



ESO/UC-77

Users' Committee

34th Meeting

Garching, April 29 and 30, 2010

Draft Minutes

UC Members present:

Chairperson:	J. van Loon	(United Kingdom)
Vice-chairperson:	W. Zeilinger	(Austria)
	H. Schmid	(Switzerland)
	M. Groenewegen	(Belgium)
	M. Hamuy	(Chile, alternate*)
	J. Grygar	(Czech Republic)
	T. Preibisch	(Germany)
	S. Katajainen	(Finland)
	V. Hill	(France)
	S. Benetti	(Italy)
	S. Trager	(Netherlands)
	I. Negueruela	(Spain)
	N. Ryde	(Sweden)
	Excused:	J. Meléndez
F. Grundahl		(Denmark)
M. Zoccali*		(Chile, replaced by Hamuy)

On behalf of ESO:

Organizer:	F. Primas	User Support Department
	P. Andreani	ALMA Regional Center Department (ARC)
	P. Ballester	Pipeline Systems Department
	T. Bierwirth	Data Flow Infrastructure
	F. Comerón	Data Management and Operations Division
	C. Dumas	Paranal Science Operations
	A. Kaufer	Directorate of Operations
		La Silla Paranal Observatory
		European ALMA Support Centre
	B. Leibundgut	Directorate of Science
	G. Mathys	Observing Programme Office
	P. Padovani	Virtual Observatory Project Office
	M. Péron	Software Development Division
	M. Romaniello	Data Products Department
	W. Wild	ALMA Construction Division

ALMA Operations:	E. Humphreys	ARC Astronomer
	D. Petry	ARC Scientist

Minutes taken by:	S. Chasiotis	Administrative Assistant
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Secretariat:	S. Chasiotis
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1. OPENING OF THE UC MEETING

The 34th UC meeting opens with a quick round of introductions of all participants. J. van Loon introduces himself as the Chair of the 34th UC Meeting and mentions that this is his last year in office. He also notes that N. Ryde, the Swedish representative, is joining the meeting via video link.

J. van Loon then lists the absent representatives (F. Grundahl - Denmark, J. Meléndez - Portugal, and M. Zoccali - Chile), mentions that M. Hamuy is replacing the official Chilean representative Zoccali, and introduces the new representatives (H.-M. Schmid - Switzerland, S. Trager - The Netherlands, T. Preibisch - Germany, and S. Benetti - Italy).

2. ADOPTION OF THE AGENDA

As no suggestions for changes are raised the draft agenda is adopted.

2.1. APPROVAL OF THE MINUTES OF THE 33rd UC MEETING

In regard to the approval of the minutes, F. Primas points out that ESO's standard procedure is to officially approve them at the subsequent meeting. Thus, the question arises whether any prior agreement reached via email can be considered official. The UC Chair thinks that this should be accepted in order to be able making them public as quickly as possible. They both agree to postpone any further discussion on this topic at the end of the meeting when action items and recommendations are discussed.

No further points were raised. Minutes of the 33rd UC meeting were approved.

3. UPDATE ON ESO'S PROGRAMME

A. **Kaufer** gives a presentation on behalf of the ESO Director General about the ESO Programme ([attachment 1](#)).

4. REPORT FROM THE OBSERVATORIES: LA SILLA & PARANAL (INCLUDING APEX)

A. **Kaufer** updates on the observatories La Silla, Paranal and APEX ([attachment 2](#)).

5. REPORT FROM THE OBSERVATORIES: PARANAL SCIENCE OPERATIONS

C. **Dumas** reports on Paranal Science Operations ([attachment 3](#)).

6. REPORT FROM OPERATIONS: HIGHLIGHTS FROM THE FRONT-END

F. **Primas** gives an overview of last year's achievements in the front-end of the VLT data flow and operations, followed by M. **Rejkuba** who presents a report on the start of VISTA/VIRCAM operations ([attachment 4](#)).

7. REPORT FROM OPERATIONS: HIGHLIGHTS FROM THE BACK-END

M. **Romaniello** gives a report on last year's achievements in the back-end of the VLT data flow and operations ([attachment 5](#)).

8. REPORT FROM THE OBSERVING PROGRAMMES OFFICE

G. Mathys gives an update from the Observing Programmes Office, including telescope time statistics ([attachment 6](#)).

9. REPORT ON THE UC/OPO/OPC LIAISON MEETING

J. van Loon (UK) provides feedback on the OPC/UC/OPO liaison meeting ([attachment 7](#)).

10. GENERAL DISCUSSION

This part of the meeting included both short summaries from the representatives of the individual member countries and detailed discussions about specific topics. For the sake of clarity and reading of the Minutes, we have grouped all summaries in Section 10.1 and all discussions in Section 10.2, even if the latter were usually discussed during the interventions of the individual UC members. Underlined text in Section 10.1 refers to specific topics that were raised, and the discussion of which is now reported in Section 10.2.

10.1 FEEDBACK GIVEN BY THE INDIVIDUAL COUNTRIES

W. Zeilinger (AT): We had a meeting with Austrian users using ESO facilities last week. The number of people using the ESO archive has increased. They are generally very satisfied with the services ESO provides.

S. Benetti (IT): Italian users are mostly satisfied with ESO's services. Some users have complained about not having support at La Silla, but they are a minority.

M. Hamuy (CL): Chileans are quite satisfied with the services offered by ESO both at La Silla and Paranal. There were no complaints.

T. Preibisch (DE): Most German users are also quite satisfied. There were some complaints. One major issue are page limits for short proposals. We also received some complaints concerning the upcoming non-availability of NACO after 2011. Apart from these concerns, only minor issues were mentioned.

H.-M. Schmid (CH): The Swiss users are frequent users and have been granted a lot of time. I am pleased to report that feedback from both Zurich and Geneva is basically positive.

N. Ryde (SE): The Swedish community is in general very happy with ESO. There were just a few negative comments in regard to the NACO issue, the scientific and technical feedback from the OPC as well as the frustrating experience when trying to install pipelines for UVES on a Mac platform.

M. Groenewegen (BE): This year there were relatively few responses from the Belgium community, however, rather positive. The more interesting comments refer to ALMA. One question I would like to raise now is about the status of the call for spectroscopic surveys.

S. J. Katajainen (FD): The Finnish users are quite satisfied. They expressed some criticism about the lack of support on La Silla, and as usual some also about the OPC feedback. In Finland we have several astronomers who are doing polarimetric studies. According to their opinion the current instrumentation is not the best one, considering for example the time resolution of FORS and EFOSC2 that since it was moved to the NTT is totally useless for polarimetry. Thus they expect improvements especially in this area. Consequently I was very pleased to hear that ESO plans to provide pipelines for polarimetry.

I. Negueruela (ES): I received quite positive feedback from the Spanish Community. After three years of membership the usage is showing signs of maturation as Spanish users apply for almost all available instruments. Most of them are satisfied with ESO's services. The comments I received are not so enthusiastic as the ones I received in the beginning. This is because people got used to ESO's services and consequently take high standards for granted. The complaints I received concern mainly the OPC feedback (inadequate justifications when time was not granted). This brings us back to the problem we always have. There are many programs that do not get time just because there is no time and not because of any particular reason. I personally do not know whether giving feedback is better than not giving it.

J. Grygar (CZ): We are celebrating this year our 3rd year as ESO member state. Joy over this is

reflected in the many positive responses I received from the Czech users. However, I will first mention their complaints. The main complaint is still the oversubscription at UT2 and the little time available on FEROS at La Silla. Furthermore users criticized ESO's webpages (especially the newcomers find them counterintuitive and chaotic as they have difficulties to detect proper information) and manuals. A positive aspect that was noted is the very good cooperation with ESO's staff. Rejkuba was explicitly mentioned in this respect.

S. Trager (NL): I was impressed by F. Primas saying that 10% was a good number of response to a poll. I personally polled 300 people and received only 11 responses. However considering the overall number of Dutch PIs these 11 responses actually relate to 20%. A good portion of responses came from people who wanted to comment on ALMA's future early science. In general I did not receive the number of complaints concerning OPC feedback I expected. This is positive as it indicates that people in the Netherlands most probably came to grips with what the OPC actually does and how it works. In fact some of the comments I received were very positive. There was one user who is of the opinion that perhaps it would be nice to add a panel to group B dealing with extragalactic stellar astronomy for those people who are doing stellar populations in nearby galaxies outside the Milky Way. Otherwise the Dutch are especially excited about X-Shooter, the fact that people are using it as well as about the good results. They were also extremely pleased about the oversubscription at UT2 over the last four semesters. This was very hard for everyone apart from the Dutch. For us it was actually very pleasing to experience X-Shooter's popularity since we were initially told that no one wants a single instrument that does stars primarily. However, now it is the third most requested instrument, which has completely dominated UT2. Besides, one user commented that it would be nice if the X-Shooter pipeline would be released to the general public.

V. Hill (FR): I was quite pleased to see that the users continue to be extremely thankful that ESO implemented the very fast archive data release for service mode observations. This proves that people really do make fast use of VLT data. Most comments were definitely positive. Another fact that I would like to point out because it indicates a new move of ESO is VLTI's new AT configurations. In the beginning they were strongly criticized by many heavy VLTI users, particularly by their strong community in France. Thus I was very pleased to see that those bad comments disappeared this year. The reason for this was that the involvement of the community in defining these new configurations was very well appreciated. This is not necessarily displayed by the positive comments but by the absence of the negative feedback. Besides, I wanted to come back to the high pressure on UT2 and address a question to Gautier. I saw that the very high subscription comes from X-Shooter and you have shown us the break down of the pressure in regard to the requested nights on UT2 by instruments. Could you please let me know how much of the available time is actually given to the different instruments? Because one fear I have considering the large spectroscopic public survey prospective is that X-Shooter will be very harmful to the users of FLAMES and perhaps UVES as well. So I was wondering if you have already some hard numbers that you could share.

10.2 DISCUSSION AND FEEDBACK ON SPECIFIC TOPICS

> Non-availability of NACO (raised by T. Preibish - DE)

J. van Loon (UK, Chair) finds the decommissioning of NACO surprising (especially since this instrument has been upgraded quite frequently) and asks whether someone of ESO could explain the reasons for this decision.

A. Kaufer: ESO is analyzing options to overcome the non-availability of NACO, but it is not easy to prepare NACO so that it can be mounted and dismounted in exchange with another instrument. Enabling science is here the main driver for ESO to take the final decision. The case of NACO has actually reopened the discussion about which instruments will be needed at the VLT in future years, with special emphasis on complementing those second-generation instruments, which have already been approved and are under construction. The STC has raised this concern already a year ago and since then studies are being conducted to identify possible solutions. ESO tries to look into new instruments, which can integrate capabilities of those instruments that will be decommissioned. The STC has been presented with different options, but the discussion is still ongoing.

