Draft Minutes
5th Joint HAC-PAC meeting
Monday May 22, 2017
Copenhagen, Denmark

HAC Participants*: Javier CALVO (SP rep.), Ole KRARUP LETH (DK rep.), Bart van den HURK (NL rep.), Heiner KORNICH (HAC Chair and SE rep.), Saji VARGHESE (IE rep.), Sami NIEMELA (FI rep.), Trond IVERSEN (NO rep.), Jeanette ONVLEE (HIRLAM PM)*
PAC Participants*: Philippe BOUGEAULT (MF rep.), Radmila BROZKOVA (PAC Vice-Chair), Fatih BUYUKASABBASI (PAC Chair), Jure CELDINIK (LACE rep.), Claude FISCHER (CSSI Chair), Daniel GELLENS (non-LACE non-MF rep.), Branka IVANVAN-PICEK (LACE rep.), Maria MONTEIRO (non-MF non-LACE rep.), Patricia POTTIER (Secretary), Piet TERMONIA (ALADIN PM), Yong WANG (LACE PM)*
Excused*: Alain JOLY, Theodor F. HERVARSSON, Aarne MANNIK, Gintautas STANKUNAVICIUS, ECMWF observer*

1. Opening and welcome

Heiner (HAC chair[1]) opened the meeting and gave the floor to the DMI Director Marianne Thyrring who welcomed the HAC/PAC participants in this very day when the DMI was celebrating new radars. She encouraged everybody to continue their good work, specially in the huge task to prepare the convergence of the ALADIN and HIRLAM consortia.

2. The agenda below was adopted

Agenda *	Introduced by	Documents
1. Opening and welcome	HAC chair	
2. Adoption of the agenda	HAC chair	*2_agenda_HAC_PAC_2017*
3. Final approval of the minutes of the last HAC-PAC meeting **(D)**	HAC chair	*3_minutes_4thHAC-PAC*
4. Policy issues **(C)** 　1. 2014 joint ALADIN-HIRLAM Declaration follow up: status of the requested clarifications 　2. Status report on the definition of the ALADIN-HIRLAM Common Codes 　3. Status of the ALADIN-HIRLAM Rolling Work Plan 　4. Presentation of the ALADIN-HIRLAM convergence roadmap 　5. Research and benchmarking licences 　6. EUMETNET/SRNWP issues 　7. organization of the 3rd joint ALADIN General Assembly & HIRLAM Council	ALADIN & HIRLAM PMs HAC & PAC chair	*4.1_Declaration.pdf* *4.2_AH_common_codes.pdf* *4.3_AH_RWP.pdf* *4.4_convergence_roadmap.pdf* *4.5_licences.pdf* *4.7_3rd_joint_GA-C.pdf*
5. A.O.B	HAC chair	
6. Date and place of the next meeting **(D)**	PAC chair	
7. Closing	HAC chair	

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

The draft minutes of the 4th HAC-PAC meeting were approved.

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1 Following the agreed procedure of an alternate chairmanship for the joint HAC-PAC meetings, the HAC Chairperson will chair this 5th joint HAC/PAC meeting.
* **(D): Decision ; (C): Consultation; (I): Information**

4. Policy issues

    1.   <u>2014 joint ALADIN-HIRLAM Declaration follow up : status of the requested clarifications</u>
The 1st joint ALADIN General Assembly & HIRLAM Council (GA/C) identified 5 issues that needed to be resolved in the convergence process and the new <u>A-H cooperation agreement</u> detailed some actions required to deal with these issues. During the past half-year, the PMs have been tackling the common codes (point 4.2 below) and the rolling work plan (point 4.3). The convergence road map until 2020 (see point 4.4) gives the whole picture.

    2.   <u>Status report on the definition of the ALADIN-HIRLAM Common Codes</u>
Piet explained that the <u>A-H cooperation agreement</u> establishes a "*Co-ordination Group in charge of drawing up and maintaining a list of all shared codes, identifying (i) the ALADIN - HIRLAM Common Codes, (ii) the HIRLAM Common Codes (iii) the ALADIN Common Codes, and (iv) other shared Codes with appropriate reference to the owners and the rights granted by the owner to the Parties*".
Last year HAC/PAC tasked a working group to "*define and propose for approval at the GA/C the list of potential ALADIN-HIRLAM Common Codes, with the identification of the ALADIN and the HIRLAM contributions to these common codes ...*".
After studying the phasing contributions since 2007, the working group proposed to base the initial list on what is necessary to run the Canonical Model Configurations (CMCs), rather than on what was contributed into the fortran code in the past. AROME and ALARO are already identifed as CMCs. Once HARMONIE-AROME (as defined in Lisa's article) is in the Toulouse repository (including its validation with the Mitraillette sanity check), it will be the 3rd CMC.
Philippe completely approved this principle to define the list of the Common Codes but reminded that the GA/C should be provided with a concrete list.
The HAC/PAC debated on the scope of the concerned codes and concluded that **the working group should establish and propose a list of the Common Codes at the next GA/C, based on the routines used by the CMCs (thus by the forecast models only), excluding what belongs to MESO-NH, the historic parts of Surfex, ECMWF and Data Assimilation codes.** Radmila expressed some reservations on whether to include the dynamics in the list. This will be taken up by the working group. Each group will indicate the exact code version (in the Toulouse repository) of their CMC that should be taken into account.

