



**4<sup>th</sup> Joint ALADIN General  
Assembly / HIRLAM Council  
20<sup>th</sup> November 2018  
Zagreb, Croatia**



**Minutes**

*The meeting was co-chaired by the Chairs of the HIRLAM Council (Marianne Thyrring) and of the ALADIN General Assembly (Martin Benko).*

## **1. Opening and welcome**

Martin welcomed the representatives (see Annex 1) of the ALADIN General Assembly (GA), of the HIRLAM Council (C) and the ECMWF observer, for the 4<sup>th</sup> joint GA-C. All Members are represented but Iceland, Lithuania, Morocco and Portugal (IPMA had sent to the GA chair their positive opinion to most important topics on the agenda).

## **2. Adoption of the draft agenda**

**The proposed agenda was adopted.**

## **3. Report and plans**

### **1. Report from the 6<sup>th</sup> and 7<sup>th</sup> PAC-HAC meetings**

As asked by the last joint GA-C in Krakow, the Policy Advisory Committee (PAC) and the HIRLAM Advisory Committee (HAC) held two joint meetings in 2018, in June in Dublin and in October in Prague. The PAC Chair (Daniel Gelens) reported on these meetings (for details, see (\*) the minutes of these meetings) and highlighted the following points:

- Rolling Work plan (RWP) : the new format of the RWP was approved, the realization of the RWP2018 scrutinized (compared with the commitments) and PAC-HAC recommended the approval of the RWP2019;
- Manpower monitoring tool : a new tool was developed by Patricia Pottier; PAC-HAC validated it (and approved the few modifications proposed in the reporting after 6 month utilization); PAC-HAC appreciated the possibility to get clear evaluation of the FTE projected and reported by the teams; the distribution of committed manpower among the Work Packages was also considered as an important asset for resource planning;
- Scope document : The 3rd joint GA-C tasked the PMs, together with PAC-HAC to make proposals on the scope of the future single consortium. The scope WG (ALADIN, HIRLAM and LACE PMs, HAC, PAC and CSSI chairs, PAC MF rep.) met and web-met (Feb.-March 2019) and proposed a draft document that was discussed at the 6<sup>th</sup> joint PAC-HAC, amended there, then distributed to the ALADIN GA and HIRLAM C (June 2018) for comments; the scope WG prepared a new version after summer, that was discussed at the 7<sup>th</sup> joint PAC-

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(\*) A copy of the presentations of the 4<sup>th</sup> joint GA-C, some preparatory documents and some photos are available on the ALADIN website : <http://www.umr-cnrm.fr/aladin/spip.php?article326>.

HAC (Oct. 2018) where PAC-HAC agreed on the proposed scope document with a few modifications; the scope WG prepared an updated version of the document accordingly (this document was distributed as a preparatory document to the joint GA-C); the last PAC-HAC also tasked the scope WG to further reflect on the quality assurance procedures;

- PAC-HAC supported MF proposal to share the code with emerging countries under some conditions raised in the minutes.

**The GA-C had no comment.**

## 2. Report on the 2018 Rolling Work Plan

Piet Termonia recalled the new structure of the Rolling Work Plan as it was approved last year, organised in Work Packages with deliverables and committed manpower. Piet showed some statistics(\*) on its realisation during the first half of 2018 (the realisations are higher than the commitments, probably due to (1) an underestimation of the commitments when committing for the first time the manpower in this newly structured RWP2018 and (2) more accurate manpower reporting with the use of the new monitoring tool). The distribution of the accumulated manpower (either committed or reported) by grouping of Partners (HIRLAM, LACE, Météo-France, FR i.e. ALADIN Partners besides LACE and MF) is very stable, around ¼ for each grouping (23% for HIRLAM and LACE, a bit less for FR while MF take up the biggest contribution).

Then, the 3 PMs (Martina Tudor for LACE, Jeanette Onvlee for HIRLAM and Piet Termonia for ALADIN) made these statistics concrete when presenting(\*) some important achievements among the Strategic and R&D Work Packages.

Radmila would like that the reporting tool includes some “T-code” criterium in order to get statistics on how much of the manpower reported on these R&D achievements has a concrete impact on the Toulouse common code repository.

