



Draft Minutes
4th Joint HAC-PAC meeting
Monday May 23, 2016
Brussels, Belgium



HAC Participants: Javier CALVO (SP rep.), Rossella FERRETTI (DK rep.), Bart van den HURK (NL rep.), Heiner KORNICH (HAC Chair and SE rep.), Aarne MANNIK (ES rep.), Ray McGRATH (IE rep.), Sami NIEMELA (FI rep.), Jorn KRISTIANSEN (NO rep.), Jeanette ONVLEE (HIRLAM PM),

PAC Participants: Philippe BOUGEAULT (MF rep.), Radmila BROZKOVA (PAC Vice-Chair), Fatih BUYUKASABBASI (PAC Chair), Claude FISCHER (CSSI Chair), Daniel GELLENS (non-LACE non-MF rep.), Alain JOLY (MF rep.), Maria MONTEIRO (non-MF non-LACE rep.), Patricia POTTIER (Sec.), Piet TERMONIA (ALADIN PM), Yong WANG (LACE PM)

Excused: Jure CELDINIK, Theodor F. HERVARSSON, Branka IVANCAN-PICEK, Abdelwaheb NMIRI, Vladimir PASTIRCAK, Gintautas STANKUNAVICIUS

1. Opening and welcome

Daniel briefly presented the IRM, a small but old institute : in 1826, the Brussels-Uccle Observatory was created on the Plateau, with a meteorology and climate department (space observatory was too expensive). Adolphe Quetelet became the Director of the Observatory. He began the first meteorological observations 4 times a day in the Plateau on the 1st of January 1833 (one of the longest series of observations in the world). Belgium became the first state with an official meteorological institute. In 1913, the IRMB was born, with the separation of the Brussels Observatory (space/planet) from the meteorology. At the end of the 1990s, a third institution was created on the Plateau to take into account the increase of the chemistry and agronomy departments. These tree institutions work together, whereas with different main topics. Nowadays, politicians are thinking about gathering the tree institutes back to a single big Observatory, to optimize expenses.

Fatih thanked Daniel for this nice historical background and the IRM for hosting this meeting. He opened the meeting and proposed to adopt the agenda.

2. The agenda below was adopted

| Agenda * | Introduced by | Documents |
|---|--|--|
| 1. Opening and welcome | PAC chair ¹ | |
| 2. Adoption of the agenda | PAC chair | 2_agenda_HAC_PAC_2016 |
| 3. Final approval of the minutes of the last HAC-PAC meeting (D) | PAC chair | 3_minutes_3rdHAC-PAC |
| 4. Policy issues (C) <ul style="list-style-type: none"> • 2014 joint ALADIN-HIRLAM Declaration: reporting of activities • Strategy • ALADIN/HIRLAM common agreement • organization of the 2nd joint ALADIN General Assembly & HIRLAM Council | ALADIN & HIRLAM PMs HAC & PAC chair | 4_Declaration&Strategy 4_A-H_Agreement 4_Organization_CA_Council |
| 5. A.O.B | PAC chair | |
| 6. Date and place of the next meeting (D) | HAC chair | |
| 7. Closing | PAC chair | |

* **(D): Decision ; (C): Consultation; (I): Information**

- Following the agreed procedure of an alternate chairmanship for the joint HAC-PAC meetings, the PAC Chairperson will chair the 4th joint HAC/PAC meeting.

3. Final approval of the minutes of the last HAC-PAC meeting

The draft minutes of the 3rd HAC-PAC meeting (as sent as preparatory document) *were adopted.*

4. Policy issues

1. 2014 joint ALADIN-HIRLAM Declaration : reporting of activities

The PMs reported on their activities to tackle to the five issues identified in the joint declaration as to be resolved with the aim of forming a single consortium by the end of 2016-2020 MoUs.