    3.   <u>Status of the ALADIN-HIRLAM Rolling Work Plan</u>
Heiner recalled the principles set up by the A-H agreement : "*The ALADIN Assembly and the HIRLAM Council shall annually decide during the common ALADIN GA/ HIRLAM Council meeting upon the common research/work plan to be carried out. The work plan shall include explicit indications of the resources that Members plan to dedicate to Phasing during the year that follows.*"
In the recent HMG/CSSI meeting, an alternative setup and process for writing the common Rolling Work Plan (RWP) was discussed and agreed upon (see the <u>HMG/CSSI minutes</u>): a new template for Work Packages (WPs) description was proposed with the aim to clarify efforts on code phasing and maintenance, to identify t-code and non-t-code deliverables, responsible redactors, …; the RWP will be written during summer; the ALADIN Local Team Managers (LTM) will commit the manpower after their meeting besides EWGLAM (early October). For HIRLAM, the plan including staff contributions will be discussed at the HAC on 17/18 October 2017.
Most HAC/PAC participants approved of this new process after debating on a few issues :
- Radmila expressed her fear that this process would lead to an increasing bureaucratic work as LACE already have their work plan. Yong was confident that fitting the LACE work plan into the new templates wouldn't be much additional work and would enforce the communication and the coordination between the groups. Jeanette added that the first step is to gather everyone plans (WPs) before the summer, then the 3 PMs (ALADIN, HIRLAM, LACE) and Claude (for MF) will (web-)meet and integrate the components into the RWP, identifying common actions, activities with possible cooperation on the shared-code within some partners

(specific activities) and avoiding double work. The groups will keep their freedom to follow their own ambitions but the RWP will facilitate and make collaborations more visible.

- Piet confirmed that the lead redactors will be responsible for the redaction and the reporting, as in the EU projects, but won't stand for the commitments.
- Radmila asked about the link with this reporting and what is reported in the ALADIN manpower database. Piet answered that the RWP and the manpower reporting are two different processes. The ALADIN-HIRLAM agreement asked the PMs to prepare a common workplan first. The reporting should be addressed as part of the clarifications asked in the 2014 Declaration. The ALADIN manpower reporting will remain the same until the end of the ALADIN MoU5. Patricia added that, anyhow, the manpower reporting is very different in ALADIN and HIRLAM and something has to be invented for reporting the manpower in the future single consortium.

4. Presentation of the ALADIN-HIRLAM convergence roadmap

The ALADIN and HIRLAM PMs prepared a convergence road map composed of 6 steps (see below). Piet presented these steps and their links with the issues in the 2014 declaration (the signing of the new A-H agreement solved the issue about data policy and is a basis for these 6 steps) :

- S1: a way to address the scientific legacy;
- S2: the GA/C agreed on the broad definition of core/common/specific activities;
- S3: to demonstrate the maintenance part of the CMCs by introducing HARMONIE-AROME in the Toulouse repository and in the Mitraillette sanity check;
- S4: introduce two core programs (DA, dynamics) that prepare the future, going beyond the current definition of the CMCs currently based only on physics parametrizations;
- S5: the new process for the RWP will define/articulate the meaning of the core/common/specific activities;
- S6: once the 3 CMCs are fully defined (in the Toulouse repository and by the published articles), the whole ALADIN-HIRLAM System should be documented (included the list of Common Codes and their maintenance).

On a longer term and at the policy level, the governance and IPR issues should be tackled at the HAC/PAC and GA/C levels and the PMs asked HAC-PAC for guidance.

