

WORKSHOP ON SYSTEM COLLABORATION

Toulouse, 13-14-15 May 2002

a short report by Filip Vana and Claude Fischer

ORIGIN :

- HIRLAM initiative
- a call for SRNWP cooperation with possibly EU fundings

GOAL :

collaboration of European projects in the area of NWP development to avoid duplication of work

PRESENTATIONS :

- description of present or planned operational suites, with their own technical constraints : (UKMO, DWD, Switzerland, HIRLAM, LACE, ALBACHIR)
- already existing projects of collaboration (PRISM, DATAGRID, EUROGRID, AROME, WRF)
- software development (OLIVE)
- code optimization (WRF, NCEP model)
- coding tools and rules

WORKING GROUPS :

• Internal coding standards

- make the code as modular as possible (ex : dynamics and physics "plug-compatible", automatic code generation)
- technical conventions (ex : flux from physics, grid definition, grid interpolation, rules about σ)

• External coding standards

- observation formats
- graphics
- version management

• User interfaces

web based (prepIFS, OLIVE) versus *Tcl, Tk based* (UKMO)

--> none of existing tools is general enough

GENERAL IMPRESSION :

- need for harmonization is recognized
- need for setting new rules for system development is also recognized (plug-compatibility, σ exchange)

BUT :

- the precise goals are not yet clear
- no sufficient standards exist
(? should be based on ECMWF software ?)
- the 4 European groups are at very different states of developments :
 - + UKMO : new dynamical model but recoding of the control routines
 - + HIRLAM : movement to a new NH system, general recoding considered
 - + ALADIN : middle of its lifetime
 - + COSMO : LM has just become the new operational model

OUTCOMES :

1. ask users about their real interest
2. discussion at the next EWGLAM/SRNWP meeting, with the proposal to set up a specific working group on "System Collaboration" in the SRNWP frame

CONCLUSION : THINK ABOUT COMPATIBILITY