



**1st Joint ALADIN General
Assembly / HIRLAM Council
2nd December 2014
Reading, UK**



Draft Minutes

1. Opening and welcome

The ALADIN General Assembly (GA) Chair and the HIRLAM Council Chair welcomed the participants and underlined the importance of the cooperation between ALADIN and HIRLAM and of this 1st joint meeting to assess how this cooperation can be improved. The GA Chair insisted on the collaborative work on ALADIN allowing small countries to benefit from state-of-the-art Numerical Weather Prediction (NWP) models and thus to provide good forecasts and warnings to save lives and goods (like for instance during the recent flooding in Morocco).

Due to visa problems, Algeria and Tunisia were excused from this meeting and Bulgaria too, as the new Bulgarian Director had just been appointed. Nobody from Lithuania was able to join. The HIRLAM PM was unavailable and replaced by the HIRLAM Advisory Committee (HAC) Chair.

2. Adoption of the draft agenda

The GA Chair proposed to have the point 3.4 (scalability program) before 3.2 as Florence Rabier (ECMWF observer) had other duties in the afternoon.

The proposed agenda was adopted.

3. Reports

3.1. Report from the 2nd joint HAC/PAC meeting

The ALADIN Policy Advisory Committee (PAC) Chair reported on the 2nd joint HIRLAM Advisory Committee (HAC)/PAC meeting. He underlined the productivity of this meeting where all points of this 1st joint GA/Council were touched (see ^(*) the provisional minutes of the 2nd joint HAC/PAC meeting): a strong cooperation (scientific and on the code) but quite a difference in the implementations and in data policy (see below, point 5.3). The HAC/PAC had set up a data policy Task Force and various solutions are being considered so far : (1) free data policy (2) no convergence (3) free publication of graphics files - no GRIB files- outside its own country (4) free publication only on its own country. The Task Force will gather in Vienna in January 2015.

3.2. Rolling work plan : reporting and priorities

The joint reporting on the common rolling work plan was not fully comprehensive for this meeting due to the absence of the HIRLAM PM.

The ALADIN PM first took the floor and gave ^(*) examples of : scientific innovations, attempts to reach a critical mass of countries to apply for EU funding, countries relying on the ALADIN consortium to reach high-resolution (Tunisia) or data assimilation, similar fog issues tackled with complementary solutions (Hungary and Finland), good ALADIN-HIRLAM cooperation (HARMONIE system working week organized in Slovakia). He also proposed some priorities for

^(*)The draft minutes of the 2nd HAC/PAC meeting, the joint declaration, some photos and the documents presented during this 1st Joint GA/Council meeting are available on the ALADIN website: <http://www.cnrm.meteo.fr/aladin/spip.php?article271>

2015 and a common strategy meeting at the beginning of 2016, after the ALADIN and HIRLAM Memorandum of Understanding (still two separated MoUs) renewal. He explained how some HIRLAM originating “demands” had been fulfilled with introduction of the corresponding modifications in the common code. He proposed some possibilities to be better prepared for these demands in the next MoU (cf. Code Architect position, discussed in point 4).

Then, the HAC Chair completed this presentation by report on more HIRLAM-specific items such as the attempt to develop a climate branch of HARMONIE, the call for a Regular Cycle of Reference (RCR) centre for the next full release of the HARMONIE cycle and the satisfaction of the HIRLAM PM on the collaboration with ECMWF.

The GA Chair appreciated these many concrete examples that allow ALADIN and HIRLAM to benefit from each other's activities.

3.3. Scientific and technical issues

Claude Fischer (ALADIN Committee for Scientific and System Issues, CSSI Chair) presented^(*) the process to update the common code, through roughly two cycles per year : a common ARPEGE/IFS cycle (between ECMWF and Météo-France) and a common Météo-France/ALADIN/HIRLAM cycle prepared with the involvement of ALADIN “phaser” staff in Toulouse, the HIRLAM System coordinator and some System Experts, and Météo-France staff. Possible cross-cutting code issues are discussed through technical video-conferences and documented in technical notes.

The modernization of the codes is accelerating with OOPS (use of C++ and re-coding of the old Fortran) and COPE (new observation pre-processing) scheduled for IFS Operations in 2015. Claude Fischer underlined the good relationship with the code experts at ECMWF and the important role played in ALADIN by the ALADIN Coordinator for Network Activities (ACNA).

