

# MAIN CONCLUSIONS OF THE SO-CALLED “AAA MEETING”, PRAGUE, 13/2/2004

**(document prepared by Jean-François Geleyn and sent to ALADIN directors and correspondents on February 25)**

- The proposal for clarification of the terminology was accepted, with the replacement of the name ‘TOOLBOX’ by the name ‘INTERFACES’ for one of the sub-projects.
- It was decided to disconnect for the time being the launching process of ALADIN-2 from the HIRLAM problematic.
- The need for the ALARO 'intermediate step' between two transitions (on the way from ALADIN to AROME) was confirmed by the nine Partners attending the meeting (representing a majority of the ALADIN workforce). The first transition will be in the source code (ALADIN => ALARO) and it shall be harmonized within Partners as much as possible, also because of the associated change in file structures and of the externalisation of ISBA. In its standard version it should also imply some additional costs, for the parts where one will know that the Meso-NH physics is worth adapting to any scale (at least microphysics and turbulence, quite likely). The second transition will be in the cost (CPU and memory) of going to the scale of resolved convection and of 3D turbulence and will be on individual choices of each Partner, depending on its mastering of the new tools and on its computing capacity. The separation between these two transitions shall make the whole exercise as smooth as possible in a still coordinated ensemble. Indeed some evolution of the NWP applications during the ALARO intermediate step will be encouraged, especially if some progress happens in the treatment of the 'grey zone' problem.
- The question of "critical mass of manpower" was raised, with the comment that so many subprojects might cause an exaggerated spread of the current human resources, something that may even slow down the ALADIN-2 progress. ALADIN Partners were again made aware that the chosen "intermediate step" between two transitions will imply some additional effort, but they judged it still appropriate to their situation with respect to AROME and ALADIN.
- The respective role of operational codes, prototypes and Meso-NH software in the R&D of most ALADIN-2 actions was clarified, even if some uncertainties can only be treated later.
- There exists now a rather detailed ALADIN-2 workplan for 2004 that should:
  - be the basis for first urgent actions;
  - help to a reformulation of the strategic document, this leading, with the help of Slovenia, to a political translation of the now chosen orientations (effort targeted for the next Assembly in Split);
  - allow the quick mobilisation of especially dedicated manpower transversal resources fostered by Meteo-France and LACE, in order to reach the missing critical mass of coordination and supervision work, in particular on ALARO.
- The 'tool-box' and 'convergence' basic principles still exist to structure the ALADIN-2 actions, but they should be taken more pragmatically. In short, their concretisation should be sought only when really necessary (physics-dynamics interface and coupling file creation vs. use, for example).
- Concerning the question of a potential internal competition between solutions either coming from differing origins or meant for different purposes, only three areas in the physics of ALARO were identified as really requiring the security of separate efforts (deep convection,

macro vs. micro physical aspects in the 'grey-zone' and shallow convection), this leading to a small but unavoidable overhead. Elsewhere one should rather aim at specific declinations (e.g. for efficiency and stability at long time steps) of the same 'AROME inspired' software. Dynamics and data assimilation are not supposed to require the same level of attention on this particular point.

- Priorities within the preliminary synthetic planning document were examined, work force was redistributed whenever necessary (except that the problem of lateral coupling is obviously undermanned, at least for the time being) and the harmonisation with the LACE plan required the suppression of two items of the latter (plus the consequences of the above-mentioned transversal adaptations). The individual cases of people having to change topic as soon as feasible were also scrutinised whenever identified. Dominique Giard will produce an up-to-date version of the 2004 plan for topics put in 'priority one', the other (non-discussed) items being left in Appendix.
- Concerning the preparation of the SplitAssembly (29-30/10/04):
  - one aims at a one and a half day meeting;
  - steps should be soon taken to ensure the best possible level of attendance, given the importance of the event;
  - it is assumed that the work plan coming out of the present Prague meeting helps extending the ALADIN current official scientific plan until the end of the second ALADIN-MoU (hence one can concentrate at the Assembly on the other issues, also by strongly diminishing the time devoted to non-urgent standard agenda items);
  - on top of the definitive anchoring of ALADIN-2 (see above), the follow-on process of the ALADIN MoU should be central to the discussions at this Assembly; given the link between this and the ALADIN-2 planning and supervision, it is expected that the outcome of the AAA-meeting will allow compiling a list of important modifications necessary to the MoU. After discussion by Directors, this could be converted in Split into draft proposals for the official replacement of the MoU (targeted to the Bratislava Assembly of Fall 2005).
- There is a need for more gatherings of the type of community assembled at the occasion of this 'AAA' ad-hoc meeting. This should mainly happen at the occasion of other events (ALADIN Workshop, EWGLAM-SRNWP, Assembly). Additionally each big item of the working plan should have a coordinator and/or contact points. All this should progressively lead to a new scientific steering structure for the new project.
- One ought to extend the scope of the next ALADIN workshop: discussion sessions are required on a few well-targeted topics, and one could extend the already identified main one to "developments and plans in physics", in order to attract more scientists.