**Marianne and Martin thanked the PMs for this experimental report and congratulated all Members for these developments that contribute to the ALADIN-HIRLAM common success.**

## 3. Approval of the 2019 Rolling Work Plan

Piet explained that the 2019 Rolling Work Plan (RWP2019) had been looked at by PAC-HAC who had recommended its approval. He showed some graphics(\*) that illustrate how much manpower is committed on the different Work Packages by the 4 groupings.

The GA-C representatives expressed their satisfaction with this very ambitious RWP2019. They would like to have an estimation of the proportion of the RWP where the consortia are effectively working together and they would like to see this proportion increasing each year.

**The GA-C unanimously approved the RWP2019<sup>1</sup>, asked their teams to start working on it and tasked the PAC-HAC chairs to assist the 3 PMs to prepare a more integrated RWP next year.**

## 4. Progress and plans at Météo-France

Claude presented (\*) the progress and plans of MF, with a large focus on the preparation of the upcoming CY43T2 e-suite. The horizontal resolution of all the global NWP applications will be increased (Arpège forecast, 4D-VAR and EPS). For example, the global deterministic forecast will run at 5km resolution over Western Europe, to be compared with 7.5km in the present operational version. Other important ingredients in this e-suite are the improved representation of infrared

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1 *The approved RWP2019 is available on the aladin website : <http://www.umr-cnrm.fr/aladin/spip.php?article321>*

radiance errors (by taking into account inter-channel correlations), the careful tuning of model parameters to the new resolution and the technical modernization in the operational suites.

Claude stressed the arrival of new model outputs in the Arome-France suite, such as visibility and types of precipitation falling to the ground.

Finally, highlights of the possible content of the 2019 e-suite and the mid-term planning were given. A specific aspect for the mid-term is the change of HPC at MF, planned to occur over 2020-2021.

Martin thanked Claude for this very interesting presentation.

Xiachua Yang commented that cycle 46T2 will soon run in an e-suite at MF whereas most HIRLAM partners are still running cycle 40. He hoped that the gap between versions run at HIRLAM and MF will get narrower.

## 5. Progress and plans at ECMWF

Florence RABIER presented (\*) the progress and plans at ECMWF. Since last year, a new cycle has been introduced in operations (Cy45r1), with full coupling of the high resolution forecast to ocean and sea ice, making all systems (HRES, ENS, SEAS) more consistent. A new cycle (Cy46r1) is being prepared for implementation in 2019, including continuous data assimilation, a 50 member EDA, calling radiation every hour in the ensemble and many other developments. This will likely be the last scientific cycle on the Cray before the move of the data centre to Bologna and a new supercomputer currently being Procured.

The scalability programme is in full swing with a new phase of European projects being started and the submission of the preparatory phase of the ExtremeEarth Flagship project in September.

Other major developments include the set up of a pilot phase for the European Weather Cloud, jointly with EUMETSAT, to be discussed at the next ECMWF Council, for bringing the compute to the data.

For Copernicus, there is considerable interest in atmospheric composition forecasts from companies providing services through Apps, and the products are consequently increasing their reach.

The ERA5 reanalysis is being released for the 1979-current period and next year it will be extended to 1950. The multi model seasonal forecasts are now including 5 models from ECMWF, France, UK, Germany and Italy.

Marianne thanked Florence for her presentation and these ambitious plans.

## 4. Governance issues

### 1. Follow-up of the joint declaration

Martin acknowledged the progress on the convergence roadmap since the last GA-C meeting : the major milestones this year were the redaction of the scope document (see point below) and the RWP with its manpower monitoring (already discussed).

**The GA-C had no comment.**

### 2. Scope of the future single Consortium

Marianne proposed the assembly to go through the scope document in order to give the opportunity to all Partners to react on this document and to make sure every Partner understands the same the content of this document. She also proposed to freeze the scope document as it was, but to ask the PMs to take into account the GA-C remarks on the scope document for the further steps.