3.4. Link with ECMWF (scalability program)

Florence Rabier presented^(*) the scalability program at ECMWF and beyond : it will allow running complex systems with acceptable cost and within allocated time on the new HPC architectures, this opening many issues. Scalability is completely cross-cutting all activities related to weather forecasts. It is not science but will work for the benefit of scientists. It is organized in projects, i.e. OOPS and COPE that have been integrated in the framework of the scalability program. Some parts will be funded by the EU through the proposals submitted -and accepted- to H2020, by ECMWF and their partners (international community, HPC vendors, Météo-France, ALADIN, HIRLAM).

The GA Chair asked who represents ALADIN and HIRLAM in the scalability program : the ALADIN and HIRLAM PMs participate to the Scalability program board (together with Alain Joly for Météo-France). At the OOPS project level, the boards are smaller and Claude Fischer will represent ALADIN, HIRLAM and Météo-France.

3.5. Link with other European programs (EUMETNET & SRNWP matters)

Nothing was discussed in the absence of the HIRLAM PM who had been active in OPERA.

4. Towards a “seamless” system as a common flexible basis for the future collaboration

The HAC Chair and the ALADIN PM gave^(*) their analysis of the ALADIN/HIRLAM cooperation and proposed consistent steps and time line for the preparation of the next -still separated- ALADIN and HIRLAM MoUs :

- **The two MoUs have different scope, governance, funding and practicalities of respective cooperation** : ALADIN is essentially a code cooperation (members develop and

maintain a common code, while leaving each member free as how to implement and apply this code for its own purpose); LACE (subset of ALADIN) has ambitions on regional cooperation beyond the code cooperation within ALADIN (LACE members adhere to common ALADIN commitments but allocate staff, resources and set up a management structure towards these additional ambitions); HIRLAM aims to provide for its members a complete setup of code, scripts, libraries and tools for operational use in NWP environment, and to insure its quality.

- Considering the ALADIN/HIRLAM work practice related to the scope of the collaboration (see^(*) the synthetic overview “**From science to applications** summarized in 1 sheet”), it was proposed **to strengthen the goals of the two future MoUs on common code collaboration**, the common code being under the responsibility of ALADIN/HIRLAM, the more “downstream” operationally-oriented activities being under the full responsibility of the individual members or subgroups (i.e. HIRLAM or LACE), though common tools are jointly developed.
- **A road map to define the ALADIN-HIRLAM system and to provide a seamless system** (applications in the code shared with ECMWF for all activities ranging from global modelling to regional NWP and climate) for NWP across 26 countries was proposed.
- It was also proposed to fund **Code Architect(s)**, with recognized responsibility and dedicated time to coordinate implementation of new scientific ideas, to achieve and help maintain a coherent code design, carrying out the scientific and technical part of the **road-map**. The ALADIN and HIRLAM PMs will propose the Terms of References of this new position.
- Some small modifications of the ALADIN and HIRLAM MoUs and of the ALADIN/HIRLAM agreement are needed to introduce the Code Architect(s), to assure a better consistency and to make it clear which are the common ambitions and commitments (clarification of the common vocabulary, agreement on concepts, terms, rights, ownership). Some flexibility in the MoUs duration could be introduced to offer the possibility to merge quicker than 5 years after signature.
- The first draft of the ALADIN and HIRLAM MoUs will be discussed at the next joint HAC/PAC meeting.

The GA Chair thanked the HAC Chair and the ALADIN PM for their presentations and asked the Council and GA members for reactions to their proposals.

Olivier Gupta (FR rep.) underlined the common objective shared by the 26 ALADIN and HIRLAM NMSs (to develop jointly a Limited Area Model (LAM) built on the IFS/ARPEGE global system) and, to improve the -for historical reasons not fully optimized- organization. He favoured to have one single consortium with possibility for optional programs to meet the expectations of more restricted groups of countries. He proposed to conclude the meeting with half-a-page declaration that (1) makes this objective plain, (2) identifies the topics that need to be fully investigated before the merge and (3) gives a timetable to solve these questions.

Kristin Lyng (NO data policy expert) explained the premises to take into account for a further collaboration between partners with different business models : to clarify the Intellectual Property Rights (IPR) regarding the code and/or the outputs, to comply with national regulations and, for the European partners, to comply with the PSI directive (EC directive on the re-use of public sector information) and with ECOMET.

Gerard van der Steenhoven (NL rep.) shared Olivier Gupta's vision. He proposed to find manpower to solve the identified problems, not to rely only on the ALADIN and HIRLAM PMs.

Daniel Gellens (BE rep.) fully supported the position of France and The Netherlands and added that we should be proud of the important community being built.