B. Leibundgut: The STC has asked to receive a presentation that reflects ESO's plans concerning this matter at their next meeting in October.

> EFOSC2 – guest instruments (raised by S. J. Katajainen – FI)

J. van Loon (UK, Chair) asks if anyone would like to comment on EFOSC2 and/or if there is any possibility to make it available at the 3.6m (not just at an ad hoc basis).

A. Kaufer: I don't think that making EFOSC2 available at the 3.6m telescope is really an option. However, there exists an imaging polarimetry community that has solved this problem by using its own instruments dedicated to imaging polarimetry (both at the 3.6m and at the NTT). This approach is more in the spirit of how we would like to use La Silla. Thus I would encourage you to consider this path and to build as well as use your own instrument. This channel is open and we would be pleased to help you making the best interface and ensuring that it can be used easily.

S. J. Katajainen (FI): This is very interesting indeed. At the University in Turku there is actually a group of people who developed a new polarimetry instrument, which could be used as a visitor instrument. Thus I will forward this news to the chair of this.

A. Kaufer: Another possibility would be to join the groups that visit La Silla with their polarimetry instruments since they always try to maximise the impact of their visitor instrument proposals. We actually have two independent polarimetry groups proposing visitor instruments for period 86.

J. van Loon (UK, Chair) asks why it is easier to bring a guest instrument to the telescope than to move an existing one. Is it because you have to move it back?

A. Kaufer: For ESO to move an instrument means that it will have to be fully certified and tested before it can be released to the users. If a group brings its own instrument they are fully responsible for its performance and commissioning. ESO only provides the telescope and its operation.

G. Mathys comments that this would also have a scheduling impact as a matter of fact since ESO will have to make two instruments unavailable at the same time. However, when using a visitor instrument ESO just has to replace one instrument at a time.

> Status of the call for spectroscopic survey (raised by M. Groenewegen – BE)

B. Leibundgut: About a year and a half ago the STC asked ESO to identify the scientific demand for wide field spectroscopy/spectroscopic surveys. Thus ESO and the STC together organized a workshop in March 2009, the outcome of which has been the recommendation to implement spectroscopic surveys at the VLT but also at other ESO telescopes on La Silla. There are several aspects that need careful evaluation, as differently from the imaging surveys that run on dedicated telescopes, spectroscopic surveys will make use of telescopes regularly used in standard operations, thus they will compete with regular programs. I discussed this internally within ESO because it affects several departments starting from USD up to staff on the mountain. I presented an implementation proposal to the STC two weeks ago at the La Silla - Paranal subcommittee meeting on April 7, which triggered a long discussion followed by a detailed discussion at the STC itself. In the STC recommendations (which I received only last night) there are two requests. One of those requests you saw in Christophe's (Dumas) presentation, i.e. there are three new instruments coming in 2011 and 2012. Each of these instruments has very large guaranteed time allocation already. So the STC asked us to make a projection reflecting what time is already allocated on the VLT telescopes in the years 2011, 2012 and 2013 since this will have an effect on what can't get approved. We implemented already some programs on the telescopes and ESO had a difficult time to finish those large programs. They also requested to replicate what we did with the imaging surveys, which implies having a two-step process. Therefore, we will likely first have a Call for Letters of Intent to envisage what is going to come and then move on to a real call. Regular proposals will be requested for Period 88. The STC recommended in addition to make clear that the proposals describe the scientific legacy of the surveys and that the call is open for all ESO telescopes which includes the La Silla telescopes as well. We consider at most two surveys to be approved at this round since we need to very carefully examine how much extra load we can put on the telescopes and the observatories.

M. Groenewegen (BE): Will there be a limit in time or nights?

B. Leibundgut: We haven't discussed this yet. However, we cannot commit an instrument for ten years. For La Silla, for example, Andreas Kaufer will need to indicate how long he can financially operate the telescopes. Thus I can't give any numbers at this point. Only once the call has been evaluated will we be able to say what the organisation is willing to commit.

> **Mac support (raised by N. Ryde – SE)**

J. van Loon (UK, Chair) proposes to postpone the Mac discussion to the Tour de Table session in the afternoon.

> **Fraction of observation time per instrument/different modes (raised by V. Hill – FR)**

G. Mathys: I would like to point out that ESO does not predefine the fraction of time that each instrument is allocated. My first estimate is that it probably gets a fraction of the time, which is proportional to the fraction of the time that gets requested.

V. Hill (FR): Is my assumption correct that there is no plan to make the pressure between UT2, UT1 and UT4 more even in the coming semesters?

A. Kaufer: This issue is ongoing. The move of ISAAC from UT1 to UT3 was a first step, which was relatively easy. The options we have with respect to UT2 are more limited. ESO currently studies the possibility to swap VISIR with X-SHOOTER. The planned upgrade of VISIR could possibly provide ESO with the opportunity to move VISIR. This involves a move of the whole infrastructure of VISIR like the cable wrap, helium lines, and the compressors. In addition the possibility of a large spectroscopic survey with VIMOS has to be factored in which would then compete with X-SHOOTER for the dark time on UT3.

V. Hill (FR): This applies also to UT2. Maybe one of these huge public surveys gets approved also on FLAMES?

A. Kaufer: Yes, this is why we are having some problems to take a decision and are still studying the options to be able to react. Thus I cannot yet confirm that we will eventually move any instrument.

V. Hill (FR): So I assume this situation will remain as it is until the large public surveys are approved and defined.

A. Kaufer: This was actually one of the comments I made regarding Bruno's proposal. We need this information in order to be able to address this problem.

J. van Loon (UK, Chair): Is there the possibility that VISIR gets proposed for spectroscopic surveys?

A. Kaufer: This is not excluded.

G. Mathys: I can actually share with you the hard numbers of the last two periods. XShooter was requested for about 550 nights and 189 nights were allocated. However, this number includes about 70 nights of GTO. UVES was requested for about 360 nights and 53 nights were allocated. FLAMES was requested for about 300 nights and 55 were allocated. So if you leave GTO on the side it seems that the proportion is comparable between the different instruments.

V. Hill (FR): I am not sure whether GTO should really be left outside.

A. Kaufer: One can see in the publication statistics of some of the first-generation instruments that they are probably past their peak in productivity. Again, the push by the community has to come from the science proposals. Only those will allow ESO to take the right decision in regard to which instruments need to be still supported and which not.

J. van Loon (UK, Chair): Maybe in the end the only solution is to get all the observatories in the world together as there are too many different modes people are asking for which can't be offered all by one observatory.

B. Leibundgut: This is exactly what the Astronet Working Group on two to four meter telescopes is proposing for Europe. This is going to be an interesting test case.

A. Kaufer: I don't think that exchanging observing time on specific instruments with other observatories would be beneficial for ESO's community. So far all cases, where such exchange programs were studied, showed that the ESO community would have been actually disadvantaged. Thus this is not necessarily attractive for us.

11. CLOSED SESSION

12. TOUR DE TABLE

J. van Loon (UK, Chair) opens this session by debriefing ESO on their Closed Session. They had a look at the old action items and recommendations (which will be discussed after the break) and they concentrated on a few items that the UC considers important. Nevertheless, they would also like ESO members to suggest topics to be discussed. Users are quite happy with the latest developments and especially pleased about the presentation and plans regarding Reflex as this is something they have been waiting for. However, there are issues on which we would like to ask your views. Since you asked us for some feedback on La Silla, I would like to start with that.

> ESO's attitude towards external parties operating a telescope at La Silla

J. van loon (UK, Chair): La Silla is now been operated in a minimal operations model. The users understand the reasons for this. Many have accepted that, though not everybody is completely happy with it. There are also users who suggest to re-open all telescopes. So there is a continuous demand for small 2 to 4 meter telescopes or even 1.5 meter or less. We, as a committee, realize that ESO cannot just reopen all these facilities, but we would like to have confirmed what we believe is the case. For instance is it indeed the case that ESO is in principle open to external parties operating a telescope (even if officially closed) if they come with the money and the manpower? There is an ongoing demand for small telescopes and there is still a feeling amongst users that the telescopes that are still being operated at La Silla are heavily oversubscribed.

A. Kaufer: This is what happened last year with the Schmidt telescope. A team operates it remotely now. There are people who are bringing new telescopes to the old domes and others who take telescopes out of the domes and mount them somewhere else. To come and do your own small telescope project is part of the philosophy of La Silla. Whether an existing telescope can be used is something we have to check in detail since there are cases where it is technically not possible. However, the option exists in general.

J. van Loon (UK, Chair): Is this the case for both re-opening existing telescopes as well as for building new telescopes at La Silla? Will La Silla be long enough operated to execute such projects?

A. Kaufer: Long enough depends on the need of the science project. Current agreements typically run for 3 to 5 years, which appears to be the typical length of a science project.

S. J. Katajainen (FI): How much is the approximate price for a 1.5 meter telescope?

A. Kaufer: The cost of a telescope primarily reflects the actual operation costs. That means you will have to pay for what you use. The cost driving factors are power, water, Internet, accommodation, travel, etc. These factors all contribute to the final price. I cannot give you a price per telescope diameter. However, if you describe a project we can relatively quickly provide a first estimate how much this will most probably cost.

> Guaranteed time programs/forecast of available observation time at the E-ELT

J. van Loon (UK, Chair): Another thing we wanted to flag again as some users have expressed some concerns about it, are the guaranteed time programs. These are sometimes quite large and often block too many targets or maybe the only good targets that can currently be executed. We are worried about the future. When taking the E-ELT as an example, how much

time is actually still open for general observing? We were wondering whether paying in GTO time is the way to go and whether instrument developers should just be paid in Euros.

B. Leibundgut: This is a discussion that is happening in Council right now. ESO will present a paper to Council this June on how we think GTO should be handled in the E-ELT case. There is a bit of a runaway process happening with the VLT instrumentation where ESO pays for manpower. It is clear to everybody that the model we used at the VLT cannot be carried forward one to one. It is also true that the costs of the E-ELT or an E-ELT-night will be massively higher than a VLT night. Thus we are trying to find the right balance by discussing this issue with Council.

J. van Loon (UK, Chair): That means that a team, which will build an instrument at the E-ELT, won't get the same amount of time since every night of observing at the E-ELT is more expensive and the instruments are more expensive as well.

