



ESO/UC-76

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**Users' Committee**  
**33<sup>rd</sup> Meeting**  
**Garching, April 27 and 28, 2009**

## **Draft Minutes**

### **UC Members present:**

Chairperson:	J. van Loon	(United Kingdom)
Vice-chairperson:	F. Courbin	(Switzerland)
	W. Zeilinger	(Austria)
	M. Groenewegen	(Belgium)
	M. Zoccali	(Chile)
	J. Grygar	(Czech Republic)
	F. Grundahl	(Denmark)
	S. Katajainen	(Finland)
	V. Hill	(France)
	B. Poggianti	(Italy)
	W. Jaffe	(Netherlands)
	J. Meléndez	(Portugal)
	I. Negueruela	(Spain)
	N. Ryde	(Sweden)

Excused:	J. Heidt	(Germany)
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### **On behalf of ESO:**

T. de Zeeuw  
P. Andreani  
P. Ballester  
T. Bierwirth  
M. Casali  
F. Comerón  
C. Dumas  
E. Emsellem  
P. Glaves  
A. Kaufer  
M. Kissler-Patig  
B. Leibundgut  
G. Mathys  
A. Moorwood  
P. Padovani  
L. Pasquini  
F. Patat  
M. Péron  
F. Primas  
M. Romaniello  
L. Tacconi-Garman  
W. Wild

<b>RRM/ToO users:</b>	S. Covino E. Pian
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<b>Minutes taken by:</b>	S. Chasiotis
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<b>Secretariat:</b>	A. Beller S. Chasiotis
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## **1. OPENING OF THE UC MEETING AND ADOPTION OF THE AGENDA**

J. van Loon notes that the meeting is growing every year due to new Member

States. He opens the meeting, introduces himself to the Committee as Chairman and representative for the UK and invites all UC Members to introduce themselves.

## **2. APPROVAL OF THE MINUTES OF THE 32<sup>nd</sup> UC MEETING**

J. van Loon positively notes that the minutes of the 32<sup>nd</sup> meeting were circulated within one month. With no changes requested, the minutes of the previous meeting are approved.

## **3. ESO'S LONG-TERM STRATEGIES AND PRIORITIES**

The DG gives a presentation of his views about ESO's long-term strategies and priorities ([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: ALMA**

W. Wild reports on ALMA ([attachment 3](#)).

## **6. REPORT FROM THE INSTRUMENTATION DIVISION**

M. Casali gives an overview of instrumentation developments ([attachment 4](#)).

B. Poggianti: What is the date for the call for the wide field spectrograph?

M. Casali: The date has not been decided yet, it may be possible by the next STC in October 2009.

## **7. SPECIAL REPORT ON X-SHOOTER**

L. Pasquini gives a report on X-Shooter ([attachment 5](#)).

## **8. REPORT ON THE E-ELT: CURRENT STATUS AND FUTURE PLANS**

M. Kissler-Patig gives a report on the E-ELT ([attachment 6](#)).

## **9A. REPORT ON TELESCOPE TIME STATISTICS**

G. Mathys gives an update on telescope time statistics ([attachment 7](#)).

## **9B. REPORT ON ESO'S SCIENTIFIC OUTCOME**

B. Leibundgut reports on ESO's scientific outcome ([attachment 8](#)).

## **10. REPORT ON THE OPC/UC/OPO LIAISON MEETING**

J. van Loon gives a feedback on the OPC/UC/OPO liaison meeting ([attachment 9](#)).

## **11. GENERAL DISCUSSION**

F. Courbin: What are ESO's plans for implementing "assisted" observations (service mode + PI interaction).

F. Comerón: This is being considered for E-ELT operations, but the large investment in infrastructure upgrades to achieve this at the VLT is currently not foreseen.

J. Meléndez: Could we have usage statistics normalized by telescope size or number of telescopes, to compare to GEMINI, for example. V. Hill follows up that request by asking if numbers can be broken down by community or telescope and made available.

B. Leibundgut: The numbers presented will be on the web, but care must be taken in interpreting them. Further slicing the numbers into smaller and smaller bins makes them less and less easy to interpret properly. Over 5-10 years the numbers are more reliable. Telescope usage numbers are given to the Council every half-year, and users are encouraged to contact their Council Member to ask if they can obtain those numbers.

J. van Loon: Are committee minutes available online? B. Leibundgut and G. Mathys: The STC, OPC, and UC minutes are all available publicly online, once they have been approved by the respective committees.

V. Hill, F. Grundahl, and W. Jaffe report on enthusiastic user feedback on the near real-time availability of Service Mode data.

B. Poggianti asks J. van Loon what measures have been discussed to reduce the OPC load. J. van Loon: He will take it up in his meeting with the OPC Chair tomorrow.

