

Draft Minutes of the ALADIN regular 16th General Assembly
Toulouse, November the 15th & 16th 2011

1. Welcome and opening of the meeting at 14h on 15/11/2011

The General Assembly chairman (GA Chair, Klemen Bergant) warmly welcomed the members of the 16th GA, in particular the members participating for the first time: Mrs. Tatiana Spassova (Bulgaria), the two Météo-France hosts, Mr. Olivier Gupta and Mr. Philippe Bougeault, Mr. Erik Andersson (ECWMF Observer), Mrs. Doina Banciu (Romania), Mr. Václav Dvořák (Czech Republic), Mr. Karam Essaoui (Morocco), Mr. Fatih Kocaman (Turkey) and Mr. Josef Vivoda (Slovakia). He also welcomed Mr. Zoltan Dunkel, back as Director of the Hungarian Service and back to the General Assembly. A full list of attendees is attached in the Annex 1 (all Partners were represented with the exception of Algeria and Poland).

Olivier Gupta took the floor and, on behalf of Météo-France, welcomed the participants and expressed his pleasure to host the GA in Toulouse, in the core of meteorology at Météo-France. He wished a fruitful meeting for this first General Assembly under the MoU4 governance.

2. Adoption of the draft agenda and approval of the minutes of the 15th GA

The proposed agenda was approved by the GA.

The GA Chair appreciated the preparation of the minutes from the last GA. As no additional comments were made, the GA unanimously adopted the minutes of the 15th GA.

As for 15th GA, a copy of the presentations of the 16th GA will be joined to the Minutes and available on the ALADIN website (<http://www.cnrm.meteo.fr/aladin/spip.php?article225>).

3. Program Manager's intersession report

Piet Termonia reported on his first year as Programme Manager (PM) (*see the on-line presentation* for more details*) : he mainly focused on the management aspects (budget, workshops, ..), the coordination and the strategic planning. For the future, he planned to pay more attention to people management and to manpower in the consortium in order to translate the strategy down to operational levels.

Besides ALADIN specific activities, the ALADIN PM first reported about his missions (voluntary contribution of the RMI), his publications, his teaching activities, his study of the possibility to have a more flexible flat-rate budget accounting in Brussels (with no result, so far).

He presented then some selected issues addressed by the 15th GA and a number of points that were relevant to the following year, excepted those to be treated in details later in the meeting.

- During the LTM meetings, the attendance was low and most of the discussions concerned reports of problems related to the code.
- The scores of ARPEGE were improving and quite close to ECMWF's ones, mainly due to the assimilation of more data (the ALADIN PM congratulated MF).
- On the short-term, the strategy meeting concluded of the necessity to be more active in radar data assimilation (a bottleneck : the exchange of radar data in Europe and the role of OPERA).
- The impact of the OOPS overhaul on the code and its impact of LAM versions within HARMONIE should also be studied.
- A strategic report was already distributed.

- For next year, the SURFEX Steering Committee created at the initiative of Philippe Bougeault proposed to bring the large user communities together and to work on the lack of skilled code experts (the SURFEX working week held this year in Brussels was a feasibility study with as a result the agreement on the switch to SURFEX scheme for all applications).
- Besides the unclear situation of the Forecasting Capability Area roadmap, the ALADIN PM considered that C-SRNWP is an important programme (link with OPERA, EUR-EPS proposal, high-performance computing in Europe, ...).

The GA Chair thanked the ALADIN PM for the report.

Abdalah Mokssit congratulated the ALADIN PM for his good job. He also underlined that many topics presented by the ALADIN PM involve Europe whereas some ALADIN Members are not European countries. He showed his concern for the possibility for non-European ALADIN Partners to get involved well in advance in the planning process and get access to deliverables afterwards, including those coming from European projects/programmes as is the case with Eumetnet.

The ALADIN PM proposed to strengthen their acquaintanceship by visiting some North-African NMSs in 2012.

Philippe Bougeault emphasized the ALADIN PM's excellent start as PM and the excellent relationship with Météo-France.

