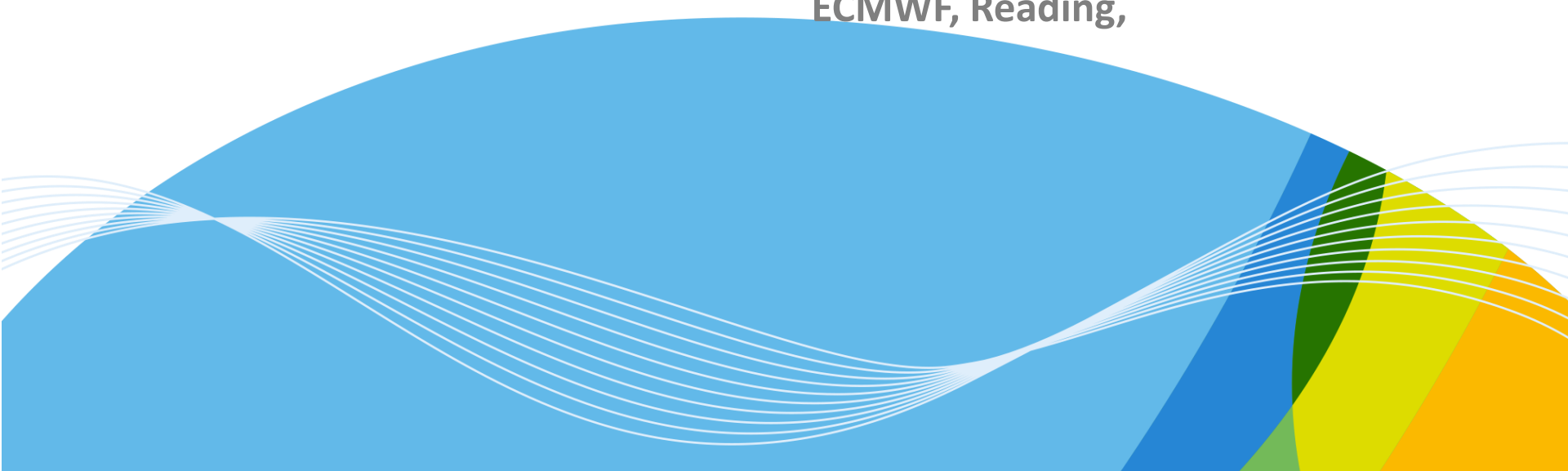FINNISH METEOROLOGICAL INSTITUTE

TOWARDS THE NEW MoU

Joint HIRLAM Council – ALADIN GA meeting: 2 Dec. 2014

HIRLAM Council, 4 Dec. 2014

ECMWF, Reading,

Preparations for the next MoU phase

➢ **HIRLAM Council and ALADIN GA decision: no organizational merge at this stage.**

➢ **Reasons:** different scope, governance, funding and practicalities of respective cooperation:

ALADIN: Essentially a code cooperation: members develop and maintain a common code, while leaving each member free as to how to implement and apply this code for its own purposes.

LACE (subset of ALADIN): has ambitions on regional cooperation beyond the code cooperation within ALADIN. LACE members adhere to common ALADIN commitments, but allocate staff resources and set up a management structure towards these additional ambitions.

HIRLAM: aims to provide for its members a complete setup of code, scripts, libraries and tools for the use of the model in an operational NWP environment, and to ensure its quality: the Reference system (some similarity with LACE).