I. Negueruela: Most of the issues in the Spanish community are related to OPC matters, but he suggests that it is impossible to please everyone.

S. Katajainen: Motivating astronomers in the Finnish community to answer the user questionnaire is his biggest problem.

J. Grygar thanks B. Leibundgut, G. Mathys, and L. Tacconi-Garman for travelling to Prague to give presentations about ESO observing proposals to the Czech community.

M. Groenewegen asks W. Wild about the baselines for early ALMA science. W. Wild replies that it is unclear at present exactly what baselines will be offered initially, but neither very long baselines nor very high frequencies will be part of the initial configuration. The plan is to start relatively simple.

M. Groenewegen: Asks A. Kaufer about the ATs and AMOS. A. Kaufer: ESO has closed contracts with AMOS and will proceed on its own with AT improvements. He anticipates receiving an STC recommendation to make this a top priority.

W. Jaffe: The community is not being readied by ESO for writing ALMA proposals, and the way the ALMA Regional Centre Nodes are designed to work will lead to an inefficient use of resources and expertise.

P. Andreani: The ALMA data reduction package, CASA, is already at an advanced

stage, freely available to download, and is the subject of a series of tutorial workshops at ESO and the ARC Nodes. As far as support is concerned, ESO will provide the basic functions: from proposal submission through publication-ready data delivery. Specialized questions go to the nodes. For instance, when dealing with high frequency issues you may address Leiden because they build the band nine cartridges.

J. van Loon: There were a number of talks at the JENAM 2009 meeting about the ARC Nodes, predicting that they will be all ready to go by the end of 2010.

W. Wild: The set-up is based on sound principles, but it is obviously not up and running at the moment. Lines of communication are established and management is actively working on bringing this situation to reality. One should not expect perfection from day one; constructive criticism is welcome.

W. Jaffe then cites improvement in OPC feedback.

W. Zeilinger: Austrian astronomers are very happy with ESO with only a few minor complaints (e.g. finding details of the La Silla 2010+ plans).

J. van Loon asks about plans for replacing the DIMM seeing monitor with something else, and wonders if quality control of Service Mode observations is based on DIMM values.

A. Kaufer: There are no such plans, as the DIMM is serving as a reference for site testing. Actual conditions are judged in addition by other sources of information (e.g. telescope active optics data). C. Dumas: The QC judgements are made in consultation with the telescope and instrument operators, and the weather officer.

W. Jaffe: MIDI does not work well in seeing worse than about 1.2" and wonders how to make this information known. A. Kaufer: He should contact the MIDI Instrument Operations Team ([midi@eso.org](mailto:midi@eso.org)) to include this information in the documentation. F. Primas: Sending an e-mail to [usd-help@eso.org](mailto:usd-help@eso.org) is an alternative.

J. van Loon concludes by saying that in general people are very happy and a lot of things have been actually worked on over the last year and have basically been removed from the agenda or become minor items.

## **12. CLOSED SESSION**

## **13. TOUR DE TABLE**

J. van Loon asks for a brief update on the Science Data Products Group and plans for development of the recipes.

M. Romaniello: The entire process to ensure higher scientific data quality is being addressed (data acquisition, calibration, recipes, ...). The Science Data Products Group coordinates within ESO and with the community these efforts. As a first step, pipeline development has become multi-instrumental and theme-based. In addition, an Internet forum has been opened to engage the community into providing ideas, questions, pieces of software, calibration procedures or whatever they feel like. Monthly progress meetings are held. Part of this effort is also part of the Austrian in kind contribution (e.g. combining different observations together, both in depth and

in area).

J. van Loon: Could the roles of pipelines, CPL recipes, and Reflex be clarified?

M. Romaniello: The aim is to bring the current mostly-Quality-Control-focussed pipelines up to science grade, without neglecting QC. And there is an effort with the second-generation instrument consortia to define right from the outset what they should deliver in terms of science grade data reduction modules.

J. van Loon: Has the expected volume of data produced by MUSE been taken into account in terms of pipelines and data reduction?

M. Romaniello: MUSE data specifications have been taken into account.

P. Ballester: Resources have been reallocated for several pipelines. Further, ESO is developing new routines going beyond what the pipeline is doing (e.g. multi-OB-combination, mosaicking) — for science reduction not quality control. For new instruments, ESO puts a strong emphasis on getting from the consortia from day one a pipeline that is science grade when it is delivered.

J. van Loon: What can users expect for science grade pipelines for existing instruments? P. Ballester: ESO has identified themes/improvements that are common for several instruments. The prioritisation planning is still under construction.

J. van Loon: Would it be possible to add sections to the instrument manuals indicating what users should expect for pipeline changes?