The GA congratulated again the ALADIN PM for his work and agreed on the importance for the ALADIN products to be available to all ALADIN countries, specially to North-African partners in the case of European projects.

4. Report from the PAC meeting

Aderito Serrao summarized the main recommendations of the 8th PAC meeting (*see the on-line presentation* for more details*). The PM should propose an update of the strategy 10 years plan to the GA. The PM should prepare a light progress report for the GA. PAC endorsed the priorities of the 2012 work plan, the creation and the shape of a SURFEX Steering Committee, the coordinated efforts and the need to establish a list of requirements to OPERA, the guidelines for manpower reporting practices, the focus put on the convergence action “3MT in ARPEGE”. PAC recommended to pay attention to the need to fill-in the ACNA position, to the actual budget constraints of the members, to train people on maintenance practices and to investigate the impact of OOPS.

The GA Chair thanked the PAC members for their valuable contribution to ALADIN, especially Aderito for his chairmanship.

5. Reports

- highlights and plans

As PAC asked for a light report, the ALADIN PM prepared a sort of “tour d'ALADIN” from the highlights sent by the LTMs (*see the on-line presentation* for details country by country*) :

- Data Assimilation: OPLACE proved to be crucial for implementing 3Dvar, especially in countries having a less experienced DA/NWP team.
- Verification : an old tool (some “sleeping beauty” in Slovenia, woken up by Alex Deckmyn, from Belgium) should be complemented with some fuzzy methods (Poland) and the coordination organised.
- Two milestones for Deep Convection : more flexibility should be added and the first multi-scales runs with NH dynamics should be started. Progress has been reported on the effort towards a self-extinguishing convection scheme for high resolution.

- SURFEX : exhibiting recent scientific evolutions allows better simulation of atmospheric mechanisms.
- We need to actively search for skilled people to become code experts, the ALADIN PM mentioned as an example that a colleague from Turkey (the latest ALADIN entry) showed great potential in this and could become a code expert after his preliminary work on the code structure of Full-Pos. He stressed the need in the next year to actively search for such talent and he will make a special effort on that.

The GA took note, without comment, of this overview of the ALADIN countries.

- LACE report

Dijana Klarić (LACE PM) first summarized the main decisions from the 32nd RC LACE Council meeting : review and deliverables for 2011, plans and budgets for 2012 (in 2012, LACE will organize LACE Data assimilation working days, ALARO working days, GLAMEPS-ALADIN/LAEF kick-off meeting and will participate to SURFEX working days in Brussels and to OOPS/C++ training, if some training is organised). The Council decided to increase the national data exchange and gave a green light for the use of OPLACE within the ALADIN-HIRLAM cooperation (but some practical matters such as maintenance have still to be fixed).

The Council appointed Dr Václav Dvořák as new RC-LACE President and Jozef Vivoda as new LACE-SC chair and settled a task force for the preparation of the new LACE MoU (for the period 2013-2017).

The LACE PM also reported on the results (scientific papers, operational use, ...) of the RC LACE projects 2008-2010 (*see the on-line presentation for details*).

Henri Malcorps asked about the motivation of the new LACE MoU and its coherence with the 4th ALADIN MoU signed last year. LACE PM answered that LACE MoU governs what is about Operations and what LACE, as a group, do besides ALADIN, through a more internal cooperation within Central-European countries.

Henri Malcorps therefore understood that the new LACE MoU will be consistent with the ALADIN MoU4.

- HIRLAM report

Jeanette Onvlee (HIRLAM PM) reported on **some organizational changes following the new HIRLAM MoU** : a new management group and a new Partner (Lithuania); the operational cooperation enters the work plan: Xiaohua Yang has been appointed as the first MG coordinator for operational activities. In addition, Jeanette Onvlee introduces the Swedish/Norwegian initiative of a joint (but decentralized) operational centre (the MetCoOp project for Meteorological Co-operation on operational NWP).

