Minutes of the PAC third Session (Prague, 7th-8th June 2007)

The PAC Chairman will make a short verbal report about the third PAC Session and will invite the delegates to the General Assembly to ask for precisions, to comment the issues that were dealt with and to confirm or infirm PAC's orientations for the issues that shall not be specifically dealt with during a regular Agenda Item of the 12th General Assembly.

The delegates to the GA are invited to take note of the content of the PAC's third Session Minutes (the conclusions and/or decision-related issues are underlined in yellow), to hear the verbal report of the PAC Chairman and to raise any linked issue for questions, comments and discussions at the Ljubljana General Assembly.

Third ALADIN PAC Meeting Prague, June the 7th and 8th 2007 Minutes

1. Welcome and opening of the meeting

The meeting was opened at 10.30 am by Radim Tolasz on behalf of Ivan Obrusnik, Director of the Czech HydroMeteorological Institute. He welcomed all the participants (annex 1) and wished them an efficient PAC meeting and an enjoyable stay in Prague.

The chairman thanked RT on behalf of the attendees and ensured that everyone will do his/her best to contribute to the success of this third ALADIN PAC meeting.

As observers the chairman welcomed especially Stefan Nilsson, HIRLAM representative as vice-chairman of the HIRLAM Advisory Committee (HAC), for his first attendance of the PAC

2. Adoption of the draft agenda

The (slightly revised) agenda was adopted. Item 6.b.ii discussion will be postponed if needed. The chairman left room for changes if needed during the course of the meeting.

3. Final approval of the Minutes from the second PAC meeting

The final version of the Minutes from the second ALADIN PACmeeting is approved.

4. PAC matters:

a. Matters arising from the Budapest General Assembly

JFG highlighted two points:

- Monitoring of main strategic issues related to the GA remarks about the "Objectives and Priorities" standing document (for instance governance). EB mentioned Lateral Boundary Coupling (LBC).
- Two "hot" topics: nowcasting and LAM climate work, difficult to isolate from the main work stream. However there are already some successes in those two domains and many more potential ones. The issue was how to account for them at the CSSI level, and whether it is worth identifying work forces. EB indicated that nowcasting based on NWP is likely to becoming a strategic issue. Climate is also a key domain to satisfy users' needs. The feedback of climate research to NWP is real, so it is worth paying much attention. In HIRLAM, SN explained that e.g. common climate related work could be treated within an optional project (with the PM acting as coordinator (and with a specific domain project leader) However, at the moment there is no such optional project defined in HIRLAM.

JFG is pleading for having CSSI designation, but without participation to the joint ALADIN-HIRLAM meeting (since there will be no counterpart in the HIRLAM side). This is of course a temporary solution.

PAC recommended that NWP aspects of Nowcasting and Climate be considered in CSSI. Members are invited to look for candidates. JFG will consult with the CSSI chair.

b. PAC advices/recommendations about the execution of the 2007 work-plan on issues where the Budapest GA drew specific attention:

i. LAM-EPS issues

JFG stressed some difficulties in this field: lot of activity in the NWP community, including at ECMWF; MF concentrating on other things (PEARP); SRNWP proposal on LAM EPS not accepted. Regarding this issue, FN reminded that EUMETNET council was not in a position to adopt this proposal, mainly for financial reasons.

ALADIN and HIRLAM have nevertheless agreed to set up a common project in coordination with ECMWF, based on GLAMEPS (HIRLAM leader) with contribution from LAEPS (LACE leader) also. So there are two projects, with similar goals but different tools (scripts, post-processing). So ALADIN is torn apart in terms of priorities and human resources. JFG asked for a clarification.

DK would favour GLAMEPS because of its international recognition as the main test bed for the probabilistic/ensemble approach, and its long term sustainability.

EB remarked that ECMWF ensemble suite is not set up for short term ensemble forecasts. A specific set up has to be defined.

SN mentioned that HAC at its last meeting had some concern about the contribution of the ALADIN components to GLAMEPS.

PAC advised more cooperation with HIRLAM, and a reorientation of LACE (technical) effort to embark in GLAMEPS as soon as possible. (JFG will communicate with the help of directors and LTM to have as much buy-in as possible for the LACE involved persons regarding this inflexion of their work).

DK insisted that ALADIN members, being ECMWF members too, may decide to dedicate some of their own IT computing resources units at ECMWF to allow the GLAMEPS numerical experiments to run (the idea is to have the biggest ensemble of forecasts available – up to many hundreds if possible), since the allocation for GLAMEPS as special project will not be sufficient.

ii. Work on dynamics

JFG reminded that resources were clearly identified by the GA as being not enough in this field, even more if HIRLAM is considered. However, some NWP experiments have been set up for severe weather situations, which indicated a potential for improvements based on new or alternative numerical (theoretical or algorithmic) solutions.

