

Roadmap for the new consortium and risk analysis

1. Timeline in order to sign the MoU at the end of 2020 and smoothly start operations of the new Consortium

(the actions completed are underlined in green):

- Mid-November 2019: Start preparation of Strategy meeting
- December 2019 GA/Council:
- February 2020: Aladin-Hirham Strategy Meeting
- Shortly after the Strategy meeting: The CWG will draft a proposal concerning the priority objectives for the next 5 years and the corresponding list, attributions, and ToR of all Area leader positions.
- May 2020 HAC-PAC: Formulation of the final MoU proposal (including the list and attributions of Area leader positions).
- June 2020 GA/Council: Last modifications and approval of MoU formulation, including the definition of all Area leader positions. If necessary, final discussion and decision on procedures for the selection of all management positions.
- July 2020: Call for applications for PM and the three CSC leaders. Deadline for application: 15 September 2020
- September/mid-October 2020: Interviews of candidates to PM and CSC positions, recommendation by selection panel (deadline: 15 October 2020), confirmed by correspondence by the GA/C.
- November 2020: Call for applications for other management positions (including the two positions attributed to Météo-France, Integration leader and Scientific secretary).
- November 2020 GA/Council: Signature of the MoU, election of all Officers of the governance bodies of the new Consortium.
- February 2021: Interviews and selection of candidates for other management positions.
- Spring 2021: Start of the work of the new consortium under the new management structure.

2. Risk analysis of the convergence process and options for mitigation

~~**Risk 1: Difficulties in agreeing key objectives during or shortly after the Strategy meeting**~~

~~**Risk 2: Delay in MoU preparation due to divergences between Members on non-scientific aspects (e.g. finances, IPRs, settlement of disputes, voting majorities, etc...)**~~

Risk 3: Lack of good candidates for PM and CSC leader roles

Mitigation plan: The organization of the Strategy meeting with a large contribution of all staff aims at limiting the risk that agreed key objectives are perceived as unrealistic by potential candidates.

In the event that the selection panel receives no good application for these roles, he may interview some of the (non-applying) potential candidates to understand their reasons for not applying. They may have reservations on the formulation of the key objectives or on the agreed structure of the consortium management. Depending on the nature of these reservations, the GA/C may task the CWG to develop new options for the collaboration. An extension of the current MoUs and cooperation agreement would then be necessary.

Risk 4: Lack of good candidates for other management positions

Mitigation plan: as above.

The PM and the CWG may interview some of the (non-applying) potential candidates to understand their reasons for not applying. They may have reservations on the formulation of the ToR of the area leader positions, on the formulation of the key objectives for the consortium, on the adequation of half-time position with the work to be done, etc... Depending on the outcome of these consultations, the PM and the CWG may need to develop a new proposal for the management of the new consortium.

Risk 5: Delay due to Covid-19 crisis

Mitigation plan: The CWG and the PAC-HAC recommend to replace physical meetings by video-conference.

We are already largely using video-conference meetings to proceed with the time-line, i.e. ALADIN Wk/HIRLAM ASM, HMG-CSSI meeting, and PAC-HAC meeting. Although they were successful, the workload of the support team and the equipment needed to organize such events should not be minimized. Next GA-C is also proposed to be organized in video-conference. After the good experience during the HL-wg video-meetings, the CWG is confident that next GA-C could be organized in an efficient manner.

Risk analysis of the ALH strategy 2021-2025

Here we provide a brief analysis of what the CWG perceives as the main risks for the execution of the ALH strategy 2021-2025. One of the main source of uncertainties and ensuing risks is the evolution of the computing infrastructures. The strategy document itself contains already a detailed analysis of this issue and proposes a strategy to mitigate these risks by introducing a new, transversal Area called *Addressing future evolutions of software infrastructure*. Apart from addressing the technological uncertainties, it also recognizes an existing lack of skilled manpower within the ALH community in the domains of dynamics and code engineering. This issue was also raised during the joint HAC-PAC meeting that was held on 15 May 2020.

The strategy proposes two approaches to mitigate these risks:

1. ECMWF was very successful in obtaining external funding to hire experts in this domain and developed a long-term vision as part of the Scalability Program. This ALH strategy will align with that vision by strengthening the link with ECMWF on the proposed technical solutions.
2. Secondly, the strategy proposes a few concrete topics where training will be organized urgently, within the first stages of the 2021-2025 period.

In order to anticipate the issue of the expertise, the CWG sent out an inquiry to the HoRs and LTMs of the ALH community, with the specific question, to which of the strategic goals of the draft strategy document the Member would be willing to invest during the strategy period, either by existing expertise or by willingness to investigate in new staff. The result is shown in the attached table 1. Please note that this inquiry does not imply any commitment at this stage. The table is nevertheless instructive. It confirms the lack of expertise in the first two areas ("*Addressing future evolutions of software infrastructure*" and "*dynamics*"). Special attention should be paid to convince and motivate the participating Members to commit to the corresponding work packages of the future Rolling Work Plans.

Lastly, the low interest in contributing to EPS5, *EPS collaboration and working environment aspects*, is not considered by the CWG as a fundamental risk. Indeed, there are partners in the community, either individual ones or larger groupings of individual Members, who have strongly invested in the past in scripting and cycling techniques for EPS. If this strategic goal EPS5 will not fully materialize, the work may become suboptimal but it will not stop the ongoing progress. Nevertheless, this may become a point of the attention for the future management.

