

Minutes of the ALADIN regular 13<sup>th</sup> General Assembly Cascais, Portugal, November 6-7, 2008

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# 1. Welcome and opening of the meeting

The General Assembly Chairman (GA Chair) warmly welcomes the members of the ALADIN 13<sup>th</sup> General Assembly. In particular, the new participants to the meeting:

- Dr Yong WANG, Local Team Manager, Austria;
- Dr Piet Termonia, CSSI Chair, Belgium;
- Mrs Eve Honnay, Chief of Dr Malcorps' secretariat (for the report), Belgium;
- Mr Tomas Kral, ALADIN Coordinator for networking aspects (for the report, technical parts), Czech Republic;
- Mr Vincent Casse, Deputy Director Weather forecasting, France;
- Mr Mehmet Çağlar, General Director of Turkish Meteorological Service, Turkey;
- Mr Ralal Bukowski, Deputy Director of the Institute of Meteorology and Water Management of Poland;
- Mrs Wanda Costa, Meteorological Institute of Portugal;
- Mr Hichem Fehri, Institute of Meteorology of Tunisia.

Apologies were received from:

- Dr Fritz Neuwirth, Policy Advisory Committee Chairman (PAC Chair);
- Mr. Ferhat Ounnar, Director General of Algeria;
- Mr. Christian Blondin, France;

Dr Soci, PAC Vice-Chair, will replace Dr Neuwirth as PAC Chair.

The participant list can be found at Annex 1.

GA Chair expresses his thanks to Mr. Aderito Vicente Serrao for his warm hospitality, for the social event of the evening, for the gifts to all the participants and for the nice weather!

GA Chair declares ALADIN 13<sup>th</sup> General Assembly open.

# 2. Adoption of the agenda and the minutes of the 12<sup>th</sup> GA

There is no comment on the agenda. The agenda is unanimously adopted.

Mr. Jean-François Geleyn, ALADIN Programme Manager (PM), has included all the remarks he has received in the minutes of the 12<sup>th</sup> GA.

Dr Klemen Bergant requests two modifications on items 12 and 13 of the minutes of the  $12^{th}$  GA:

- Item 12, page 20, Election of the Vice-Chairman:

The name of Dr Klemen Bergant was proposed by Mr. Vladimir Pastircak.

- item 13, page 20, Appointments of the PAC Chairperson and Vice-Chairperson:

The first name of the GA Vice-Chair should be spelled without "t" at the end: Klemen.

The revised minutes of the 12<sup>th</sup> GA are approved and will be diffused on the ALADIN website (www.cnrm.meteo.fr/aladin).

# 3. Report of the GA Chairman on the 'Bureau Meeting', Brussels, October 22, 2008

GA Chair informs on the Bureau Meeting that took place on October 22, 2008 in Brussels. The aim of this preparatory meeting is to help making the GA meeting more efficient, transparent and fluently.

Following persons participated to the meeting:

Dr Henri Malcorps, GA Chair Dr Fritz Neuwirth, PAC Chair Dr Piet Termonia, CSSI Chair Dr Cornel Soci, PAC Vice-Chair M. Jean-François Geleyn, Programme Manager Mrs Eve Honnay, Assistant to Dr Malcorps

All agenda points were overviewed:

CSSI Chair gave a presentation about AROME-ALARO convergence; it was followed with much interest.

There were also a lot of discussions about the 4-year plan and PM was asked to link it with the strategic plan.

The Bureau Meeting also agreed about a way forward to present the work plan for 2009. All these items will come up during the GA.

# 4. Report of PAC Chairman

The 4<sup>th</sup> PAC meeting took place in Casablanca on May 19-20, 2007.

Dr Soci, PAC Vice-Chair, points out different outcomes out of the report:

- Convergence related actions: there were fruitful discussions and attempts to solve the problems which still existed.
- Cooperation with HIRLAM: PAC is pleased to report that the cooperation is going very well, there are attempts to prepare a common plan for the future, with common objectives.
- HARMONIE: there is a need for a model for research purposes. Teams from Aladin and from HIRLAM are working together for preparing a simplified HARMONIE set-up model for universities.

# 5. Programme Managers' reports

PM informs that the preparatory Document n°5 "ALADIN and HARMONIE issues during the GA Intersession" is distributed purely for information about the everyday life of the projects.

# a) ALADIN work in the intersession and outlook for issues at the 13<sup>th</sup> GA; CSSI and LTM specific matters

PM gives a PowerPoint presentation on the activities since the previous GA (12 months ago):

- Main topics;
- CSSI and related matters;
- PM activities.

## Main topics

First of all, PM announces with great pleasure that Turkey has become 16<sup>th</sup> Full Member of ALADIN on January 1, 2008.

PM further details the other important topics of the past 12 months:

- Elaboration of the 4-year plan which is now closed to its 1<sup>st</sup> year final shape. Bureau Meeting has decided that it would become a gliding plan.

The framework for the 4-year plan is the updated Strategy document (upon request of the 12<sup>th</sup> GA) and the revised document n°8 of the Ljubljana GA (guidelines for the elaboration of the 4-year plan).

The CSSI members prepared the input to the document.

The document was than overviewed by PAC, in the presence of the CSSI Chair as observer. PAC asked for some improvement. The document was than once again modified because of the outcome of the convergence days.

The resulted document came to the CSSI LTMs Meeting (Local Team Managers) in Madrid and then to the Bureau Meeting. Small adjustments were brought.

The final and agreed version is proposed to the GA and will be discussed under item 9.

- Other scientific operational or pre-operational and/or political achievements. The HARMONIE joint Data Assimilation strategy continues to be implemented quite smoothly (outlined on October 12, 2006).

The LAEF (LACE Ensemble Forecasting) system participated to the demo project of Beijing 2008 on the occasion of the Olympic Games. A positive evaluation is expected.

AROME is now very close to operational status at Météo-France for model and data assimilation.

ALARO-0 including 3MT (new way of treating the water cycle in a more prognostic way) is operational at 3 places and preoperational at 3 other places.

Convergence: There is a stable perspective now, based on the guidance from the 12<sup>th</sup> GA and from the PAC 4 meeting in Casablanca, together with a strong involvement of Météo-France.

Convergence Days took place on November, 24-25, 2008 in Toulouse. We can rely on something rather good in terms of both absolute performance and cost effectiveness for all. The problem is how to avoid in the future both uniformity (a system with only one of the component) and the heavy cost of using both alternatives at a time. From the scientific point of view, the AROME physics is far too much geared towards the "small time step anyhow" paradigm of Meso-NH and the grey zone approach of ALARO-0 is too exclusive in its algorithmic constraints. Both AROME and ALARO share a very strong legacy of previous research work. Item 8 will explain the way out that was found.

- Double stabilization of the flat-rate budget.

The budgetary procedure is now in equilibrium thanks to the efforts of Christian Blondin and his team, but the backlog of money transfers is not yet solved. Last year we started the so-called delegation of organization of stays to Météo-France and LACE which is now stabilized at a correct level.

When staff members are going to stays financed by the flat rate budget, either directly or for Météo-France or for LACE, the members are kindly asked to tell them that it is not pocket money that they get to travel, this is a fixed sum that has been assessed to be sufficient. If it happens that it is not enough, they absolutely should not attempt to modify the attributed amount, they must solve the problem within their meteorological institute.

Further is PM happy to announce that nearly all planed items of the flat-rate plan for 2008 were fulfilled, a progress with respect to previous years.

# CSSI and related matters

PAC recommends to twin the CSSI position on "Observations and Monitoring" with the RC LACE Data Manager Position and to approve the nomination of Alena Trojakova, RC LACE Data Manager, as CSSI member.

PAC recommends approving the nomination of Edith Hagel as CSSI member for "EPS and predictability" (Alex Deckmyn became the ALADIN representative in GLAMEPS).

PAC supports the replacement of Martin Janousek by Tomas Kral as ACNA (ALADIN Coordinator for Networking Actions).