B. Leibundgut: Exactly. We are looking at models so that we don't have to sell the E-ELT to its instruments. For the VLT it was agreed that guaranteed time should not exceed 10% of the total observing time. As far as I know we followed this agreement, not for every semester but overall. We are getting a bit into a crunch when looking at 2011, 2012 and maybe 2013 where three instruments will be made accessible at the same time. This is an issue we are examining right now and ESO will present its suggestions to Council this June.

H. M. Schmid (CH): The GTO issue is an often-discussed issue among users. I believe it could be useful to discuss this topic in a public forum or in a Messenger article. In this way one could get the ideas of the instrument builders across to the users. After all, scientists have the best ideas when it comes to observing. In this way the understanding between instrument builders and observers will improve and more importance is attached to this discussion.

B. Leibundgut: This has been a problem from day one. People just want to reserve the right targets for themselves. At the same time we at ESO, particularly Gautier Mathys is in the middle fighting for the community to make sure that the guaranteed time is not getting overcommitted. In the very beginning we received a target list for guaranteed time proposals amounting to 3 years even though we could offer only two semesters. It is still quite often an individual discussion. Guaranteed time holders are definitely entitled to GTO and we are not disputing this at all. However, at the same time ESO needs to preserve the right balance. I believe that this is something you can't write down once as the situation differs for each instrument and consortium.

G. Mathys: Indeed we have been a bit stricter recently trying to make sure that the list of protected observations that are released before the Call for Proposals are realistic. However, some consortia had a hard time accepting this. Nevertheless, this is a culture that needs to become the norm and we are working on this by talking to users.

V. Hill (FR): What you said refers to the discussions between the consortia and ESO. However, the reason why it comes back to this Committee all the time does not result from this channel but from the frustrated normal user who sees those big lists of targets but does not know and understand what kind and amount of discussion has preceded to reduce this list. Out of this reason Hans Martin Schmid (CH) suggested publicizing this selection process in a medium like for example the Messenger hoping that in this way the normal user will understand your position.

G. Mathys: Maybe we can mention in what way we have been stricter enforcing the list of protected observations and how this has opened opportunities for general observations. However, we are also facing the opposite problem where consortia claim that users took typical targets that had a limit between two periods and that they wanted to put in their list of protected observations for the next period as they could not include them last period due to the limitation in the number of targets. So this proves that this is a two-way discussion.

J. van Loon (UK, Chair): Is there any role for the OPC to keep checking this? Could it also act with respect to releasing targets?

B. Leibundgut: I would not think so. The OPC's role in regard to GTOs should be very limited. The target lists are published with the Call for Proposals so that people do not write a proposal that will get turned down because they request already protected targets. I believe the OPC's role should be rather limited as GTO is a commitment ESO made to the instrument builders and that needs to be honoured. This system can be adjusted fractionally in special

cases, however; overall it needs to be preserved. An article that tries to explain this might be a good idea.

J. van Loon (UK, Chair): The GTO programs were negotiated at some stage. Are external referees having an idea about what would be reasonable for a team to ask for and how much should be left to other users involved in this process?

B. Leibundgut: I know that many consortia have an internal selection process that decides which proposals are submitted as GTO and which are rejected. This is a process we can't look into. However, we made the very specific request that for a given semester/period we only accept the number of targets that fit the GTO time that is foreseen for that period. Thus people can't just submit their targets for the next two years. Many consortia have complained about this, as they want to have some long-term stability of their target lists. We do not interfere with the GTO selection but pass it on to the OPC, which except for few cases does not act on the selection either. This is the process ESO follows right now.

J. van Loon (UK, Chair): That is why I am asking. If for instance the consortium, which builds the instrument, has to define a GTO program right from the start and that is what they are going to do, it should be clear to everyone. However, this is different from if they are allowed to just propose every ESO period because they have time and can just define a new program as they see fit. The latter is less predictable and does not allow other users to foresee what is happening in the next period. If, however, it is completely described upfront what the consortia are planning, everybody else can plan accordingly. Does it actually happen that way?

B. Leibundgut: We have consortia where this happens. HARPS is an example where it was clear from the beginning what they wanted to do and this was implemented. However, there are other instruments, like for example X-Shooter, that can be deployed multifunctional or where the consortia is so big that it includes various countries that have different interests. Therefore, for certain instruments this can be defined more easily than for others. The Council approves the amount of guaranteed time that flows into the contract with the consortium beforehand. This happens several years before the instrument is finished. So at that time the consortium cannot be asked to come up with the program they plan to do. It might be an interesting idea to define the stage a year or two before commissioning where this question could be posed. ESO does not apply such a procedure so far.

G. Mathys: No, ESO has not done this so far. However, some of the consortia - especially the VLT MIDI and AMBER - presented a general plan of what they intend to do with their guaranteed time. They tend to stick pretty close to this plan; at least up to date as they normally propose some parts out of this plan for a given period.

> Mac support

J. van Loon (UK, Chair): There is one request that the UC members feel quite important to be discussed and that has been raised many times before. Up to now we always accepted the fact that there is not enough manpower to support this request. Besides, there were other more important concerns that were given higher priority. However, since those other issues have now been solved, this request finally surfaced and made it to the top. This request is the repeatedly requested Mac support. Users are getting more and more confused why such a support is not feasible although ESO staff is using Mac quite extensively as well. Mac is Linux based, and users have already managed to make applications compatible with Mac out of personal interest in their free time. This proves that it is indeed manageable. Thus we would like to open this topic for discussion and see if ESO can find a way to support Mac. Besides we would like to know at what cost this would be realizable and whether there are other things that have to be considered.

M. Péron: Before commenting on the Mac support, I would like to understand what the users would like to have supported on Mac. We distribute a set of tools to the community. Many comments we receive are related to GASGANO and the pipelines. However, we also develop other tools. I also saw comments about VMMP, which is the observation preparation tool for VIMOS. There is GASGANO, VMMP, FIMS, P2PP and many other things.

J. van Loon (UK, Chair): Actually, you mentioned all the applications that were requested by the users to be supported also for Mac. Of course there might be a limit to what ESO would be able to support. This topic is also related to making things available on as many platforms as possible, however, in principle Mac. There are for example applications that work with a

different JAVA version. So those applications could be streamlined all together if this is possible at all.

M. Péron: There are some tools that work with JAVA 1.5 and others that work with 1.6. This should be solved when P2PP 3.0 is released next year. Our main platform is Linux as this is the platform that is used on Paranal and it is where we also test our software. This is not only monitoring whether the installation procedure is working but the tools have to be checked carefully as well. In this way, we have been able to release software with a minimal number of Linux-related problems. This is what support on a platform demands. The Mac platform would require the same in-depth checks. Besides, it is a false conclusion that all applications work on Mac the same way as they work on Linux. This is not the case even though JAVA is supposed to be portable. We have noticed different kinds of behaviours in the codes for, e.g., both P2PP and GASGANO, which is probably due to the code itself, but nonetheless it would require testing, also each time a new version of the operating system is released. This is why it is so important to understand what users are exactly asking for.

J. van Loon (UK, Chair): Users are asking for all the tools that were mentioned. This means the ones used for proposal preparation, for Phase II and ideally also for data reduction. However, Mac users are generally very eager to help making this possible. Maybe the user community could be involved in the testing and hence reduce the number of resources that ESO would need to invest. Several users have already offered their help.

M. Péron: The users could certainly be involved in the testing of pipelines. They could also be involved in testing P2PP. However, they cannot be asked to fix those tools, as this is ESO's responsibility.

J. van Loon (UK, Chair): Is that really so? Can't they be involved in some of the actual work?

M. Péron: The learning curve regarding the system would be quite steep and besides, these tools are operation critical. My main question is however a different one. I know that you are aware that ESO cannot increase the number of resources to develop software for the VLT while money is requested to build the E-ELT. If users claim that the highest priority is to support Mac ESO will take up this request. However then the next question, which will have to be answered, is what are the users willing to drop in return to make this possible? This is why a list of priorities in regard to Mac support is important.

S. Trager (NL): It would be very nice if at least GASGANO and P2PP use consistent JAVA versions so that Mac users do not have to hack the P2PP start up code in order to make it work on a Mac.

F. Primas: P2PP is actually running on Mac and some ESO users know this. Besides, we are providing unofficial advices how this can be done.

S. Trager (NL): What Jacco van Loon meant, however, is that there must be a reasonable way to feed this kind of information back to the community. I have had a problem in the past with the VIMOS preparation software and it would have been very nice if the code had been visible to figure out what was going wrong with it. However, some source codes are available but others aren't, and I do not understand why that is, as the community is pretty smart in solving this kind of problems. Of course I do understand that there are security issues for certain applications like for example P2PP, which is definitely operational critical, but not for all.

M. Péron: Some codes are an open ESO source and others not, like for example P2PP, which has a copyright. We cannot pass maintenance on to the users as those tools have to function on the mountain as well and their service has to be retained at the usual level for the whole community. Of course we appreciate any help the community can offer as well as your feedback. However, you have heard earlier from Martino Romaniello that there is a data reduction forum on the web which currently counts only very few posts. This proves that not everything that works in theory does necessarily work in practice.

S. Trager (NL): We actually discussed this a bit. It might be best for the data reduction forum if people do not exchange individual emails with individuals at ESO using the usd-help email address but to handle this correspondence via the data reduction platform. This way it would become the key platform between users and ESO. This is how open source products work.

A. Kaufer: In regard to operation critical tools, experience has shown that if they are made public users will modify them to their needs, which is fine. Unfortunately, such modifications

can lead to incompatibilities to the operational tools at the observatory. This has happened with FIMS and other tools several times. In those cases it took us sometimes many nights to find out what was going wrong and to realize that people had modified the code. This lesson was learnt in the early times and therefore operational critical tools are out of question. In regard to pipelines, however, ESO has gained a lot from the community modifying and re-working them by feeding in also users' ideas/suggestions. Therefore we need to differentiate tools, which directly interact with the telescope from those that are not operation critical.

C. Dumas: It would be interesting to know what percentage of Mac support is related to pipeline reduction tools and what percentage concerns other tools. ESO could then examine whether there is the possibility to start providing Mac support for a few tools like for example the data reduction pipeline or any other application.

S. Trager (NL): Judging from the users comments I found in the submitted documentation which was read by Michele as well, users would like to have Mac support first of all for Phase I and Phase II tools. At least those are the applications Mac users are currently complaining about. This actually excludes the pipelines, which in my opinion are another issue entirely. People should be able to modify pipelines since they are open in the sense that they are accessible and can be read.

M. Péron: Most of the pipelines actually work on a Mac. The problem was the relationship and the interface between GASGANO and the pipelines. As far as I can judge from the VMMPs and the FIMS code this is where it gets difficult.

