

**Minutes of the 14<sup>th</sup> ALADIN LTM meeting**  
**April 15, 2013, Reykjavik**  
**16:00 – 18:30**

**Participants**

**ALADIN Program Manager** : Piet Termonia

**LTM or deputy LTM**

Algeria :

Austria : Christoph Wittman

Belgium : Alex Deckmyn

Bulgaria : Boryana Tsenova (dep)

Croatia : Tomislav Kovacic (dep.), Dijana Klaric

Czech Rep. : Radmila Brozkova

France : Claude Fischer

Hungary : Gergely Boloni

ACNA: Maria Derkova (Mariska)

**LACE Program Manager** : Yong Wang

**Support Team** : Jean-Maziejewski, Patricia Pottier

**CSI Members welcome** : Ryad El Khatib, Jean-François Mahfouf

Morocco :

Poland : Marek Jerczynski

Portugal : Maria Monteiro

Romania : Simona Tascu (dep.)

Slovakia : Jozef Vivoda

Slovenia : Neva Pristov

Tunisia : Zied Sassy

Turkey : Ersin Küçükcaraca (dep)

**1. Opening and welcome**

As the new ACNA, Mariska opens the LTM meeting. In order to fasten the debate, many preparatory documents were sent to the LTMs and their substitutes. There will be no time for presentation of these questions during the LTM meeting but there is room for discussion.

**2. Adoption of the agenda**

Maria M. proposes to add a point to the agenda : the possibility of having some meetings dedicated to specific topics by video-conference. The agenda is adopted with this additional point (A.O.B.).

**3. Actions issued from the GA and agenda for PAC**

Piet has sent a list of actions following the GA (the main actions will be discussed later in the agenda). No comment from the LTMs on these actions.

**4. Support Team matters: reporting and newsletter**

Piet will compare the manpower committed in the 2012 rolling work plan versus the 2012 reporting and will present this comparison at next PAC meeting. The LTMs may get some feedback.

Piet will also report at PAC about the ALADIN main activities, mainly from developments or results presented during this ALADIN Workshop. Piet proposes that he and the Support Team will prepare a newsletter from his report to PAC : some people will be directly contacted to give more material and transform their Workshop presentation into an article. A first attempt was done last year without success but people were not aware of this proposal before the workshop (contrarily to this year when it had been announced in advance).

For the future, in the framework of a further merge between ALADIN and HIRLAM, we could think about a common newsletter with HIRLAM.

**5. Technical progress and plans**

Claude has prepared a comprehensive view about cycles (see the preparatory document for more details): the general message is that the OOPS-related Fortran re-coding is ongoing and the overall code structure is now significantly and progressively going to evolve. The work for COPE will begin (it has already started at ECMWF) and, in about 2 years time, the observation pre-processing and the screening would be completely recoded.

Claude thanks the countries that have sent phasers to Toulouse for the last phasings (we had rather frequent cycles

last year and the phaser teams proved to be an efficient help). The LTMs should be aware of the possible dates for the next phasings and consider proposing phasers.

About the Progress and Plans at Météo-France, Claude summarizes the main steps : porting to BULL from spring 2013 until the end of 2013 (CNC cluster) and in 2014 for CA cluster; preparations for an increase of resolution in ARPEGE and AROME-France with an expected date of switch to operations in the autumn 2014. The people in GMAP are now facing simultaneously phasing, porting and e-suite.

Claude has launched an inquiry to explore how partners would plan to upgrade their local suite (increase of resolution of the LBC data, increase of coupling frequency) in order to estimate the evolution of the volume of the coupling data within the coming 2 years. The increase of the volume data can be an issue in comparison to the possible extension of transmission capacity (RMDCN).

Claude will prepare an overview of the wishes of all countries, together with Piet and Mariska. The question how best to quantify the increase of volume of coupling data linked with these wishes was addressed. Radmila would prefer Météo-France to give the maximum acceptable factor of increase. She says that a simple on-the-thumb rule is enough to evaluate the increase of size of files, and then infer the increase in volume.

Claude, as French LTM, explains he will prepare these estimates with the available information for instruction at Météo-France (with Operations and IT). He will keep Piet and Mariska informed about the evaluation.

Dijana reminds that LACE has a backup solution to get the ARPEGE coupling files through ECMWF and asks if anybody has put it into question. Maria M. would like to have a similar solution for Portugal but wonders if it could be a problem for MF to upload the coupling files to ECMWF would their size dramatically increase.

Radmila protests against the mixture of Fortran 90 and Fortran 2003 in the code. Claude answers that 5 specific F2003 features have been recently discussed with ECMWF, and an inquiry has been sent at that time (November 2012) to all Aladin partners (by himself) and Hirlam (via System coordination). Hirlam prepared a rather comprehensive answer that was added to Météo-France's one plus 2 replies in Aladin (Hungary, Bulgaria). Only 2 out of the 5 features eventually were accepted. Ryad reminds that a small test program is available for each feature, so any partner who may face difficulties with one of them on its local platform could test and liaise with its vendor for a compiler upgrade if necessary. Claude adds that the inclusion of some F2003 (if not F2008 – COARRAYS) is almost unavoidable, but this will happen little by little, since the Fortran compilers have evolved much slower than the norm (when some features are tested and work, they cannot be refused). By 2015, ECMWF plans to stop running the IFS from Fortran only (i.e. control level would be OOPS/C++ only).

## 6. FA/LFI inquiry

Following Radmila's request about a Météo-France support to the library handling Input/Output (FA/LFI routines), the ALADIN partners were asked to describe their needs. Piet sent an inquiry to collect some technical details about the potential problems and the needs (bugs found over the past 5 years ? Solutions found with/without remote support ?).