PAC recommends approving the nomination of Marek Jerczynski as CSSI member for "Verification".

PAC supports the candidatures of Yong Wang and Ales Farda for the CSSI positions "Nowcasting" and "LAM-Climate" (the duties do not include participation to the joint HMG-CSSI Meetings).

The "Documentation Officer" position is not fulfilled and PAC calls for support for some of these tasks (scientific secretariat assistance).

GA approves all the proposed nominations.

## PM activities

- Many visits to member countries.
- Governance: further steps to try to increase the role of the CSSI and responsibilities of LTMs. Need to follow the plan's statistics; PAC and the Bureau Meeting asked to produce a stable scale on the occasion of the resigning of the MoU.
- Budget's execution.
- Special efforts at the end of the year to get timely the full membership of Turkey.
- Survey of other candidacies: exchange of mails with 2 countries.
- Support work for the elaboration of reference documents about cooperation and licensing.
- Convergence: supervision of the 4 core actions of the convergence, preparation and attendance to the Convergence Days, preliminary applications of their outcome and preparatory steps for approval by GA.
- Scientific guidance on physics, dynamics and surface issues. Also some guidance about the system corresponding to the interoperability SRNWP efforts and applications, help for CHAPEAU, scientific support and orientation aspects.
- Publications and lectures.
- Links with the partners: involvement at the HARMONIE, RC LACE and EUMETNET-SRNWP level.

Alain Ratier congratulates PMs and all the teams involved in the work because obviously it was an exceptional year for all the PMs (ALADIN, HIRLAM and LACE) and he thanks them all for their efforts, in particular Jean-François Geleyn.

Dijana Klaric thanks Jean-François Geleyn on the name of RC LACE for his involvement.

Turkey thanks Jean-François Geleyn for his support for completing the full membership before the end of the year.

GA is impressed by the work done and congratulates all PMs and in particular Jean-François Geleyn for the great job done.

# b) HIRLAM aspects of the joint plans under HARMONIE

GA Chair gives the floor to Jeanette Onvlee and thanks her for her presence at the GA for reporting about HIRLAM and the collaboration between our organizations.

The collaboration is going quite well. There are 2 areas in which direct cooperation started at an early stage:

- Data assimilation and
- Dynamics and surface.

## Data assimilation

The big challenge was to get large scale flow correctly from nesting model and maintain it in the mesoscale model (flow dependency), and to insert smaller scale information from high-res observations.

The algorithmic developments are broadly on tracks. Nice achievements were made as far as 4D-VAR is concerned: first runs are made. HIRLAM can take over all the activities left due to recent staff changes at Météo-France, but ALADIN is kindly asked to see to what extend they can maintain their conditions to be involved in this area. HIRLAM is open for suggestions.

A main alternative to 4D-VAR (as we are not quite certain that it is operationally feasible) would be a hybrid ensemble – variational assimilation techniques. When we have these assimilation systems, we need to put a lot of effort in getting the observations in. The access to high resolution data (radar, GPS, surface networks) must be ensured. Efforts are asked from all the members to assure that the data are available for international exchange.

## **Dynamics and Surface**

Manpower is quite thin in these two areas but we are making the best use of the presently available scarce manpower resources.

There are coupling problems with surface fields between different models. This is a specific issue where concerted effort is required.

On the longer term, the issue remains that we need to assure sufficient manpower in both these important areas. Dynamics: because there are fears that the expertise would be dropping. Surface: because this subject is getting more and more important.

## The upper-air physics

HIRLAM works with both the AROME and the ALARO physics. There is still considerable scope for improvements and there are many ideas of possible solutions.

Efforts are absolutely necessary the next year for sharing our experiences and making joint experimentation for tackling the identified problems.

The way to handle joint and share experimentation will be discussed during the meeting of November 24-25, 2008.

Quantitative, objective verification tools are really needed at this stage. Scientific preparation as well as convergence in code-technical/interfacing aspects are required.

## Probabilistic forecasting

There are the already mentioned coupling problems of the surface schemes, which are hampering ALADIN efforts within the GLAMEPS.

ALADIN is involved in probabilistic forecasting together with HIRLAM in two different ways: one is GLAMEPS and the other is LAEF. It would be highly desirable to integrate these efforts since the former problem of difference in size of domain is about to be solved.

## System aspects

There is a need of a transparent (in the eyes of everyone) common process of how to maintain the system, how to validate and test it pre-operationally and how to introduce changes in it.

This requires the convergence of two strongly different system management cultures (ALADIN and HIRLAM) and it is really not helped by the fact that there are semantic misunderstandings. People are however willing and interested to work together. There is an ongoing cooperation and exchange of ideas in a number of issues, particularly with LACE on: script system; verification and validation and web functionality and communication.

A HARMONIE version for academic use (CHAPEAU) was developed.

# Points of attention

- Data assimilation: Role of ALADIN in 4D-VAR? Attention to both the technical aspects of getting high-resolution data in the system and assessing their impact but also the data-policy aspects of their availability.
- Dynamics and surface: We should not forget to ensure sufficient expertise and manpower resources on longer term. The coupling issues with the surface need urgent attention.
- The upper air physics: there are still some big problems that we need to solve jointly. This also requires convergence from both the scientific and code framework terms.
- LAM EPS: push for integration of GLAMEPS and LAEF activities.
- System maintenance and upgrading: We have to get rid of the misperceptions and a stronger communication and interaction between the system people is hence highly desirable. One should as well decide upon a transparent validation process of introducing common developments.
- Get the HIRLAM/ALADIN strategy in phase.

PM recalled that last year he was saying that we should start assessing the outcome of more and more common actions but he has the impression that we have been doing things a little bit differently. We have increased the number of common actions and not really assessed where they are going. A controlled process was maybe missing.

Jeanette Onvlee states that people are really willing to work together and there are more and more people joining in. This brings some chaos but also many new ideas. But indeed, it is not so stable and easily manageable as one might like. But this is not a concern according to her.

PM states he is not particularly worried, he just wanted to get the opinion of HIRLAM.

Alain Ratier has one question about the system maintenance issue: is there any action in order to identify and understand the differences in language? This is indeed an important matter and it will be discussed later on on the agenda. Mr. Ratier further informs on the high resolution data that are needed. Jeanette Onvlee confirms that what is needed in the mesocale models is: 3D-type volume data, ground based and surface networks data and the radar data, which are all essential. The data-policy about the exchange of radar data is a critical issue. Mr. Ratier is surprised to hear that request for radar data, because it had been discussed at the former EUMETNET Council and normally, there should be no remaining issue at all.

Dijana Klaric wonders who will represent LACE at the meeting of November 24-25, 2008, for upper air physics people from AROME, ALARO and HIRLAM. Radmila Brozkova will not attend the meeting but Jean-François Geleyn is going. About the system aspects and the management cultural differences and convergence, Mrs. Klaric assures that it is not going badly at all. It is just that we are looking for true options: what is beneficial and would avoid overcomplicating the system.

Jeanette Onvlee stresses once more that it is really the case that people want to work together and share their work but everyone is used to his certain way of working and they do never explain themselves because it seems obvious for them. So they believe that everyone understands them, but it is of course not the case. Dijana Klaric comments that from the LACE point of view, this problem will never occur because they are small enough Partners to understand that one needs cooperation.

Jeanette Onvlee stresses that everyone is eager to cooperate, this is not the problem.

Dijana Klaric further informs that LACE has already started to warm up the research on radar data assimilation. Unfortunately, they don't have scientists who are able to cope with both radar and numerical weather prediction. This is quite demanding, especially in Central Europe.

About the misinterpretations problem, Andras Horanyi suggests that it would be much more fortunate if somebody from HIRLAM could be present during the meetings and immediately clarify issues if needed.

PM confirms that it happens once a year when we have both meetings together. Unfortunately the planning was already too heavy to add an additional common meeting this year.