On the point about research, many topics are common with ALADIN or LACE. An effort was put on assimilation methods, on high density data assimilation, on quality control (next big issue : some quality control should be done at radar level; HIRLAM countries will apply quality control inspired by, but extending, the present OPERA specifications to their data until OPERA manages it). The weakness of HARMONIE in cold stable winter conditions was studied. Some aerosol representation was implemented in HARMONIE (as it had been done in HIRLAM). A real-time pre-operational GLAMEPS was settled at ECMWF.

The main HIRLAM-ALADIN cooperation issues were the fruitful strategy workshop, the preparation of the joint work plan 2012, the SURFEX steering committee (HIRLAM PM thanked MF for its enormous work to make the code more open), the evolution of GLAMEPS and a common action towards OPERA.

The GA Chair thanked Jeanette for her report and specially for the cooperation issues.

Erik Andersson (ECMWF observer) reminded that GLAMEPS had been included in the TIGGE archive. There is an opportunity for EU-funding to support the development of a LAM-EPs component of TIGGE.

- invited presentation by the host : Assimilation of radar data in AROME and in Europe : review and prospects (*see on-line the presentation for the details*)

Florence Rabier presented the main features of radar assimilation within AROME : **the most important improvement in AROME precipitation forecast was obtained with the assimilation of an increased number of radar data** (radial wind, reflectivity, after a very restrictive data selection by the processing and the quality control); experience has demonstrated the importance of accounting for the “no-rain” information in the assimilation and, more generally, the need to work with data producers to improve data usefulness. **An increase exchange of radar data and a best specification of information required in OPERA files could benefit the data assimilation systems in Europe.**

The GA Chair thanked Florence for this presentation that fitted perfectly well with the previous discussions of this GA.

The HIRLAM PM pointed out that NWP users are really demanding users for OPERA and should be patient with OPERA but not passive : OPERA is very depending on the availability and quality of data from countries (OPERA has given guidelines on how data should be cleaned).

Claude Fischer reminded that a questionnaire had been sent by C-SRNWP to evaluate the LAM-NWP needs and to prepare a synthesis to be sent to OPERA.

Jeanette Onvlee explained the chosen strategy for Harmonie radar quality control, which is to extend existing tools to the level required for NWP, using OPERA formats and working jointly with the OPERA team in order to support their own developments. Philippe Bougeault asked whether this effort was not duplicating what would be done by OPERA; Jeanette Onvlee explained that all was done to coordinate the Harmonie effort with OPERA, keeping close contact and thus, hopefully, avoid any duplication.

6. Scientific and technical issues

- operational report

Claude Fischer (CF) summarized the main changes introduced in MF's operations and presented the plans for next year. He also reported on the most recent ALARO updates and on some forthcoming novelties.

The operations overview in partners centres showed that countries are using more various model configurations : 2 types of code versions (based on CY35 and CY36, mostly) with a certain variety in terms of model forecast configurations (several AROME and/or ALARO implementations); data assimilation in several countries with some variations (blending, surface); AROME 500 meters in development at MF for nowcasting; possible use of various AROME and ALARO versions in multi-model ensembles; ...

- maintenance report

CF recalled that the calendar of both IFS and interim cycles is available on the ALADIN website (the LTMs have also access to the protected part of the website with IFS technical memoranda).

Despite the fact that a pre-phasing was done and the good expertise gathered in the phaser teams of

2011, the last two cycles proved to be very complex ones, with a huge set of modifications from a great number of contributors.

Two big phasing efforts are also planned for next year. Given the number of contributors, **an upstream coordination is needed.** The **validation of the increasing number of configurations should be decentralized**, even if the **central phasing exercises** (invitation to 6 week stays for IFS/ARPEGE/LAM phasings with also a possibility to pair twice 3 weeks for interim cycles) and the **central code repository** will remain in Toulouse.

CF gave the statistics of manpower dedicated by partners to both phasing and other maintenance (*see the on-line presentation for details*). Some maintenance is realized outside Toulouse but there is a need for a **stronger local technical knowledge transfer** (an initial training should be done in each team). Besides this, **experts in various fields** (hybrid parallelization, code design, C++, ..) should be identified.

