

2nd Call for applications to the management positions of the ACCORD Consortium Area Leaders (AL) for Physics and Meteorological Quality Assurance

After some 30 years of cooperation, the ALADIN, LACE and HIRLAM Numerical Weather Prediction Consortia have decided to reinforce their collaboration. At the end of 2020, twenty-six European National Meteorological Services have become Members of a new single Consortium, ACCORD, under this **Memorandum of Understanding – MoU** - (http://www.umr-cnrm.fr/aladin/IMG/pdf/mou_alh_for_signature.pdf) covering the period 2021-2025.

The Members have adopted an ambitious **2021-2025 Strategy** (<https://www.umr-cnrm.fr/aladin/spip.php?article363> – **Strategy document**) outlining their objectives in meteorological and computer science for this time period. The outcome of this Strategy has been reflected in the **Rolling Work Plan - RWP2021** (<http://www.umr-cnrm.fr/aladin/IMG/pdf/rwp2021.pdf>) describing the work packages for 2021.

To coordinate the work and deliver the objectives of the Strategy, the Consortium has defined a Management Group composed of:

- the Programme Manager (the “PM”)
- the 3 CSC Leaders
- the Integration Leader: this specific position will be held by a staff of Météo-France
- **8 Area Leaders (“AL”)**
- Supporting functions:
 - o the Scientific Secretary: Météo-France defines its own procedure for the Consortium Scientific Secretary
 - o the Coordinator of Network Activities (“CNA”)

In a specific Call for Applications issued in the summer 2020, four management positions have been already appointed:

- Claude Fischer from Météo-France as PM,
- Jeanette Onvlee from KNMI (Netherlands) as Harmonie-Arome CSC Leader,
- Martina Tudor from DHMZ (Croatia) as Alaro CSC Leader,
- Eric Bazile from Météo-France as Arome CSC Leader.

A 1st Call of Applications for the 8 Area Leader positions, as well as for the Coordinator for Networking Activities, has been undertaken with a deadline set on 15 January 2021 (http://www.umr-cnrm.fr/aladin/IMG/pdf/call_for_applications_al_cna.pdf). The applicants from this 1st Call will be interviewed in February 2021.

For two positions, namely for the Physics and Meteorological Quality Assurance Areas, the Assembly has decided to reopen the Call for Applications in a short term. The potential candidates are invited to refer to the description and Terms of Reference below.

Call for applications for the positions of the Area Leaders of the new Consortium

The Area Leaders work under the leadership of the PM on the implementation of the Strategy. In accordance with items 106-108-109-112 of the MoU, the Area Leaders are responsible for the modernization of the code and working methods, which should lead to increased modularity and interoperability across CSCs.

In their activity, the Area Leaders will respect the continuity of the CSCs especially in the initial phase of the MoU. However, Area Leaders are not responsible for the specific implementation of the scientific developments in each CSC, that remains the responsibility of the CSC leaders.

Each Area Leader function is corresponding to a minimum commitment of 0.5 FTE and is delivered by one Consortium Member. Applications are required to be sent as personal application by one staff (the Applicant), with backing from the Member institute employing the staff. The MoU foresees the possibility that the whole Area Leader commitment can be split among the Applicant and one supporting person from the same employer. In the case where the personal manpower commitment of the Applicant remains lower than 0.5 FTE, an explanation about how the function is proposed to be fully occupied must be provided (name of additional staff, total manpower commitment reaching 0.5 FTE, organization of the tasks within the function). However, a single personal application fulfilling the whole function will receive a higher priority in the ranking and selection process (see below).

Applications are invited according to the following calendar:

- Issue Call for Applications: 28 January 2021
- Deadline for Applications: 11 February 2021 (incl.)

Conditions to be eligible to these positions are the following:

- You must be already employed by your Institute or show a commitment that you will be employed if selected.
- Your application must be supported by your Institute.
- Good knowledge of English.

How to apply:

Send your application to Patricia Pottier from Météo-France: patricia.pottier@meteo.fr

Your application should consist of:

- a letter of motivation
- a CV
- a letter of support by your Institute
- if the function is proposed to be fulfilled with the support of additional staff, then the letter of support should contain information about how the responsibility and tasks are proposed to be shared. The names of the additional staff should be listed with CV

Selection process:

The applicants will be interviewed by a selection panel composed of the PM, the 3 CSC Leaders, the chairs of STAC and PAC, and an external adviser on human resources (the Head of Personnel of ECMWF). The selection panel will rank the applications per Area, taking into account the way the function is proposed to be fulfilled (eg. single versus multiple staff proposal), the level of expertise, the interpersonal skills of candidates, the coherence of the vision and motivation of the Applicant with respect to the strategical goals and ToRs of each Area Leader function.

The final definition and the attribution of the Area Leader functions will be done by the Assembly. The Assembly will attribute all Area Leader functions simultaneously, taking care of geographical balance.