Dominique Marbouty comments on the information he gave at the EUMETNET Council about the fact that ECMWF has started using the American composite radar image. He was able to show that we have had some clear positive impact on the quality of the global forecasts. Then they started to see what they could do with the European composites and they didn't go very far because immediately it is obvious that there is a lack of quality control on this sort of information. The EUMETNET Council was quite reactive to that information.

GA Chair thanks Jeanette Onvlee for putting harmony in the HARMONIE project and for her report.

# c) Transversal issues (C-SRNWP EUMETNET Programmes / CHAPEAU [link with Academia])

GA Chair gives the floor again to Jeanette Onvlee. She comments that the presentation that she is going to give reflects her own opinion and invites Andras

Horanyi, Jean-François Geleyn and Dijana Klaric to complete her explanations when necessary.

The new SRNWP programme has been running for almost a year with a number of extensive changes, among which:

- The new structure which is now much more organized along the lines of the consortia and working with expert teams and an advisory committee.
- There have been a lot of efforts for getting SRNWP related programmes running within EUMETNET: Interoperability and Verification.
- Evolution of the relations of SRNWP programme with other EUMETNET programmes or bodies.

## New SRNWP structure

Eight expert teams have been created with the help of the Consortia. In all of them, ALADIN, HIRLAM and LACE are well represented by usually several members. The expert teams have started making their plans and started common activities. There were strong contributions from them at the EWGLAM meeting in Madrid, last October. The expert teams are a strong improvement compared to the former lead centres. They are much more likely to foster active cooperation between the Consortia.

The advisory committee is composed of Andras Horanyi, the Programme Manager, and the consortium leaders or representative for the Met Office. Having this small committee, along with consortium lines, is quite useful. It will certainly be more workable and direct than nationally-based representation as we had before.

A slight concern is that because of the ongoing cooperation between HIRLAM ALADIN and LACE, the other members of the consortium might be left out. This is not the case for the Met Office, they are quite strongly involved, but for COSMO it is not so sure.

The advisory committee works as a support of the programme managers in contact with other EUMETNET bodies. Jeanette Onvlee thanks Andras Horanyi who has been very active in that area by approaching the other programmes and bodies but also by soliciting the ideas of the PMs of how dealing with that.

## New SRNWP programmes

## Interoperability

The original proposal was quite ambitious and had to be reduced to manageable proportions. The Met Office has been doing a pretty good job in refining it. The needed participation and manpower resources have been guaranteed by the Consortia. The quick-off meeting will take place in December, 2008.

## - Verification

The Consortia feel the need for availability of routine verification methods suitable for mesoscale (clouds, precipitations). The Met Office is likely to become responsible member. The person they proposed for the job is really an expert and will certainly do an excellent job.

Andras Horanyi confirms that they have accepted the position.

# Relations with other EUMETNET programmes

EUCOS and related observation programmes are important because, as users, we can specify our needs to them. Several of these programmes have approached us for their requirements and this is a very good thing.

We have also started to participate in EUCOS regional observation impact studies. On the climate side, with ECSN, we just quite recently started to have contacts about what could be the potential areas of cooperation. Dominique Marbouty comments on SRNWP Interoperability that he has been in contact with the programme manager. ECMWF will be participating to it mainly by providing boundary conditions to local area models and providing some resources.

GA Chair thanks Jeanette Onvlee for her report.

GA Chair gives the floor to CSSI Chair for the last transversal issue, CHAPEAU.

CHAPEAU stands for Common HIRLAM ALADIN Package for Educational and Academic Use. The idea is to develop an academic version of the HARMONIE and ALADIN for universities. The project was first discussed during the CSSI meeting in Brussels in Spring 2008 and then at the subsequent PAC Meeting. One person could be recruited at RMI for working on this project in Brussels: M. Daan Degrauwe.

Students from the new programme at the University of Ghent, Belgium, will so have the possibility to run a Linux version on their laptop, together with a few cases that will be the subject of the course. The plan is not very ambitious at first stage, it is very local but if successful, it will be extended to something more international and more ambitious. The problem of licenses will then have to be solved.

Ivan Cacic was concerned on how feeding universities and involving young scientists in ALADIN models and he is happy to welcome this initiative that meets his worries. Is CHAPEAU exclusively connected to one university or is it open to other ones? Anyone who has a Linux configuration can install it. Just a few cases are available, but data assimilation is not provided.

Yong Wang wonders whether there is a difference between operational and academic ALADIN. CHAPEAU is not meant to follow the cycles in order to avoid maintenances. The idea is to have students doing research on it (educational part of the project). It would be nice to have students working on the code and maybe try parameterizations.

PM comments that it is not the aim to disperse the code freely, we look for partnership. We need a contact point at the university that receives access to CHAPEAU. This person is directly involved on the project and works on it. Otherwise no collaboration is possible.

Ivan Cacic explains that, as a LACE community, they want to fill in some gaps, and want to get some new brains. PM informs that if interested, M. Anton Marki would be the ideal contact point for them. He has already worked with ALADIN in the past and he is working at the university now.

Jeanette Onvlee explains that they took the approach of taking universities with which we already had strong research contacts: at the Ghent University for example, but there are also three other universities in the Netherlands that were interested in installing HARMONIE for research purposes and they had already collaborated with us on many issues. They are willing to act as beta testers for the system, to work out with systems that are not so user friendly as one would like. And on the basis of that, you can gradually develop something which you can put out more broadly to universities with whom contacts are maybe not so very good beforehand.

GA Chair thanks CSSI Chair for his report.

# 6. 'Classical matters' for the past year

# a) Operational report (Tomas Kral)

- In February 2008, resolution of the operational global forecasting system ARPEGE was increased from 23km to 15km in horizontal (over Western Europe) and from 46 to 60 vertical levels. This resolution increase affected the size of coupling files for ALADIN applications by a factor of 2. Due to an advance preparation in partner countries the transition to higher resolution happened without any problems. Next ARPEGE resolution upgrade is planned in 2009 with 10km resolution in horizontal (over France) and with 70 vertical levels.
- In June 2008, ARPEGE operations were switched to new release cycle 33t0. This
  upgrade was transparent for ALADIN applications as it primarily encompassed
  only assimilation of new observations.
- Presently, there are 3 data assimilation systems with operational status: Météo-France, Hungary and Morocco. However, there is an ongoing work on ALADIN 3Dvar implementations in LACE countries as well as preparation of observation data center in Hungary.
- In June 2008, the first operational implementation of ALARO-3MT was initiated in Czech Republic followed by implementations in Slovenia, Croatia and Slovakia. Other implementations are further planed in Belgium and Austria.
- There is ongoing work on validation of coupling of new externalized surface scheme SURFEX with ALADIN/ALARO models. SURFEX is planned to reach operational status in 2009.
- Operational switch for AROME in Toulouse is scheduled at the end of 2008 with operational forecasts 4 times a day with 30h range and 3Dvar assimilation cycle of 3 hours. Later implementations are planned in Portugal and Hungary.
- A new 16<sup>th</sup> member, Turkey, joined ALADIN consortium on the 1<sup>st</sup> January 2008. Congratulations.

# b) Maintenance report (Claude Fischer)

- Claude Fischer explained the evolution of components of ALADIN system. Global model ARPEGE, as well as limited area models ALADIN, ALARO, AROME, are evolving in cycles which contain some common versioning with IFS and some interim versions which are only common to the ALADIN/HIRLAM community. Maintenance of the ALADIN system is basically done by development work in Toulouse plus phasing exercises for which ALADIN collaborators are invited to Toulouse.
- In terms of evolution in year 2008, there were two common cycles with IFS: CY33 finalized in late 2007 and CY34 finalized in the summer 2008.
- In January 2008 an updated version of CY33 was released correcting few bugs and adding extra features for limited area data assimilation systems with new bias correction scheme (scientifically originating from ECMWF) which was adapted to the LAM or more generally to multi-model applications.
- Next interim cycle 33t1 with export version (export version is better validated and officially granted version of source code intended for remote installations) was prepared in May 2008 with several scientific additions e.g. for coupling surface and atmospheric turbulence in ALARO, some adaptations of physics in ARPEGE/ALADIN France to prepare experimental suite in Toulouse, major update of AROME code and some adaptations in ARPEGE data assimilation. Next there were two cycles with the same scientific contents. First one was common cycle with IFS CY34, which was prepared before the summer and was merging the last Toulouse interim cycle 33t1 with the last ECMWF interim cycle 33r2, together with some code cleanings. The ensuing cycle 35 prepared just after the summer

was simply a technical reorganization of the code to sort out some obsolete features. In September there was a bug fix version of this cycle on the side of data assimilation.