HIRLAM also aims towards greater operational cooperation (e.g. ensemble forecasting, observation exchange, and common validation and monitoring).
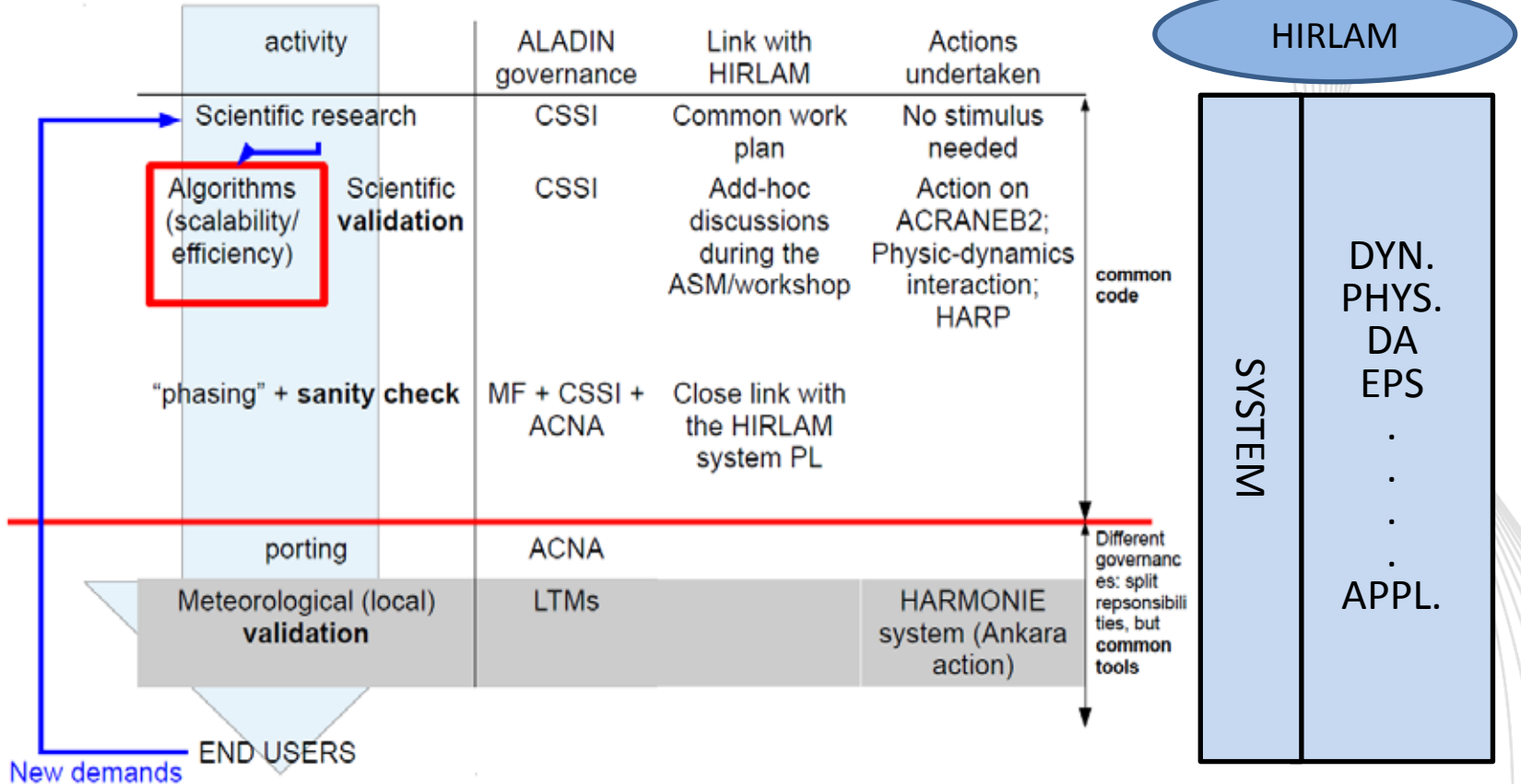
Via the **HIRLAM-ALADIN agreement**, HIRLAM consortium committed to the development and maintenance of a common code (such ambitions not shared with ALADIN partners) .

⇒ **Two consortia will still have separate MoU's** for the period 2016-2020.

=> Both Management Teams: 1st priority for coming years is to **enhance the organization of the complex code cooperation + Data handling, Quality Asuurance, Data policy (TF)**

From science to operations summarized on 1 sheet

activity	ALADIN governance	Link with HIRLAM	Actions undertaken
Scientific research	CSSI	Common work plan	No stimulus needed
Algorithms (scalability/ efficiency) — Scientific **validation**	CSSI	Add-hoc discussions during the ASM/workshop	Action on ACRANEB2; Physic-dynamics interaction; HARP
"phasing" + **sanity** check	MF + CSSI + ACNA	Close link with the HIRLAM system PL	
porting	ACNA		
Meteorological (local) **validation**	LTMs		HARMONIE system (Ankara action)

common code

Different governances: split repsonsibilities, but common tools

New demands → END USERS

HIRLAM

SYSTEM — DYN. PHYS. DA EPS . . . . APPL.