The general and specific Terms of Reference for the 2 Area Leaders are provided hereafter.

The Area Leaders

The Area Leaders are responsible of implementing item 31 of the MoU:

- either lead the corresponding area, that is define a long term scientific and architectural vision for the modernization of the code, including normative aspects, increased modularity and interoperability and take full responsibility of the delivery or the corresponding developments,
- or conduct specific actions on CSC interoperability, as decided by the Assembly and for a limited duration.

Area Leaders are not responsible for the specific implementation of the scientific developments in each CSC, that remains the responsibility of the CSC leaders.

The Area Leaders provide input for all documents prepared under the responsibility of the PM for the governance bodies.

The Area Leaders also contribute to the preparation of the Strategy.

The Area Leaders may be called by the PM to make presentations to the governance bodies in their area of expertise.

The Area Leaders attend meetings of the MG when their area of expertise is needed. For their evaluation of scientific novelty and implementation in the common codes, they will take into account the desired synergies between the three CSCs, their interoperability and ultimately reduction of number.

Personal skills:

- Excellent knowledge of the state-of-the-art scientific issues in their field of responsibility. Recent scientific publications, technical notes or participation in the coordination of activity in their field would be an advantage
- Good knowledge of cross-cutting scientific issues in other fields of activities of R&D in the Consortium
- Good knowledge of the code modernization and interoperability aspects in their field, or a firm intention of concern and participation in these aspects
- Good knowledge of the ACCORD NWP codes, including the process of building new code versions and the related challenges (or a firm will to be in touch with these issues)
- Good communication in an international context
- Ability for team work

The specific Terms of Reference of each Area Leader are listed hereafter.

Area Leader of Physics (Length of mandate 2 years, to be redefined after the first tasks are complete)

- The Physics Area Leader will execute a number of specific actions on topics that are transversal to the three CSCs:
 - coordinate the creation of an inventory of the blocking points for convergence between the CSCs and analyze and define by 2023 a road map for convergence (PH9),
 - coordinate actions to increase the interoperability at the level of the exchange of parameterizations schemes between the different CSCs,
 - analyze and coordinate the development of the code restructuring needed for the implementation of 3D physics.
- The leadership of the physics of the CSCs will remain in the hands of the CSC Leaders, as described in work packages PH1, PH2, PH3 and PH5 in the RWP.
- The PM will in principle be responsible for all transversal issues between the three CSCs (specifically, PH6-PH10 and HR1 in the RWP). He/she may appoint additional experts to address specific transversal issues, in particular concerning the redaction and execution of the related work packages in the RWP.

Interoperability issues are situated in the physics packages of the different CSCs. In order to ensure that clear and concrete convergence steps will be made, the mandate of the Area Leader for physics will be, in the first years, deliberately limited to a few very specific technical and scientific tasks, while keeping the scientific progress of the physics parameterizations of the CSC's still under the responsibility of the CSC Leaders. In practice he/she will take responsibility for the first strategic physics goal *to work towards a greater level of interoperability (enabling exchange of individual parameterizations across CSCs)*. Additionally he/she will be responsible for the interoperability aspects of the new 3D code solutions needed for the second strategic physics goal, i.e. *to develop the model physics to be fit to represent the hectometric scales*. This will allow the Physics AL to work in the first two years with a clear deliverable in mind and guarantee that *by 2023 a roadmap for further convergence can be delivered*. The expectation is that the content of the roadmap will take into account the relative ambition (difficulty) of the interoperability tasks, leveraged by their expected benefit for collaboration and new ambitions across the future Consortium.

The roadmap will be scrutinized and approved by the various governance bodies of the Consortium. The Assembly will then decide whether the Physics AL position will be extended or redefined, and possibly reopen the position. The Terms of Reference of the Physics AL will be reviewed, in accordance with the decisions in the Governance bodies, by 2023. The Physics AL will then implement it and lead the area in more general terms with joint scientific and technical goals in mind.

Area Leader on Meteorological Quality Assurance (Length of mandate: 5 years. If the candidates or the institutes cannot commit to 5 years, they can commit to 3 years, the 3rd year being used as a liaison period with the next AL to be designated after reopening the position)

- The Meteorological Quality Assurance Area Leader will lead the Meteorological Quality Assurance Area during the period of the MoU.
- He/she will be responsible for the redaction and the execution of the MQA work package and of the RWP. He/she will

- coordinate an iterative consultation process to collect requirements and assess what needs to be done to make HARP more attractive as a common tool; (MQA1)
- coordinate the developments of common methods/metrics with focus on methods for spatial-temporal verification and high impact weather; (MQA2)
- carry out verification of physical processes to aid model development, including the necessary observations and their quality. (MQA3)
- He/she will strengthen the synergy with DA team on observation format and quality control.
- He/she will strive to enhance the user-developer interaction: both R2O (didactic) and O2R (model weaknesses, cases).