

TELESCOPE DIRECTORS MEETING – OBSERVATOIRE DE HAUTE
PROVENCE – 17, 18 NOVEMBER 2004

MINUTES

<u>Attendees</u>		
Alex Oscoz	Christos Goudis	Michel Dennefeld
Bernard Gelly	Panayotis Boumis	Felix Bettonvil
Roland Gredel	Jorge Melnick	Michel Boer
Tino Oliva	Oskar Von Der Luehe	Rolf Schlichenmaier
Rene Rutten	Christian Veillet	Birgitta Nordstrom
John Davies	Alejandra Martin	Saskia Brierley
Dan Kiselman	Anselmo Sosa	Andy Adamson
Mathew Colless (by telecon part time)		
<u>Apologies</u>		
Dave Carter	Jesus Burgos	David Mouillet

1 Welcome - Adoption of Agenda

John Davies welcomed the attendees and informed the meeting that Mathew Colless will join by telecon for parts of the meeting.

Apologies were received from:

Jesus Burgos, David Mouillet and David Carter

Anselmo Sosa introduced Alejandra Martin who was joining the Access Office team. Anselmo himself would now work mainly on support of the N2 network

Christos Goudis introduced Panis Boumis.

Oskar von der Luehe introduced Rolf Schlichenmaier to whom he will be handing over responsibility for attending future meetings.

2 Minutes of last meeting, actions and matters arising

There were no comments on the minutes of the last meeting which were accepted.

The updated actions are as follows:

1. Complete
2. J Burgos' actions are complete
3. R Rutten has completed his action and this is posted on the webpage
4. A Martin/J Burgos will deliver a document analyzing the different procedures, Time Allocation Committees and systems to allocate observing time under the OPTICON contract as soon as possible
5. Complete
6. Complete
7. Complete

Under matters arising

R Rutten asked about the 'common interface' for users to submit applications. This is covered under item 6.

3 Report of Paris splinter meeting

J Davies reported that he had held a short meeting in Paris over the summer with R Gredel, R Rutten, T Oliva and M Dennefeld. The meeting had been primarily to get updates on the status of the 4m telescopes in the network as part of a process to prepare a longer term plan for the OPTICON telescope network. It was reported that both ING and Calar Alto have entered into agreements with Spanish astronomers and their futures seem reasonably secure in the medium term. There was also some discussion of plans to implement M Dennefeld's enhancement activities.

4 Summary of Access Programme

M Colless joined by telephone for part of this discussion.

J Davies began with a presentation of the aims of OPTICON as stated in the proposal to the EC

- Improve access for scientists in countries which lack world class infrastructures
- Co-ordinate future investments in European infrastructures for the benefit of the entire community.
- Withdraw support from infrastructures in low demand or which are no longer world class facilities

J Davies then reported the response of the OPTICON Executive and Board to the early results and the guidance which they had issued -

- Must widen community, especially to CEE and avoid impression of ‘business as usual’
- No telescope to exceed contracted minimum
- Maintain a smooth spend profile and not exceed 80% of budget by year 4.
- OK to pay all travel grants already notified to qualifying users even if not all user fees are eventually claimed

J Davies then gave a brief overview of the first year of the access programme –

5 year user fees (nominal)	4,660,465 Euro.
18Mo user fees (10% of above)	489,418
2/3 (12/18months) of which is	327,957 for 2004
Existing ‘commitments’ for 2004	1,253,911

So existing oversubscription with regard to cash in hand in year 1 is ~factor 4
 Fraction of total budget subscribed is 27%

J Davies then reminded the meeting of some financial issues.

- 1) The notional 5.5 million Euro in the Access programme has to fund user fees, travel grants and the cost of administering the programme.
- 2) All budgets in the 5 year plan are in principle negotiable after the first 18 months of the contract had elapsed and that the whole project would likely have a major re-balancing exercise around the time of an EC mandated Mid-term review. Therefore future planning had to take into account possible perturbations of the notional budget in the later years of the contract. In particular all activities have now been told not to exceed 80% of their planned 5 year spend without specific authorization from the Executive.
- 3) The EC money had not actually arrived until the late summer and when it did the EC had only provided 80% of the planned budget as pre-financing. Due to the needs to fully fund various subcontracts this had created a potential cash flow problem within the OPTICON project as a whole.