Piet took the floor for his reporting and proposals to go ahead :

- Code ownership : in ALADIN, the manpower (work on and for the ALADIN system) is reported every quarter since 1991; the accumulated manpower can roughly be split in 1/3 for Météo-France, 1/3 for LACE (7 Partners), 1/3 for the others 8 Partners. In the ALADIN MoU, the ownership of the code is shared according to this statistic and determines the voting rights at the General Assembly in absence of consensus (it was never used so far). Despite this shared ownership, all Partners have the full right to use the ALADIN system. Piet recalled that the ALADIN MoU precisely defines the ALADIN system (codes and tools), the ALADIN code repository (located in Toulouse), the Code Architect position, the CMCs for Canonical Model Configurations (operational configurations that are phased in Toulouse repository, with experts available, with possible help from the ACNA for local porting) and insisted on any scientist could work on any exotic configuration they wish but should not expect immediate support at consortium level , i.e. from the ACNA, CA, CSSI activities).

A new version of the ALADIN-HIRLAM agreement has been prepared by Philippe. It refers to the list of the ALADIN-HIRLAM common codes (list currently empty). Piet proposed to focus on the definition of this list in the next months, to check the routines of the code in the ALADIN repository and the documentation (technical memoranda), with the help of the ALADIN CA, the resulting list being presented at the next Council/GA. HIRLAM experts should also be part of the definition of this list. A scientific paper on the ALADIN system will also be published to assess the ALADIN legacy and scientifically document the increment with the ALADIN-HIRLAM system.

- Data policy

The data policy as agreed on in the 5th ALADIN MoU was plugged into the new version of the ALADIN-HIRLAM agreement. It is a significant step towards HIRLAM positions on data policy (see point 4.3).

- Annual contributions (manpower)

The annual contributions of ALADIN Partners are calculated using the very detailed reporting done in ALADIN every quarter. As HIRLAM's reporting is not directly comparable, Piet proposed to estimate an initial HIRLAM contribution based on HIRLAM contributions to the common ALADIN-HIRLAM codes.

- Identification of common/specific activities

A proposal for ALADIN was made by Piet (see point 4.2 and the relevant preparatory document).

- Branding

Piet expressed his concern. Although the branding should be discussed last (at the end of the current MoUs), the use of the HARMONIE acronym should be clarified now : first, HARMONIE designated the

scripting system (calling AROME or ALARO models, including verification tools and DA); at the last joint ALADIN Workshop & HIRLAM ASM, HARMONIE was presented as a model configuration and an HARMONIE-climate community is emerging.

Jeanette took the floor and give her point of view on the progress with respect to the same five issues from the joint declaration :

- Data policy : the last version sent by Philippe is a very good basis for the new ALADIN-HIRLAM agreement, the HIRLAM data policy experts have only some minor proposals to reformulate some sentences (see point 4.3).

- Common versus consortium-specific activities :

During the good discussions at the strategy meeting, there was agreement on the ambitions of most topics; there was not enough time to consolidate the conclusions and discussions should continue at the HAC/PAC level.

- Code ownership and common codes :

The list of the common codes is presently empty and should be defined, once we agree on the scope (fortran codes only or also scripts/tools).

Jeanette proposed to consider the Harmonie Reference Model (RCR for Regular Cycle of Reference) as a 3rd CMC, as it is well defined, its code is different from AROME-France and the differences are increasing. Piet insisted on the CMCs needing commitment on manpower for its definition, phasing and maintenance and underlined that it would need time to implement it in the common repository and sanity check tool (as it took time for AROME and ALARO). Piet insisted that the first step is to sign the agreement, to define the common codes, then the ToR of the equivalent to a CA for HIRLAM, to work on how extending “mitraillette” to this possible 3rd CMC and to contribute to the phasing.

Daniel pointed the necessity to take time to build the convergence very carefully, to get the ALADIN GA & HIRLAM Council support and to have a single repository, with the support and the agreement of Météo-France.

Ray and Jorn agreed to be careful (nobody wants to risk their system) but would prefer to go quicker.

- Towards joint organization :

Noting that two governances make things complicated, Jeanette proposed to think about some HAC/PAC subcommittees to explore options for joint steering bodies.

Philippe commented that the issue of how the bodies of the single consortium will be organized should be tackled later as it is not the most urgent and was not in the five issues identified by the joint declaration.

Piet also preferred to first define the perimeter of the future single consortium before thinking about the governance that would allow it to better work.

Jeanette agreed. She also proposed to create some thematic coordinators in areas where the ALADIN and the HIRLAM teams are working well together.

