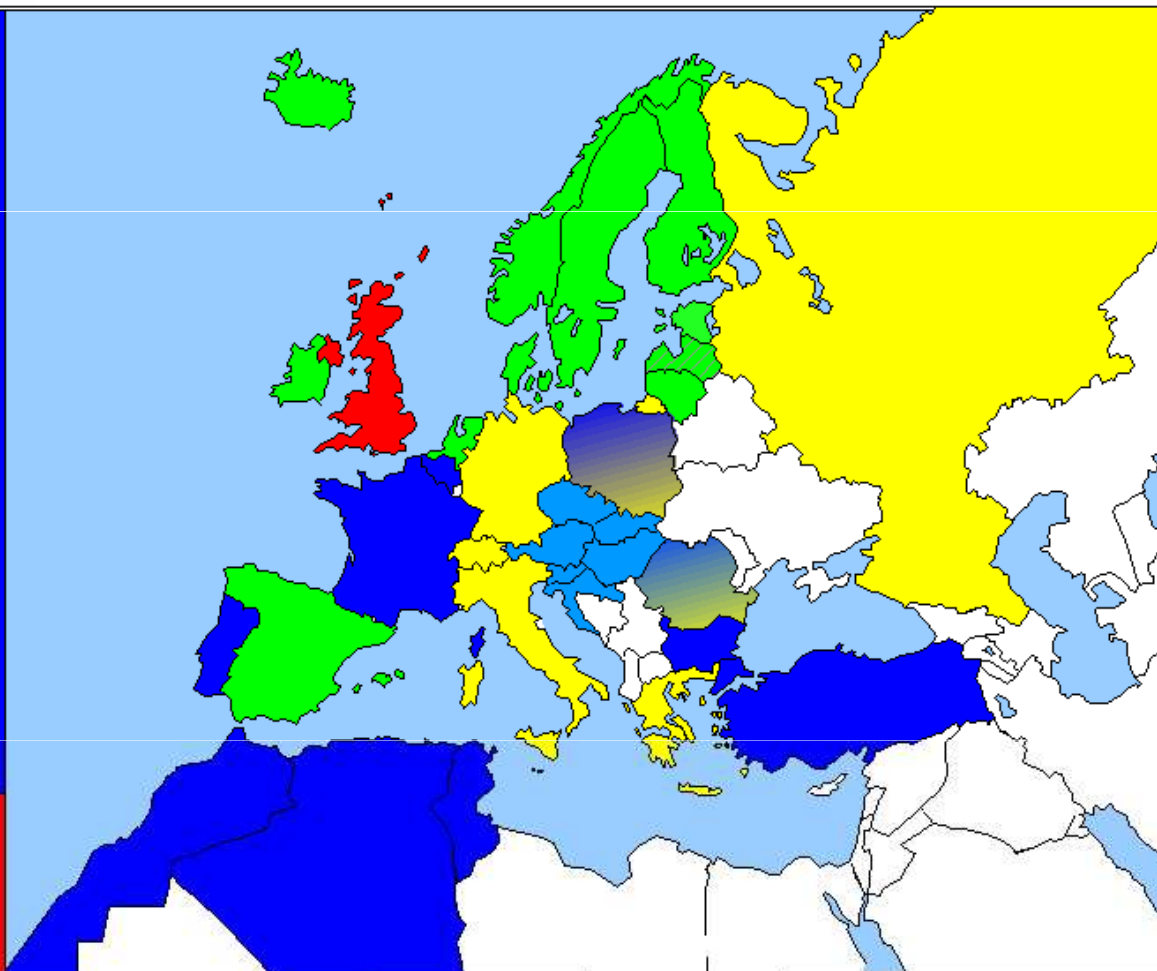


HIRLAM

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

COSMO

Germany
Greece
Italy
Poland
Romania
Russia
Switzerland



Lithuania as full member of HIRLAM!



PARTICIPATION (CONSORTIA and PARTICIPATING STATES)

- Consortia: ALADIN, COSMO, HIRLAM, LACE, Met Office
- (Formally) participating states
 - EUMETNET members: **Austria, Belgium, Croatia, Cyprus, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Luxemburg, the Netherlands, Norway, Portugal, Serbia, Slovenia, Sweden, Switzerland, United Kingdom** (all EUMETNET countries except Poland!!)
 - Non-EUMETNET members: **Bulgaria, Czech Republic, Romania, Russia, Slovakia, Turkey**, (Lithuania), (**Algeria, Morocco, Tunisia**)
 - C-SRNWP members, but not member of any of the Consortia: Cyprus, Luxemburg, Serbia (Is it a problem?)