J Davies then set out and the financial consequences of the way in which the Access programme had developed in 2004. In particular noting that overall the amount of access was oversubscribed by a factor of about 4 compared to that which was in the available budget for the first year. The contracted delivery of access in the first 18 months had been estimated at 10% just to make sure that the project didn’t underdeliver. T Oliva commented that in fact the programme was running more or less at the expected level. For a level profile we should have committed 20% of the funds in the first year, twice what is actually in the contract, and the contract was based on a budget that had itself been halved by the EC. Our original forecast was based on experience of the FP5 access programme and so the forecast was broadly correct.

J Davies remarked that the reason he had put it this way in terms of money is that the cash available in Cambridge right now is 4 times less what is required to pay all the commitments so far entered into. J Davies showed a slide which indicates that if we are cash flow constrained in the way the board wishes, then the balance left for 2005 is only 380,000 Euro. If we wish to avoid a drastic curtailment of the programme then several options are open to us -

- 1) Accept in full all of existing runs and limit 2005 allocation to a few key runs, giving strong priority to CEE users.
- 2) Pay all qualifying travel grants but waive user fees for selected runs in order to have extra resources for targeted projects in year 2
- 3) Withdraw fully some runs from programme and pay neither travel nor user fees for these.

An additional option would be to accept all the existing runs but delay payments of the user fees to smooth the cash flow situation. R Rutten noted that if it is simple as a cash-flow problem it can be discussed, but it is the role of this meeting to present the case for maintaining and supporting the Access Programme to the Board. Furthermore, if there is that risk that the Board will reshuffle money then it's not in anyone's interests to delay in asking for any payments because that money might disappear.

J Andersen, who is a member of the Board and Executive, clarified the situation by pointing out that G Gilmore had said that there is no contingency in the OPTICON budget. What can be scaled up and down is the Access programme – which is why the Board wants to keep us at 80% of the budget. We may or may not like that but that's the intention. The underlying philosophy was the Board wanted to see continuity – the telescope directors are being told by the Board that up until end of next year only 35% of the programme should be regarded as available and the programme has spent 27% already. He suggested several options such as allocating only a quarter of access time next year compared to this year, which might look silly, OR we renounce some user fees OR we say to the Board in October that we will fall into line but the “braking distance is too short”.

In response to a question from T Oliva, J Davies confirmed that the Board would like to see the activities continue throughout the 5 year programme and therefore allocating all nights over two or three semesters may not meet with their approval.

O v d Luehe remarked that provided there is a way to commit the Board to assuring that they will refund nights allocated then he wouldn't mind if there was a delay to solve a cashflow problem, but there must be a payment down the line.

The Access Office presented its vision of how the cash flow might be managed. This is summarized in point 6 below.

There was then a wide-ranging discussion on various aspects of the programme. At the end of this there was a general consensus (except where noted) on the following points -

1) The initial high demand shows that the programme should be considered a success. However, the forum recognizes the financial realities and the need to manage the spending profile in a way which is in the best interests of the wider OPTICON programme. In this regard R Rutten noted that the Board had said each telescope should not commit more than 80% of the contracted nights without authorization and he felt that this was micro-managing. Instead the fine detail of how to stay with the recommended envelope can be managed by the directors themselves. This was agreed and J Davies will present this sentiment to the executive.

2) The majority of the forum rejected the complaint that this activity was business as usual. In particular, all the allocations had been done using the principles of scientific merit, which all agreed was the primary discriminator of the programme. There was considerable discussion on the meaning of the phrase 'new user' and it was pointed out that new users did not have to be from central Europe, but simply groups who had not previously had access to each telescope due to either limited resources or the previous allocation policy of the telescopes now in the programme. A Martín pointed out that Access office had estimated that 66% of the take-up is new users – if one defines a new user simply as someone who hasn't used facility before.

A critical point was to support European astronomers who cannot gain access to a specific resource- for example a particular type of instrument- through their own observatory. In particular the group did not wish to lose sight of the goal of increased efficiency through collaboration. The specific example of the TNG/ING time swap was mentioned. At the beginning there was resistance from both communities but in the end once experience of the process had been gained this resistance disappeared. The main thing that made this process work – having English astronomers going to an Italian telescope and vice -versa made the point that they don't have to build their own instruments for every possible capability and this is itself a huge achievement.