CF presented the status of Object-Oriented Prediction System (OOPS) : on the side of the Fortran code (bottom-up part of the OOPS project). On the side of the object-oriented programming (top-down part of OOPS), the cleaning of the core of ARPEGE/ALADIN (several millions of lines of code) has already begun; a new coding language (C++) was introduced and a first stable version of an OOPS/C++ control level code was technically reviewed in June 2011. A scientific review of a 3D-Var prototype will be realized at the beginning of 2012 after a first C++ training of scientists (to be held in Toulouse, in French language). A training in English should be organized possibly within the collaboration between ECMWF, MF and the LAM consortia.

OOPS has already impacted the LAM versions through the last code cleanings. **A few key staff should be identified within the ALADIN&HIRLAM Consortia and some experts from the LAM community (geometry, ...) should be involved in the OOPS/LAM work.**

The Minutes of the regular MF/ECMWF technical meetings and visio-conferences are made available on the ALADIN website. ALADIN & HIRLAM will participate to the OOPS Steering Committee.

CF also presented COP(E) : the Continuous Observation Processing (at ECMWF). With the aim of taking the observation pre-treatment out of the critical path of the Data Assimilation sequence and providing more flexible conversion tools for observation formats, COP(E) will deeply re-organize the observation pre-treatment with the recoding in C++ (again !) of several parts of the code.

The ALADIN PM asked where to put the priority between the need to increase code experts (C++) or phasing.

CF explained that, for phasing, it is a continuous effort on local transfer of knowledge (people should be trained in their NMS to become good enough on the existing architecture). For the novelty (OOPS and C++), a training should be organized for some key people (not everybody will be a C++ expert).

Radmila Brozkova drew the attention of the GA on two recurrent problems : (1) the integration of some parts of code coming from other teams that do not follow the IFS/Arpège coding standards and that cannot be parallelized, so that they run unreasonably slow on our platforms; (2) the future of the code of the current proprietary file format in ARPEGE/ALADIN (so-called FA files, historically developed by the DSI team at MF but no longer maintained).

CF proposed a case by case decision for imported code as it might not be easy to recode or to ask for big code changes when the pieces of code have been written for external projects with specific fundings. There also is the issue about the required manpower with respect to priorities. The ALADIN PM explained that he considered that recoding of imported code always should be checked, and that specific scientific rules of interfacing better should be followed.

A document of recommendations for code developments will also be written.

Radmila asked who would decide, in fine, whether a big piece of code is accepted or not.

The GA chair concluded that the GA is definitely not the right body to decide about the integration of an imported code; the CSSI (or a larger group if the PM thinks that it is necessary) will evaluate the proposed code and decide.

Abdalah Mokssit proposed to share the Moroccan knowledge on installing ALADIN & AROME on a new computer within the ALADIN countries and to cooperate also on new topics such as nowcasting, urban forest, environment. He also stressed the interest of any Service to send staff to technical training, phasing and maintenance work, as this helps the team to gain skills for local system installation and validation.

- SRNWP programmes and ALADIN involvement

ALADIN is involved on cooperation within SRNWP : the former C-SRNWP PM and the new one are from an ALADIN Partner (Hungary); ALADIN scientists are chairs or members of the SRNWP expert teams.

ALADIN had also dedicated some manpower to SRNWP/verification and SRNWP/interoperability. The ALADIN PM participated in the redaction of the roadmap of the Forecasting Capability Programme.

7. Strategy (outcome of the strategy workshop)

The ALADIN PM reported on the strategy meeting held in Brussels last September. There was a consensus on the strategic goals and on the short-term issues to keep the strategy on track.

To face the challenges of High Performance Computing technology in the future, it was proposed to perform some inter-comparison tests on HPC infrastructure in collaboration with the other consortia and to apply for external scientific fundings (i.e. EU-FP7 or the next EU-FP8). EUMETNET and the SRNWP dynamics and system Expert Teams should play a role there.