LBC situation in particular is a paradox: not enough human resources, but significant progress, even with incomplete or to-be-refined solutions. Newcomers are needed on this topic, but there is a high risk that they may not appear on time for different reasons (key people already too busy, competences departures, etc..).

SN remarked the same situation occurred in HIRLAM, with dynamics as a real bottle neck.

However, work on dynamics has now been picked up again after the start of Mariano Hortal as project leader for this area.

EB stressed that following the Lisbon PAC decision, MF has involved ALADIN partners by the creation of a working group which is indeed working well with ECMWF on NH issues,. To be more specific, JFG asked permission to contact, together with the PAC Chairman, the Slovakian director since he holds part of the solution.

JFG indicated that the next issue of the newsletter prepared by the above-mentioned working group should report on progress.

PAC recognized that it can only "put to the finger" on this issue, and reported in this way to the GA. Possible solutions: at least secure current resources; prepare the venue of comers in this field. N-B: FN and JFG will write a letter prior to the Ljubljana GA to the directors to attract their attention on this issue.

iii. SURFEX

JFG introduced the topic by recalling the SURFEX Oslo workshop, recognizing that some orientations taken previously in Toulouse will have to be reconsidered, taking a longer term perspective. The 3 working groups (joint between both consortia) tackling this issue have agreed to come on with a common 5 year proposal, written in the "grey" literature (e.g. no scientific reviewed one).

DK indicated that LACE, because not well prepared on this issue, will like to join in one year or so.

EB supported the approach strongly, and highlighted the link with the strategic ALADIN framework and the complementarities with HIRLAM expertse.

PAC recognized the importance of the subject, approved the formation of an enlarged joint working group with the aim to writing the specifications of the future 4 year work plan.

iv. Operational-like reorientation of ALARO-0

JFG recalled that this has been a hot issue for many months, giving raise to several debates in PACs and GAs. After reminding the commitment of MF to dedicate resources to test ALARO-0 versions – but not to participate in maintaining them – JFG mentioned that his first evaluation of the needed resources for this was insufficient and led him to a too pessimistic view. Indeed the situation evolved quite positively after the PAC endorsement and GA approval of the modified Lisbon document on this issue.

JFG reported on computing efficiency (CPU time and in-memory requirements), the various combinations of scientific modules being tested, and their forecast quality. Despite that all parameters are not yet adjusted to their limits (for instance time step length versus instability), or that some parameterizations are not comparable (ALADIN-France radiation known to be expensive, orography set up specific, evaporation of falling precipitation a bit different), some conclusions can be drawn.

ALARO-0 is a "good value for money" model based on preliminary results on 2 x 10 day periods looking a comprehensive set of parameters. It is "normal" that a LAM model beats a global model. More surprising is the impact of just algorithmic improvements (since the scientific novelties are not incorporate yet in ALARO-0), mainly to attribute to internal consistency.

Even in term of human efficiency, the ALARO-0 success is worth stressing, since the ALARO-0 corresponds only to 3 to 4 equivalent persons effort, with the handicap of being dispersed. ALARO-0 is demonstrating also its ability to provide a reasonable and smooth scale dependency solution (interpolation-like) across the "grey" zone (between 10 and 2 km grid resolution).

JFG regretted that MF participation to the dedicated meeting on this topic was a minimum, due to collision with other important MF scientific meetings.

EB thanked JFG to this nice work, and recalled that MF significantly contributes to ALARO,. DK recognized that also LACE was not able to provide a sufficient contribution to the scientific challenge, but acknowledged that the convincing results will be a strong impetus to consider working more on ALARO. Despite that those results are to be attributed to individuals, it has to be considered as an ALADIN community asset, which is a strong message to pass around. She stressed that any MF decision on using ALARO-0 would be a decisive encouragement to all members to use ALARO-0 and to invest more in it.

EB insisted on the MF commitments taken in Lisbon, which have been respected. Concerning the future, the use of ALARO could be mainly used for on the one hand for short term ensemble forecasts and also for overseas territories. Some developments of ALARO-0 have already been integrated in ARPEGE, AROME and Meso-NH, and more are to come. EL added that the ALARO interest lays also in the fact that even with its new NEC computer and computing resources, MF will not be able to move all current ALADIN versions to AROME counterparts. So ALARO-0 is a nice way to make improvement without waiting too long.

DK wanted to have more communication, involvement and feedback from internal users, mainly forecasters, aspect too much missing.