A. Kaufer: The mentioned tools are sometimes 10 years old as they were deliverables from the instrument consortium. They are functioning well but difficult to maintain. Porting them to different platforms would become a major development. This has to be balanced with the fact the related instruments do have finite lifetimes.

J. van Loon (UK, Chair): The main purpose is to communicate what has been found out and the electronic forum was mentioned as a way to post this kind of information. We are not insisting on ESO supporting all tools on Mac and maintaining them but to find a way to work with Mac users. So the electronic forum could serve as an interface run by the users in principle. Of course it would be good if ESO also interacts with this forum but generally it can also be a forum between users where they share experiences.

M. Romaniello: There are certain things we really don't want the community to do, like using FIMS versions, which are different from those distributed by ESO. This is based on experience. All of us have been on Paranal long enough and remember what happened when we did allow users to edit FIMS files as well as the time we lost at the telescope because of that. So we are not talking about time of staff located here in Garching but telescope time at night, which got wasted because people thought they knew what they were doing with certain tools. I am not exactly sure what you mean by Phase I tools. As far as I know they are actually Latex based. There are certain things that we are not going to post on any forum ever because we do not want anybody fooling around. This concerns the process of preparing OBs. Thus I do not believe that the forum is a viable option in this respect. This is why as soon as an OB is submitted an automatic check is done on the version that was used to create the slit position for example. You mentioned institutes that have no Linux boxes at all. In my opinion this is far fetched. A Linux box to enable users to run P2PP or VMMPs twice a year costs 500 Euros these days. This is by any means cheaper for an institute rather than having the mountain to fix FIMS for the latest Mac software.

J. van Loon (UK, Chair): Is there anything that has to be said in regard to Mac support that hasn't been said yet?

F. Comerón: Well, we take it as a fact that installation problems occurred with some of the tools for which the code was distributed. People do hack and find their solutions. As far as I know this hasn't caused any problems since ESO is confident being shielded against modification concerning FIMS or VMMPs output files. However this does not apply to modifications to installation scripts concerning other tools like P2PP. So if the community feels happy using the data reduction forum to exchange this kind of information, there is nothing we can do about it. However, the general disclaimer has to be accepted in this case that ESO does not take on any responsibility for consequences resulting from applications developed by means of solutions or recipes that have been posted there. As long as this distinction is made it is up to the community to decide.

J. van Loon (UK, Chair): This is a sort of a compromise. ESO could support the exchange but at same time make clear that there is no guarantee that those things will actually work.

M. Péron: I would like to point out again that nevertheless it would be very useful if users could come up with a list of priorities.

F. Comerón: Just to make clear that this is correctly understood. This priority list will be merged with other priority lists generated internally, which have some impact on the implementation of those different facilities.

J. van Loon (UK, Chair): This is completely understood.

> Next big project after the E-ELT

J. van Loon (UK, Chair): So let's move on with something slightly different. Before we go round the table there are some points we wanted to briefly raise. Andreas mentioned in his first presentation that ESO has started considering what the next big project after ALMA and the E-ELT will be. Those projects would probably start some time after 2017. However, you did not mention what kind of projects you have in mind. We actually know there is already such a big project, which is the SKA. So we were wondering whether this is one of the projects ESO is considering. We also know that the countries would have to finance both whatever project ESO has in mind as well as the SKA. The users would like to have your view on this.

A. Kaufer: What I mentioned in my presentation is that ESO is working on creating a way that will enable funding of future projects. The only thing we know for sure with respect to any future project is that it will cost money. Bruno might want to expand on the ongoing discussions.

B. Leibundgut: I can only support what Andreas said. The goal has to be that once ESO finishes the E-ELT, the organisation is not in the situation where it cannot afford doing anything else. At this point it is completely open what this should be as it is far too early to discuss future projects. ESO is perceived as an organisation that can handle large ground-based astronomical projects, whether this is the SKA or something else. After all nobody knows what will be in demand in 2017. I think this discussion will get really serious when the E-ELT is on its way. Maybe SKA is still the hottest project at that time. However, there are also other projects like the European Solar Telescope for example, which is one of the topics that the European Science Forum for Research Infrastructure is considering. The voice of the community will definitely be heard as this is not something ESO decides on its own.

J. van Loon (UK, Chair): Personally I am slightly worried. The E- E-ELT costs a fortune. You are asking member countries to pay for that. Nevertheless they might not want to keep paying more for ESO's next projects. I would like to take the U.K. as an example where people were spoiled with all the facilities the U.K. was involved in some years ago. However, due to the economic crisis they were forced to drop things with huge consequences. Thus I am worried that people dream about very beautiful things for the future without keeping possible consequences in mind. Who takes the responsibility for the community and checks whether the world can actually afford what might be envisaged?

B. Leibundgut: I couldn't agree more with you. We have to be very careful that we do not overheat the program. If ESO builds the E-ELT but does not get additional funding, we won't be able to do anything else after this project. Thus Tim de Zeeuw, ESO's Director General, is working as hard as he can to prevent that ESO ends up in debts that can't be paid off during the next 20 years as this would imply the end of the organization.

> Astronet report

J. van Loon (UK, Chair): Something I forgot to ask. The users wanted to hear your comments on the Astronet Report and know whether this will actually affect the way ESO operates La Silla.

B. Leibundgut: First of all I would like to remind you that the report is open for discussion right now. There is a web-link where the community is asked to provide input. ESO will take care of the Southern sky. The coordination for both southern observatories run by ESO is already done by ESO. Thus we are doing already what most of the report is asking in regard to

La Palma as well as to the coordination between telescopes. This discussion and the related discussions in the STC are exactly dealing with the coordination activity that ESO is implementing for its telescopes. So the report as we see it, almost confirms the situation ESO is currently in. There are some recommendations in regard to wide field spectroscopy. However, most of what the report says is something we take on board and feel is happening already.

J. van Loon (UK, Chair): ESO is providing telescopes for the European Community. But there are also other two- to four meter telescopes in the South. Is ESO going to look more carefully at those other facilities and see how European Astronomers can make use of them on the occasion of this report?

B. Leibundgut: The report is very specific about European telescopes and all European telescopes in the South are actually run by ESO. The only exception is the AAT, which is now Australian. The Astronet Report is not going beyond the European telescopes. If you are however aiming at coordinating with American observatories then we are talking about something completely different. The report does not deal with this topic.

Tour de Table

> Publication of PI packs after proprietary period

S. Trager (NL): I would like to know whether the PI packs will become public after the proprietary period is over so that people can access the pipeline reduced data.

M. Romaniello: This is and was always the plan. We cannot commit to a date right now. However this is going to happen.

> Refurbishment of the Danish telescope

J. Grygar (CZ): At our last meeting we discussed how to use La Silla or rather its instruments in the future given that they no longer belong to ESO but are national property now. Consequently I initiated a discussion and proposed to the Czech users to contact our Danish colleagues. This happened and I am pleased to report that a very good program is underway aiming at the refurbishment of the Danish telescope in order to observe asteroids in the Southern Hemisphere.

> User feedback in regard to pipelines

P. Ballester: Reading the fact sheets I saw many comments regarding pipelines, which surprised me, as their quantity was higher than the total number of tickets we actually received during the whole year. Some of those comments are very interesting. In very limited cases there is a large discrepancy between the ETC prediction and what users were actually able to do. I would highly encourage users to submit tickets reporting such cases and provide us with the corresponding numbers we need. We are validating a new sky spectrum model at the moment. Thus we expect being able to predict sky background better and any user experience in this respect is of course more than welcome. The data reduction forum Michele mentioned before has unfortunately very few posts. The reason why we distribute the core of the pipeline is of course to allow users to give feedback if they face any problems. We would appreciate receiving more user feedback.

> User forum

J. van Loon (UK, Chair): Unfortunately we forgot to include the user's forum in the poll. This would have helped raising awareness. However, I am surprised to hear that the users do not use it much as I thought that the forum was very well advertised by ESO. With respect to comments made through the poll that are not received as tickets or end of mission reports I would like to point out that we can always contact the people who submitted them. I am mentioning this as the comments are forwarded anonymously. However we possess the originators' email addresses and in most cases it is probably no problem to disclose them.

Thus we can contact them for you and ask them to submit tickets for your analysis.

P. Ballester: Particularly for the ETC we are going to study the comments one by one. So we might come back to you.

> Data rights

N. Ryde (SE): I received a specific question from a user regarding a problem on data rights. There was an extension of a target list for a GTO HARPS program on the 3.6m, which was approved. However the data was made available to the public immediately after the observations, as there was no proprietary period applied to this data. Is this the way it works or did this happen due to a misunderstanding?

B. Leibundgut: This is a very complicated situation. These people were doing their guaranteed observing according to a list they had submitted. However, subsequently they submitted a change request, as they wanted to change or add targets to a different target list if I remember well. Consequently they dropped some of the pre-approved targets. Since the target list was changed and due to the fact that this happened during commissioning time those targets became public because commissioning data is public by default. I have been in contact with these people. Discussions have started in house but the loop hasn't been closed yet. This is an extraordinary situation at least at two levels. This is not something ESO does automatically. There is a misunderstanding in the GTO team as well as within ESO and we are currently trying to sort this out.

> [usd-help vs data reduction forum](#)

M. Romaniello: Scott mentioned something that sounded very interesting but I am not sure whether I understood it correctly. You mentioned using the forum instead of [usd-help](#). Did you use it for something specific?

S. Trager (NL): Well, the suggestion came actually from V. Hill.

V. Hill (FR): You did not witness my initial suggestion as I mentioned it in the closed session. I proposed to publicise some of the questions [usd-help](#) receives and which are of general interest for the forum. This is because we were quite worried that ESO received that few posts and puzzled when we realized that a considerable amount of those actually concerns spam from some Wiki page. The idea was that until this forum contains a sufficient number of information it is not going to grow. Thus it needs sufficient seeds to grow naturally.

S. Trager (NL): Only 14 out of all together 20 posts are actually real posts. Those on HAWK-I are extremely useful. Others however are not at the same level of interest. Besides, we realized that the last post was posted about 6 months ago. Thus we were wondering why information of general interest is not communicated back to the users via this platform.

M. Romaniello: I have some reservations in posting correspondence that is not related to data reduction.

F. Comerón: I insist on what I said before. The data reduction forum is a platform that ESO is making available to the community. It is not an official channel of information from ESO to its users and there is the danger of mixing warranted with non-warranted information. I appreciate the idea but one needs to be careful with it. I agree with Martino that this is a data reduction forum and not a place to hide information.

S. Trager (NL): Perhaps a compromise could be made. ESO could publicize at least those frequently asked questions and the respective replies provided by ESO members, which are related to data reduction. Would you agree with this?