**The GA-C agreed and went through all the scope document paragraphs. The GA-C agreed on**

**the recommendations below :**

- Introduction: no remark;
- Definitions/dictionary: the PMs were tasked to carefully explain what the Canonical System Configurations are; to elaborate on Quality Assurance; to underline the importance of the interoperability of the 3 CSCs and the ultimate goal of having only one CSC allowing many options; to make sure that Partners can develop their own operations as they need it;
- Generalities: no remark;
- Scope: the proposed scope for the future single consortium and the possible enlargements are approved without further comment;
- R&D activities: in the governance, the GA-C agreed that the PMs should be given more authority to stop some activities when too many parallel developments are pursued at the same time;
- Delivery of new releases of the common codes: no remark;
- Governance: the indications in the scope document for the standing committees and Assembly were accepted, with a modification for the Assembly (the Directors should meet twice a year at the beginning of the single consortium), and the important comment that the PAC should meet only when requested by the Assembly; the PMs were tasked to prepare a full proposal for the governance and management of the consortium;
- Voting rights: no remark;
- Management: the collaboration with ECWMF and other Met communities should be added;
- Budget: efficiency should be used as a principle in resource management;
- IPR: for the old codes, it was accepted that the IPRs remain with the current owners; for the new code, the GA-C agreed that the IPRs will be collectively owned by all Members according to a scale based on the global amount of work supplied to the Consortium. In addition, several Members requested that the Consortium develop a proactive approach to Open Source licensing : the PMs were tasked to prepare a document on the pros and cons, and legal difficulties of open source licensing;
- Licensing of the Common Codes: this part may have to be amended to take into account MF proposal for emerging countries (see point 3. below);
- Consistence with the 2016-2025 Strategy: no remarks.

The PMs (with the help of the scope WG) are tasked to meet early 2019 and work on a new document taking into account the above points and the scope document. Philippe proposed that they would begin to work on the Memorandum of Understanding (MoU) of the future single consortium and to address the above raised points in the text of the MoU. The GA-C supported this proposal.

**The scope WG was tasked to come back to the next GA-C with :**

- **a proposal for the MoU (based on the scope document with the above remarks),**
- **an analysis of the pros, the cons, and legal difficulties of the open source licensing for the new codes.**

### **3. Possibility to provide the shared ALADIN-HIRLAM codes to NHMS from non-European emerging countries**

Anne introduced MF proposal of sharing the ALADIN-HIRLAM successful experience on NWP with emerging countries, on a step-by-step process and on a case-by-case basis, with different options depending on the capacity of each emerging country (training the local teams, helping them to run a forecast model locally, going to DA at a later stage, with the possibility that they might ultimately apply to become acceding members if they wish). The modalities have to be agreed between the ALADIN-HIRLAM Partners and ECMWF.

Both the ALADIN GA and the HIRLAM Council approved the approach taken by MF and agreed with the PAC-HAC recommendations : **agreement on this proposal as long as (1)** this would not

put an extra stress (manpower, money) on the consortia **(2)** the decision would be taken on a case-by-case basis by the GA-C and ECMWF Council **(3)** the resources necessary to train and support these NMSs would be carefully estimated and billed (or ensured through the development projects). The GA also added a condition on the IPR: **(4)** to respect the IPRs of the codes as they are currently defined (or will be agreed on in the future single consortium).

**Many representatives expressed their strong support to this initiative and pointed the importance of offering training and support to emerging countries** (not letting them only using the code as a black box).

Florence explained that, to get ECMWF agreement, a written detailed proposal should be prepared by ALADIN-HIRLAM Partners. Then MF, as Member State of ECMWF, will formally propose to present this document at the ECMWF Council who will decide.

**The PMs, together with the scope WG, are tasked to prepare such a document and to propose it to the PAC-HAC and the GA-C for approval within ALADIN-HIRLAM Partners.**

#### 4. United Weather Centers (UWC)

Marianne presented the purpose (operational cooperation) of UWC and its development in 2 steps and 2 dimensions (from 2022 to 2027 an operational cooperation in 2 consortia : UWC-east and UWC-west; 1 consortium after 2027). As seen from UWC, the relation between UWC (operations) and HIRLAM-ALADIN (R&D) is built on 3 principles :

- UWC implements its operational configurations together, irrespective of East/West constructions;
- Development towards operational model systems is carried out in the ALADIN-HIRLAM collaboration;
- It is UWC intention to share the results of balancing the operational and R&D needs for a specific CSC with the entire ALADIN-HIRLAM consortium.