RT reported on the positive comments so far from forecasters.

In summary, PAC congratulated the ALADIN PM for the results achieved so far, acknowledged the increasing involvement of MF in ALARO, and welcomed the prospect of new possibilities for the Consortium with the ALARO approach.

5. Strategy of the ALADIN Programme:

JFG indicated what small improvements he brought in the Task Team paper. Due to the good structure of the document, it was easy to do. However, the paper is still at a provisional status, and is of course opens to inclusion/modifications.

FN proposed a general discussion on the document, focussed on the main aspects which have to be improved/included.

AM recalled the way the work has been organized. He thanked every body for the contribution, especially F. Bouttier. He recognized that his own contribution was mostly on setting the scene and the timetable.

a. First discussion about the draft strategic document

AM stressed that he had the chance to look at the document from a manager point of view. The main objective of the document is to convince decision maker (minister, director) of the interest, the added value of ALADIN and how and why ALADIN is a good answer to national needs. He argued that the document is mainly missing an international positioning analysis. Taking the IPCC reports as an example, he stressed that the document should not only be a scientific paper, but should clearly indicate the key thrusts: R&D, operations, implementation and international framework. The executive summary should be able to indicate at first glance the main goals of the consortium.

FN concurred with AM, especially on the lack of political vision. He proposed to rewrite the paper in a more positive way, indicating solution to tackle risks rather than to concentrate on difficulties. In this way, the HIRLAM strategy looked more attractive both from the internal and external point of view.

AM added that, for many countries, it will be important to find in this document arguments to justify for instance increase in computing resources.

EL expressed the view that the current document is the direct result of the competences of the Task Team, with a strong scientific background. So the document is a very sound one regarding scientific strategy.

SN indicated, based on HIRLAM experience, that the document should include a bit more of international context analysis. It is also important to decide for what purpose and for what public the strategy document really is written.

EB commented on a specific issue : data assimilation should be presented as a strategic issue for the Consortium.

PAC thanked the task Team, recognized the value of the scientific analysis and proposals, but also the lack of political vision, and recommended a more positive approach.

JFG commented that the document has not touched the governance/management issue, since some progress have to be made on key issues like financing, human resources – EL reminded that, due to the recent changes in relation with the 3rd MoU, it was not felt that this was the most pregnant issue. JFG also wanted that the document keeps many options open, making explicit the main challenges in order to motivate scientists, and indicating that risks should not be ignored and that, based on the past history, it should convince that difficulties can be overcome due to the "soft" NWP-oriented organisation which has been in place from the start.

AM insisted on the need for having some brochure to enable an easier communication to "sell" ALADIN.

CB suggested that "soft" issues have to be considered at the same level as "hard" level when drafting the strategy.

Answering EB stressing the need to be more positive, JFG insisted on the need to distinguish between risks and challenges.

EL proposed that this document, after revision by JFG, and presentation of PAC comments, has to be sent back to the Task Team to give them a chance to confirm that their intent has been well understood.

DK indicated that in the LACE council, the questions of the uniqueness of the code, of common infrastructure – shared with partners for instance – have to be addressed. ALADIN could have many options regarding collaboration with other communities, for instance being advisers or

users of others communities or consortium products. The visibility of ALADIN at European level is not sufficient, so ALADIN should 'project' its own image, especially its networking structure.

AM concurred that DK issues are part of what he would like to see encompassed in an implementation part of the strategy. He pointed out that the executive summary should be explicit on the main objectives, specific goals, deliverables, timetable, etc ...

JFG added that on the top on the four main strategies (R&D, operations, implementation, international), there have been new elements incorporated: management, etc.. He felt that the document has not explained enough why and how ALADIN has remained alive, keeping remarkably all acceding members on board (but Moldavia).

FN commented that the HIRLAM strategic document treated this aspect in an efficient way by simply stating that HIRLAM wanted to **maintain** its position in the NWP competition. AM confirmed that his proposal of executive summary he circulated was very much welcomed in DMN of Morocco, because it contains in simple terms the ALADIN strategy.

FN wants a document that states the ALADIN strategy. EL argued that the problem to solve is to make sure that all main types of readers have a document (or part of it) they can read easily with understanding and profit.

EB indicated that the current document answer what was asked from the Task Team, basically clarifying and stating proposals which helps the ALADIN members and the scientific teams to understand what they aim doing, and is a solid basis to write a 4 year operational plan.

JFG proposed to summarize in a working paper this afternoon discussion.