However, it was noted that the original medium telescope working group had not set out to include solar telescopes nor telescopes under 2m, both of which had in fact happened, but that it had set out to involve central European astronomers and that this hasn't happened as much as might have been wished. It was recognized that if the uptake by the central European community remains low then the programme might be perceived by some as a failure and this would give grounds for early termination.

On the issue of the low take-up of the project by central European countries a short discussion revealed that in general it was due to a low number of applications and not that the applications were of systematically poorer quality than those from more traditional users. M Dennefeld said we need to know where the proposals were submitted and really need to know total number. J Davies said this is a requirement for the EC reporting and

steps were already underway to obtain it. It would be good to bring this information to the next meeting

Action 1 Directors to provide suitable statistics to the Access Office.

Information requested: Nr of users, P.I. and team members home institutions of all the proposals eligible in principle for OPTICON support.

It was noted that significant efforts had already been made to promote the programme to these new communities. Specifically:

- a) presentations had been made at two JENAM meetings, and at several other venues
- b) posters had been distributed by the IAC as part of their general mailings
- c) articles had been submitted to the EAS newsletter
- d) the Access programme was well represented on the OPTICON web pages.
- e) Among other promotional material, the Access Office will produce an audio-visual presentation on a DVD or similar medium

Nonetheless, it was felt that further actions would be desirable and the following actions were proposed:

- a) More visits, also known as 'roadshows', at national astronomy meetings in the target countries. The Access Office can help as J Burgos has an excellent presentation already prepared. However, who will find the time to go on the road? J Davies/M Denefeld could go to at least 1 or 2 National Society meetings.
- b) production of a glossy brochure for distribution to institutes.
- c) J Davies and A Sosa to liaise on placing an article in astro-ph, as being a likely place to get the attention of working astronomers.
- d) Summer schools to encourage younger people into optical observing as an alternative to theoretical research.

3) Recognising the limited amount of money in the programme there was considerable debate as to whether it would be possible to waive user fees for a particular run, or to accept reduced user fees per night or to extend some runs by adding extra nights without charging the user fee for them or of having some graduated user fee depending on the characteristics of the runs in questions. All options have some merit but also disadvantages. O v d Luehe suggested that at least the travel time for observers to come to the telescope should be paid & that some of our time can be given for free. The Access office in particular noted that it would be impossible to pay travel support for runs not declared to the EC and they urged that the project declare all the qualifying runs so far allocated. Waiving user fees was not considered desirable as it was felt that it would send the wrong message to the EC and might impact other access programmes or the attempts to get user fees for nights allocated to Neon-type schools under the Marie Curie programme.

4) On controlling the oversubscription of the programme into the future it was first agreed that scientific merit would decide who gets scheduled on the telescopes. The critical question is who gets supported from the OPTICON funds. It was decided that this decision would henceforth be made by the telescope directors who would base their decisions on the number of nights remaining at their facility and apply the criteria of supporting new users and those with no similar national infrastructure.

5) J Davies proposed that we will stage the payments over the 3 years – J Davies can work out the individual financial details one by one.

6) The Access Office suggested to declare all the access provided (22%). A second advanced payment should be agreed and released among Telescopes operators amounting to up to 50% of the notional budget. No more than this 50% should be released before June 2006. A guarantee of continuing time awards from those telescopes that have exceeded 50% of their access should be obtained. Proposals coming from the Spanish TAC (except for the TCS) should not be considered eligible under OPTICON. This will contribute to smooth the spending profile.

5 The entry of Aristarchos and LT into the Programme

JKD reminded the forum that the EC had insisted that a peer review process has to happen before these telescopes should join the programme. The question was one of when is a sensible time to have such a peer review and how to carry it out.

5.1 Aristarchos Telescope

C Goudis then gave his status report on the Aristarchos telescope and showed that first light images had already been achieved. Current planning called for commissioning and acceptance tests to take place in the Summer of 2005. The forum felt that any review should occur after these acceptance tests. After a short discussion about the size of a suitable panel and who is technically qualified to be on it, J Melnick agreed he would accept the commission to chair a panel of three members of the forum to conduct this review. The precise schedule would be determined by the progress in the commissioning and so the Aristarchos team and J Melnick would remain in close contact in order to set a suitable date.

Action 2 J Melnick will accept commission to chair Aristarchos Review Panel and select another two technically competent panel members.

Aristarchos team will provide updated information to the Access Office to be posted on internet.