LIST OF EXPERT TEAMS (CROSS-CONSORTIA WORKING GROUPS)

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

DATA ASSIMILATION AND USE OF OBSERVATIONS

- Chair: **Bruce Macpherson**
- Members: **Claude Fischer, Mikhail Tsyruльников, Nils Gustafsson, Gergely Boloni**, Loik Berre, Maria Derkova, **Christoph Schraff**, Harald Schyberg, Sue Ballard, Richard Renshaw, Marian Jurasek, **Tomislav Kovacic**, Lars Isaksen
- Support for the observation strategy (roadmap)
- Participation on the EUCOS Science Advisory Team (E-SAT) meeting (Bruce)

DIAGNOSTICS, VALIDATION AND VERIFICATION (SRNWP-V)

- Chair: **Clive Wilson**
- Members: Joel Stein, Francis Schubiger, **Carl Fortelius**, **Dijana Klaric**, **Marek Jerczynski**, Alexander Kann, Adriano Raspanti, Ulf Andre, **Xiaohua Yang**, Marion Mittermaier, Nigel Roberts, Lovro Kalin, Dave Richardson
- SRNWP-V: intercomparison results at the EUMETNET portal
- How the results should be interpreted (see the discussion on Monday)?
- What about the other deliverables?
- The follow-on programme for 2011-2012 is already granted by the EUMETNET Assembly

DYNAMICS AND LATERAL BOUNDARY COUPLING

- Chair: Pierre Benard
- Members: Lucio Torrisi, **Mariano Hortal**, Nigel Wood, **Filip Vana**, Petra Smolikova, **Piet Termonia**, Michael Baldauf, Isabel Martinez, **Terry Davies**, Chris Smith, Jan Masek, **Nils Wedi**
- The use of ECMWF boundary conditions (see ECMWF boundary issues later)

LINK WITH APPLICATIONS

- Chair: **Jeanette Onvlee**
- Members: Maria Monteiro, **Pierre Eckert**, Simon Jackson, Benedikt Bica, Jean Nicolau, Flora Gofa, **Per Udden, Mike Bush**
- Did anything happen in the light of our discussions in Athens (scope: „interpretation of mesoscale forecasts for the forecasters” and „numerical weather prediction as tool for nowcasting”)?
- Change in chairpersonship?

PHYSICAL PARAMETERISATION (UPPER AIR)

- Chair: **Sander Tijm**
- Members: **Valery Masson, Federico Grazzini**, Peter Clark, **Neva Pristov**, Tomas Kral, Dmitrij Mironov, **Bent Hansen Sass**, Andy Brown, Paul Field, **Doina Banciu**, Anton Beljaars
- Comparison between mesoscale models (alreday started between COSMO and AROME)
- Other topics for cooperation?
- Change in membership and chairmanship (HIRLAM)?

PREDICTABILITY AND EPS

- Chair: **Chiara Marsigli**
- Members: **Alex Deckmyn, Trond Iversen, Ken Mylne, Yong Wang, Laurent Descamps, Alain Joly, Pierre Eckert, Susanne Theis, Jan Barkmeijer, Jose Antonio Garcia-Moya, Sarah Beare, Martin Leutbecher**
- Compilation and submission of the renewed EUREPS proposal (see below)
- Discussions around LAMEPS BC requirements towards ECMWF
- Preparations for the ensemble data assimilation workshop (Bologna, February, 2011)

EUREPS (EUROPEAN EPS PROJECT)

- Original proposal in 2007: possible combination of existing EPS systems
 - Refused by the EUMETNET Council, which gave priority to interoperability (SRNWP-I) and verification (SRNWP-V)
- New (availability of SESAR + EUMETNET strategic funds) proposal submitted this spring: research and development on convective-scale EPS
 - Refused by the EUMETNET Assembly although the general support was rather high
- What to do next?
 - Discussions at the EPS Expert Team are already ongoing (thanks to Chiara for all of her efforts and dedication!)

SURFACE AND SOIL PROCESSES (MODEL AND DATA ASSIMILATION)

- Chair: **Jean-Francois Mahfouf**
- Members: Jurgen Helmert, **Sander Tijm**, Martin Best, **Alena Trojakova**, Rafiq Hamdi, Jean-Marie Bettems, Maria Diez, Imtiaz Dharssi, **Gabriel Rooney**, Laszlo Kullmann, Jure Cedilnik, Gianpaolo Balsamo, Patricia de Rosnay
- Initiative for the exchange of surface and near-surface data for European supersites (leading role by COSMO, particular thanks to Jean-Marie Bettems)
 - Lindenberg, Payerne, Capofiume, Sodankylaa, Cabauw, Toulouse, (Cardington)
 - <http://www.cosmo-model.org/srnwp/content/default.htm>
 - Access is granted to SRNWP members
- Exchange of snow (cover and depth) information (see discussions this morning)
- Maintenance of lake database?