- Presently there is an ongoing work on interim cycle 35t1 for which an export version will be prepared too. Further there is a plan to produce one more interim cycle early next year which should be finished in February before porting to new NEC HPC system in Toulouse. After that there should be a common cycle with ECMWF CY36 which should be prepared in the early summer 2009.
- There are generally 5 or 6 ALADIN participants invited to Toulouse to help with phasing which is rather technical work, sometimes mixed with science. In terms of updated table of contributions per country the distribution of the manpower is more or less balanced.
- There are multiple platform installations which are tested on regular basis including number of installations in ECMWF HPC system.
- Presently, we can observe an increasing trend to have more external libraries which are not native IFS/ARPEGE codes, e.g. libraries for the satellite data assimilation or Meso-NH physics.
- In terms of coordination for the technical questions we certainly need to continue and enhance real-time networking, i.e. coordination of input information about who and when is contributing, since there are 16 ALADIN countries with potential contributors plus the same from the HIRLAM side, so certainly there is a need to work in improved networking conditions.
- PM remarked that on October 12, 20 years had passed since a meeting at ECMWF that semi-officially kicked-off the IFS-ARPEGE collaboration, upon which ALADIN and HARMONIE were later built. Reaching 35 cycles in 20 years is a remarkable success for this project, and an achievement which was surely not foreseen to such an extent at that time.

# c) Manpower figures for 7-07 to 6-08 (PM)

The figures of manpower evolution since the beginning of ALADIN programme have been stable for the past two years and we can say that we are now roughly at 200 person months per 3 months which is something around 70 equivalent persons inside the project. With 16 partners it corresponds to an average of 4, but of course with big disparities. In a list of countries ranked by amount of contributions we see of course a strong position of Météo-France. Decreasing trend of proportion of manpower in stays, which we could observe in past years, seems to be stabilized, maybe thanks to the success of flat rate and some increase of the LACE mobility with more activities organized between LACE countries. Presently, manpower at stays is at roughly 7 equivalent persons, which is, in relative terms about 1/8 of the status at the beginning of the project. We should try avoiding to land below this number, since this would be against the core spirit of ALADIN programme.

There were no other comments.

# 7. Signing of the ALADIN MoU

PM introduces the new ALADIN Memorandum of Understanding (MoU). As approved during the 11<sup>th</sup> GA, following changes have been made:

- Number of partners (now up to sixteen) and mention of Turkey as full member;
- Updated manpower contribution scale computed for 30.06.2008 (see page 2 of Document N°7).

A foot-note specifies that "With reference to the Article 14/98 of the present Memorandum of Understanding (MoU), Turkey states that its position concerning United Nations Convention on the Law of the Sea (UNCLOS) remains unchanged".

GA approves the new MoU including the consolidated manpower contribution scale.

GA Chair thanks PM for his efforts in preparing this new version.

Mehmet Caglar receives the floor. Turkey is honored to be a full member of the ALADIN Consortium. He expresses his special thanks to GA Chair, colleagues at Météo-France and the members of the Consortium for their valuable efforts and support on Turkey's membership to ALADIN from the very first day till this signature day. He further expresses his willingness to continue collaboration and the intention to contribute to ALADIN activities and operations.

Due to the absence of their official representative who is allowed to sign the MoU, following members are handing authorization papers over (seven ones):

- Morocco. M. Mustapha Geanah authorizes M. Hassan Haddouch to sign in his name.
- Germany. M. Fritz Neuwirth authorizes M. Yong Wang to sign in his name.
- Slovakia. M. Jan Kucharcik authorizes M. Vladimir Pastircak to sign in his name.
- Romania. M. Ion Sandu authorizes M. Cornel Soci to sign in his name.
- Hungary. M. Laszlo Bozo authorizes M. Andras Horanyi to sign in his name.
- Bulgaria. M. Valéry Sipidinov authorizes M. Aderito Vicente Serrao to sign in his name.
- Algeria. M. F. Ounnar authorizes M. Aderito Vicente Serrao to sign in his name.

The sixteen members and official representatives sign the new version of the MoU and M. Aderito Vicente Serrao offers the champagne on this great occasion.

GA Chair congratulates Turkey for its membership and is happy to collaborate with them.

# 8. CSSI report on the PAC-assigned task concerning 'AROME-ALARO convergence'

- To give a time line of decisions that were taken in the past and which led to the 'convergence days' meeting: the first event was CPPN meeting in the Paris in October 2007 where there were some encouraging and stabilizing short term steps towards convergence. Next there was PAC session in Casablanca where it was decided that the convergence issue is a more scientifically oriented problem and it should be studied at the level of CSSI and it was proposed to organize a scientific workshop where the problem should be solved.
- The so called 'convergence days' took place in Toulouse in September 2008. The outcome of 'convergence days' is 4 actions that will be taken:
   i) action on DDH (Diagnostics on Horizontal domains),

ii) physics-dynamics interfaces,

iii) micro-physics,

iv) implementation of 3MT in ARPEGE.

The outcome of 'convergence days' was discussed by CSSI on CSSI/LTM meeting in Madrid in October 2008 where CSSI agreed on the actions and also tried to take out the political essence of the problem, as a preparation for the GA,

without going too much to the scientific and technical details. Basically, what was identified during 'convergence days' is that there are two sources of scientific selections for actions. On one hand there is Meso-NH-type science that is implemented currently in AROME and on the other hand there is a 'traditional' NWP science which is a research done in the context of IFS/ARPEGE/ALADIN/ALARO (IAAA) and which can be characterized by focusing more on cost-affordable solutions. It was also stressed that implementations of both sciences' inputs are crucial for the collaboration and should be guaranteed. As an example, one of the discussed issues during 'convergence days' was reproducibility of the results of old ISBA scheme in ALADIN context with the new SURFEX scheme. The conclusion was that if we want to have solutions that guaranties that people will be able to reproduce what they had before, then we will have to come to a new shape of collaboration between AROME and IAAA.

- Basically, convergence is between two models: a) AROME which is application developed to run at 2.5km resolution and below; b)
   IFS/ARPEGE/ALADIN/ALARO are developed for global scale up to 5km. The situation is that AROME gets its source of science from research in Meso-NH (which is a collaboration between Météo-France and universities) whereas IAAA gets it from 'traditional' NWP science. So if one forgets about the scale specificity of these models, the major differences come from the implementation side where AROME can be defined as a tool to quickly implement Meso-NH science and IAAA as 'traditional' NWP science. If we want to benefit from both science branches, the proposal is to gradually move from the scale specificity to the definition of the models with respect to the difference in a way of capitalizing on the upstream research. With time, both implementation sources should transversally become available in both models and should finally converge into a common multi-scale super-system.
- Jeanette Onvlee commented that tackling a development process from fast approach and slow approach capitalizing on upstream research is wise because it's in practice to correctly define an existing difference. She welcomes this idea and mentions that it will surely have also consequences for the HIRLAM code.

GA took note of the importance of convergence for further collaboration and it was agreed that we are on a good track. GA Chair congratulated the people from CSSI and also to people from Météo-France who were contributing to this progress.