5.2 Liverpool Telescope

With regards to the LT it was noted that no representative was present and no specific information had been provided by them as regards the LT entering the programme. It was agreed that the minutes would note this situation and the feeling that the forum felt that the LT contact the Project Scientist when they felt ready to participate actively. At such a time the same review panel established for the Aristarchos telescope would consider how to proceed.

6 Common application forms

J Davies noted that A Gunn, RadioNet Project Manager, had been to the recent OPTICON Board meeting and talked about RadioNet's plans for rationalizing application forms. J Davies had circulated a RadioNet document on these plans and asked to what extent is building a common interface sensible?

J Andersen had studied the report and had the following comments:

1. Integrating proposal submission is already happening between some OPTICON telescopes.
2. The RadioNet philosophy is based on internet connections working but this doesn't happen in our case
3. JA prefers an approach more like the ESO P2PP process – and not relying on being online to central database all the time.
4. I.e. sounds wonderful, but is it worth the effort?

J Davies remarked that the I3s are supposed to exchange good practice so if we make progress we should inform the EC. So if we can find a way to collaborate either amongst ourselves or with RadioNet, that would be a valuable success.

A Adamson reported that UKIRT was in OPTICON and JCMT was in RadioNet and since these two telescopes are both operated from the Joint Astronomy Centre they will be collaborating with each other but he certainly wouldn't want to rely on internet connections for whatever solution they adopt.

A Sosa advised the forum that as an action from the last meeting the Access Office had compiled a set of OPTICON telescope network forms and a Unique Selection System and user interface are being studied. They would like feedback from the directors.

J Andersen felt that that progress needs to happen now.

Action 3 A Martín/J Burgos will deliver a document analyzing the different applications forms as well as the guidelines for the development of a joint user interface before February 2005 .

7 Report on the enhancement activities

M Dennefeld reported that since the last Directors Forum there had been two positive developments:

- 1) An Observing summer school had taken place at ESO Garching – using not new observations but data from the archives. This had been great success, receiving 50 applications for 20 places. The post course questionnaire demonstrated that students were happy to see what could be done with data mining.
- 2) There had been a positive evaluation of the Neon School proposal by the EC and contract negotiations were underway. These should be concluded by end of this year for 4 years financing. The EC directed that they decrease the organizational cost per student but M Dennefeld feels they can still come out with a good outcome. M Dennefeld will organize a meeting to provide an overview of the wider aspects of the Enhancement programme in the spring – this is an OPTICON deliverable.

B Nordstrom said she would be very interested in looking at the teaching materials for this summer school. M Dennefeld said there was a record of the past schools on the EAS website where the teaching material used is available.

The EAS website: <http://www2.iap.fr/eas/>

- 3) Another activity of the Enhancement programme is to try to convince solar astronomers to do a similar schools programme.

DAY TWO

JKD opened the session with a review of the points discussed the previous day and noted that there would be a mid-term review about Year 3 – it will be a scientific review conducted by the EC, but JKD would like to make sure all the financial affairs are in order by then as well

After some minor modifications these conclusions can be summarized as follows –

- The access programme should be regarded as a success, oversubscription is just an issue to be managed.
- The majority do not accept the criticism that it is business as usual, there are many new users. However the need to further involve the CEE countries is understood.
- The guideline of 80% of notional budget over 4 years is understood and should be managed by this body
- The operators will accept a cash flow smoothed across years 1, 2 and 3 provided there is an assurance that runs scheduled will be refunded before the end of the programme
- The access programme should not be seen as a cash flow buffer for the rest of the Project.

The following steps are proposed to resolve the cash flow situation

- Smooth the allocation profile by following algorithm
(80% of contract – nights allocated so far)/3 nights per year for each of the next 3 years
- 66% of contracted 18 Mo user fees to be delivered ASAP
- Roughly equal payments close to end of year 2 and 3 but possibly loaded towards year 3 to clear outstanding balances by year 3
- Project office to discuss individual payment schedules with PI and operators taking account of existing pre-financing wherever possible

How do we modify our methodology in the future?

- Using new guidelines of nights/year based on the above algorithm the directors can identify and prioritise runs likely to merit support
- Directors are responsible for staying close to this profile with emphasis on new users and particularly CEE countries when peer review permits
- Access Office to formally confirm qualification for support and deal with travel
- Access office to keep statistics of qualifying runs unsupported due to lack of funds

O v d Luehe stated that we all expect explicitly to receive at least 60% of the initial 18 month payment by the end of this year. That would be a fair compromise since the telescopes have delivered the access they promised and they expect to be paid. However it was understood that some telescopes with particular problems should have priority.