Experience from other consortia (as exchanged during the EWGLAM meetings and through C-SRNWP) showed that maintaining different physics packages is feasible, but maintaining different dynamical cores is difficult and should be avoided. In the light of the strategical “bet” discussed in the Brač-HR meeting (17-20/5/2010)¹, it would be better that, within the context of SRNWP, we accept the different numerical approaches within the different consortia and agree to carry our common tests. This is an issue that could be best arrange at SRNWP level, but, where so far no special attention has been paid to it.

Regarding slow progress in verification within the consortium, one should first better define what our end users are. It was agreed to put some efforts in defining our end users and their requirements.

The analysis of the feasibility of a seamless system (in the temporal scales from nowcasting to climate, or in the spatial scales with our diversity of model configurations) could enable ALADIN-HIRLAM to identify their future targets.

For the next steps, ALADIN PM proposed to run MF's academic Méso-NH model at very high-resolution, to investigate whether it can be taken as a validation or as our scientific target and to come back to PAC with more practical proposals.

PM proposed to proceed with three steps:

- take special care of our “upstream” scientific sources.
- clarify the conclusion existing regarding the strategical goals of generality/modularity/flexibility of the code (that was mentioned in the ALADIN strategy document 2008-2017), with concrete examples

¹ Developing a new dynamical core from scratch takes place on a time scale of about ten years by a team of a dozen experts. Should we redirect our activities to embark on such an effort if we are not sure today that the final solution will effectively suit the future evolution of HPC.

- better articulation of the distinction between scientific and algorithmic methodology.

See the on-line presentation for more details on the above issues with also some examples of user requirements and some illustrations of the need for high-resolution NWP.

The GA took note of the short term actions.

The GA chair questioned the choice of Méso-NH model and asked if it is well documented and user friendly. The HIRLAM PM added that Méso-NH is only one of the very high resolution models and, in the high resolution communities, an ensemble of such models is generally used to define the truth. Philippe Bougeault explained that Méso-NH could be used as a laboratory (the code is given by a simple licence agreement). Of course, it is not the truth but its main advantage is that it has more diagnostics than any others and it can go easily to very high-resolution.

The GA stimulated the use of Méso-NH as a laboratory, took note that MF offers the licence but also encouraged the use of other models.

Many participants to the GA underlined the importance, as National Met Services, of the improvement of our NWP prediction, for public safety and end users benefits. **Our strategy should have scientific aspects and expected concrete targets to make our models useful and visible.** The verification should also be considered from the point of view of users (but not too much users-oriented).

The GA chair proposed to make a review of the kind of users in the consortium and what sort of verification they will need. The ALADIN PM proposed to test the extension of the Belgium tool that keeps track of users to Portugal first, then to other Partners.

The GA supported the extension of the Belgium system with the help of Portugal first.

The ALADIN PM indicated that a specific request for a user-oriented inquiry and targeted actions had been launched in Belgium recently. He will try to extend this end-user inquiry to all ALADIN countries with the help of Maria Monteiro (PAC member and member of the Applications Expert Team of SRNWP). So Portugal could become another ALADIN member to give input soon.

The GA supported the launch of an end-user inquiry within the whole ALADIN consortium, to be coordinated by PM with the help of Portugal first.

8. Work plan 2012 : manpower, priorities, task force for verification

The ALADIN PM explained the heavy procedure to write the common work plan with HIRLAM. Two main issues of this exercise were the content and the redaction procedure. Nevertheless, the 2012 work plan was available since the end of the previous week.

As requested by the GA Chair, the ALADIN PM presented a brief summary of the main issues of this work plan. He underlined what is related to the 5 short-term actions identified during the strategy meeting and what is related to more longer term strategic issues.

The ALADIN PM gave also the tentative schedule of the working weeks planned on important topics for 2012.