FN indicated that a draft strategy document has to be ready for the GA, so the main writer has to be identified.

b. Listing the issues needing further discussions and/or PAC guidance (for a revisit on Agenda Item N° 8)

Summarizing the previous discussion, JFG identify 8 "missing themes", which have to be regrouped and sorted out to carry a clear message:

- o Implementation aspects
- International positioning
- o Policy aspects more visible and regrouped
- o Continuous sustainability in a win/win mode
- The HARMONIE dynamics
- o The link with common European meteorological infrastructures
- o Taking the adviser-user side in the document
- o Going in some aspects of "what is ALADIN" to "why ALADIN".

Concerning the document presentation, PAC recommended to writing one document, with the possibility of a brochure-type document as main body and the remaining as Annexes to it.. PAC welcomed the good will of JFG to improve the existing document concerning the R&D and operational aspects, especially with CSSI input and of AM to enrich the "Executive Summary" part. PAC tasked EL to complement those resulting documents with the "missing themes" with the help of DK and some support of CB and to provide a new draft of the strategy. The goal is to have the draft version ready for GA evaluation in November 2007, so the PAC recommended a preliminary version to be available by September. This new draft version will be distributed to PAC members for comments. In term of elaboration meeting, most of the work will be done through e-mail, with a possible meeting of Chairman of GA, FN, JFG, AH and EL in October.

PAC discussed a more detailed input on the "missing themes".

o Implementation aspects: the information regarding past implementation can give guidance.

- o International positioning: amongst others, other consortia, European institutions, WMO have to be put in the picture; JFG offered a paper he wrote some time ago, which has to be revisited, to orient the perspective of the future; JFG reminded also that after the meeting on the NWP future in Europe, the UKMO produced some documents which could be of use; CB suggested that "membership" perspective have to be provided
- o Policy aspects more visible and regrouped: mostly an editorial issue
- O Continuous sustainability in a win/win mode: DK pleaded that NWP being the spine of a modern met service, this aspect has to be attractive to decision makers. JFG added also that a "collective pride" of working in ALADIN has to be maintained; CB proposed to indicate on what principles ALADIN is working (collaboration, networking, team spirit, openness, etc...) and highlight that the deliverables are a proof-of-concept; FN suggested also that somehow the cooperation between an large service (MF) and smaller ones is exemplary; AM insisted that there should be convincing arguments to demonstrate to Ministers that ALADIN is a good investment.
- The HARMONIE dynamics: SN reminded that the HIRLAM strategy is not quite definitive on this issue. CB suggested that a mirror approach and wording be adopted.
- The link with common European meteorological infrastructures: JFG reminded hat the overall philosophy of ALADIN is to downscale the ECMWF solutions. The open question is whether the LAM requirements could always be able to cope with ECMWF evolution dedicated for its global scale model; FN informed that just now EUMETNET is drafting its strategy as a sort of strategy of the European Meteorological Infrastructure taking into account the strategy of ECMWF and EUMETSAT too. He felt that this EUMETNET strategy, especially the SRNWP programme, should be looked at too when drafting the ALADIN strategy.; EB argued that the key political issue is to increase the interaction between the LAM consortia and ECMWF on its scientific developments.; SN read some key sentences of the EUMETNET strategy draft document, pointing for instance to ambitious objectives on code interoperability, shared code libraries, ... FN was of the opinion that the ALADIN strategy have to align somewhat with the EUMETNET NWP component
- Taking the adviser-user side in the document: to be included in the international aspect, bearing in mind the worldwide context of NWP
- o Going in some aspects from "what is ALADIN" to "why ALADIN": JFG saw this as guidance to the positive rewriting.

6. ALADIN planning and programme definition:

a. Update on important intersession events:

i. HMG/CSSI joint Meetings (Oslo, April 22 and 26) report

JFG reminded the context of this joint meeting. The meeting was split in two parts: general discussion and precise identified actions. A review is already planned in Brussels at the next decided joint meeting. In a nutshell, the meeting was a success, especially regarding the data assimilation aspect, thanks to Claude Fischer, Andras Horanyi and Nils Gustafsson who transcended their own preoccupations.

SN and DK questioned the organisation because the size, if maintained, could be a handicap, including the finance and organisation burden. But they agreed that it is important especially for young scientists to feel they belong to a large community, with a lot of competencies.

EL asked whether the all staff meeting has to be every year or every second one, with specialized workshops in between. JFG indicated that is likely to become the long-term tendency. However with around 200 participants, this meeting is still manageable. DK insisted on the increasing number of cross-cutting issues and the increasing size of the interested

population (for instance ECMWF staff members, since they are concerned with interoperability issues).