# 9. ALADIN 4-year plan

## a) Presentation of the Draft 4-year plan (CSSI Chair & ALADIN PM);

What we need is probably something similar to what happened last year for strategic document; that is endorsement under conditions of last small updates because hopefully the whole process will full PAC, CSSI/LTM has been correctly conducted. Then we shall need discussion and approval from the GA to start the process for the new work plan on the basis of 4-year plan. With two months remaining, this will be relatively simplified this year, but for the next year we will have to start doing three things:

i) having the work plan earlier so that it can be shown to GA,

ii) having the gliding part of the 4-year plan for PAC's consideration in Spring, iii) starting to consider how to merge the plans with HIRLAM.

For the time being the merging is simple: the data assimilation tool and dynamics part are going to be build as joined ones. For the time being they are not included in this way but they are practically a carbon copy without deliverable times and priorities and hopefully by next year we should be able to say this part is common with HIRLAM, this was not possible within the time scale of this year.

- The Bureau Meeting tackled the question of how to verify the implementation of the plan and there is a proposal to have a review, in a way still to be decided, probably under PAC control. But it will be difficult to create independent review with so many people involved in so many governance activities inside the ALADIN work. The first occurrence should be early 2011.
- Alain Ratier asked if convergence actions were included inside the work plan. PM confirmed that this has been taken into account in Section 5 which was completely rewritten by Bart Catry (the CSSI member in charge of parameterizations) on the basis of short summary of the outcome of the convergence days. Therefore, in Section 5, we have convergence steps for physics and convergence related parts specific in ALADIN, ALARO and AROME issues.
- Claude Fischer had two short comments for physics part from information he got from CNRM. First one is from turbulence group which suggests to include in the the next version of 4-year plan the question regarding algorithms of SLHD vs. new 3D turbulence approach. The second comment is on the side of actions for the convergence, particularly, that CNRM management absolutely insists on the needs that, after finalizing concrete actions, there is a very careful checking of manpower needs with names of manpower before doing any calendar planning. CSSI Chair noted that in preparatory document no. 8 some manpower issues are addressed, although not very specifically due to very tight schedule. PM further added that there are several scientific and technical particularities which are detailed in convergence day outcome document, but this document is not yet finalized in some of it's aspects. Basically we have the text written by CSSI Chair which is on page 3 and 4 in document no. 8 and we have for one of the actions, 3MT in ARPEGE, a complete document. What is missing, as bricks for final report, are reports from the working groups on microphysics on one side and DDH and interfacing on the other side.
- Another comment from Andras Horanyi was that in his opinion this is a very ambitious plan, and as it was written in the synthesis part in the end, it is very important to see the available manpower. He suggested that there should be an addition to the plan specifically regarding the manpower capacities. PM explained that what we want to do is to have an iteration of a work plan next year and when preparing the gliding plan to try to readjust workforce as much as possible and if we see we don't have sufficient workforce we will drop the items from the plan. Andras Horanyi also noted that this is the way we are used to work. According to him, what is important is to see the relative balance of manpower over 4 years and to be in the position to redirect resources in advance if we see that current balance is not appropriate for the years to come.
- PM asked Jeanette Onvlee for comments to have also amendments coming from the HIRLAM community. She responded that as concerns the contents of the plan it conforms very well to the discussions they have been having in the context of HARMONIE cooperation. The form depends on particular subjects, it still reflects to some extend the origin of documents they came from, so there are still differences in the style that can be resolved in time, this is certainly not a big problem. As far as manpower is concerned, the mainline is very parallel to what Alain Ratier was saying, it is important also in the 4-year outlook to be clear how much manpower you will spend on what. So it's important in next step to see if we've got the balance of activities right, because some of the activities which are set here in a way that we don't know how much work is actually going to be involved, and that time of situation is always a little bit dangerous. Also as concerns the size of the document, it's quite difficult to have the right idea of priorities when reading through it. So Jeanette Onvlee would strongly suggest to have the executive summary supported by the table of main topics to be achieved

and relative amounts of manpower to be spend on those topics. That's quite essential for understanding of the plan. The GA Chair reacted by mentioning that there was a discussion linked with this issue at the Bureau Meeting and they formulated a proposal how to handle it in the future. It was decided to make it a gliding system for the first year with checking by CSSI while GA just sees it every two years. CSSI has a look on 4-year plan and Bureau Meeting decides whether to rewrite it or not. If yes they will prepare it for the Summer. PM raised a question that if we make executive summary with the manpower distribution this would be a little bit strange because there would be manpower on the whole and not manpower on the items. What PM would prefer is to do executive summary only on priorities in the first year and to have both of them with manpower in the second version. This proposal was approved by the GA.

 PM asked in what approximate time scale can HIRLAM send the comments for the 4-year plan. It was agreed to send the comments they will have until 15<sup>th</sup> December.

## Verification of the plan:

- Dijana Klaric proposed to make a crosschecking of achievements between working groups (e.g. data assimilation group could review a work of EPS group and vice versa) thus broadening the knowledge base of scientists within ALADIN community in contrary to the current situation when everybody is reviewing himor herself. This was agreed as a good idea however PM raised a question that it must be put clear what would be a definition of achievement. Whether it's publications, research potential not yet converted into operational status or operational deliverables. Andras Horanyi made another proposal that if we need somebody to objectively evaluate if the progress was satisfactory or not, we could consider NWP expert teams from other consortia. This was also found as a very interesting idea. Nevertheless, GA Chair stressed that this should be decided at the level of PAC so he proposed that CSSI and PM should create a proposal for the verification which would go to PAC and after that to GA.
- Dominique Marbouty reminded how it is done in ECMWF. It's mainly the role of Scientific Advisory Committee (SAD). If you look at how ECMWF's SAC is running, it consists of two parts. It starts by reporting by heads of departments about what has been achieved over the last year also looking at the verification reports and then looking at the programme and assessing each part and commenting on it. PM noted that it's clear that we don't have strength to do it as well as at ECMWF.

# Special presentation: *LAM-EPS preliminary achievements and pending issues* (*Dijana Klaric*)

See the slides of the presentation on the web site.

## 10. Cooperation and licensing agreements

GA Chair introduces two documents that are submitted to the approval of the GA:

- 1. Contract between an ALADIN Consortium member and an organization for the use of the ALADIN products;
- 2. License to use the ALADIN NWP system's component AROME.

PM informs that two agreements concerning the ALADIN Programme have recently been under negotiation:

- One between SHMI Bratislava and an Ukrainian institution, concerning a collaboration in terms of hydrology;

- One between IM Lisbon and an academic institution that wants to use the AROME component.

On the basis of these two cases prepared with the help of Christian Blondin, PAC tasked PM to produce two "master-type" documents that would serve as templates for standard agreements.

PM explains the legend of the colors used in the two documents submitted to the approval of the GA:

Yellow = to be completed

Red = is a comment (to be deleted) or a reference to the specified annex depending of the product

Blue = is the concerned product

GA Chair gives the floor to Dominique Marbouty.

At this early stage of discovering the documents, he has no comment on the proposed template for a contract between an ALADIN Consortium member and an organization for the use of the ALADIN products.

He has a comment concerning the template for a license to use an ALADIN NWP system's component. If one of the member states or cooperative states wants to have this license agreement with one of their national institutions, that's automatic from the ECMWF convention. But if it would be outside the states and it is referring to ECMWF software, than it would have to be considered case by case and would probably have to go to ECMWF Council.

PM shall adapt the template of the license to use an ALADIN NWP system's component according to the remarks done by Dominique Marbouty by adding a cover page stating that the license is only applicable to any ALADIN member that is either a member state or a cooperative state of ECMWF for use within the state. Any other cases will have to go to ECMWF Council.

Item 6. iii (top of page 7 of Document N°10) of the template for the license to use an ALADIN NWP system's component shall also be corrected so that it covers not only the AROME code but AROME and ALADIN NWP systems. Corrected version is:

"6. iii. not transfer any component of the code in whole or in part to any third part, unless authorized by the ALADIN Institute."

