

**Draft Minutes**  
WG3 on system aspects  
held besides the 24th AHW; April 10, 2014

Agenda:

1. Bratislava HARMONIE system working week
2. How the bugfixes of CY38 should be treated?
3. Approach to CY40T1
4. GRIB parameters
5. Lack of common testing
6. Supermarket of tools
7. Removal of LFI file format from SURFEX in-line

1. Bratislava HARMONIE system working week

The HARMONIE system working week in Bratislava will be organized in the second half of October 2014. Olda shall check with Ulf and other HIRLAM system people their availability and fix the dates asap. The original topics were (i) installation of HARMONIE including 3DVAR on IBM platform@SHMU and/or @ECMWF to train newcomers, and (ii) to install missing ALADIN pieces into HARMONIE (i.e. blending). Piet insists that ALADIN people work with CY38T1\_bf03 (as only the porting of this version is coordinated), not the CY38h1. Ulf reminded that pure CY38T1 doesn't work under HARMONIE. It is clearly understood that to make the T-version work under HARMONIE is responsibility of ALADIN people. People willing to attend the Bratislava WW are invited to take part in HARMONIE system training to be organised in Sept in Norrkoping in person or through a web access).

2. How the bugfixes of CY38 should be treated?

The potential bugfixes of CY38 should be treated as a harmonie branch => documented and in repository. MF will provide - as usually - an incremental bugfixes of the corresponding code release version. It is asked that only one person is a contact point to collect the bugfixes, to maintain the corresponding GIT branch and to make sure the branch is properly phased to the new code versions. LACE ASC (Olda) should be contact point. The issue of "open/technical" access to GIT repository is to be checked. HIRLAM system experts should have it. It was asked that the possible discussion on the bugfixes is properly channelled and shared with responsible people on all sides.

3. Approach to CY40TY1 was discussed under item 5.

4. GRIB parameters

Definition and (local) usage of GRIB parameters table was discussed. Local deviations of grib parameters table exist among NMS. HIRLAM tries to harmonize with ECMWF (for grib\_api). In ALADIN the gribeuse software is used, where code parameters between 128 and 255 are reserved for local usage. It was agreed that the wiki link of HIRLAM and the template table will

be sent by Ulf to Mariska (Aladin ACNA), to be distributed to Aladin NMS. Tables will be collected and sent to ECMWF for the next grib\_api release.

#### 5. Lack of common testing

The question of lack of common testing of new cycles has been discussed in Ankara, but there was no progress observed since then. HIRLAM team re-explained that their priority is to always use the newest possible code; and common testing of it would avoid duplicated work. ALADIN team re-explained that their usual practice is to wait for the official code version validated and declared by MF. Then the individual porting and validation by Partners begins. MF re-explained that for many reasons the validation of assimilation configurations is always postponed after the model part, and it must begin with the ODB validation (ODB arrives as a .tar).

It was agreed that the general platform/common test bed for both technical and scientific validation would be very useful. To start with, Roger will do small inventory how NMS actually do the validation. It was required that namelists, log files from runs, ODB samples are available from MF's tests. It was reminded that all the phasing reports and phasers' meetings summaries are available @LACE forum. It was mentioned that a "historian" of ALADIN cycles is needed to record which problems/bugs occurred and how it was fixed/solved, in order to avoid that particular problem to happen again.

#### 6. Supermarket of tools

Following the presentation of Roger at AHW the idea of sharing the existing tools around the model was discussed. It was proposed that all existing tool should be collected under common repository (HIRLAM?) and documented. In this way also the visibility of these tools is ensured. The tools based on executable should go under gmckpack (alternatively they could be provided with make file).

The inventory of existing tools on RC LACE web page should be consulted (<http://www.rclace.eu/?page=106>)

Roger will write a document summarizing the presented tools. Ryad will write "How to add new executable under gmckpack". Trygve will write a wiki about SODA. There exists a GIT repository of R-libraries for HARP.

#### 7. Removal of LFI file format from SURFEX in-line

A code development by Philippe Marginaud exists that allows SURFEX in-line to write out files in FA format instead of LFI. (remark: other formats are still used in off-line SURFEX). A set of converters also exists to go from/to LFI<->FA, in order to keep backward compatibility. Ulf should check with MUSC users if this wouldn't cause an issue for them. Trygve confirms that for SODA development removal of LFI should be technically transparent. However, the memory requirements to write out bigger files should be checked. The question will be re-open by Claude and Ulf when the coordination of CY41T1 will start.