PAC took note with appreciation of the success of this initiative, and recommended that, after a period of change, a stable period of 2 or 3 years is required, unless some necessary adjustments have to be introduced.

ii. LTM meeting (Oslo, April 25) report

JFG was pleased of this opportunity to have an extra LTM meeting in Oslo.

Besides the ToR LTM document, the discussion was focussed on ways and means of working, on both administrative/management and scientific/technical issues, with an excellent outcome document.

EL stressed that since the meeting, there has been a version update, which was a direct application of the principles and decisions taken before and confirmed in Oslo, and which was the pursuit of a real improvement on previous situation, especially regarding communication and coordination aspects within the Partners.

JFG indicated that there are still some aspects to be improve upon, for instance budget management, internal help.

EB stressed that this improvement is a success and achievement of the PAC, recalling that one and a half year ago, the outcome of a difficult situation was not clear, and that it was thanks to the constructive discussion in the PAC and the orientation given that the situation improves. He pleaded for the application of this principle and mechanism to solve future difficulties.

PAC acknowledged this positive report, and expressed its satisfaction that the LTM recognition is well established.

iii. CSSI-ST meeting (Oslo, April 25) report

Two main items: 2008 planning, input to the strategic document.

PAC took note of the report, with appreciation.

iv. TCA0 (Radostovice, March 26-30) debriefing

JFG indicated the subtle difference between what the ALARO-0 community asked to itself, and what is expected of it from outside, since the Lisbon PAC paper and the Budapest GA incitation to move manpower.

JFG congratulated all contributors for the provision of excellent documents, the challenge being to maintain a complete and high-quality documentation in the duration.

Many PAC members commented on the excellent feed back they had form attendees, coming from a wide community.

It is felt that this meeting was a good way to build a team spirit and working competence with regards to ALARO-0 maintenance needs, including in MF despite its current 'potential-only' involvement in ALARO-0 maintenance.

EB stressed that, from MF point of view, this event fulfilled its requirements.

To repeat this type of event or not remains an open question.

JFG proposed to have small team meetings at an appropriate frequency to assess the need to organize such an event. Of course, financial and organizational aspects have to be assessed at some stage.

EB exposed the way the transfer from the research side to operations is implemented in MF. In particular, the test suite is a way to assess the value of version upgrades. JFG agreed on the methodology, but required that the decision to declare operational a new ALARO reference version - which has to be proposed by the PM- need not be a "M-F => Partners yes/no choice". There is a certain level of risk to be accepted, since not all aspects can be examined and it should be left to everyone to choose its own level of risk-acceptance.

GR indicated that it is likely that the reference version to assess the benefit from the Nth version might have to be the N-1 one. But JFG argued that there is a strong possibility that versions

start to diverge after the initial rather compact shape of ALARO-0, thanks to its modular character.

PAC acknowledged this very good achievement in the tutorial domain.

PAC recommended that NMHS having invested in the ALARO maintenance should make the best effort to keep them on this task. PAC asked PM to provide with a provisional report on the need to duplicate the exercise.

b. PAC advices/recommendations on matters linked with these meetings:

i. CSSI and ST Membership

JFG explained the decision about the completion of the CSSI and ST memberships, either on missing position or vacant ones due to individual moves.

PAC welcomed Jean-François Mahfouf acceptance to participate in CSSI regarding surface aspects, and accepted that the Observation and monitoring position will be taken temporarily by Claude Fischer, waiting for LACE to fill its Data manager position.

Of course, there should not be a trend to populate all future missing position by MF/French persons.

AM proposed to investigate if DMN can provide a candidate.

ii. ALADIN-2 follow-on (in particular LTM coordination)

JFG presented the question of a possible follow-up of the ALADIN-2 MF/RC LACE contract supporting the network, especially the LTM coordination one.

The interfacing issue is going to an end one way or the other. On the opposite, the networking aspect, with HARMONIE and increasework with ECMWF is likely to amplify.

Claude Fischer suggested a month or two ago that a financial support for the networking aspect is necessary, but not using the flat-rate mechanism. So the idea is to write a new contract between MF and RC LACE to deal with this aspect with an associated budget of around 11 k€. DK questioned if the contract will encompass the small money needed to better liaise with HIRLAM. JFG argued that the situation is not so bad, because of the increase effort of MF. However it is likely that the LACE side will have to increase also its financial effort. The main blocking aspect is the value of the flat-rate ceiling adopted in 2005 (for the non-LACE non-MF Members) at what should rather have been an 'average'. The future is likely to also have a "common pot" ALADIN / HIRLAM as component, for instance to ease the big joint meetings' organisation.