Code cooperation *per se* (activities above the red line) vs. more "downstream" operationally-oriented activities, which may be jointly undertaken within LACE and HIRLAM but which are generally done individually by other ALADIN members (below the red line), though more common tools will be jointly developed (e.g. validation)

<u>Various</u> practical steps towards code cooperation

➢ **Technical planning for implementing code changes in new cycles**: IFS/Arpege coordination meetings with Aladin and Hirlam as observer status
=> facilitate coordination of phasing + communication on long-term evolution of the IFS/AAAH code framework;

➢ **+** Very important wrt. extensive changes from ECMWF **Scalability Programme**

➢ **+ Pre-phasing coordination meetings/webcons:** with Hirlam system staff and M-F to prepare phasings with dedicated responsible persons (cycle master)

➢ These working practices to be continued in the future.

➢ **Towards common tools:** model configuration, testing and validation of new cycles:
  ▪ Joint development of the HARP system for probabilistic and spatial verification;
  ▪ Turkey NMS validation of Cy38 using HIRLAM configuration and validation tools;
  ▪ ALADIN staff got acquainted in Bratislava with those tools helped by the Hirlam system manager to validate Cy38T1 (Coordinating role of ALADIN ACNA).

➢ **Relations with ECMWF have deepened and enlarged**: OOPS, CODE, IFS/AAAH, scalability programme, H2020 project

Time line for new MoU

- **Nov. 2014**: Time line discussed in HAC
- **Dec.**, **Joint Council/Assembly meeting**: First exchange, agreeing on objectives and timeline.
   Hirlam Council: Agreeing on External Review (ToR+Members); Debriefing on Joint meeting
- **Jan. – June 2015**: HIRLAM External Review activities
- **Jan.-….:** Activities of TF on data policy
- **April/May**: First draft of strategic objectives and organizational choices for MoU.
- **March-April:** first draft of MoUs
- **May, HAC meeting + Joint HAC/PAC** : Preliminary review outcome + MoU/strategic objectives discussion.
- **June/July, Hirlam Council:** Revised draft MoU ; Strategic objectives discussion.
- Extraordinary ALADIN GA?
- **July:** Draft ToR and position announcement for PM, agreement on recruitment process.
- **Sept.:** Recruitment of PM (**Council decision** by email correspondence)
- **Oct./Nov., HAC meeting**: Finalization MoU, strategic objectives discussed in HAC, ToR, position announcements for Project Leaders
- **Nov./Dec.:** Recruitment of PL's. **Final Council decision** on MoU, strategic objectives, HMG management group.
- **Dec**.: Signature of new MoU
- **Early 2016**: Hirlam-Aladin scientific strategy meeting to define scientific goals for next period and towards more convergence.

New elements in MoU

- ➢ **Clarification** through common vocabulary/agreement on concepts, terms, rights….
- ➢ In Hirlam MoU: To make clear which are the **common ambitions** and commitments towards the Hirlam-Aladin code cooperation, and which are the **Hirlam-specific ambitions** on top of that.
- ➢ Scoping Task Force : **Translation from science to code design and implementation is essential =>** new role could be played by so-called "*code architect*".
- ➢ **Code architect(s)**: recognized **responsibility** (and dedicated time) to coordinate **implementation of new scientific ideas** to achieve and help maintain **a coherent code design**.
- ➢ **Option**: **CodArch for forecast model** and perhaps for **data assimilation**(?) aspects, (latter's tasks and mandate presently not yet clear).
- ➢ The PMs are still discussing the ToR of this new position and the ways in which it could be delineated in the new MoU's.
- ➢ **Supporting resources important**. HAC: **should be jointly supported => ψ message**
- ➢ Still to assess **how articulated with current supervising bodies/individuals** (HMG/WLs, CSSI and LTMs)