SYSTEM ASPECTS (SRNWP-I)

- Chair: **Ulrich Schaettler**
- Members: Ryad el Khatib, **Xiaohua Yang**, **Glenn Greed**, Oldrich Spaniel, Andrey Bogatchev, Jean-Marie Bettems, Toon Moene, **Rachel North**, Bruce Wright, Alfred Hofstadler
- SRNWP-I: where are we with respect to the original schedule?
- Surface issues?
- Follow-on project (its content)?

ECMWF-RELATED ISSUES

- ECMWF offered to C-SRNWP PM observer status in its Scientific Advisory Committee meeting (around EWGLAM/SRNWP: dates to be adjusted)
- ECMWF would like to intensify the cooperation with SRNWP and they offer to host a meeting for facilitating the discussions around the requirements for deterministic and LAMEPS boundary conditions (followed by a user meeting)
 - When shall we organise this meeting together with ECMWF (C-SRNWP coordinator with ECMWF staff) ?
 - End of 2011, first quarter of 2012, other?
 - Which Expert Teams are considered?
 - Dynamics and coupling, EPS, system, surface what else?

ADDITIONAL ISSUES: PROPOSAL FOR ESF

- Research proposal for the European Science Foundation (ESF) on „Mesoscale Predictability of High-impact Weather Events”
 - Project Leader: Volker Wulfmeyer (University of Hohenheim)
 - ALADIN, COSMO, HIRLAM and C-SRNWP Programme Managers were involved in the preparation of the proposal
 - The proposal is **just refused** by ESF

ADDITIONAL ISSUES: SRNWP STRATEGY

- Based on the encouragement of the EUMETNET Executive Director (last year in Athens) a roadmap document for short range NWP was prepared by the Advisory Committee and then submitted to the May EUMETNET Assembly (see more details below)
- The strategy-related issues are now considered in a wider context in the framework of the new EUMETNET structure (see more a bit later)

PROPOSED NWP STRATEGY (SRNWP ADVISORY COMMITTEE)

- Relation to EUMETNET Strategy
 - Improved efficiency with shared services (*common operations?!)*
 - Collective investment in science, technology and skills (*research cooperations?!)*
 - Essential partnership with EU/EC (*common EU projects?!)*
- Position of (SR)NWP within Europe
 - Recent target: convection-permitting models
 - Relations with „observations” (requirements are formalised)
 - NWP models to be used for nowcasting
 - Climate (change) services (regional climate modelling)

NWP STRATEGY (SRNWP ADVISORY COMMITTEE)

- Shared services
 - Towards convection-permitting models → no any more interest to run neither a common deterministic nor an EPS system over a pan-European domain
- Strategic „extension” possibilities
 - Towards nowcasting: rather emerging field
 - Towards regional climate modelling: possible on the longer time scale