PAC agreed on the principle, taking into account that MF cannot yet commit on the exact sum, and tasked the ALADIN PM to prepare ddraft text.

iii. HARMONIE maintenance procedures

The question concerns the access for HIRLAM developers to ALADIN code, taking into account the current MF/ECMWF agreement limited to ALADIN members, giving priority to ARPEGE/ALADIN consistency before checking the ARPEGE/IFS compatibility and considering HIRLAM specific needs. Jeanette Onvlee supported in Oslo JFG views that any evolution in this practice has to be gained through negotiation. EB announced the agreement from ECMWF to invite ALADIN and HIRLAM observers to the IFS/ARPEGE meetings.

PAC recommended keeping a high priority on the maintainability of the ALADIN system, in agreement with the common position put forward by the ALADIN and HIRLAM PMs.

The question of how to make the rules evolved to allow more interaction with IFS system will be tackled later.

iv. <u>EUMETNET/SRNWP & Interoperability issues</u>

PAC was informed of the history of the writing of the common HIRLAM/ALADIN proposals presented at the EUMETNET council on SRNWP management, and the three scientific subprogrammes: interoperability, LAM EPS and verification (training being abandoned).

FN reported on the EUMETNET council position. First he stressed that the overall proposal was judged of a high quality and very relevant, especially recognizing the common evaluation that not enough had been done before in this domain. The council position to keep the SRNWP to its current level of funding and to accept the interoperability as a EUMETNET optional programme came from the crude reality of finance limitation. Not to expand the SRNWP management came also from the fact that the necessity for coordination was limited with interoperability being the sub-programme accepted.

FN explained then the procedure for the call for proposal of a responsible member for the approved programmes.

JFG asked whether some consideration was given by the EUMETNET council to specific questions like the adequacy between the council decision and the very reason to have this proposal. JFG also felt some contradiction between the call for proposal in the way the programme manager position for interoperability was described and the real aim of such a thrust (namely the possibility should exist that the programme manager and the main work force do not come from the same consortium).

PAC took note of the EUMETNET position, and welcomed that the council may review the proposal regularly, capitalizing on the first results of the SRNWP and interoperability programmes.

v. **SURFEX-EURRA**

No comments! (No money, no EURRA project so far)

But the topic is a strategic issue both from a scientific point of view and for fulfilling user's needs.

vi. Scientific maintenance of ALARO-0

See previous report meeting items on this topic.

vii. AROME progress towards operational status

JFG asked F. Bouttier to report on this issue, for PAC information.

JFG praised the objectivity and quality of the report.

PAC took note with appreciation of this report, and welcomed regular reports on AROME and HIRLAM progress in the future.

As a side issue, DK remarked that HMG-CSSI concerns on the feasibility on inter comparison between models (ALADIN, AROME, ALARO, HIRLAM) are not addressed, especially because this issue was source of divergent views. The sensitive issue is on how to carry out such an exercise not to become a judgment of the intrinsic value of specific physical packages, but an objective assessment of the pluses and minuses of each one. JFG proposed two types of verification: one on the absolute results for selected situations, a second one dedicated to compare each package at the resolution or in the context it is supposed to be tuned best.

PAC recognized the value of such an inter comparison, providing it is not organized as a "beauty contest", and be focussed on strengths/weaknesses of the physical packages. But at the same time, PAC draw attention to the fact that the conditions for a proper inter comparison are not yet met.

7. Météo-France positioning within the Consortium (Pac's input for an Agenda Item of Météo-France's CPPN of June the 21st)

FN asked about the very reasons for having this open discussion at PAC – without preparatory document.

JFG explained that EL is CPPN secretary, which has an agenda item about ALADIN/ALARO. EL indicated the type of question that CPPN has to discussed, which could be a mixture of strategic and practical issues. Regarding ALADIN, one recurrent issue is the level of involvement of MF in ALADIN – versus other investment in the NWP fields, making sure that the requirements and expectations of ALADIN partners are properly known and accounted for before CPPN decisions, the latter aspect being presented by JFG.

JFG proposed to discuss items one by one.

DK reminded the strong and specific links between LACE and MF.EB commented that there is no much point in discussing other topics than what MF and the partners expect from each other. FN indicated that the issue is to know whether the partners concerns and complains if any towards MF are well reported and acknowledged by MF.

EB indicated that he personally asked for a revision of the CPPN functioning, recognizing some flaws in the previous way of organizing the CIPN (former similar body).

FN stressed that for instance, the clarification by CPPN that AROME was to be a major development, not only for MF but also for ALADIN partners too, had been essential. This CIPN decision had been made possible because the partners' expectation was properly carried in the CIPN meeting.