P. Ballester: The tickets that were submitted to [usd-help](#) and which relate to pipelines concern installation issues, missing documentation, recipes not producing the right product, etc. Thus it is difficult to identify a trend. We received 120 tickets over the past year. 60 of those tickets are related to pipelines of over 14 instruments and concern at least 5 different issue categories. So there are only a few tickets that are really related to data reduction.

J. van Loon (UK, Chair): I assume that we sufficiently covered this topic and that people will need time to reflect on how the forum could be made more successful as well as in which way frequently asked questions could be posted there.

M. Romaniello: The point on seeds is well taken and was a concern from the beginning. No one likes to write on an empty board. I appreciate that you believe that the forum was well advertised by ESO. However, according to my opinion we did not do enough to populate it also amongst us. So what could be done is to channel some of our internal discussions and make them public on the forum. There are many scientists at ESO who do use the pipelines. Thus they get discussed internally as well. Publicising these discussions could provide some seeds.

> Limited access to observing schools

H. M. Schmid (CH): I heard that the “observing schools” are fully booked. It is a pity that we have to turn down young researchers. Small telescopes actually form the teaching ground for young astronomers and PhD students. So I was wondering whether we could reinforce those observing schools and combine them with data reduction schools. In this way young people could be trained by ESO or at least with ESO’s expertise and support.

F. Comerón: There are a number of activities, which are led by or with strong participation of ESO. ESO continues to be one of the partners of the NEON schools including the archive searchers school that takes place here. The VO project office is leading and participating in initiatives normally set up by the respective national community. Another important activity is VLTI schools in which some of the USD astronomers have important participation. An aspect which was supported particularly in the last years are schools organized by the community and sometimes by ESO promoting the knowledge on and usage of ALMA, as for obvious reasons this has to be our top priority now. I think the topic was already discussed briefly last year. I presented a list of activities in which ESO participated. However, I am afraid devoting more time to participation of ESO astronomers, especially those involved in operations, would start impacting the work we have on our radar. ESO is aware of the importance of this aspect. We have a big community in Europe and perhaps it is a healthy sign that those schools are always oversubscribed. Of course we will continue trying to do our best in managing this.

B. Leibundgut: I should add just one thing. The NEON program was not renewed since the EU no longer funds it. It has been moved to the Opticon program, however, with less money. One of the things we have been discussing recently is to have a school in La Silla. Something we haven’t done ever before as it is slightly expensive to get European students to South America. Many years ago there was a school specifically for South American students in Santiago. We keep on talking about this project but that is certainly not one of the core activities at ESO.

J. van Loon (UK, Chair): Is this due to limited resources with respect to staff time or regarding money? Paying the travel of participants is a very nice initiative. However, not everybody needs that. For instance in the UK students have a separate pot of money to attend training. Thus it would be a pity to not have the possibility to send students to such trainings although the money is available.

B. Leibundgut: I fully agree. This is one of the things we did change in the new scheme, as we do not support students anymore. However, you still have to pay for the lecturers. I believe that as an observatory this is the least you can essentially provide for free. So I fully agree that there are ways to actually make such activities cheaper. However, the critical problem is that this is something ESO certainly does not have in its budget.

S. Trager (NL): You mentioned South America. I remember a Chilean institution that did support a number of Chilean students to attend an observing school of two weeks every summer. So perhaps there is money in the South American budget to facilitate such a program.

M. Hamuy (CL): This particular institution ran out of money several years ago. However, there are other institutions that have money for outreach. Thus this is just a matter of coordination. I am sure that the Chilean community is interested in supporting these kinds of programs.

> Photometric facilities/lack of knowledge concerning polarimetry

S. J. Katajainen (FI): I have two specific topics. One is about photometric facilities especially in

regard to the reading time of the CCD. It is hopeless trying to do fast photometric work, as the sub-framing does not support it. If reading takes almost fifty seconds one can't observe targets, which could spin in 30 to 60 seconds. The second thing I would like to mention is that we have the feeling that there is a lack of knowledge at ESO in regard to polarimetry. Out of this reason it would be good if ESO could make sure that people who do install polarimetric optics do this correctly to avoid that data get lost again.

J. van Loon (UK, Chair): This is a very specific point that you might like to discuss off line.

A. Kaufer: Fast photometry is one of the best covered modes by visitor instruments to the NTT and VLT. For example the ULTRACAM team has been extremely successful through collaborations with Co-Is and PIs from different countries and communities. My recommendation would be to join this or other equivalent teams. In regard to the polarimetric observations I cannot exclude that mistakes have been made. It is not always easy to spot problems during commissioning runs until the data reduction is performed. Polarimetry is difficult in general. However if the mode is more frequently used knowledge will increase.

> Page limit for short proposals

T. Preibisch (DE): I received several complaints regarding the page limit for short proposals. Many people are of the opinion that more pages are needed to explain the project sufficiently in order to get accepted. A solution that was proposed is to shift the limit between short and normal proposals from ten to five hours as five hours are really short but ten hours are already more than one night.

B. Leibundgut: We are waiting for the OPC working group to finish its work. Most probably the short programs will disappear but the normal programs will only have one page of scientific justification. We talked about reducing workload from the referees in this way, as they would have to read less text. It is not clear yet whether this will indeed happen. However, at least part of the working group is moving in this direction. I personally believe that our system is too complicated as we have too many different proposal types. Thus reducing them and making them simpler will not only help the community but also us internally.

H. M. Schmid (CH): I believe that one page would be an initiative against specialised programs like polarimetry for instance. One does not need a lot of explanation when doing what everybody else does but only for another target. A lot of people use well-known instrument modes. However, when doing something more specialised one needs to be more detailed in order to explain to the panel what is going on as well as what are the technical challenges. So for this purpose two pages are still very little.

J. van Loon (UK, Chair): Currently the scientific justification is two boxes long. The other box is probably not really necessary but it just defines the telescope. I believe this is really something that does not need to be spelled out, like for example specifications on how to deal with the data. Thus some of these boxes could be removed or moved elsewhere. People are expecting that they have to write a lot in these boxes as part of their justification.

B. Leibundgut: Discussing the proposal form is something astronomers love to do no matter where this topic is brought up. We have discussed this with people who have experience in the OPC and various other panels. So it will not be a revolution but an evolution. However, if we get something wrong users should not hesitate to tell us so.

> ESO's attitude towards potential collaboration with the LSST

M. Hamuy (CL): As future user of the E-ELT I am wondering whether ESO is considering collaborating with the LSST. The LSST is planning a promising machine that has a ten-degree field of view and will image the Southern sky every three nights. I think it will be a wonderful source for E-ELT galaxies, stars and transients especially. Have you been thinking about that? I am asking as LSST is trying to get funding for construction. However, I believe that any interested country, organisation, institution or association will have to participate from the beginning in order to be granted access afterwards.

B. Leibundgut: There was a discussion in ESO Council and we got a very clear message from them not to pursue LSST. The Council made the statement that ESO builds and operates

telescopes but should not participate only in operations or as a funding agency. There was a big concern in Council that ESO will not be able to control the LSST project. The Chilean community will probably be the only one, which will have access to the LSST data and to the E-ELT. You are in a privileged situation.

13. REVISION OF OLD ACTION ITEMS AND RECOMMENDATIONS

UC32.AI.1: The user community perceives that the lack of ESO-supported scientific quality data reduction tools (N.B. not monolithic pipelines for QC work) significantly limits the quantity and quality of the scientific work based on ESO observations. ESO should present a plan for the implementation of Reflex-based scientific data reduction tools.

J. van Loon (UK, Chair): We were quite happy about the presentation of data reduction tools given last year as well as about this year's presentation in regard to Reflex. So we are probably going to close this action point. Thus it does not need to be discussed right now.

UC32.R.5: ESO should release the public minutes of its external committees in a timely fashion.

J. van Loon (UK, Chair): Many thanks to Stella for producing the minutes of our own meeting timely. However, this is also related to other meetings like the STC and OPC. So the question is how quickly those minutes were produced.

F. Comerón: I would like to inform you in regard to the minutes of the present meeting that in addition to her usual DMO duties Stella is also backing up Angelika Beller, who is in charge of the logistics of visiting astronomers travelling to Chile. As she is preparing the minutes in addition, a conflict concerning deadlines that need to be kept arises, which will prevent her from producing the minutes within one month as previously agreed.

J. van Loon (UK, Chair): Two months are still a reasonable time scale. There is no need to set a strict timeline as long as the minutes are not completed shortly before the next meeting, as it had been the case in the past.

F. Comerón: This is highly appreciated.

B. Leibundgut: The STC minutes are approved at the following meeting. As soon as they are approved they are made public. This cannot be done earlier as in case of changes they need to be implemented first. So there will be a delay of half a year.

G. Mathys: The same applies also to the OPC minutes.

J. van Loon (UK, Chair): So we will see if this recommendation still has to be upheld.

UC32.AI.4: ESO should develop a mechanism through which restricted access of Co-Is to specific runs can be provided, following authorization by the PI.

J. van Loon (UK, Chair): Will it be possible for Co-Is to get access to specific programs in the near future? Is this something you are working on?

F. Primas: I am presenting the answer that was provided by the staff working on this issue. The goal in regard to data access right delegation is to have it operational in quarter three of 2010. Open issues are currently being resolved. Regarding Phase II delegation the situation is however a bit more complicated as budget reductions have implied the re-adjustment of priorities. Thus ESO cannot commit to a delivery date for the Phase II data access right delegation at the moment. However, the Data Management and Operations Division as well as the Software Development Division meet once per quarter. At this meeting projects are prioritized. So if changes occur that allow advancing this project although it has been classified lower right now it might still get realized. We are fully aware of the interest that the community has in the Phase II data access right delegation and will do our best in order to implement it within a decent time scale.

J. van Loon (UK, Chair): Thanks for this clarification and for sharing your plans.

UC32.R.6: The current LaTeX forms for Phase I proposals are hard to handle efficiently. ESO may consider developing a new web-based form with online help.

J. van Loon (UK, Chair): This is something users often ask for. We realize that this requires quite a lot of work by ESO. At the moment there is nothing that prevents people from applying for time. So although this is not the highest priority for us, it remains a recommendation therefore it will probably be upheld. However, we are not expecting that it will get implemented fast given that it is not a high priority, however, desirable.

G. Mathys: I would like to point out that this is indeed something that we would like to implement. However, we would like to put any new web-based forms including online help in a broader context including also future prospects in view of the E-ELT. Concerning this matter I would like to mention that a preliminary study of the requirements and options also in respect to what is done elsewhere is currently being executed.