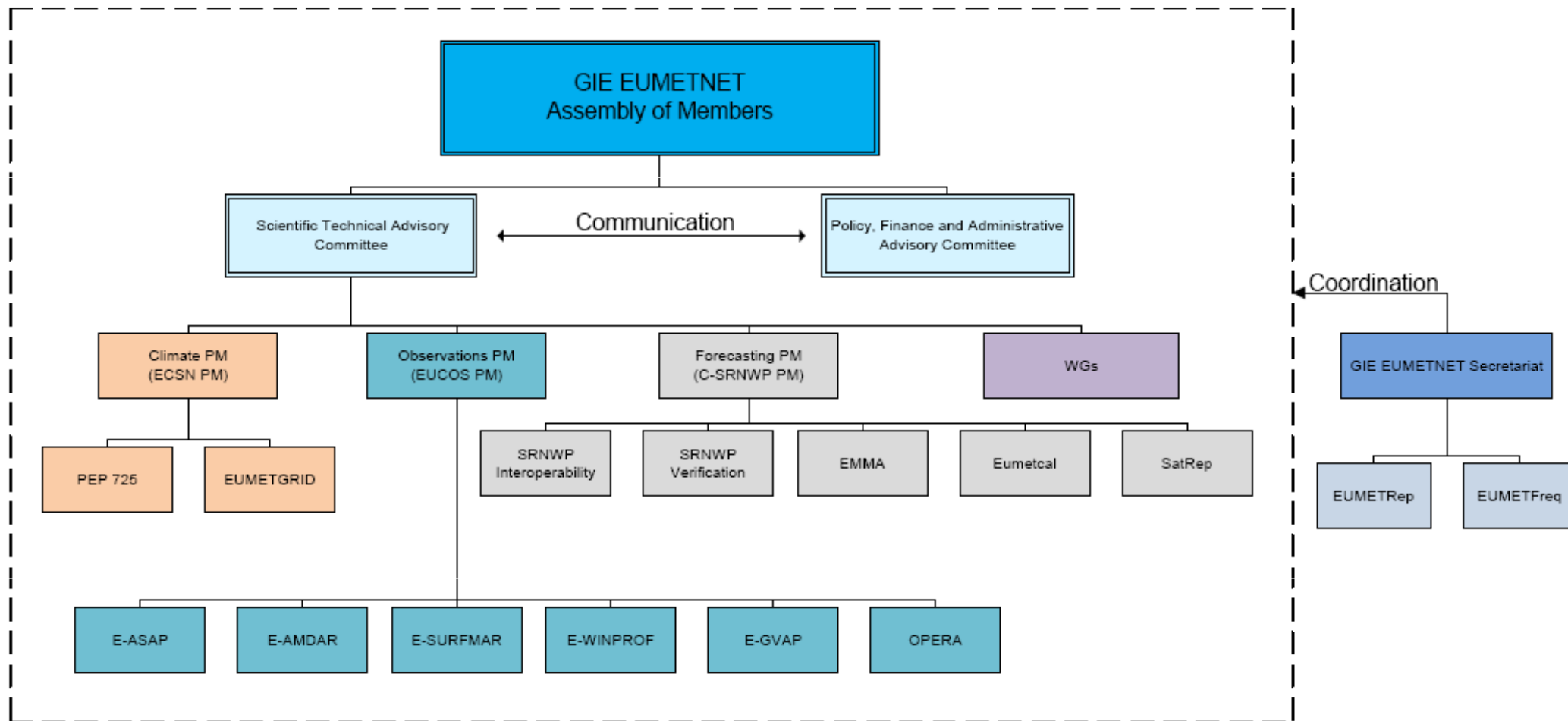
FUTURE MEETINGS

SUBJECT	DATE AND PLACE
SRNWP-I meeting	end of 2010
SRNWP-V meeting	end of 2010
Joint EPS-DA workshop	23-25 February, 2011, Bologna
SRNWP workshop on non-hydrostatic modelling	16-18 May, 2011, Bad Orb
ALADIN/HIRLAM All Staff Workshop	Spring, 2011
COSMO General Meeting	5-9 September, 2011, Italy
ECMWF SAC meeting	3-5 October, 2011
EWGLAM/SRNWP meeting	26-29 September or 10-13 October , 2011, Estonia
EWGLAM/SRNWP meeting	autumn, 2012, Finland

EUMETNET MATTERS

- EUMETNET became Economic Interest Group (last year)
 - Legal entity, which can take part in bids (EU projects), can have procurements and can employ (!?) personnel
- New structure of EUMETNET is accepted
- EUMETNET Strategy is accepted and going to be translated into observation/forecasting/climate strategies (goals) and then specific actions (roadmaps)
- SESAR (Single European Sky Aviation Requirements) are specified → optimisation and reorganisation of air traffic management (strong requirements towards meteorology)
 - First answer from the EUMETNET community is already submitted (does anybody know its details?)

NEW EUMETNET GOVERNANCE AND STRUCTURE



NEW EUMETNET GOVERNANCE AND STRUCTURE: CONSEQUENCIES TO SRNWP

- SRNWP will be just one programme (project) under the forecasting capability area
- The forecasting capability programme manager might not be an NWP expert (opportunity: combination of the roles of forecasting capability programme manager and C-SRNWP PM)
- STAC and PFAC committees will advise on proposals coming from the programmes (Assembly will decide!)

EUMETNET STRATEGY AND SRNWP

- Observational strategy and roadmap is already accepted by the EUMETNET Assembly (→ SRNWP inputs are presented on Tuesday)
- Forecasting/climate strategy to be proposed until spring 2011
 - SRNWP draft strategy was already elaborated by the Advisory Committee (see above), but it was not accepted by the Assembly
 - NWP strategy and EUREPS concept will be possibly part of the EUMETET forecasting strategy
 - Relevant Programme Managers and experts nominated by the members will act as redaction team to prepare the strategy

OUTLOOK

- New governance of EUMETNET is accepted and its practical realisation is (super-programmes, new advisory bodies) ongoing (without extra resources → slow progress!)
- The forecasting strategy (and roadmap) should be compiled until spring, 2011 and we should „supervise” its content (the SRNWP strategy and EUREPS are possible ingredients)
- Our observational requirements should be updated in the future (adding more details)
- The continuation of SRNWP-V is secured (2 more years)
- Follow-on of SRNWP-I: to be prepared!
- This phase of C-SRNWP is going to be finished at the end of next year
 - Call for responsible member can be expected
 - (A possible merge of C-SRNWP PM and forecasting CPM)



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



**Thank you for your
patience and attention!**

HIRLAM

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

COSMO

Germany
Greece
Italy
Poland
Romania
Russia
Switzerland

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