Action 4 J Davies to discuss payments structure with Executive Committee

J Melnick again proposed that even if the Access programme ran out of money for user fees we could continue to expect OPTICON to pay travel and lodging costs for suitable people who were accepted at our telescopes. However, the Access team re-emphasised that travel costs have to correspond to declared runs. J Davies repeated that discussions have been held regularly that concluded giving away time for free gave out the wrong signal. T Oliva agreed that no-one wants to give time away but nothing is wrong if, after the user fee money has run out, in trying to find some small amount of extra money for travel and lodging.

Action 5 J Davies to investigate the contractual issues about breaking the link with user fees and travel grants in time for the next Medium Telescope meeting. The objective would be to have a clear set of guidelines by the time of the next allocation round in early summer and fully understand the alternatives and consequences.

8 Future and FP7

8.1 Access Office 18months review

The Chania board meeting placed action on the Directors forum to assess the Access Office after the programme had been running for 18 months. JKD wishes that this should be done by a group outside the N1 Management Team . B Nordstrom proposed M Dennefeld to chair this review as he is not a Telescope Director. The forum felt that Directors should, however, be represented on the panel. M Dennefeld accepted the commission of the forum and asked for the assistance of two including one from a solar telescope. R Gredel and B Gelly accepted this responsibility. The timescale for the review was to be such that it could report before the next Telescope Directors forum which itself would be scheduled to occur before the next Board meeting. This places the review in the period between July-October 2005.

Action 6 M Dennefeld, R Gredel and B Gelly appointed to conduct mid-term Access office Review. J Davies to clarify dates of next Board meeting in order to refine this timescale.

8.2 Rebalancing the programme to achieve our longer term goals

This forum has already agreed that it will not include any further telescopes but the long term goal is to rationalize the suite of medium sized European telescopes. This will require a rebalancing of the existing programme, perhaps by withdrawing OPTICON support for specific facilities, or of focusing that support on only a subset of the better telescope-instrument combinations in order to encourage decommissioning of some equipment and time swapping.

J Davies noted that to date the UK Schmidt have not identified any qualifying proposals. Furthermore the AAO have indicated that they will withdraw support for this telescope by the end of semester 2005. The question is should we continue include it in OPTICON (if it passes AAO tag criteria) as AAO will operate the telescope provided the user pays the marginal cost of running the telescope on those nights.

It was noted that the telescope had been brought into the programme at a very late stage and that it seemed likely that the user fees were based on running costs which might now prove to be incorrect. In brief, no-one present offered support for retaining the telescope in the programme if it was no longer supported by its parent community. The removal of a contractor requires the agreement of the Board but in this case the proposal is for

removing support for UK Schmidt and not AAO. Nevertheless, J Davies must take this issue to the Board. In the meantime, the Schmidt will remain in the programme. M Dennefeld remarked that he would be keen for the Board hear this conclusion but that they must understand it's a strong recommendation from this forum and listen to that recommendation.

[NB. M Colless was not participating in the meeting at this point and has since pointed out that RAVE runs are passed by the AAO Tag, are highly multinational in composition and are supported by some national grants]

J Andersen suggested that the mid-term review would be the correct time to implement any such changes because it is not a decision to be taken lightly and we need more information on how the programme is actually working. J Davies proposed three possible options for such a review: by an external expert; by the Board or from a subset of the Directors themselves.

R Gredel felt that the best form of review would be by external experts. J Davies suggested that he start to organize this to take place in the spring of 2006 and ask the review to report at the time of the mid-term review. The details of the review are to be defined at the next forum meeting.

Action 7 J Davies to make proposals for programme review.

M Dennefeld proposed that there be revised plan for instrumentation at the same time but no simple mechanism to do this could be identified. However, R Rutten has updated his list of instruments at each observatory. O v d Luehe noted that each director completed a detailed description of their facilities at the time of the proposal and he proposed that each director should review their telescope plan as entered in the proposal, update it and resubmit it which could start as a basis for an external review. J Andersen added that the emphasis should be different and should concentrate on each directors vision of their 2 or 3 most competitive instruments in 2007.