J. van Loon (UK, Chair): Thanks! This is very encouraging.

UC32.AI.5 (now UC33.R.1): ESO should propose an implementation by which generic target lists can be included in observing proposals.

J. van Loon (UK, Chair): This action item was changed into a recommendation. No one really insisted on this issue this time. Thus we believe it is not a high priority. So we will probably remove it or even close it.

All old action items on the UC/UC Chair were closed.

UC33.AI.2: ESO should clarify their plans for the coordination of the ALMA Regional Centre nodes, including their support of users based outside the ARC nodes countries.

J. van Loon (UK, Chair): As we will be discussing ALMA tomorrow, we will refer to this topic tomorrow after having seen how things are organized.

UC33.AI.3: The UC should advertise amongst its constituencies the electronic forum for data reduction.

J. van Loon (UK, Chair): We had planned to include the electronic forum in the annual poll. As this got forgotten we will try to do this next year.

UC33.AI.5: The UC Chair should prepare a relevant summary of the UC fact sheets and relay this to the STC before their next meeting.

UC33.AI.6: The UC Chair and STC Chair should have a Telecon to discuss how best to share information between their meetings.

J. van Loon (UK, Chair): I sent the fact sheets to the Chair of the STC and he was very interested in establishing regular contact between the UC and the STC. Whether this should happen via a teleconference or by means of document exchange has to be defined. We will probably combine Action Items 5 and 6 on the UC and define another action item or recommendation on ourselves. However, this should not imply more work as it is already in place. Thus no new documents are planned but rather presenting the current documents in a way that is useful to the other party.

14. CLOSED SESSION

15. SPECIAL TOPIC: ALMA OPERATIONS

15.1. INTRODUCTION

A. Kaufer presents the European ALMA Support Centre (EASC) and the ALMA project ([attachment 8](#)).

15.2. OPERATING ALMA

P. Andreani introduces ALMA operations ([attachment 9](#)).

15.3. OBSERVING WITH ALMA: THE ALMA OBSERVING TOOL

E. Humphreys (ARC Astronomer) presents a short demo of the ALMA Observing Tool (OT, [attachment 10](#)).

15.4 ANALYZING ALMA DATA: THE CASA SOFTWARE PACKAGE

D. Petry (ARC Scientist) introduces the CASA software package ([attachment 11](#)).

15.5 GENERAL DISCUSSION

> ARC nodes

V. Hill (FR) asks about the help to be provided to ALMA users: If I am not mistaken you mentioned two supporting groups. The general helpdesk handled by the ARC and the face-to-face support handled by the ARC nodes. How will this be communicated to users?

P. Andreani: ESO is planning to have a central helpdesk, which should be contacted also in case a user wants to be redirected to one of the nodes. Of course we can't prevent users from contacting the ARC nodes directly. However, the idea is to centralize information to allow ESO to keep track. The central helpdesk is connected with all ARC nodes and will forward requests of users that require specific expertise to the most suitable ARC node via ticketing system. Subsequently the contacted ARC node will log into the system and answers the concerned user directly. The face-to-face help is more difficult. The various ARC nodes will organize their institutes independently in order to host users in the best possible way.

J. van Loon (UK, Chair): Wouldn't it be more efficient to have one ARC node offering all expertise like in Japan or the US instead of spreading expertise over various ARC nodes throughout Europe?

P. Andreani: I agree that having one ARC node would be more efficient, however, many years ago we agreed on a decentralised system.

J. van Loon (UK, Chair): I am a bit worried about other countries wanting to have their own ARC node. What happens if there is no expertise existing in that place? How should such a country build a centre of expertise? Initially there were about three ARC nodes. However, now they are already seven. Can everyone start a node?

P. Andreani: Actually the first six ARC nodes were planned from the beginning. There was a call for applications some years ago and the STC as well as the Council selected them. Consequently those six countries/institutes had applied and were accepted to host an ARC node at that time. When the Czech Republic joined ESO, they expressed their interest to also open a face-to-face support there. At the same time a list of requirements was drafted that applicants have to fulfil and which makes sure that the applicants have enough scientific expertise to host a face-to-face support for ALMA. So there is a formal procedure to be followed in order to qualify for hosting an ARC node.

V. Hill (FR): However, my question is not answered yet. The individual ARC nodes differ, on the one hand, in their geographic location and on the other hand in their expertise. Thus, should the user contact the ARC node that geographically is nearest or the one, which owns the necessary expertise?

P. Andreani: The idea is to choose by expertise. If for example a user from Sweden needs support regarding solar physics observations he or she should travel to the Czech Republic. All ARC nodes will be connected with each other and share information electronically so that countries that do not host a node have access to this data as well.

> Archive

S. Trager (NL): You mentioned quite often the ALMA archive. However, I haven't seen how the archive is going to be accessed. Do you already have a working archive in place that you could probably show us at the next meeting?

P. Andreani: Yes, at the next meeting we should have a working archive. At the moment the archive is installed only at the OSF in Chile. However, we also have already two machines at ESO where the database and the archive software have been installed. We have started to test the archive exchange between the ESO Data Centre and the Alma Construction Division where people developing the archive software are actually placed. The next step will be to mirror the archive from Chile to ESO-Garching. Hence we are already working on the implementation of the archive. There will be a request handler allowing the users to access the archive via the User Portal in order to retrieve data. This function is not ready yet, but I hope it will be already at the next meeting.

J. van Loon (UK, Chair): Is there a reason for keeping the ALMA archive and the User Portal separate from the ESO archive and ESO User Portal? Couldn't they just be merged?

P. Andreani: The User Portal was developed for ALMA worldwide. We are not excluding the idea of integrating them. However, at the moment we do not have a working system to test this. Besides, the database is based on another architecture. Thus the same machines can't deal with both systems. Though we might discuss the idea of implementing a single request handler.

> Delegation of Authority

S. Trager (NL): Will it be possible for PIs in the ALMA system to delegate authority so that Co-Is can access their data during proprietary period?

P. Andreani: We are discussing this with the software developers in order to find a solution.

J. van Loon (UK, Chair): The same problem exists with the current ESO system. What makes it so difficult to implement an authorization delegation?

M. Péron: The reason why it hasn't been implemented yet is not because it is complicated but due to other, higher priorities that needed to be implemented first. However, yesterday it was mentioned that this data access delegation should be implemented in 2010. We can't announce a certain date yet. However, we hope to be able to communicate it soon.

Paul Eglitis (ADE): From a conceptional point of view there is a complexity to this. It is not just a simple localised task to delegate access from one user to another. This task is tied in with the complete data policy, which is protecting data of the principal investigator. There has been an overall project to homogenize handling of access control in a way that allows applying the same model to all data projects throughout the system. If you want to enable a friend to access your bank account you can just give him your pin number and password. However, none of us would probably do that. Thus we have to find a way to provide some kind of proxy access. We are treating a lot of data, which has a proprietary period and is highly valuable to the principal investigator. Out of this reason we have to look at the whole system design and not just solve the local problem of being able to give access. Judging from the Archive's point of view and considering the whole system how this can actually be implemented I think it is quite challenging to find a way that really stands the test of time.

J. van Loon (UK, Chair): Is there no example elsewhere where this already exists?

Paul Eglitis (ADE): Similar systems also exist in the banking industry. There is a good solution, which will get implemented.

> Length of scheduling blocks

J. van Loon (UK, Chair): You mentioned scheduling blocks of 30-60 minutes. So again it won't be possible to ask for longer contiguous observations? For example in interferometry one might want to do a full track of 10 hours.

P. Andreani: You can ask for a program of 10 hours duration. However, it will be split in

several scheduling blocks. This is also due to practical reasons as it allows calibrating observations one by one.

J. van Loon (UK, Chair): However, one might want to observe a target on 10 different nights and in each case one hour.

P. Andreani: Yes, this is possible, and it must be specified in the proposal and in the subsequent phase when the scheduling blocks will be created.

> Observation tool

Nils Ryde (SE): Who owns the project concerning the observation tool you presented for ALMA? Is ESO developing it? Can ESO use it for the optical part too?

P. Andreani: It is a worldwide ALMA development. When the ALMA project was initiated each executive was commissioned to provide some deliverables. Hence, the observing tool is developed in Europe, however, available to all ALMA users.

> Early science

J. van Loon (UK, Chair): I have a question in regard to commissioning. There will be some early science opportunities for general users. What happens with the commissioning data? Will this data be made public early enough so that people can prepare themselves for early science proposals?

P. Andreani: The science verification data is usually made public. At the moment we do not have science verification data, which we can make available to the community. In the future the project scientists may decide to make some data available before early science starts.

J. van Loon (UK, Chair): Is there a commissioning plan somewhere so that people know what to expect?

P. Andreani: There is a commissioning plan, which is not public. There was a commissioning review and the presentations referring to it can be obtained.

J. van Loon (UK, Chair): Could you provide the link to these presentations?

P. Andreani: Sure!

S. Trager (NL): In your talk you showed that the early science decision point is going to be in November this year. What needs to happen so that the early science decision point is going to be successful? What is on the critical path at the moment?

P. Andreani: The project scientist decides that early science will happen when 10 antennas are working together in a single interferometer with three bands at least.

W. Wild: The three antennas which are on the high site and which were used for phase closure have all four bands working. The intention is certainly to equip all front ends with four bands. However, as Paola said due to commissioning time constraints maybe not all of them can be checked on site. Nevertheless, we are not planning to deliver front ends with fewer than four bands at this stage.

S. Trager (NL): Can seven more telescopes with four bands be commissioned by November?

W. Wild: We are trying to achieve this. People are working extremely hard. There is a clear focus for the whole project worldwide. However, there are also still a number of uncertainties. Thus it is too early to judge whether seven antennas are realistic or not. It is certainly not an unrealistic goal. However on the way there, hiccups might occur like for example technical problems, which need to be addressed. Thus, I can't make a precise assessment yet. The current goal is 10 antennas by fall and 16 antennas for early science. In the case the goal of 10 antennas by fall cannot be achieved, the ALMA partners need to re-discuss to either shift the early science date or go ahead and do it with fewer antennas. Early science with fewer antennas would allow ALMA to offer a working system. On the other hand one driving idea

was that the early science array should not be less powerful than already existing millimeter arrays. Hence, at this moment we can only speculate. Let's assume that we will succeed in having the 10 antennas on site on time.

J. van Loon (UK, Chair): Will the early science proposals be reviewed by the same program review committee or will there just be an interim committee?

P. Andreani: We are planning to have a formal process from the beginning. We are aiming to have eight panels with four different science topics. We are actually already testing the tool that the scientific referees will access in order to retrieve the PDF file of the proposal and rank it subsequently.

