

What type of cooperation do ALADIN and HARMONIE need (or hope)?

(The ALADIN Programme Manager, Toulouse, 24-25/9/08)

- Guideline for the presentation is physics, but the thoughts are mostly general
- The HARMONIE case is treated first, despite being here ‘off topic’
- The ALADIN point of view is difficult to give because of the rather diverging views between, e.g. CNRM and LSC (*in order not to go to the level ‘M-F’ vs. ‘others’ which is hopefully less contrasted*)
- Despite being quite dimensioning, the Meso-NH legacy issue is intentionally not treated here

What is HIRLAM doing and expecting?

- HIRLAM accepts that, via the far reaching consequences of a code collaboration centred on the dynamical core, the backbone structure of HARMONIE comes from IAAAA.
- HIRLAM however wishes to be taking full part to the contributions to ‘HARMONIE’ and to its steering.
- This leads to synergetic efforts in DA, dynamics and EPS.
- Concerning physics HIRLAM has a double attitude:
 - Wait and see (via home testing of various solutions) for a ‘structural’ evolution which they long for;
 - Adapt to the current complex situation when they nevertheless decide to contribute (thrusts in 3 directions!); they are ‘internally’ used to adaptability.
- The decision making structure is the most truly critical aspect, and one on which the HIRLAM management group has definite concerns. They would have serious problems with a situation in which any single group would have a veto on new developments to be included, rather than one in which the partners jointly agree on an equal basis.

What are ALARO-0 involved Partners proposing?

- That the search for CPU-saving solutions finds back a transversal role within all Consortium actions.
- That, even without full interoperability, the reliance on modularity-flexibility allows each Partner to tune and to dimension its applications to its specific needs.
- That the level of ‘reliance on norms’ (scientific and/or technical) increases back, in order to facilitate the decentralised work, promoted by M-F in 2003 and to which they adapted since then, without all tools for that.
- That the work on the ‘grey-zone’ is recognised as sufficiently promising to be reintegrated, not only in operational plans, but also in a unified view for research.

What are ALARO-0 involved Partners fearing?

- That the “convergence” issue is further treated on the basis of ‘forced juxtaposition’ (from either side) rather than of ‘common future actions’.
- That the manpower issue is systematically treated in a way that may be summarised like *‘we do not have any margin but you do have some; it is anyhow impossible to converge now on a common code; hence, if you really want “convergence”, then create a third code, since we do not want any concerted adaptations concerning two of them!’*
- That the decision processes lose transparency (a HIRLAM fear) or further forget the scientific level.

Looking ahead

- Find back a way to have common (and hence higher) ambitions on physics in HARMONIE, rather than juxtaposed ones on ‘processes’, ‘algorithmic’ and ‘diagnostics’ (respectively AROME, ALARO and HIRLAM, if grossly simplifying).
- Stop hiding true discrepancies through the reduction of their scope to very specific details. One day the EUMETNET ‘Interoperability’ Programme will touch core NWP software and it would be a shame if HARMONIE is the least prepared entity for that situation.
- Try to make the most of the existence of TWO federating thrusts: the one of ‘scale-independent solutions for processes’ and the one of ‘multi-scale handling’ algorithmic. They MAY become additive.

How?

- Relax the symmetric (and mutually enhancing) constraints created by:
 - The issue of ‘code intangibility’ for AROME and ARPEGE;
 - The issue of ‘obliged data flow’ for ALARO.
- Create preventive mechanisms for avoiding that new developments fuel “divergence”.
- Involve HIRLAM as a true ‘third party’ to these steps and consider even wider ‘sources of ideas’.
- Start considering common work as a chance rather than a burden.