AM indicated his hope that any CPPN decision proposals would be evaluated with respect to partners' implications and impacts.

Amongst other improvements, EB mentioned the publicity of the CPPN agenda to the ALADIN pm and its participation to the meeting, the involvement of the MF LTM, which is a component of the warranty that ALADIN partners' concerns are taken into account. EB said that the decisions to be taken are pre-drafted and sent to JFG for consultation and evaluation within the ALADIN community.

RT explained that his main concern is the "black box" aspect of the Meso-NH physics, making his colleagues users and not partners.

EB stressed that the Lisbon accepted strategy is the most reasonable one, and that communication is essential but not to the point that decisions should try to accommodate every (especially extreme) positions. Regarding the "black box" issue, EB reported on the recent decision to create a regular process in order to discuss with the ALADIN partners any proposals for upgrading AROME and corresponding Meso-NH physical package. So in a reasonable time frame, all Meso-NH package will be documented, and changes coming from outside in the Meso-NH code could be possible.

JFG indicated that the "black box" concept might have different meanings. For instance, because SURFEX is externalized and that no competencies exists in the ALADIN community, speaking there of 'black-box' for the ALADIN Partners is clearly a reproach to the latter, without any link with the rather different use of the same term by RT a little earlier.

DK acknowledged that the PAC has now a chance to interact with MF before the CPPN, which is a good thing. She stressed that one symptom of the situation is the fact that the HIRLAM/ALADIN joint meeting has not AROME physics on its agenda. A progress would be to considerer AROME physics has a common topic to be discussed.

FN stressed that a frank and transparent communication is required between partners and is a normal way of functioning in a consortium.

EB recalled also that JFG, as ALADIN PM, has been given the possibility to interact with the MF R&D strategic document.

DK considered that there is still not a team dedicated to the AROME physics outside MF.

JFG recalled that some basic problems have to be overcome, like the ones still coming from the decision not to let the second version of ALARO influence Meso-NH, this leading in turn to the

birth of ALARO-0 as third solution, with all further well-known consequences. EB argued that the said decision was just not taken at the right level and in the right instance.

PAC expressed its satisfaction that such an open discussion had been possible.

8. Revisit of the strategic document issue. Road map for a consolidation of the version to be presented at the General Assembly (details of this Item will be précised during the treatment of Agenda Item N° 5)

9. Resource matters:

JFG asked about the numeric replacement of Dominique Giard. EB indicated that MF has a possible candidate, who should be able to start getting acquainted with the partners as soon as possible. EB will liaise with JFG, with the help of Claude Fischer, to prepare the venue of this person.

a. Manpower status

JFG indicated that detailed figures are still not available. However, the overall average figures are probably correct.

Their may be an indication (to be confirmed) that too large a tendency exists for some NMS to balance their deficit of participation in the ALADIN project through more bilateral cooperation with MF.

JFG will prepare and circulate a revised document when corrected figures are available.

PAC appreciated JFG offer to prepare a GA presentation, more oriented to the state participation.

b. Budget matters:

i. Accounting of the 2006 budget

FN thanked JFG for providing the table in the preparatory document, since the gathering and consolidation of figures had been quite a difficult exercise. One not well mastered aspect is the voluntary contribution (e.g. financial support to non national employee missions), which has to be differentiated from the "in kind" contribution (national employees working for the ALADIN community).

The overall balance between declared and executed is within the error margin. This result is partly due to MF effort to implement the flat-rate budget.

The figures indicated that 4 countries have had a financial contribution even below the minimum required in the MoU.

JFG commented that the LACE total and non-LACE flat-rate total showed clearly where the loss of solidarity comes from.

PAC took note of the figures, and acknowledged that a message should be passed to GA regarding the "underestimated" value of the non-LACE flat-rate contributions with respect to the total effort in NWP of both LACE and HIRLAM members – taking into account in the case of MF its contribution to HIRLAM – scaled by GNP.

Regarding the "in-kind" aspect, referring to the MoU definition, there is some ambiguity. JFG mentioned questions for PAC guidance:

- Presentation (which information?)
- o Unambiguous figures (for instance difference between mission payments and flat rate compensation)
- Value of asking commitments when half is executed or taking only into account the previous year as a baseline to track trends

PAC recommended looking at total figures only, keeping "declared"/"executed"/"difference" per country. To keep it simple, PAC recommended ignoring the unbalance between mission payments and flat-rate compensation. PAC recommended taking the continuity solution to assess the fairness of member contributions.

Answering a DK question, JFG indicated that European grants would appear in a national voluntary contribution.

ii. Report about the ongoing execution of the 2007 budget

PAC allowed modifying the PM 2006 and 2007 management of the flat-rate contribution for non-LACE Members (figures to be corrected due to missions' cancellation, title errors).