The ALADIN PM explained that the ALADIN manpower indicated in this 2012 work plan corresponds to the potential future involvement of teams on main topics (as announced by LTMs who are the very persons able to propose the staffing for each topic). This work plan should be considered as a tool, i.e. it allows the management to local manpower during the course of 2012 per topic. The manpower will however not be compared, at the level of the people, with the declared reported manpower.

In order to avoid overload of paper work and documentation, the ALADIN PM and the CSSI Chair proposed to have a gliding plan instead of a yearly-rewritten plan (this will be also proposed to HAC), but with a yearly presentation at the GA of actions, priorities, manpowers, new topics for next year. Radmila Brozkova remarked that LACE does a similar exercise every year and Dijana expected to have a long term LACE planning at the autumn (for the new LACE MoU).

The GA supported the approach of a gliding work plan and also agreed that the annual WP can be improved taking into account some information from the LTMs according to their Direction. The GA asked the ALADIN PM to provide the next GA with an overview of what will be really done in the forthcoming years for topics of the work plan.

The GA also asked for some evaluation of the work plan. The ALADIN PM anticipated this question and **proposed a better reporting** : after being informed on this new functionality of the reporting tool, the LTMs will provisionally report specifically on code maintenance/design/development (some criteria will be added to the manpower data base, for a limited period, for a better reporting of some specific topics of the work plan : this won't detract from the record of cumulative manpower contributions of Members as defined in the MoU). **The GA agreed.**

9. Budget issues and manpower

- Manpower figures and reporting procedure

Patricia presented the record of cumulative manpower contributions and the usual statistics (breakdown of the manpower by Partners or by Components of the consortia, mobility, type of work, fundings ...). These figures are prepared after the reporting by each LTM of the quarterly participation in his/her NMS. As requested by the last GA, **the guidelines for reporting practices have been revised and the revised guidelines were presented and positively supported during the last PAC session.**

Last year, the average total manpower dedicated to ALADIN by the Partners has slightly increased towards 75 person per month; more than 90% of this work was realized by the local permanent staff in their NMS. The cumulated (since 1991) manpower represents about 47 full-time persons per year. *See the on-line presentation for more details.*

- Report on the execution on the ongoing budget.

The ALADIN PM gave an overview of the flat-rate expenses execution : as usual, the planned stays were mainly realized (the LTMs are quite proactive in the organisation of these stays) and most of the surplus (8900€) is linked to non-executed missions (some missions planned for the LTMs to attend the LTM meetings were not realized).

- Adoption of the 2012 budget

The ALADIN PM announced the flat-rate ceiling for 2012 : 8331.20€ (the 2011 ceiling was increased with the 2010 inflation in the Euro zone). He proposed a contribution at the level of 8300€ per Member to finance the missions, the stays and the organisation of the ALADIN workshop in Morocco and a SURFEX working week.

Aderito Serrao explained that, even if the MoU says that the flat-rate ceiling is increased with the inflation, he would vote against any increase of the contribution for 2012 (the situation is not the same

than when the MoU was signed and the Portuguese administrations are no longer allowed to subscribe any increase). He suggested to stick with the 2011 amount, i.e. 8200€.

Abdelwaheb Nmiri underlined the necessity to know earlier about any increase of the contribution, some NMS internal budgets being prepared in June.

Abdalah Mokssit would prefer more flexibility in the management of the money, for instance in the use of the royalties. Claude Fischer reminded that, according to the decisions of the previous GA and to the MoU, the royalties are distributed to each member and each member must use this money for ALADIN.

The GA Chair explained that, according to the MoU, the ceiling is automatically increased with the inflation but it is only the top limit and the GA may decide a lower contribution. Understanding the national constraints and taking into account the transfer in the 2012 resources of 8900€ (non-executed actions in 2011), he proposed 8200€ for 2012 contribution per Member.

A new version of the 2012 budget was presented, with a slight decrease in the stays expenses to compensate this slight decrease of resources.