GA asks PM to correct item 6.iii and to take the remarks of ECMWF into account and approves both "master-type" documents after correction.

PM informs of a third type of agreement concerning non re-dissimilation in case of benchmarking of computer firms.

Dominique Marbouty offers to transfer the template they use at ECMWF as example. PM thanks him for his offer and will adapt it to the ALADIN needs.

# 11. Membership and cooperation matters

GA Chair informs that he has received two requests for membership and he states that it would be very useful to have a general procedure for membership.

Bureau Meeting proposes that PAC Chair and PM write down a general procedure. This procedure would be submitted to PAC and than to the approval of GA. GA approves the proposal of the Bureau Meeting that PAC Chair and PM prepare a general procedure for acceding membership.

Dominique Marbouty reminds that if the request for acceding membership does not come from a member state or cooperative state of ECMWF, the request must go to the ECMWF Council.

The ECMWF agreement has been updated recently (only the annexes) and Mr Marbouty will provide a copy to PM.

## a) Ukraine's first official steps

PM summarizes the different stages of Ukraine's request.

First contacts took place in 1999 with Météo-France but the official request for participation in the ALADIN Consortium was only sent to Météo-France on February 12, 2008. The Bureau Meeting decided to submit the request to GA.

GA Chair asks for the opinion of ECMWF.

Dominique Marbouty explains that at ECMWF cooperation is open for all members of RA VI. Ukraine is member of RA VI, so their request would have to be handled. The vote of the Council would be needed at the end of the process.

GA has not a clear understanding of the reasons why Ukraine is introducing its request for membership. That's why GA decides:

- 1. PM shall prepare and send them a list of clear questions;
- 2. On the basis of the answers to the questionnaire, PM and GA Chair will decide whether a visit can be paid to Ukraine;
- 3. If the process is correctly ongoing, PM and GA Chair will decide to invite Ukraine to defend its case in front of the GA.

#### b) Viet-Nam's search for contacts

Viet-Nam is also requesting to become a member of the ALADIN Consortium. It seems that they are willing to run an ALADIN version as part of a multi-model EPS system without specific collaboration. This is contrary to the MoU.

As Viet-Nam will never become a cooperative state within ECMWF, they can not become a member of the ALADIN Consortium.

GA decides not to handle the request of Viet-Nam. In the case that they would come back with their request, the normal procedure would be followed with a particular attention to their motivation.

## c) other similar matters, if any

GA Chair received a request from Vladimir Pastircak for a contract (Contract between an ALADIN Consortium member and an organization for the use of the ALADIN products) between the Slovak Hydrometeorological Institute (SHMI) and the Zacarpathian Hydrometeorological Centre (ZHMC) in Uzhorod.

The proposal of contract has been written by Christian Blondin and PM.

#### GA Chair gives the floor to Mr. Pastircak.

ZHMC is a branch of the Ukrainian Hydrometeorological Centre. The contract concerns the provision of data on high impact weather (especially for hydrological models in case of floods). The data will not be used for commercial purposes and will not be disseminated to any third parties.

GA approves the contract between the Slovak Hydrometeorological Institute (SHMI) and the Zacarpathian Hydrometeorological Centre (ZHMC) in Uzhorod.

# 12. Work plan for 2009, essentially in terms of manpower priorities

PM starts by recalling the situation of elaboration on work plan two years ago when itemization by CSSI and LTMs was done in a more straightforward way getting a plan which was relatively balanced but also showed huge gaps (e.g. overstaffing problem). He expressed his hope that having the strategy document and 4-year plan as a backbone, the situation will be better for this year. He explained that the intention is to ask each CSSI member to make itemization for 2009's elements of 4-year plan and to ask LTMs to fill up the grids with manpower they are ready to dedicate to it. PM then presented the list of reasonable targets for 2009 work plan:

# 1) Data assimilation and use of data observations

Jeanette Onvlee remarked that from HIRLAM side they would have strong interest in more direct cooperation with ALADIN on observation impact studies.

- Claude Fischer raised an issue of the methodological progress, i.e. the mastering of technical and scientific aspects of the variational algorithms and understanding the code.
- PM noted that both raised issues should be discussed under item 13.

# 2) Diagnostics

There were no comments.

# 3) Dynamics and boundary coupling

- Claude Fischer had a remark on bullet four in the presentation. He informed that question of geometry was discussed recently between GMO and GMAP. PM responded that the plan is to come up with concrete solution even if the science is not as far as everybody would wish.
- For the next slide Claude Fischer remarked that the point of numerical efficiency is fairly ambitious. PM explained that it is a specific part of convergence which says that data flow from physical interface will remain separated to the physicsdynamics interface which should become unique. If we do this step then the gate is opened for restarting experiments on the sequencing (which has been asked by HIRLAM). Currently there is an ongoing work on this in Brussels which is basically continuation of Martina Tudor's research that didn't bring yet any stable solution. However, as noted by CSSI Chair, the problem has been identified and if no other problems appear, we might expect results by the end of next year.
- Jeanette Onvlee mentioned that there is a third component needed and that is that when we look at numerical efficiency we have to look at it from the scientific side into the code, but we also have to systematically look from the code side at how much every step costs. For example in HIRLAM there will be more substantial effort put in systematic profiling in the future.

# 4) Link with applications

- PM introduced this point mentioning that this is a starting project with rather limited ambitions for the time being.
- Yong Wang asked what the expectations from INCA are. PM explained that INCA has become a successful nowcasting system which is very flexible. Additionally INCA is widely used by the community, especially in Central Europe, and there is a need for systematic analysis to see what could be done more structurally and what should be left to each partner to do freely.

## 5) Physics

There were no remarks for this point.

# 6) Predictability and EPS

- PM remarked that for the EPS issue it is urgent to sort out which elements are structural and which are still opened. Otherwise there is a risk that we will fall in the same situation as with the physics 4 years ago.
- Claude Fischer had a comment on the activity in PEARP mentioning that on the side of PEARP there is a room for considerations on aspects of perturbation of physics for instance.
- Yong Wang expressed his feeling that in LAEF they are missing some information from Météo-France on the activities in PEARP. He thinks it would be very beneficial for both sides to communicate more and exchange information such as how to perturb surface initial conditions for instance. Claude Fischer commented on that by describing the plans for next year. People plan to increase the number of ensemble members and also to increase vertical resolution. The main streamlines of work should be focused on some aspects of coupling between the ensemble data assimilation and PEARP or on the aspects of perturbations in the physics (stochastic approach vs. multi-physics approach).

## 7) Surface

ACNA has got as main task for the coming year to finish the problem of upward compatibility of SURFEX with the existing operational solutions (a task which was previously supposed to be solved by 2006 ...). PM stresses this doesn't strictly mean that SURFEX will become operational by all partners in one year time. However, an important condition that must be met before adopting the new system will be simply not to stay too much behind the recent cycles. He pointed that this is also a warning to every delegation that keeping up with the recent cycle will become more necessary for the transition to SURFEX. As this task is the firmest target for the next year, there is currently also work on this problem in Météo-France, Hungary and Belgium.

## 8) System aspects

There were no comments for this point.

GA Chair commented that the discussions in this item were too technical and suggested that in the future it should be first discussed within CSSI and then brought to GA.

The plan has been approved and will go to CSSI and LTMs. He stressed that it's important for directors to motivate LTMs to be active in finding manpower resources.

# 13. Important scientific or technical issues for the 2009 planning; draft list to be updated if needed

## a) Physics (including 'convergence')

There were no remarks.

## b) Dynamics

PM mentioned the still persisting problem of lack of manpower in dynamics which makes it more difficult to itemize the concrete actions. With not enough manpower we cannot treat in parallel all necessary actions. Consequences of decisions in dynamics are far more important then any other decisions, e.g. the ones in physical parameterization, as this touches the core of data flow and has influence on many things that are not necessarily seen at the time when a given scientific idea is brought into the community. So we are facing this conditioning which brings difficulties in a longer term projection of consequences. However, there is a small improvement because we start to train new people but this (may be) will signify progress only after a certain amount of time.