AM stressed that North-Africa countries have made an important effort to ease the financial stream

CB commented that non-execution of missions has two consequences: increase the country contribution, with the risk of ceiling overshoot, a penalty for MF since this "surplus" money has to be considered as a new expense in the MF next year budget.

PAC asked its chairman to insist on the latter with the support of the CA chairman at the next GA.

PAC gave a positive statement on the 2007 budget definition and implementation. It will recommend the GA to continue the flat-rate management with the improved mechanism introduced with the signature of the MF/ZAMG convention.

iii. Pac's first guidance for the elaboration of the 2008 budget:

• Balance between the various constraints

JFG presented scenarios for both revenues and resources. Both are likely to increase, with the possibility to reach the ceiling as far as the flat-rate budget is concerned.

PAC approved the general presentation, was of the opinion that the 2008 flat-rate budget has to be at ceiling level, and will recommend to GA that some savings have to be found, which could come from limiting the financial support for meetings.

• Rules for the execution of the flat-rate budget parts

Concerning the necessary savings PAC discussed the different possibilities. Especially the costs for organising the All-Staff-meeting of ALADIN and HIRLAM together (??) – this year in Belgium – were a matter of concern, stressing at the same time the importance of this joint meeting.

To solve what appears to be a recurrent problem in the future, PAC will advice the GA to look for a coordinated ALADIN/HIRLAM solution. PAC is inviting HIRLAM through the HIRLAM observer to prove the possibility of financial support from the HIRLAM side too. The PAC chairman will also contact the EUMETRep representative Christophe Jacob to assess the possibility of EC support to organize these meetings. When the royalties are better known, and if the need for more money is assessed, a letter might have to be written to ALADIN Members asking for voluntary contributions. PAC identified another possibility through the LACE budget mechanism.

PAC was supportive of an invitation of EUMETRep to attend the first part the EWGLAM meeting.

10. ALADIN Membershipissues

FN informed PAC of the letter sent to the Turkish Met service.

AM reiterated his wish that the non-European membership in ALADIN be continuously advertised, as a mean to ensure the sustainability of the ALADIN system, and a good publicity for encourage new membership, especially of non-European countries.

11. The ALADIN trade-mark problem

PAC advised not to look for a "trade-mark" (e.g. commercial one, allowing copyright protection) in the near future.

DK asked if an ALADIN domain on the internet could exist with a non-MF (i.e. more generic) address. MF (EL) will explore the possibilities and report to GA.

12. A.O.B.

a) A simplified HARMONIE model setup available for research at e.g. University

SN reported that HAC and HIRLAM council examined the possibility of setting-up a simplified model version of HIRLAM (and in the future of HARMONIE) for research purposes.

CB claimed that as a consortium, ALADIN is in favour of scientific cooperation with universities and academia. He stressed the need to have a joint approach to the question between HIRLAM and ALADIN.

JFG reminded that this issue has also been discussed in the Oslo HMG-CSSI meetings, and that a working group has been assigned the task to assess the requirements and the possible solutions.

EB insisted also that, taking into account the big picture, it might be advisable to deliver, under restricted conditions, the daily BLC which are necessary to run this simplified version. JFG stressed the risk to provide, and the fact that no ECMWF data assimilation code should be made available.

PAC welcomed that a working group already exists for this matter, encourage members to designate their representatives, and thanked in advanced its chair to provide input to the next GA.

13. Date and place of the next PAC meeting (two scenarii must be envisaged for 2007: an autumn PAC session or a 'bureau-type' meeting [in preparation for the Ljubljana General Assembly])

PAC confirmed the "bureau-type" meeting to deal with the strategic document.

PAC appropried that the next PAC meeting will be held in Casablanca tentatively.

PAC announced that the next PAC meeting will be held in Casablanca tentatively on May, 19th and 20th 2008.

14. Closing of the meeting

The meeting was closed at 12.30 on June, 8th 2007.

Annex 1

List of participants to the third ALADIN PAC session, Prague 7-8/06/2007

Chairman: Fritz Neuwirth (FN)
Vice Chairman: Cornel Soci (CS)
PAC Members: Eric Brun (EB)

Emmanuel Legrand (EL) Abdalah Mokssit (AM) Maria Monteiro (MM)

Radim Tolasz (part time) (RT)

Gabor Radnoti (GR)

Programme Manager: Jean-François Geleyn (JFG)

Observers: Christian Blondin (CB)

Dijana Klaric (DK) Stefan Nilsson (SN)