The 2012 budget, based on a flat-rate contribution of 8200€ per country was adopted by the GA. The GA Chair also asked the ALADIN PM to present a first estimate of the 2013 flat-rate ceiling at the PAC meeting in June (this value will be distributed to Members but the final 2013 contribution will only be known just after the next GA). The GA Chair, the ALADIN PM and Météo-France will also investigate how to introduce more flexibility in the money budget.

- Royalty-linked issues

The ALADIN PM explained that the previous estimations of the royalty fees are not in agreement with modifications introduced in the 3rd MoU. According to the MoU3 (&MoU4), when a Member sells ALADIN products for use outside its national territory, **40%** of the information price is shared between **other** Members, in proportion of their respective cumulated manpower contribution to ALADIN.

In 2007, Météo-France shared **100%** of the information price. Between 2008 and 2011, 40% of the information price was shared but between **all** Members (including Météo-France).

The comparison of what was done and what should have been done with the strict MoU rules shows that the 2007 redistribution fault and the cumulated error from 2008 to 2011 roughly compensate themselves.

The GA Chair proposed to ignore past errors. Henri Malcorps supported the proposal. Olivier Gupta added that it would be more resources consuming to correct it than to leave it as it is.

The GA decided to keep the past royalty fees as they were calculated until the 15th GA.

The GA took note of the true numbers presented in the 16th GA for 2012 (in 2012, LACE should send a 4592€ invoice to Météo-France International for the royalties of the LACE members and each flat-rate Members should send a 345€ invoice) .

10. Governance issues

- Election of the GA Chair and Vice-Chair

Olivier Gupta opened the discussion by giving his feedback as a newcomer in this assembly. He was positively impressed by the work that has been performed in the preparation and the chairmanship of this assembly. Thus, he proposed that the GA will re-elect the same chairperson and vice-chair person. The GA unanimously approved and congratulated the chairperson (Klemen Bergant) and vice-chair person (Abdalah Mokssit).

- Cooperation with HIRLAM

The ALADIN PM compared the ALADIN and HIRLAM governances. Main bodies are quite comparable in their functions but not totally equivalent. They differ more with respect to their membership: each HIRLAM country is represented in HAC whereas PAC is organised by groups – flat-rate countries, LACE, MF; HMG and CSSI are organized by topics, but these topics do not have a one-to-one correspondence. At the scientific level, the ALADIN-HIRLAM collaboration took concrete form through, for instance, the common annual work plan, the joint annual workshop/all staff meeting and the common HMG/CSSI meeting.

The HIRLAM PM added that, from the scientists side, the bottom-up convergence is in a growing way : in Data Assimilation and Surface, teams are integrating well; in Dynamics and Upper air physics, people decide together what has to be done, then they share work between them and keep each other informed of what has been done; in Probabilistic forecasting, the 2 teams working for GLAMEPS and LAEF do double work but this also allows to try different possibilities; on Verification, the double work certainly should be addressed and avoided as this is an area of critical and understaffed resources; for system aspects and downstream applications (nowcasting, use of the models for climate, ..) a lot of the work is out of the cooperation. The HIRLAM PM insisted on the need to take some steps on Probabilistic forecasting and Verification.

The GA Chair commented that the difference in the governances should be taken into account when writing the next MoU. In the current scientific work, it is important to know which scientific topics need more collaboration and to improve the collaboration there.

The HIRLAM PM and the ALADIN PM proposed a common coordination for Verification through a Task Force, as defined in the ALADIN and HIRLAM MoUs. The ALADIN PM underlined that some part of the ALADIN manpower would then be part of a task force with a potential Task Force Leader not from ALADIN, but from HIRLAM. The GA Chair did not see any problem as this was written in the MoU.

The LACE PM added that LACE supported the task force (LACE has presently nobody for verification in its Management Group).

The GA approved the idea of a Task Force on Verification and asked the ALADIN PM to come back with more details for the next GA.

