

# Coordinators for Scientific and Strategic Issues (CSSI)

## 2002 report

### A. Introduction

The CSSI group, established by the 6th Assembly of Partners (Casablanca, 14 January 2002), could meet twice along 2002 :

- in Budapest (8, 9, 11 March 2002),
- in De Bilt, before the EWGLAM meeting (6 October 2002).

Most exchanges were by e-mail, because of the very few opportunities to travel and meet.

Here is a report of its activities along 2002, following the list of duties assigned by Directors. A few recommendations for improving the efficiency of research actions are also expressed.

### B. Activities

#### 1. Define priorities of the scientific plan

An executive summary underlying the main challenges for the three coming years was written.

Besides, a work plan for 2002 was designed at the beginning of the year, as a guideline for researchers. The most important and (assumed) reachable goals were identified, together with a list of persons or teams likely to work on each topic (an item with none involved cannot progress ...) and potential external collaborations.

#### 2. Precise cooperation with HIRLAM, UKMO and COSMO

Whenever possible, potential collaborations at the European level were mentioned in the work plan for 2002.

However the cooperation between European LAM NWP consortia is already managed at the EWGLAM and SRNWP levels. To enhance or start collaborations, a minimum participation of ALADIN partners to the already organized workshops is required. Participation to scientific meetings organized by other consortia has been recommended in the SRNWP framework for several years.

Here is the list of such meetings in 2002 :

- HIRLAM workshop on Variational Data Assimilation and Remote Sensing  
Helsinki, 21-23 January  
*ALADIN participants* : L. Berre, P. Caille, E. Gérard (Fr)
- SRNWP workshop on System Collaboration  
Toulouse, 13-15 May  
*ALADIN participants* : R. El Khatib, J.D. Gril, E. Sevault (Fr), Z. Sahlaoui (Mo), F. Vana (LACE)
- COSMO annual meeting  
Warsaw, 25-27 September  
*ALADIN participants* : none
- SRNWP workshop on LAM EPS  
Madrid, 03-04 October  
*ALADIN participants* : A. Horanyi (Hu), J. Nicolau (Fr), Y. Wang (Au)
- EWGLAM / SRNWP annual workshop and special SRNWP workshop on August floods  
De Bilt, 07-10 October  
*ALADIN participants* : S. Alexandru, D. Banciu (Ro), F. Bouyssel, D. Giard (Fr), R. Brozkova (Cz), L. Gérard (Be), T. Haiden (Au), A. Horanyi (Hu), S. Ivatek-Sahdan (Hr), M. Monteiro (Pt), J. Vivoda (Sk)
- HIRLAM workshop on Mesoscale Modelling  
Dublin, 14-16 October  
*ALADIN participants* : D. Klaric (Hr)
- SRNWP workshop on Numerical Technics  
Toulouse, 12-13 December  
*ALADIN participants* : P. Bénard, J.F. Geleyn (Fr), R. Brozkova ?, P. Smolikova ? (Cz), G. Radnoti ? (Hu), Y. Wang ? (Au), ?

Let us underline that the French participation to HIRLAM meetings initiates from an old Météo-France <-> HIRLAM cooperation, rather than from an ALADIN participation.

A few more specialized axes of cooperation were identified along the last EWGLAM meeting : training, multi-model LAM EPS, reference datasets for high resolution modelling, reference (quasi) academic experiments for the evaluation of dynamics, ...

To end with, let us mention that the SRNWP network sent an "Expression of Interest" for a "network of excellence" in the framework of the forthcoming 6th Framework Program for Research and Development of the European Union. It is entitled : "*Improvement of Weather Forecasting and Risk Assessment in Europe by Very High Resolution Simulations, Ensemble Forecasting and Modelling System Developments*". If the proposal is accepted, this could help enhancing exchanges at the European level; however around 100 such demands were submitted in the domain of environmental sciences.

### 3. Select coordinators, organise more efficient networking

A list of thematic coordinators was proposed by CSSI during its first meeting. For domains where networking was already quite efficient, such as numerics or data assimilation, the previous organization was kept. Oppositely, for physics, many subtopics were considered, since research was very centralized up to now and there are not so many experts. To end with, some domains still miss a coordinator though not of minor importance (operations, maintenance, verification, applications).

To start or help networking, several mini-workshops were organized along the first semester of 2002, taking advantage of the simultaneous presence of many scientists in Toulouse, Kranjska-Gora or Medulin. Some were quite technical, for example those of dynamics. But for most the first aim was to allow persons interested and likely to work in a research topic to meet, know each other and discuss problems and proposals, first. That is the minimum required for working together afterwards. This is of course to be completed by training, intensive e-mail exchanges and thorough distance supervision.

The research plan under its various versions (full, presentation, summary), the work plan for 2002, the lists of coordinators, most reports from working groups, ... are easily available on the ALADIN web site, at the following address : <http://www.cnrm.meteo.fr/aladin/scientific/>.

### 4. Follow the progress of the AROME project

The CSSI group had no means, officially, to follow the progress of the AROME project. The reports from meetings are available only within Météo-France (internal web site, restricted e-mail list), in French.

However the project leader very recently agreed to provide informations, via the ALADIN Newsletters, on the research performed with ALADIN in the AROME framework.

### 5. Report to the Assembly

Here is the written report, since a participation of the CSSI group to the 7th Assembly of Partners, to report and discuss with Directors, was clearly not scheduled (by none).

## C. Recommendations

### 1. Introduction

First the five active members of CSSI would appreciate a modification of the composition of the group, since the sixth member, A. Mokssit, did not help at all, not even answering a mail. The committee could be reduced to 5 persons, or kept to 6 scientists with an efficient replacement.

Second it is clear that an efficient decentralized research cannot work without a minimum of means. They are listed hereafter.

### 2. Researchers

For already several years, some ALADIN teams often reach a sub-critical size (even reaching 1 person !). A team of e.g. 3 persons in charge of supervising the operational suite (including verification and downstream adaptation), managing part of the computing department, developing new tools for end-users, training newcomers, ... has only little time left for research.

### 3. Training

The decentralization of research relies on the (real) availability of experienced researchers in each team, and the continuous basic and advanced training of newcomers. A few years of work on ALADIN as well as the participation to training courses or research stays abroad may be necessary.

#### 4. Meetings

Networking cannot succeed if people never meet. Every team should send at least a participant to the ALADIN workshop, and as far as possible also to the EWGLAM meeting, i.e. 1 or 2 travels per year.

#### 5. Data exchange

Research on mesoscale data assimilation and verification is likely to slow down very soon if high resolution (in space and time) observational data cannot be exchanged between ALADIN partners at least (not in real time first).

The problems related to the lack of documentation for ODB (Observational Data Base, the new interface between model and observations developed by IFS), hence/and its poor portability, are also to be underlined. All the more since ODB must be used with the most recent versions of the ALADIN library. Two complementary actions are to be considered : an official demand from NMSs to ECMWF and exchanges of experience during the LACE training course on maintenance organized in Budapest in November.

Both items also meet SRNWP recommendations (real-time exchange of hourly SYNOP data, common interface to observation databases).

#### 6. Maintenance

As usual !

#### D. List of joint pieces

- Executive summary of the third medium-term research plan
- Work plan for ALADIN : 2002
- List of coordinators
- List of coordination meetings (most reports are available in the 22th ALADIN Newsletter)
- Progress in research along 2002 (reports from coordinators)
- SRNWP Expression of Interest