	Sem 2	2017 Sem 1	2017 Sem 2	2018 Sem 1	2018 Sem 2	2019 Sem 1	2019 Sem 2	2020 Sem 1	2020 Sem 2
S1: papers	Redaction papers								
S2: define activities (common/core/spec. R&D)	Decision								
S3: proof of concept for new CMC		Proof of concept of a third CMC for physics following S1							
S4: core programs	Kick off meetings	1. Dynamics (scalability/efficiency) 2. Data assimilation basic kit							
S5: AH work plan		New process to incorporate S2		Annual work plans: (a) identify and (b) monitor the **common activities and the specific activities**[2].					
S6: documentation				Document AH System					
Longer term			Follow up at GA/Council and PAC/HAC level						

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2   In the version sent as preparatory document, "and the specific activities" was missing in S5

Heiner opened the floor for remarks. Philippe congratulated Jeanette and Piet for this clear road map but asked about the detailed list of specific activities. Piet replied that he was confident that the provisional list discussed at GA/C would become the final one, however he would prefer to wait until the RWP has been established to confirm that and register who is doing what in terms of specific activities. Philippe then proposed that the roadmap should include a clear date indicating when the final list of specific activities will be decided. This was supported by HAC-PAC.

Then, the HAC-PAC discussed the longer term issue of code ownership. It would be very difficult to estimate the IPR according to the number of lines of fortran code and all inputs in the codes don't have the same impact.
Philippe proposed to grant, as a starting point, 25% IPR to each component of the future single consortium (25% to HIRLAM, 25% to LACE, 25% to Météo-France and 25% to the ALADIN Partners besides Météo-France and LACE). This simple and pragmatic solution seems reasonable, according to the current ALADIN IPR (the current IPR, that are manpower-based in ALADIN, roughly lead to 1/3 for to each ALADIN component) and the HIRLAM manpower, although not strictly comparable, could be estimated to 1/3 of the total ALADIN registered manpower. From this starting point, the IPR will evolve according to the future manpower contributions to the Common Codes (as the manpower reporting is very different in ALADIN and HIRLAM, some common reporting should be defined for the future).
Most HAC/PAC members found it a good solution (the legal experts of the NMSs should however check the possibility of floating IPR and voting rights). Radmila agreed with this proposal since this should still be discussed within LACE.
Philippe will refine the proposal for the starting IPR and their evolution and this will be proposed to the next GA/C (or Autumn 2017 HAC-PAC if this meeting occurs).

Regarding the governance issue, the HAC/PAC proposed to agree first on the aim, missions and the scope of the collaboration in the future consortium; then, a manageable governance should be sought, to achieve these goals at reasonable costs.
HAC/PAC agreed to create a Working Group to propose a definition of the ToR of the single consortium. The Working Group will be composed of 6 persons : both ALADIN and HIRLAM PMs and one representative by sub-groups; HIRLAM, LACE, Météo-France and ALADIN non-LACE-non-MF partners should nominate their representative to this Working Group.

5. Research and benchmarking licences

According to the A-H cooperation agreement and following an action decided by the 4th HAC/PAC, Philippe Bougeault, Jeanette Onvlee and Piet Termonia have prepared draft templates for licensing of the shared ALADIN-HIRLAM codes for either research or computer benchmarking/optimization.
The proposed licenses have been circulating by email and discussed. Philippe opened the floor for further comments :
- Bart raised a small concern about point 16 in the research license: PAC agreed to remove it.
- Trond proposed to split the point 10 in the research license into two sentences, in order to make it clearer.
With this slight amendments, the licenses will be proposed for adoption at the next GA/C.

6. EUMETNET/SRNWP issues

Jeanette explained the initiative from the SRNWP/C to involve the SRNWP community in EUMETNET/observation programs. The purpose would be to increase the visibility of the LAM models among the obs community with participation to observation impact studies.
HAC-PAC supported the general idea but asked to be presented a detailed and manageable proposal.

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

For information of the HAC-PAC, Heiner summarised the schedule of the meetings in Krakow (Poland) :

- 21st Nov. 2017 morning : ALADIN GA,
- 21st Nov. 2017 afternoon : LACE and HIRLAM councils in parallel,
- 22nd Nov. 2017 morning : joint ALADIN-HIRLAM meeting.

5. A.O.B.

None.

6. Date and place of the next meeting

The next HAC will be held in Madrid on 17-18 October 2017.
PAC had decided to move their annual meeting from spring to autumn, beginning with the 2018 meeting. Many topics could justify the necessity for the PAC to meet a second time this autumn and to meet with the HAC (RWP, IPR, WG on ToR of the single consortium, …) and the decision to meet again in 2017 should be taken before the end of June.
Thus, the next joint HAC-PAC meeting will either be in October 2017 or in October 2018, to be decided before the end of June 2017.
Radmila proposed to host the 2018 meeting in Prague (CHMI), late October 2018.

7. Closing

HAC Chair thanked the participants for the good discussions and the progress in the convergence and closed the meeting at 17:30.