- CSSI positions and ACNA

The ALADIN PM presented the Aladin Coordinator for Networking Activities (ACNA) position : the ACNA is a technical person who also does coordination (coordination of technical issues between MF and the countries for the cycles changes; chairperson of the LTM meetings). Roger Randriamampianina (Hungary) already agreed to coordinate the work on radar data assimilation. The ALADIN PM proposed Roger as the ACNA, in a slightly different balance between his technical work and his coordination than the previous ACNA.

The HIRLAM PM proposed to change the name of the position.

Yong Wang asked if an open call had been done for this position as it is paid by ALADIN. The ALADIN PM answered that he contacted all LTMs to provide candidates. Claude Fischer added that ALADIN has budgetary reserve in the LACE budget to support the ACNA position for the coming years (part of the budget resource given by MF to LACE for the ACNA position during the MoU3 and that has not been spent).

The GA assigned Roger to the ACNA position and asked the ALADIN PM to think about a new name of the position if necessary, taking into account the term of references of the ACNA.

The CSSI chair explained that he and the PM would like to strengthen the CSSI with experts who have also some knowledge on code aspects. Filip Vana leaving the Czech NMS for ECMWF (and thus the CSSI physics position), they proposed Dan Degrauwe (Belgium) for physics position. Marek Jerczynski leaving also his position on verification, the ALADIN PM proposed to fill the CSSI verification position in CSSI with the leader of the Task Force.

The GA adopted the proposal that Dan Degrauwe takes the CSSI physics position. The decision about the verification position is postponed while looking for the leader of the Task Force on verification.

- New membership

The ALADIN PM reported that he was contacted by Ukraine and sent them the MoU. The initiative is up to them now. The GA Chair added that there was no progress with Ukraine after this first intention.

The LACE PM proposed to think about the opportunity of being active in the enlargement of the consortium.

The GA Chair asked the PAC to study the strategy about a potential extension of the ALADIN consortium at its next session and to give to the next GA its recommendations.

The HIRLAM PM underlined that ECMWF, as ALADIN-HIRLAM partner, should take part to this discussion. The GA asked the PAC to invite an ECMWF representative to the next PAC session.

11. Date and place of the next assembly

Yong Wang confirmed that the next GA will be in Vienna, Austria, 13-14 November 2012.

Abdelwaheb Nmiri kindly invited the GA for 2013 to Tunisia.

The GA approved.

The GA Chair announced that Algeria also expressed the wish to host the GA. This proposal GA meeting will be confirmed by the Algerian representative at the next GA, with a view for hosting the GA in 2014.

12. A.O.B.

The GA Chair closed the meeting and thanked Météo-France for the very good support, organization and hospitality. He also thanked the participants to the GA and the LACE Council meetings for the fruitful discussions.

Annex 1 . List of Participants to the ALADIN 16th General Assembly

NAME & FIRSTNAME	COUNTRY
ANDERSSON ERIK	ECMWF Observer
BANCIU DOINA	ROMANIA
BERGANT KLEMEN	GA Chair, SLOVENIA
BOUGEAULT PHILIPPE	Météo-France
BROZKOVA RADMILA	CZECH
DUNKEL ZOLTAN	HUNGARY
DVOŘÁK VÁCLAV	CZECH
FISCHER CLAUDE	CSSI Chair
GUPTA OLIVIER	Météo-France
IVANCAN-PICEK BRANKA	CROATIA
KLARIC DIJANA	PM LACE
KOCAMAN FATIH	TURKEY
MALCORPS HENRI	BELGIUM
MOKHTARI MOHAMED	ALGERIA
MOKSSIT ABDALAH	MOROCCO
MONTEIRO MARIA	PORTUGAL
NMIRI ABDELWAHEB	TUNISIA
ONVLEE JEANNETTE	HIRLAM Observer
PASTIRCAK VLADIMIR	SLOVAKIA
POTTIER PATRICIA	GA Secretary
SERRÃO ÁDERITO	PAC Chair
SPASSOVA TATIANA	BULGARIA
TERMONIA PIET	PM ALADIN
VIVODA JOSEF	SLOVAKIA
WANG YONG	AUSTRIA