The question of the possibility for ALADIN-HIRLAM partners, currently not in UWC-east nor UWC-west, to join UWC in the future was raised. Current UWC members did not close the door to any discussion with possible candidates. **The UWC MoUs and MetCoop Agreement have been made available on the webpage<sup>(\*)</sup> of the 4<sup>th</sup> GA-C**, for the members interested in knowing more about UWC.

Martin asked about the status of UWC in the future ALADIN-HIRLAM single consortium. Jeanette answered that HIRLAM and UWC were working on this point, trying to define separate tasks and clear mandates.

#### 5. Date and place of the 4<sup>th</sup> joint ALADIN GA / HIRLAM Council

The next meetings will be held in Istanbul, according to the following schedule :

- 16 December 2019 afternoon : ALADIN GA,
- 17 December 2019 morning : LACE and HIRLAM Councils in parallel,
- 17 December 2019 afternoon : joint ALADIN-HIRLAM meeting,
- Joint dinner on 17 December evening.

The HIRLAM Council also expressed the need for a joint meeting with the ALADIN GA before summer, to closely follow the work with the convergence actions and the development of the MoU of the future single consortium. HIRLAM Council invited ALADIN General Assembly to join the (first half of) their next meeting in Lisbon on the afternoon of Friday 28 of June after the ECMWF Council. The GA will decide on this additional joint meeting via email consultation.

## 6. A.O.B

None.

## 7. Closing

The Chairs thanked the GA-C for the fruitful discussions and closed the meeting at 18:00.



*Participants of the 4<sup>th</sup> joint ALADIN General Assembly and HIRLAM Council*

## Annex 1 : Participants

COUNTRY	NMS	Participants
ALGERIA	ONM	HAMADACHE Bachir, MOKHTARI Mohamed
AUSTRIA	ZAMG	WANG Yong
BELGIUM	RMI	GELLENS Daniel (PAC)
BULGARIA	NIMH	BOGATCHEV Andrey
CROATIA	DHMZ	IVANCAN-PICEK Branka, BAJIC Alica, HORVATH Kristian, STENESIC Antonio
CZECH REP	CHMI	Mark RIEDER, Libor CERNIKOVSKY, Radmila BROZKOVA
DENMARK	DMI	Marianne THYRRING (C chair), Xiachua YANG
ESTONIA	EEA	Taimar ALA
FINLAND	FMI	Sami NIEMELA
FRANCE	MF	Anne DEBAR, Philippe BOUGEAULT
HUNGARY	HMS	Mihaly SZUCS
ICELAND	VI	
IRELAND	Met Eireann	Eoin MORAN
LITHUANIA	LHMS	
MOROCCO	DMN	
NETHERLANDS	KNMI	Gerard van der STEENHOVEN
NORWAY	Met.no	Roar SKALIN
POLAND	IMGW	Zbigniew USTRNUL
PORTUGAL	IPMA	
ROMANIA	NMA	Florinela GEORGESCU, Mirela PIETRISI
SLOVAKIA	SHMU	BENKO Martin (GA chair)
SLOVENIA	EARS	BERGANT Klemen ; Jure JERMAN, Jure CEDILNIK (PAC)
SPAIN	AEMET	Jose Antonio FERNADREZ MONISTROL
SWEDEN	SMHI	Stefan NILSSON, Bodil AARHUS ANDRAE, Heiner KÖRNICH (HAC)
TUNISIA	INM	Hatem BACCOUR
TURKEY	TSMS	Volkan Mutlu COSKUN, Ande TURKYILMAZ, DALKILIC Tayfun
ALADIN / PM		Piet TERMONIA
HIRLAM / PM		Jeanette ONVLEE
LACE / PM		Martina TUDOR
CSSI CHAIR		Claude FISCHER
ALADIN / ST	GA sec.	Patricia POTTIER
ECMWF obs.	ECMWF DG	Florence RABIER