Jeanette Onvlee expressed her opinion that it is possible, considering the state we are, to make some priorities here. In a next few years, when having models in resolution in 1.5km, an interaction between the dynamics and the rest of the model will require a lot of attention. PM confirmed that this will have to be done at some stage indeed. He also pointed out that the key item of convergence is to separate physical interface which must remain multiple, from phys-dynamical interface which on the contrary must become a single one so that we can start to attack this issue.

## c) Surface modelling- and data assimilation issues

- Jeanette Onvlee remarked again that cracking the surface field issue and looking at the right methodology for doing it should get a very high priority. We should aim for a solid solution rather then a quick one.
- PM admitted he underestimated the complexity of the problem and confirmed it needs a more systematic attention.

# d) 4D-Var related issues

- Concerning the plan, Dijana Klaric remarked that it was hard even to fulfill the plan for 2008 because there are only two persons dedicated to this job who are however already having a position inside LACE, namely F. Vana and A. Trojakova. Two people inside ALADIN community working on 4D-Var is definitely not enough.
- Radmila Brozkova confirmed that these two people have many other tasks and a reaction from the consortium is really necessary to help balance the distribution of manpower on this topic. She mentioned they may try in CHMI to motivate students to get more manpower on data assimilation but it should not be left purely at CHMI to be the sole actor in this field.
- Claude Fischer expressed his feeling that last year the knowhow on scientific and technical aspects on the variational algorithm diminished overall in the community. He thinks it is linked to the fact that the critical manpower that we could dedicate to it decreased. As a second point, he expressed that they would be interested in Météo-France in research on 4D-Var although they do not plan to work on it directly. He explained that some aspects of research on 4D-Var might be beneficial for variational algorithm as the code of 3D-Var and 4D-Var is not so different and there are scientific bridges between the two.
- Radmila Brozkova raised a question of lack of challenge in 4D-Var LAM which according to her might be responsible for low motivation of people to work on it.
   PM agreed and asked Jeanette Onvlee about the situation in HIRLAM concerning the lack of focus or hesitations in long term aspects of 4D-Var.
- Jeanette Onvlee explained that the critical point is to achieve flow dependency in meso-scale. If this cannot be achieved, having meso-scale data assimilation will make little sense or at least will loose a large part of its value. However, they are willing to do 4D-Var work by themselves even if no one else would be interested in it. They put their emphases to try it out in HARMONIE although they realize that for number of reasons, e.g. nonlinearity aspects and computational demands, it may actually fail in the operational context, which is one reason why they also put attention to ensemble assimilation techniques.
- PM expressed his worries that if we don't build a prototype the questions will drift away and it is not so clear for him that everybody is in phase for creating it. He concluded that at least it should be noted that this issue is addressed a little bit too "randomly" by having initiatives which are not always completely corresponding to the expertise existing elsewhere.

# e) LAMEPS

 PM expressed his impression that both LAMEPS and LAEF were forced to do things which were not the most corresponding to their ambitions or capacities. LAMEPS system, which is a research project, is far more empirically operational oriented, and on the other hand a LAEF project, which is set to be with an operational target, is a little bit more exploring scientific issues beforehand. So if we could make both assets more cross-influencing each other, there is probably an enormous benefit lying underneath.

# f) System aspects

- PM expressed his concerns that despite the fact that people are working more and more together and having more common initiatives, they are still not speaking the same language. He interprets it as a strong persistence of "cultural differences". Even though common work might be a little bit more integrated, the downscaling to every country is suffering. This might be explained by the fact that, on either side, people don't see why they should change their habits just because there is another partner.
- Jeanette Onvlee agreed that normally when people cooperate they start to speak the same language and things converge. However, we see that there is something which blocks it and there is really some very elementary misunderstanding on certain motivations and this should be talked out intensively between the people. On the other hand, there are also some approaches where the practices they have are so different that it's actually difficult to reconciliate them and then conflicts of interest arise. But she thinks that the misunderstanding problem is the one that needs some serious tackling first.
- PM had a proposal that maybe the correct solution would be if Jeanette Onvlee could answer the document, which was prepared by Claude Fischer and addressed to PAC, and sort out what can be categorized misunderstanding and should be treated first and what is more deeply rooted and should be left for the second stage. Structuring the answers in these two parts might help a lot.
- GA Chair added that directors agree with the proposal and the issue should be worked out among the PMs.

# g) Verifications

- Dijana Klaric informed that in LACE there was a decision at the beginning of the year to optimize the common software for verification database in Slovenia with investment of about 20k € (from royalties). However the work has been partially postponed after the SRNWP and EWGLAM meetings where it was realized that many new features might enter to this system. Namely, the interest is put on the meso-scale verification methods.
- PAC Vice-Chair commented on this that they would appreciate to receive some clear guidelines coordinated not only from LACE but also from within a wider community. PM proposed that ideally somebody from inside LACE should act as an expert and evaluate the minimum that the upgrade should be encompassing in order to enable the database to evolve in the future towards the new solutions. Not all the work has to be done now but it is crucial not to block the system and to be sure that new methods can be dealt with, later on.

## 14. Budget matters

## a) Accounting of the 2007 budget

GA Chair informs that PM had no time to prepare a document about the accounting of 2007 budget. GA Chair agreed with PM that is was less important than item 14 b) and c).

GA Chair proposes to go directly to item 14 b). The members are invited to contact PM afterwards in case of questions on the 2007 budget.

## b) Report about the ongoing execution of the 2008 budget

PM is glad to announce that it has been able, between the team of Christian Blondin in Paris and the Support Team, to reach a completely balanced state for Météo-France's internal handling and of the flat-rate "account" and to finish with a closed budget.

PM further informs that only two missions were not funded because they were not realized. Only one stay has been cancelled and it has been replaced by another one by bilateral agreement.

PM is glad to conclude that the equilibrium that the Brussels extraordinary GA was wishing, is reached. We have both the balance and the volume we were aiming at.

GA Chair gives the floor to Mehmet Fatih Buyukasabbasi who informs about the contribution of Turkey.

For facilitating the payment, it was agreed to pay the contribution via the Austrian Meteorological Service. Turkey has received their invoice a few days ago. The procedure for transferring the money can take about 20 days which means that the fee would be on the Austrian bank account by the end of November 2009.

## GA Chair gives the floor to France.

Alain Ratier talks of the problems that Météo-France encounters with regard to the payment of the contributions and of the endless discussions with their financial controller. Alain Ratier urges all the members to make every effort to pay the contributions before the end of November.

GA decides that Météo-France will prepare a letter, to be signed by GA Chair, to all the directors of the services that have not paid the contribution to the ALADIN consortium.

Alain Ratier further informs of a problem with the royalties to be paid to LACE. Their financial controller is complaining because the process was initiated with wrong figures and a justification is needed.

Dijana Klaric comments that LACE has savings from previous years, so they can face that delay, but they would like a stabilized situation in the future and ask to be more careful about this in 2009.

PM witnesses progress every year because, at the beginning, in 2006, it was very hazardous. In 2007, we managed to bring all the contractual arrangements on. This year, we have the virtual budget balance but not the actual one. Hopefully next year will be completely squared and PM will make every effort together with Christian Blondin and the rest of the Support Team to reach this target.

GA takes note of the 2008 budget execution and thanks Météo-France because they have a lot of trouble with this. GA appreciates very much the way they are handling it.

# c) Adoption of the 2009 budget

GA Chair gives the floor to PM.

The proposal comes out of the discussions at the PAC- and Bureau meetings. The idea was that, since the virtual budget was quite well targeted in 2008, and that the conditions were not changing since the suggestion made by Alain Ratier at the Ljubljana Assembly to share the entry-fee between two years, we are nearly in the same conditions.