Action 8 J Davies to remind people to update their instrument plans

J Davies reported that the plans for FP7 seemed to place research infrastructures as a strong element of that programme. Current thinking is that future I3's must consist of JRAs, Networks and Access. However, some communities are not happy with this compulsion since they didn't want to be forced to propose immature and partly thought out JRA's

A survey of existing I3's seemed to indicate that the user fee model seemed to be a popular mechanism for support of infrastructures. J Davies asked if the current user fee calculation model acceptable or do we want to review it, particularly with a view to

obtaining an allowance for capital costs folded into the user fee – which would of course increase the value of the per unit user fee.

J Davies and C Veillet pointed out that a broadly similar scheme (TSIP) was being used in the US for support national funding for instruments on private telescopes. In this case an element of capital costs were included in the per night costs estimated by the observatory. In the case of older, fully amortised, ~4m facilities this had proved unattractive since the capital costs had been trivial, making the nightly value unacceptably low. The solution adopted by the US had been to allow each facility to claim a capital depreciation element based on the cost of building a similar infrastructure today. This had raised the effective value of a night on a 4m telescope and caused them to reconsider involvement in the programme.

R Rutten pointed out that way the EC has approached it so far was to avoid picking up bills that the National Funding Agencies don't want to pay for. However, in response J Andersen and J Davies agreed the EC could/should pay towards the costs of upgrading the instruments otherwise they were buying into a programme frozen in time at the point of proposal submission and encouraging it to remain in statis for several years.

Action 9 J Davies to investigate if some allowance for infrastructure upgrades could be built into a user fee model for FP7.

J Andersen asked that if Gerry Gilmore agreed, it would be useful to circulate the summary of views submitted by the various I3 to the commission. J Davies agreed to take this action.

Action 10 J Davies to check with G Gilmore regarding circulating I3 reports

JKD also remarked that the EC publishes their thinking about FP7 on their website. Directors wishing to be informed might like to check the following URL for recent updates.

<http://www.cordis.lu/era/fp7.htm>

9 NOAO meeting report

JKD attended this meeting on 'Building the system' in May 2004. In many ways it was just like a Medium Telescope meeting. Many of the same issues are affecting the US community. JKD had circulated a summary in the summer, the meeting itself generated a report that is available on the NOAO website.

<http://www.noao.edu/meetings/system2/>

10 Web pages, etc

It was felt that no additional web-pages or twiki-type discussion forums were required at this time.

11 AOB and Date of the Next Meeting

There was no other business.

It was decided to hold the next meeting ahead of the next OPTICON Board Meeting. Chile, Hawaii and Australia were ruled out as being overly expensive and so it was felt that, in order to send another signal to the CEE astronomers, it would be desirable to hold it in such a country around the time of a national astronomy meeting. Poland, Czech republic, Hungary and South Eastern Europe were proposed. Prague seems to be ruled out given a future IAU and related meetings there. Whatever venue is chosen it will be made clear it is purely a technical meeting in order not to raise expectations that new telescopes will be invited to join the network.

Action 11 J Davies, M Dennefeld, B Nordstrom to come up with plan for next Medium Telescope meeting.

12 Summary of actions

- Action 1 Directors to provide suitable statistics to the Access Office.
- Action 2 J Melnick will accept commission to chair Aristarchos Review Panel and select another two technically competent panel members.
- Action 3 A Martin/J Burgos will deliver a document analyzing the different applications forms as well as the guidelines for the development of a joint user interface before February 2005 .
- Action 4 J Davies to discuss payments structure with Executive Committee
- Action 5 J Davies to investigate the contractual issues about breaking the link with user fees and travel grants in time for the next Medium Telescope meeting. The objective would be to have a clear set of guidelines by the time of the next allocation round in early summer and fully understand the alternatives and consequences.
- Action 6 M Dennefeld, R Gredel and B Gelly appointed to conduct mid-term Access office Review. J Davies to clarify dates of next Board meeting in order to refine this timescale.
- Action 7 J Davies to make proposals for programme review.
- Action 8 J Davies to remind people to update their instrument plans
- Action 9 J Davies to investigate if some allowance for infrastructure upgrades could be built into a user fee model for FP7.
- Action 10 J Davies to check with G Gilmore regarding circulating I3 reports
- Action 11 J Davies, M Dennefeld, B Nordstrom to come up with plan for next Medium Telescope meeting.

END OF MEETING