Considering that the Task Forces created in the previous MoUs had never worked and in order not to complicate things, HAC/PAC recommended to let these teams work, for the time being without new governance, but instead carry out the process requested in the 2014 Declaration..

- Annual contribution and branding : Jeanette proposed to explore with Patricia the possibilities for a more unified reporting of the manpower, with limiting the accumulation on the last 5 years.

She considered it is too early to work on the branding of the future single consortium.

Heiner explained that although the name HARMONIE had been created to represent the common work, it

had turn to be HIRLAM only. This causes some confusion, not only in the ALADIN teams. Philippe proposed to call it the ALADIN-HIRLAM shared system, as a provisional solution until we have a single consortium. Fatih added that this name underlines our wish to cooperate and move towards a big single consortium.

HAC/PAC recommended to use the ALADIN-HIRLAM shared system as a name for the common system, HARMONIE being only used for HIRLAM Reference model (RCR).

PAC/HAC recommended a clear action on the PMs : to define and propose for approval at the next joint ALADIN GA & HIRLAM Council meeting the list of the potential ALADIN-HIRLAM common codes with the identification of the ALADIN and the HIRLAM contributions to these common codes and the mutual commitment to the maintenance of these codes. In case of disagreement during the establishment of this list, the controversial points should be submitted to HAC/PAC for an email consultation².

2. Strategy

Based on the technical discussions during the Strategy Workshop in Toulouse, Piet proposed a definition and some ALADIN examples (see preparatory document 4_strategy) of common activities, core activities and specific activities :

- common activities : activities necessary to create the export versions (definition and implementation of the ALADIN system, implementation of the CMCs in the repository, maintenance, phasing, support to local porting of the CMCs from export versions to the operational platforms).

- core activities (R&D) : commonly agreed programs of recognised strategic importance (numerics, scalability/optimisation, development of a DA “starters kit”) : topics where we have been quite active, with identified experts and possible roadmap and plans with milestones for the next 5 years (e.g. an ALADIN-HIRLAM meeting will be organized in Brussels to fix a roadmap for dynamics). For DA, as not so many ALADIN Partners are running DA, Piet reported having been enthusiastic about the possible use of the HARMONIE scripting system to help these Partners but the first tests having caused questions concerning responsibility in implementation and maintenance (further plans for developing a “starters kit” are needed).

- specific activities : activities not widely used (OPLACE, operational EPS, 4D-var, ...) OR activities that do not impact the CMCs or the phasing in the short term (EnKF, ...) OR activities that are not needed to guarantee operations (development of a climate model, ...). These activities are not overly urgent, not in the cycling business, not crucial for the operational. The “specific” term should not be understood as pejorative, the so-called specific (or optional or any better wording) activities may be important but not for operations in the next years.

Heiner commented that he would rather consider 4D-Var as a common activity. Philippe repeated Météo-France's reservation already expressed during the PAC meeting about 2-way coupled chemistry and the necessity for Météo-France to estimate the needed manpower before committing on it.

2 Post meeting addition: during the HAC meeting on 24 May, it was proposed to identify a review committee of two PAC members and two HAC members (and the ALADIN CSSI chair who is responsible for the phasings) to follow up this action with web meetings. These meetings will be tentatively planned every three months. The ALADIN PM has already consulted PAC about this. PAC supports this proposal. HAC has appointed two review panel members (Heiner and Sami)

Jeanette took the floor and gave her proposal for core and as specific activities. She would prefer consider also more long-term activities as core activities. She expressed concerns about the scientists already cooperating on important long-term actions might be disappointed to see them considered as specific activities; a very thin list of core programs might also be considered as a wrong signal and a lack of ambition for the future single consortium.

Philippe answered that the specific activities should also be considered to be contributions to the collaboration (specific activities should be reported such that the other partners are aware of it and, if there is enough interest and resources, specific activities may become common activities). However, there is a specific concern that each member from either consortia should contribute to some key activities for the benefit of other members. These could form the rationale for defining core and common activities. One would expect, then, that each Member does contribute to at least one or two of the core/common activities..

Piet gave the example of LAEF : LACE is comfortable with LAEF being specific as it allows them more freedom on LAEF activities.