The discussions concern the volume of the budget and as a consequence the volume of the flat-rate contributions. If we want to maintain the same level of activities, the contribution needs to be 7.300€ (which is still below the 7.800€ ceiling decided by the GA of Bratislava three years ago) for a total budget of 78.860€.

GA approves the flat-rate of 7.300€ per member for 2009.

#### New financial topic for the year 2009

GA Chair gives again the floor to PM for commenting the document N° 14 c "New financial topic for the year 2009".

For the first time, ALADIN and LACE, considered in this case as a single entity, are going to benefit from the Eumetnet financing for all the programmes of SRNWP-Interoperability at the level of 18.700€ per year for a three years duration. The aim is to go to the partners that will do the efforts supporting the interoperability programme, in developing some converters, some adaptations of the software and so on. The Responsible Member (Met Office) will probably agree to have two financial entry points: one in Météo-France and one in ZAMG. If one country which is not Météo-France or LACE is willing to dedicate home work force in this programme, than the financial procedure will be more complicated and will have to transit via the flat-rate. This question only concerns Belgium, Portugal and Poland since North African countries are not Eumetnet partners.

Josette Vanderborght informs that Belgium is not going to participate. Aderito Vicente Serrao informs that Portugal is not going to participate. Ralal Bukowski informs that Poland is not going to participate either.

Claude Fischer makes it clear that people from other countries (including the three above-mentioned ones) can be invited to participate in the project. The budget will be basically used for invitations of people as part of the ALADIN contribution to the interoperability that Météo-France will host in Toulouse. PM confirms and reaffirms that the budget will not circulate through the flat-rate budget.

As no flat-rate partner is going to contribute to the I-SRNWP tasks, PM, the Support Team and LACE will evaluate what is the respective share of this budget for both entry points because it depends on the workload.

GA approves the two entry points being Météo-France and ZAMG for the I-SRNWP programme and tasks PM, the Support Team and LACE to evaluate the respective share of the budget.

## Outlook for the 2010 budget

PM warns that it will not be possible to continue with the same programme, if we stay at the ceiling. There would be a structural deficit of about  $12k \in$ .

The Bureau Meeting of October 22, 2008 arrived to the conclusion that for 2010 it could be possible that we need to raise the flat-rate ceiling, may be up to  $9.100 \in$ . Another possibility would be to cut the budget and the programme a little bit.

GA Chair calls for the opinion of the members and informs that it is not necessary to take a decision now.

Andras Horanyi wonders whether it would be necessary to resign the MoU if the flatrate is increased. PM informs that it would not be necessary as it is a decision of the GA.

Vincent Cassé wonders whether it assumes no royalties. PM informs that it is not the case. But even though we would consider the sum minus royalties, the juridical problem would be the same because the flat-rate would still be above the ceiling.

GA Chair stops the discussion and lets it open for the future. He just asks the partners who need to make their budget for next years to please consider the possibility of increasing the ALADIN flat-rate.

## d) Royalties-linked issues

PM was asked to clarify the situation and has prepared a table that summarizes the situation for the years 2007 to 2009 about the budgetary aspects of the ALADIN Royalties concerning actions performed by MFI (Météo-France International). This is a purely informative table since the Royalties' revenues are not any more part of the common budgets from 2008 onwards.

The shares are changing this year because we have signed a new MoU with another scale of contributions which determines the three respective shares of Météo-France, RC LACE and flat-rate members.

PM recalls that flat-rate members are entitled to send a bill of 460€ to MFI for 2008. The Royalties for 2009 are firmed and can be invoiced to MFI (Météo-France International and not Météo-France) from January 1, 2009 for an amount of 686€.

GA takes note of the information.

## 15. Appointments of the PAC Chairperson and Vice-Chairperson

PAC Chair is stepping down and a new PAC Chairperson is needed.

PAC proposes the candidacy of:

- Cornel Soci as PAC Chair and
- Aderito Vicente Serrao as PAC Vice-Chair.

GA approves the appointment of Mr. Soci and Mr. Serrao at the head of the PAC and congratulates them warmly.

The first PAC meeting under this configuration will take place in Paris on May 28-29, 2009.

## 16. A.O.B.

## Documentation officer position

GA Chair gives the floor to PAC Vice-Chair.

As reported from the 4<sup>th</sup> session of the PAC meeting, there is a need for a documentation officer. Patricia Pottier is doing the job very well but it is a very demanding job on top of other activities. PAC Vice-Chair and PM call for candidacies if one country would be willing to support some percentage of this task with a scientific secretary (half-time position).

PM will write to all participants of the GA with a description of tasks and of the workload. Assistance, from a voluntary basis, would be highly appreciated.

## Documentation for the GA

GA Chair gives the floor to Klemen Bergant.

He suggests that, in the future, the members of GA would receive the documentation a little bit earlier: two weeks before hand would be appreciated.

PM recognizes that the documents were sent quite late. He had to face the difficulty of an accumulation of close meetings: EWGLAM, CSSI, LTMs and GA. The gap time in-between was really too short.

PM will do his best to send the documents of the next GA one week earlier.

GA Chair is of the opinion that it is possible to improve the functioning of the GA meetings by considering which documents must be discussed at which level. He estimates that this GA was a kind of "high-level CSSI meeting" while it is not the objective.

# 17. Date of the next General Assembly (and confirmation of the places for the next two General Assemblies)

GA Chair gives the floor to Mehmet Caglar.

The Turkish State Meteorological Institute is glad to invite the members of the GA to Istanbul for the next GA on November 12-13, 2009 (from noon to noon).

The Bureau meeting will probably take place on October 14, 2009.

The Czech Republic repeats that it is glad to propose hosting the 2010 GA in Prague.

## 18. Closing of the meeting

GA Chair thanks the delegates for the constructive collaboration, PM for the hard work and Mr. Serrao and his team for their warm welcome and the very well organization.

GA Chair closes the meeting.

# List of participants

Name	Institute	Country/Title
Jean-Francois GELEYN	CHMI/Météo-France	ALADIN PM
Yong Wang	ZAMG	Austria
Eve HONNAY	Institut Royal	Belgium
	Météorologique	Deigian
Josette VANDERBORGHT	Institut Royal	Belgium
	Météorologique	Doigian
Ivan CACIC	DHMZ	Croatia
Branka IVANCAN-PICEK	DHMZ	Croatia
Piet TERMONIA	Institut Royal	CSSI Chair
	Météorologique	
Radim TOLASZ	CHMI	Czech Republic
Radmila BROZKOVA	СНМІ	Czech Republic
Dominique MARBOUTY	ECMWF	ECMWF
Tomas KRAL	CHMI	ACNA
Claude FISCHER	Météo-France	France
Vincent CASSE	Météo-France	France
Alain RATIER	Météo-France	France
Henri MALCORPS	Institut Royal	GA Chair
	Météorologique	
Jeanette ONVLEE	KNMI	HIRLAM
Andras HORANYI	OMSZ	Hungary
Dijana KLARIC	Meteorological and	LACE
	Hydrological Service	
Hassan HADDOUCH	Direction de la	Morocco
	Météorologie Nationale	
Cornel SOCI	National Meteorological	PAC Vice-Chair
	Administration of Romania	
Ralal BUKOWSKI	IMGW	Poland
Marek JERCZYNSKI	IMGW	Poland
Aderito Vicente SERRAO	Instituto de Meteorologia	Portugal
Wanda COSTA	Instituto de Meteorologia	Portugal
Maria MONTEIRO	Instituto de Meteorologia	Portugal
Vladimir PASTIRCAK	SHMU	Slovakia
Klemen BERGANT	Environmental Agency of	Slovenia
	the Republic of Slovenia	
Abdelwaheb NIMIRY	Institut National de la	Tunisia
	Météorologie	
Hichem FEHRI	Institut National de la	Tunisia
	Météorologie	
Mehmet ÇAGLAR	Turkish State	Turkey
	Meteorological Service	
Mehmet Fatih	Turkish State	Turkey
BUYUKASABBASI	Meteorological Service	