J. van Loon (UK, Chair): How many proposals do you expect to receive?

P. Andreani: We envisage receiving about 2000 proposals per year and about 700 for early science.

S. Trager (NL): I can tell you that in the Dutch community more than half of the responses to the UC poll refer to ALMA early science. In fact eight out of eleven answer that they are going to apply for early science. Maybe the Dutch community is unusual in this respect since many of us are very close to the project. However, if you are only planning for a few hundred proposals, you might get surprised.

J. van Loon (UK, Chair): At the workshop in Manchester end of March they suggested that people should be encouraged to get together and form consortia already very early in order to ask for time. So maybe there won't be that many proposals in the end if people indeed stand in doing that in the very early phase.

P. Andreani: For early science we do not accept legacy or large programs.

J. van Loon (UK, Chair): As a user I think it would be good to start the process of forming consortia and applying for early science from the very first to allow a consortium to build a large program later on. I am not sure whether there will be hundreds and hundreds of proposals coming if that indeed happens.

P. Andreani: It would be helpful if you could send us feedback from your community to see what percentage is planning to apply.

J. van Loon (UK, Chair): The results of the user poll are in our fact sheets. Actually not many people are yet ready to apply for ALMA although you are very good in trying to involve non radio astronomers into using ALMA. Maybe it will take a little bit of time. The results of the poll show, however, that only half of the new people knew what their nearest ARC node was. Not many people are aware of the nodes and know where to go. However, I believe when they actually need an ARC node, they will quickly find out.

V. Hill (FR): In my opinion the polls, particularly this year's, can be quite misleading in this respect as mainly PIs of VLT- or La Silla proposals were polled. So this is only a biased view of the community. Nevertheless, although mostly optical astronomers were contacted, one sees that still half of them are quite certain to apply for ALMA. So from this point of view numbers are quite interesting. However, when considering these results as hard numbers it is very difficult to interpret them correctly.

> Organisation of guaranteed time/key proposals

J. van Loon (UK, Chair): Thinking ahead, how will guaranteed time or key programs be organized? How much time will be set aside? Is the organisation being left to individuals or is it coordinated in some way?

P. Andreani: There is no guaranteed time envisaged for ALMA at present. Also in regard to large programs or key projects this was not decided yet. We aim to receive large programs or key projects when ALMA will be fully operational; however not in the first years.

J. van Loon (UK, Chair): What kind of programs are you looking for? What size? As I mentioned there are some people who are already looking forward to using ALMA for a very long time. Thus they know exactly what they want to do. They already come together and

build consortia. Some of them are already formulating large programs for themselves. So they may want to benefit from knowing what sort of programs will be possible and in what sort of scale or scope they should be thinking of.

P. Andreani: We are aware of that. I mentioned that we meet quarterly with the other ARC managers and the Science Operation Department in Chile to discuss all these matters. However, we haven't reached any conclusion yet which I can announce at this committee. Thus I can't tell you any details at the moment.

J. van Loon (UK, Chair): For instance some of the SKA pathfinders mentioned that they plan to execute some large projects on these telescopes. There will be some opportunities for early science using some test arrays beforehand, instead of first offering a test array to see how people go on with it and later on provide some opportunities for large programs. I think it helps a lot for the SKA path finders to define a large project and then use the opportunities to test what they call design phase to really get ready for execution of that type of survey. Of course if you do not even know whether your survey is going to be approved then it is more difficult to do all these sort of tests and design studies.

P. Andreani: This is a good point. However, I do not see ALMA as a survey instrument. For surveys the SKA people should not envisage ALMA. It will take too long. Nevertheless this is a point, which may be considered.

> [Interplay ALMA <> E-ELT](#)

S. J. Katajainen (FI): Will the Council still decide to go on with building the E-ELT if there are strong delays with ALMA?

W. Wild: I cannot predict what Council may do in such a case. The decision regarding the E-ELT has more parameters than just the ALMA progress. We are doing our best to achieve the ALMA milestones. In case there should be delays though we will present them and deal with the situation at that time.

> [Raising awareness](#)

P. Andreani: How are you planning to reach your community if you are just talking to optical astronomers?

J. van Loon (UK, Chair): That is a good point. The User Committee is going to include ALMA from next year on. We have our user poll, which is maybe a bit geared to optical astronomers in the way we advertise it. Besides, we sent reminders to a list of PIs that we usually get from ESO. Speaking for myself representing the UK I can tell that I sent the poll to a national mailing list of astronomers, which includes nearly everyone working on optical-, radio- and theoretical astronomy. In principle everybody receives the user poll. However, there may be astronomers who think that it is not relevant for them. So maybe we need to phrase it in a different way. It would be useful in case you want to know something from the users, to use the poll and place those questions there. The poll is not only for the users but mainly for ESO to learn what the users want.

P. Andreani: We are organizing community tutorials. So we are really doing our best to advertise ALMA. Thus it would be very interesting to see if the community as a whole has been reached. We are trying to advertise as much as possible but of course we won't reach everyone. Thus I would like to get to know through the user poll how widely spread information regarding ALMA is.

S. Trager (NL): The Dutch Community is rather small. There are 300 people at PhD student level or higher in the Netherlands. The questionnaire was sent to everyone on these mailing lists. The Dutch Community is very heavily involved in ALMA. Among the few responses we received to the poll there were at least 4 people who had never used ESO facilities except possibly APEX. However, they answered the poll just to answer the ALMA questions. That indicates the high interest in ALMA in the Netherlands. So in our community as far as I can tell everybody knows about ALMA and those interested consequently also know where the next ALMA regional centre is located.

H. M. Schmid (CH): In the Swiss community the situation is completely different. We have no history in radio astronomy. We tried to push that with several activities like for example a winter school in order to become more attractive. I know that Geneva is really interested. However, our community is extremely small.

W. Zeilinger (AT): In Austria the situation is pretty much the same as in Switzerland. The overall community is very small. We are about 90 astronomers. Normally the poll is distributed to the whole community. In addition we have an annual meeting. This took place a couple of weeks ago and we discussed ALMA. Austria is interested to do some early science proposals and people interested seem to be quite well informed. They are aware of the ARC nodes as well as about whom to contact.

> Operations

J. van Loon (UK, Chair): I have a question related to the operations of the ALMA site. Does staff located at the San Pedro office also include astronomers or are they just technical employees? Besides, I heard stories about security issues regarding the road leading to the high site. Is this something that has been addressed by the Chilean authorities?

P. Andreani: There is space for the astronomers. Astronomers already travel to the OSF. Besides, we are sharing the commissioning task at the moment. One of our astronomers was there for six months. The second one already joined the team for another six months. Elizabeth Humphreys will join in September. Hence we are closely connected with the operations of the OSF. The astronomers will go to Chile for few shifts per year to contribute to the observations. In regard to safety I know that the ALMA director is really taking care of this. He has hired several persons for this reason. However, I believe Wolfgang can share more detailed information with you.

W. Wild: After some incidents that happened on the public road between San Pedro and the Paso Jama (passing close to the AOS) ALMA staff is no longer allowed to use the public road. ALMA has its own road, which is absolutely safe. In addition the Chilean carabineros agreed to do more patrolling as well as controlling and since then nothing happened. It might be that the public road is still risky but ALMA people do not use it. Thus we are not worried anymore.

> VLBI capabilities

S. J. Katajainen (FI): In our community we have quite a strong group of astronomers who do radio astronomy. A lot of them deal with VLBI observations. Hence, they were surprised to hear that ALMA does not include VLBI capabilities. Is this correct?

W. Wild: The ALMA baseline project, which we are building now, indeed does not include VLBI capabilities because we are concentrating on a basic set of interferometric capabilities. However, it is on the list of future upgrades. Actually there is quite some interest in VLBI capabilities throughout the community; not only from the European side but also from the North American side. Meetings and workshops have been organized already. So VLBI capabilities are certainly within the future upgrade options. Thus, if there is a high interest in them, I would advise you to respond to our future call for upgrade ideas, which will be released some time this year. As I said, the fact that VLBI capabilities are not within the baseline does not mean that they are excluded. However, VLBI capabilities will cost money and will thus have to be funded from the future upgrade funding lines.

D. Petry: There are developments on the way, which are partly funded outside ALMA via the ALBIUS work-package of the RadioNet project in order to make the analysis software VLBI capable. So this is also underway and will probably be ready before ALMA gets integrated in any VLBI network.

> Call for future upgrades

J. van Loon (UK, Chair): In regard to future upgrades, does one have to apply to actually be involved or can everyone simply make suggestions? Is an astronomer with no engineering background for example allowed to say what she/he would like to have as an upgrade?

W. Wild: The call will be addressed to technical groups. If there is scientific interest, the proper channel to use is the European Scientific Advisory Committee (ESAC), which has already been used in the past. The request is subsequently forwarded to the ALMA Scientific Advisory Committee (ASAC). The preliminary list of options came actually from this Committee. So if any of you or your institutes has a scientific interest you should forward it to the ESAC. The scientific call I mentioned refers however to the technical implementation. We would like to receive documentation of feasibility of technical solutions, preliminary costs, figures ... this is already the second step.

I. Negueruela (ES): In Spain there is quite an important radio community. It was mentioned that the optical-, infrared- and radio communities do not communicate sufficiently with each other. This was reflected also in the poll as almost all responses I received were from optical astronomers. Nevertheless there is a huge interest in ALMA in Spain. Spain was involved in ALMA before it became an ESO member state. Hence, I am sure that many Spanish astronomers are interested in early science. They simply haven't answered the poll, because they normally do not use ESO facilities.

J. Grygar (CZ): In the Czech Republic we have a very strong solar physics group and many of those already use the radio data of several observatories in the world. Thus I believe they are very competent in physical analysis of radio data and this is the reason why we also host an ALMA regional centre. Besides, we have people of the Institute of Chemistry or Physical Chemistry that do intensive research work.

> Revisiting Mac support

J. van Loon (UK, Chair): Since there are no further topics to be discussed I would like to thank you for the presentations given. It was very nice to see that the observing tool is so easy to handle and multifunctional. I hope CASA will look the same when you start working with it. We appreciate also that ESO gives tutorials to the community.

In regard to the requested Mac support we thought that it would be useful to appoint some expert users who feel strongly about this topic and bring them in contact with you. You could for example have a teleconference with them to kick off Mac support and determine priorities. Beforehand we will also poll Mac users to provide us with their priorities. However, to proceed afterwards we thought it would be most effective to indentify Mac users who can liaise with you.