Bart proposed that the inventory of common codes should be associated with an inventory of the necessary commitments from the partners to maintain that common code.

Daniel insisted on the importance of the phasing activity and the necessity to dedicate manpower to it. Philippe added that a governance should also be settled to decide what would enter the common repository (one should not consider for granted that codes developed under a specific activity will enter the common codes, this should be the case only if Members consider that the proposed code is of general interest and will demand an affordable maintenance effort through an implementation in one of the CMCs).

HAC/PAC recommended to consider as common activities the R&D activities that encompass the common codes or are expected to be part of the CMCs (the common codes and the CMCs still needing to be defined and agreed on). Each member would have to contribute to at least one common activity; any member could contribute to the specific activities, but it would not be mandatory.

Based on the Strategy Workshop and on the HAC/PAC discussions, the PMs should prepare a draft document of the common/specific activities. This document would indicate the strategy where we want to go forward, to be presented for approval at the next joint ALADIN GA & HIRLAM Council meeting. This document should be translated into a more concrete scientific and technical strategy in the common work plan.

3. ALADIN-HIRLAM common agreement

Philippe has prepared a new version (V3) of the ALADIN-HIRLAM Agreement that takes into account the new MoUs and the comments made on the former versions of this text. PAC already agreed on this new version. Jeanette took the floor and expressed the small technical comments made by the Norwegian jurist.

The HAC/PAC reviewed the comments and asked Philippe to prepare a final draft version with these minor modifications. Once validated by HAC/PAC (email consultation), this version will be submitted to the ALADIN GA & HIRLAM Council for signature at their next joint meeting in December.

According to point 7.5 of the agreement, a standardized template should be prepared to licence for non-commercial research purposes the ALADIN - HIRLAM shared system : ***Philippe and Jeanette will compare the existing ALADIN and HIRLAM templates and propose a single document***³.

4. Organization of the 2nd joint ALADIN General Assembly & HIRLAM Council meeting

Fatih explained that Alain Ratier confirmed that EUMETSAT will be able to host our meetings at the EUMETSAT Headquarters (Darmstadt) according to the following schedule :

- ***the LACE Council and the HIRLAM Council in parallel on December 7 afternoon,***
- ***the 21st ALADIN General Assembly on December 8 morning,***
- ***the 2nd joint ALADIN General Assembly & HIRLAM Council on December 8 afternoon.***

Jorn wondered why the HIRLAM Council could not be held in parallel with the ALADIN General Assembly. The schedule is constrained by the representatives (observers, Météo-France) attending both General Assembly and Council.

In order to give the room to informal discussions between the ALADIN and HIRLAM Delegations, a joint diner will be organized once a year, besides the joint ALADIN GA & HIRLAM Council. In the current alternating scheme of organization (by HIRLAM on even years and by ALADIN, generally in an ALADIN country, on odd years), HIRLAM will support this diner on even years and ALADIN on odd years (each consortium according to its internal rules).

5. **A.O.B.**

Alain introduced a highly technical matter : the files produced by the ARPEGE/AROME/ALARO are in a special format (FA, LFI, sort of coded GRIB0); Météo-France wish to move forward to use standard GRIB2 or FA/LFI through the single interface maintained by ECMWF (GRIBAPI). Some colleagues from Météo-France have worked out plans for the evolution towards the use of GRIB2 and GRIBAPI. ECMWF won't work GRIBAPI as long as the changes are not official in GRIB2 (this part depends on a WMO decision). Alain asked the HAC/PAC members to support Météo-France request at the ad-hoc WMO committees (through their national representatives in these committees).

HAC/PAC agreed and approved on this lobbying action.

6. **Date and place of the next meeting**

Rosella invited ***HAC and PAC members in Copenhagen : 14th PAC meeting on May 22 in the morning, 5th Joint HAC/PAC meeting on May 22 in the afternoon and HAC meeting on May 23, 2017.***

7. **Closing**

PAC Chair thanked the participants and closed the meeting at 17:30.

3 Post meeting addition : Radmila pointed out that a similar action should be done and a template prepared for benchmark licencing, as benchmarking activity is considered neither as Research nor as local implementation.