As only 4 LTMs have answered, Mariska asks the others to fill the inquiry in order for Piet to have all details for PAC discussion.

Radmila insists on her request to have a MF correspondent in case of problem with FA files or xrd. Piet will discuss with MF and the matter will be raised during the next PAC.

## 7. Common ALADIN-HIRLAM verification/validation and system WW

During the system Working Week to be held in Turkey, the HARMONIE system (toolbox) will be installed in Ankara for evaluation in the context of an ALADIN system installation; the experience of this trial will then be reported to the other countries ; it will be an opportunity to work together with HIRLAM and see how they install and validate new cycles. This can be of interest to ALADIN as that specific part of system installation seems to go much faster in their group than in ours. The dates of the WW have still to be fixed (*Note: since then, the dates have been settled: 21-25 October 2013, in Ankara*)

## 8. SURFEX: report from the SURFEX SC

After the 1st SURFEX WW in Brussels, it was concluded that PREP (creation of the initial files) took too much

time : this problem is now solved (work of Tayfun and Daan, who are the first two non-MF experts in this domain ) but a potential future problem with memory consumption is feared .

Piet reports that the SURFEX SC was very positive about the delivered work of Tayfun and Daan and decided to implement it in the source code.

Radmila asks if the work for implementing SURFEX in ARPEGE has advanced.

Jean-François answers that it's not the priority before 2015 and, as said during the SURFEX SC, this will be discussed with ALADIN partners due to the level of coordination needed (similar to ISBA switch). Nothing is decided so far and many questions remain open.

Radmila also asked to keep the possibility of runs in dynamical adaptation mode (i.e. without assimilation).

## 9. Common HIRLAM-ALADIN workplan: commitment vs. Reporting

See point 4.

## 10. ALADIN verification

As requested by the Directors at the last GA, the quality of our applications will be investigated and reported : a first report will be produced from the verification database in Ljubljana and the tools developed around these data (work of Jadwiga) : Neva, Christoph, Piet will meet in Ljubljana or Brussels to decide on the contents and the periodicity of such a report.

Yong reminds that LACE has decided to put some efforts on producing some verification scores on the LACE applications and considers using the HIRLAM tools to produce these scores. Piet comments that the HIRLAM package is more oriented towards cycle validation.

## 11. Use of GLAMEPS by the partners

Piet explains that some EPS members (ECMWF probabilistic system) directly enter into GLAMEPS, creating a licensing problem with respect to ECMWF for those wishing to use GLAMEPS data or products. The only likely solution seems that these EPS members are retrieved from GLAMEPS. A solution could be to use LAEF members instead. Research results indicate that this substitution could be done with no negative impact on the quality of GLAMEPS products. In that case, the use of GLAMEPS by ALADIN and HIRLAM partners will have to be solved only within the scope of the ALADIN and HIRLAM MoUs and the ALADIN-HIRLAM cooperation agreement. The issue about taking out ECMWF (EPS members) from GLAMEPS will be raised at PAC.

Ersin asks for some extension of the GLAMEPS domain to the east (for better data over Turkey).

About licensing policy, Radmila reports about Norway providing for free some products created with HIRLAM or HARMONIE software, outside their national territory (possibly over some ALADIN or HIRLAM countries). This issue (Norway providing HARMONIE data for free outside its national territory) will be submitted to PAC.

## 12. License for universities

The GA asked Radmila and Piet to prepare a template defining an ALADIN license for research. Patricia proposes to look for example at the HIRLAM agreement for universities. There were previous cases with licenses for climate projects and CHAPEAU; recently the openIFS project.

Piet and Radmila will propose a text for this agreement.

Gergo asks about the already existing cooperation with universities that were already given part of the code. Depending on what was given to them, they may be proposed to sign this future license.

## 13. AOB

Maria M. would like to benefit from video-conference meetings when, for instance, somebody needs the help of over colleagues on a new topic. She asks for somebody to organize such virtual meetings (approval of the topic, choice of the participants, ...) and to do the technical testing.

In such a case, it is proposed that Mariska and Piet should be contacted for evaluation of the need and the people to further contact (LTMs or CSSI members, depending on the case).

The concrete testing could be done with Webex, EVO, ... or other tools : Patricia warns that these solutions work but need quite a preparation in case of very punctual use (a new attempt will be done for CSSI web-meeting for instance) and won't permit to gather all ALADIN countries in a same web-meeting.

Annex : agenda with list of preparatory documents

Agenda	Introduced by	Decision, comments, information	Documents
1.Opening and welcome	ACNA		
2.Adoption of the agenda	ACNA		
3.Actions issued from the GA and agenda for PAC	PM	Small report	GA.pdf
4.Support Team matters: reporting and newsletter	ST		
5.Technical progress and plans	CSSI chair	Cycles: plans at MF; schedule Changes in the provision of the LBC	Technical_progre ss.pdf
6.FA/LFI inquiry	PM	Report problems with the FA/LFI code	FA-LFI
7.Common ALADIN-HIRLAM verification/validation and system WW	PM	Establish/ approve content of the system WW	
8.SURFEX: report from the SURFEX SC	PM	Report of work on PREP in Brussels SURFEX SC	SURFEX.pdf
9.Common HIRLAM-ALADIN workplan: commitment vs. reporting	PM		Workplan.pdf
10. ALADIN verification	PM		
11. Use of GLAMEPS by the partners	PM		GLAMEPS.pdf
12. License for universities			
13. AOB	PM		