M. Péron: Nevertheless, the first thing to clarify is the list of priorities. Otherwise you will get Mac users who have different opinions than the majority. After receiving this list of priorities we will evaluate which of them can be implemented in line with our internal priorities. As soon as this has been decided we are happy to liaise with Mac users who could give us feedback.

A. Kaufer: The role of this Committee is to consolidate opinions of the community to ESO. Is the fact that 40% of the users have MACs already enough to demand that all tools should be working on MACs as well? Since the community is quite diverse we are asking you to first work out whether the demand is indeed that strong. Is MAC support really essential or is it just more convenient to have all tools on one machine? Please keep in mind that you might have to drop something else if you want to get all tools supported also for MACs.

J. van Loon (UK, Chair): It is understood that ESO has the knowledge to implement Mac support. However, it has become very clear that you have limited resources. So we have always tried to convey the message that users are willing to do some of the work actually for you.

A. Kaufer: I appreciate this initiative. However, we nevertheless need to follow the usual sequence to first understand what is needed and then determine how the requirement will be implemented. We then might come back to your idea that certain things could be provided by the community when we reach this step.

F. Comerón: I think in your initial formulation of this offer you mentioned some things that are a bit dangerous. You were talking about Mac users who feel strong about it and who are going to tell us about priorities. Not being a Mac user I would be puzzled if some of the tools ESO is developing and which I am interested to use in the future would be dropped without any involvement of someone representing me because support was given to Mac. The priority process is something that needs to include Mac users but also the rest of the world. Having a 40% Mac community, as 40% is not something to neglect, priorities need to be defined.

However this cannot be done without taking into consideration many other things that have nothing to do with Mac.

M. Péron: Thus, we asked you to compile a list of priorities. We would like to know if you need to have the pipelines and their related tools, Phase II applications or all tools Mac supported?

J. van Loon (UK, Chair): As actually explained yesterday, there are departments that have completely switched to Mac.

A. Kaufer: In this case it might be that they took the wrong decision.

J. van Loon (UK, Chair): Sometimes this is not completely in the control of astronomers working in those departments.

A. Kaufer: If an astronomy department depends on the tools provided by ESO this fact has to be taken into consideration when taking a choice for a computer platform.

B. Leibundgut: We had a commercial study done about ESO's IT, whose outcome was that we should drop Mac support. As you can see we did not drop it. The problem we have to face however is to match what ESO can actually implement. ESO simply cannot go out and deliver software for every existing platform. We are aware that there is a very strong Mac community. However, you need to be aware that there is also additional pressure internally. I do not believe that the issue is as big as you are presenting it right now. We regularly evaluate user's needs. One of the reasons Linux has been kept alive for many years is because it is still the cheapest option.

S. Trager (NL): I have gone through the responses to the user's poll and through the end of mission reports for Paranal as well as La Silla. The primary complaint in regard to Mac support is that the pipelines themselves are not supported. So for me it is clear where the priority should lie.

A. Kaufer: This was also ESO's finding. According to the MAC user feedback the problem is pipeline related. However, earlier it was stated that the problem is on the P2PP and tools side. Therefore, we are asking you to study the users' feedback and subsequently come up with a list of priorities. We do not want to anticipate the outcome. It is not about what is easy, cheap etc. but what is really wanted by the users.

J. van Loon (UK, Chair): We exactly agreed on this point yesterday. Scott made some preliminary analysis. I think that is a bit too quick. We need to look at it more carefully. We are not going to give you a list of priorities right now but we will formulate action items on this particular topic. The UC members' suggestion to get in contact with astronomers being strong Mac users was not meant to end up in a discussion. We just wanted to get your point of view in regard to this proposed liaison. However, we can discuss this idea at a later stage.

16. CLOSED SESSION

17. ACTION ITEMS AND RECOMMENDATIONS

J. van Loon (UK, Chair) announces that the new Chair and Vice-Chair for 2011 will be Prof. Werner Zeilinger (AT) and Prof. Scott Trager (NL) respectively.

17.1. ANNOUNCEMENT OF NEW ACTION ITEMS AND RECOMMENDATIONS

J. van Loon (UK, Chair): I will now present a list of action items and recommendations on behalf of the UC members. Some of them are new, other had already been formulated in the past and were considered still relevant. If you have suggestions in regard to how items are/should be formulated you are welcome to suggest improvements. Except for UC32.AI.4, UC32.R.6, UC33.AI.3 and UC33.AI.6 all previous action items and recommendations can be considered as closed.

> Old Action Items and Recommendations

UC32.AI.4: ESO should develop a mechanism through which restricted access of Co-Is to specific runs can be provided, following authorization by the PI. **Upheld.**

UC32.R.6: The current latex forms for Phase I proposals are hard to handle efficiently. ESO may consider developing a new web-based form with online help. **Upheld.**

UC33.AI.2: ESO should clarify their plans for the coordination of the ALMA Regional Centre nodes, including their support of users based outside the ARC nodes countries. **Closed (but see below)**

UC33.AI.3: The UC should advertise amongst its constituencies the electronic forum for data reduction. **Upheld.**

UC33.AI.5: The UC Chair should prepare a relevant summary of the UC factsheets and relay this to the STC before their next meeting. **Closed.**

UC33.AI.6: The UC Chair and STC Chair should have a Telecon to discuss how best to share information between their meetings. **Upheld.**

> **New Action Items and Recommendations**

UC34.AI.1: ESO will formally confirm that the UC minutes may be approved (and hence made public) by e-mail, shortly after the draft minutes become available.

UC34.AI.2: ESO will report at the next UC meeting on their first experiences with the coordination of ARC nodes and their use by the community.

UC34.AI.3: ESO will write an ESO Messenger article explaining their current and future policies with regard to Guaranteed Time Observations.

UC34.R.1: Some time should be reserved at the next UC meeting, to discuss the impact on ESO users of Guaranteed Time Observations policies.

UC34.R.2: ESO will look into supporting Mac OS X, with consideration of a list of priorities to be provided by the UC.

UC34.AI.4: The UC will provide ESO with a list of priorities for support of Mac OS X.

M. Péron: Within what time frame do you plan to provide this list of priorities?

J. van Loon (UK, Chair): We are thinking about half a year timescale.

UC34.AI.5: The UC will poll the users on their experiences with Guaranteed Time Observations.

UC34.AI.6: The UC will discuss with the STC Chair the future capabilities at ESO for 3-5 micron Adaptive Optics observations.

UC34.AI.7: The UC will discuss with the OPC Chair the OPC Working Group and a possible reduction of the page limits of regular type proposals.

UC34.AI.8: The UC will take steps to involve the European radio astronomical community in its liaison with ESO as the European partner in the Joint ALMA Observatory.

18. ANY OTHER BUSINESS

> **E-ELT site selection**

J. van Loon (UK, Chair): With regard to any other business I do have one question in regard to the site that was chosen for the E-ELT. What were the reasons for choosing Cerro Armazones?

B. Leibundgut: The site selection advisory committee balanced various parameters. They looked at the top five places. Beforehand many more sites were under consideration. The site in Morocco for example turned out to be not cold and high enough. Then there was a site in

Argentina, which was too windy. So after going through this comprehensive list of different parameters the site selection advisory committee recommended the site, which was rated best. The site selection report shows that all sites had advantages as well as disadvantages. So a balance was made and Cerro Armazones made it to the top of this list. This recommendation was then discussed in Council, which approved Cerro Armazones as baseline site for the E-ELT.

S. Trager (NL): What is meant by “baseline”?

B. Leibundgut: It was found to be good to write the construction proposal for a specific site in order to be able to come up with real numbers. Every site has different operation costs. For example in case a very high isolated site is chosen which is isolated operational costs are higher than if infrastructure is already available.

J. Grygar (CZ): Do you know who is the owner of the land in Cerro Armazones?

B. Leibundgut: In the Chilean offer there is a statement by the Chilean government explaining what will happen to the land. The site selection report will be made public once it is finalized later this year.

19. CLOSING REMARKS

F. Comerón: Due to the fact that the Director General could not be here today and Andreas Kaufer had to leave earlier, I am closing the meeting on their behalf.

Thank you for the work you have done to prepare and run this meeting. I would like to thank all of you for the lively discussions and the constructive atmosphere in which this meeting took place. This is traditionally for this committee and we are pleased to see that it continues this way. May special thanks go to Jacco for his work as Chair of this Committee during the past years as well as to those members who are serving this year for the last time. Taking into account that ESO has plenty of Committees I am sure a new commitment will be found for all of you soon.

In addition I would like to thank the organizers, particularly F. Primas as representation of the USD team and the operational units, which are involved in the organization of this meeting. Thank you also to those of you who gave presentations. They were very informative not only to the UC Members but also to us. Furthermore I would like to thank Angelika Beller for the logistic arrangements and Stella for taking notes during this meeting as well as for the production of the minutes later on.

We have always stressed the importance of providing ESO with feedback from the users you are representing. I think it is fair to say that the contact between the community and ESO has been healthy and increasing in the last year. Our exchange does not take place only in this room once per year but happens in multiple occasions whenever the community makes use of ESO's facilities.

I believe that this meeting is unique as it delivers a big picture in regard to the community's expectations. You are striving to get representative input from your community and we thank you for this effort. The meeting contributes also the other way round as it allows us to give you an overview of how the organization works and to explain why ESO is not an infinite pool of resources that can implement everything everyone wants. In that sense I think we all agree that the UC Committee plays a very important role in conveying this two-sided exchange.

This is the 10th UC Meeting I am attending and I have the feeling that this year's meeting somehow marks the end of an era, as the panorama will be quite different when we meet next year. ALMA will be in early operations or at least very close to it and the E-ELT will have hopefully been approved. These two events, especially the last one, are going to have a major impact on ESO. You will understand that this will stretch our resources pretty close to the limits; in some aspects as for example with respect to the budget even beyond its current limits. This does not mean that operations will decrease in importance. Operations of ESO facilities have a very central role in gaining and maintaining our credibility and in getting support from our users. If we fail in operations we won't get support for building and operating new projects. This credibility was needed more than ever when ESO went to Council asking for a substantial amount of money, which demands special efforts of the national funding agencies in order to build the E-ELT. There is no doubt that ESO will have to undergo

changes to adapt to the tense construction period for the E-ELT. Consequently it will become our shared responsibility to make sure that those changes affecting also the elaboration of priorities are well understood and supported by your communities.

I thank you once more on behalf of the DG, of the ESO staff around the table and those involved in operations in Garching as well as Chile for your continuous support. We are sincerely looking forward to meeting you here next year.

J. van Loon (UK, Chair) closes the meeting formally and wishes everyone a safe trip home.