Marianne Thyrring (DK rep.) also agreed and proposed to adopt the timetable and the steps proposed by the ALADIN PM.

The PAC Chair underlined the necessity to work together to benefit from EU funding. Jussi Kaurola (FI rep.) appreciated the positive attitude and wished to build a single consortium, starting from scratch to get rid of the loadings from the past. Pedro Viterbo (PT rep.) agreed with the previous remarks.

The Council and the GA acknowledged the difficulty of the tasks asked to the ALADIN and HIRLAM PMs for the MoUs renewal and took the opportunity of their first joint meeting to set, through a joint declaration, strong directions for the PMs to head towards.

The sitting was suspended for each consortium to discuss internally and a text was prepared.

Olivier Gupta read the proposed declaration^(*).

Recognizing the capabilities and achievements of the NMHS belonging to Aladin and Hirlam consortia:

1. The NMHS present at the joint Aladin-Hirlam meeting (dec 2, 2014) share the same objective to jointly develop and maintain the best possible skilled limited area weather forecasting system, building on the developments of the IFS/Arpege global forecast system and on the Aladin and Hirlam limited area systems. This limited area system is defined as a set of data pre-processing, data assimilation, atmospheric model and postprocessing tools for producing the best possible operational mesoscale weather forecasts.

2. Aladin and Hirlam consortia will work together with the aim of forming one single consortium by the end of the 2016-2020 MoUs. To this aim, the following issues have to be resolved:

- code ownership (software IPR) : current situation and suitable evolutions. In particular advantages vs drawbacks of open source solutions should be assessed;
- data policy (access to model outputs) ; to this aim a map of the various current operational configurations of the limited area system should be produced and scenarios for data dissemination should be assessed;
- global picture of annual contribution of countries to the various types of activities (from fundamental research to code implementation);
- identification of common activities and specific activities (possibility of core and optional programs);
- branding (including suitable evolution of the name of the system).

3. Human resources to support the work will be identified.

4. Both PM will report every six months on those issues to the consortia governing bodies.

5. Joint meeting of governing bodies of both consortia will be held at least once a year.

The joint GA/Council unanimously adopted the above declaration.

5. Governance issues

5.1. new MoUs

Discussed during point 4.

5.2. Potential further merge between ALADIN and HIRLAM

Discussed during point 4.

5.3. Data policy in Europe

Discussed during points 3.1 and 4.

6. Date and place of the 2nd joint ALADIN GA/HIRLAM Council

The GA chair recalled the invitation of Algeria to host the 2nd Joint GA/Council. **The GA/Council**

agreed to hold their 2nd meeting in Algeria during the last week of November 2015. In case of last-minute difficulties, Météo-France/Toulouse could be considered as a back-up location.

7. A.O.B

None.

8. Closing

Some photos^(*) were taken to remember this historical first joint meeting. The HIRLAM Council Chair and the ALADIN GA Chair thanked all participants for this positive meeting.

Annex : List of Participants

Country/position	NAME Firstname
AUSTRIA, PAC Chair	STAUDINGER Michael
AUSTRIA, LACE PM	WANG Yong
BELGIUM	GELLENS Daniel
BELGIUM, ALADIN PM	TERMONIA Piet
CROATIA	BAJIC Alica
CROATIA	IVANÈAN PICEK Branka
CZECH REP	BROZKOVA Radmila
CZECH REP	DVOŘÁK Václav
DENMARK	THYRRING Marianne
FINLAND, HAC Chair	JOFFRE Sylvain
FINLAND	KAUROLA Jussi
FRANCE	GUPTA Olivier
FRANCE, CSSI Chair	FISCHER Claude
FRANCE, GA Secretary	POTTIER Patricia
HUNGARY	LABO Eszter
ICELAND	SNORRASON Arni
IRELAND, Council Chair	CAMPBELL Liam
MOROCCO	HADDOUCH Hassan
MOROCCO, GA Chair	MOKSSIT Abdalah
NETHERLANDS	STEENHOVEN, Gerard van der
NORWAY	HOV Oystein
NORWAY	KRISTIANSEN Jorn
NORWAY	LYNG Kristin
POLAND	JERCZYNSKI Marek
POLAND	KASEJA Romuald
PORTUGAL	VITERBO Pedro
ROMANIA	BANCIU Doina
SLOVAKIA	BENKO Martin
SLOVENIA	JERMAN Jurij
SPAIN	BELDA Fernando
SWEDEN	NILSSON Stefan
TURKEY	KOCAMAN Fatih
ECMWF observer	KALLEN Erland
ECMWF observer	RABIER Florence