P. Ballester: There are other avenues to exchange such information, such as the new Internet forum, which awaits input from users. The forum is not the venue for new release announcements, but rather the ESO e-Newsletter is better suited for such reports.

M. Péron: The Call for Proposals already contains information about the pipelines (status, what is coming, ...), along with appropriate web links.

J. van Loon: Has the forum been advertised?

M. Romaniello: It will be advertised in *The Messenger*, the e-Newsletter, and as a link on the User Portal.

S. Katajainen asks for an answer to the Reflex question.

P. Ballester: Six workflows have been developed, but some missing underlying features (e.g. looping) have caused delays (expected for new/innovative software). Progress is still being made internally.

J. van Loon: He is encouraged to see that the previously little resources dedicated to science grade pipelines have been increased, leading to faster progress. He then asks ESO to briefly describe User Portal developmental plans.

L. Tacconi-Garman: Recently ESO implemented distribution of the ESO e-Newsletter through User Portal-based subscriptions. Both Phase II and proprietary data access

delegation development efforts are under way. The latter project must await rewriting of a large chunk of data request software, and will be made available as soon as possible. The former project will have to wait until the new survey-driven version of P2PP has been thoroughly ironed out at the telescopes.

T. Bierwirth: A new version of P2PP for VISTA/VST is required and Phase II delegation will come only after at least a period of operation. Data delegation will come with the ability to download your data also online through a web interface, to go back to your requests, to see your recent requests and downloaded data. The timeframe for both features is about a year from now, if not a little bit more.

F. Courbin: Could the User Portal be used for announcements? M. Romaniello: The e-Newsletter is more appropriate for that.

W. Jaffe calls into question the e-Newsletter, citing spam issues. F. Comerón: The ESO e-Newsletter was a very specific response to a very specific request of the UC. L. Tacconi-Garman: It is always available online, even if deleted from ones mail folder.

J. van Loon: The e-Newsletter is a very good feature and very useful. Does each User Portal user get it? L. Tacconi-Garman: It was the default to get it, but everyone has the option of cancelling his or her subscription.

J. van Loon: What are ESO's plans for improving the proposal form and submission process?

G. Mathys: The main limitation for change is the underlying database. ESO has started thinking about changing things, but always with a keen eye towards E-ELT requirements. ESO does appreciate that there are a few users who have troubles, but does not see the situation as critical. In the current system users have rightly complained about lack of support for PDF version 1.4; this is a top priority for being fixed for next period.

J. van Loon: Would updating a submitted proposal be possible?

G. Mathys: One can simply submit a second time, and e-mail OPO telling them to ignore the first. Perhaps a more automated process could be implemented, though it would have to be thought through at the technical level.

B. Leibundgut: The system to pre-check proposals exists, everyone should use it well in advance. J. van Loon: This is only for debugging.

W. Jaffe: Would it be possible for ESO to supply an update facility for resubmits?

G. Mathys: Understands the point, but any solution adopted would break down if one tried to resubmit a proposal from more than one period ago, and any such software would be almost impossible to maintain.

J. van Loon: What are ESO's plans for support for Mac OS X?

M. Péron: Mac OS X is unsupported and no plans exist for such support. This is owing to resource-based prioritisation of activities. Other tasks, pipeline quality for instance, received higher priority.

F. Courbin: Could P2PP be used as well for Phase I? B. Leibundgut: Could you clarify? Because one of the complaints heard about GEMINI Phase I is their software PIT.

W. Jaffe: This might simplify Phase I/II instrument configuration information availability. G. Mathys: The time scales for the two phases could prove difficult. He offers to study whether this is a good option.

J. van Loon: Could ESO comment on feedback from the community regarding increasing telescope/instrument pressure and the availability of smaller telescopes, as well as the concept of making the UC fact sheets available to the STC?

A. Kaufer: The UC fact sheets are inappropriate to express the wishes of the community towards the STC. He urges the formulation of a consolidated request to the STC, stressing the difficulty of getting a condensed opinion of more than a single user. With such a consolidated request the UC may influence the decisions taken by STC.

J. van Loon: He has attempted to condense the sheets into a summary, and the UC is serving to relay thoughts and ideas from the community. One thought for minimizing pressure is to buy time on Gemini, for instance.

A. Kaufer: Suggestions are appreciated, it is better to first clearly spell out the problem and let ESO look into it. The more concretely the problem is expressed, the better.

J. van Loon: The issue is telescope time pressure and new Member States feel the pinch. There is perhaps a solution in developing things on La Silla, in that if there is more done on small telescopes it relieves the pressure to some extent on the UTs.

A. Kaufer: Already a major effort was undertaken to maintain La Silla in operation beyond 2010. If the users argue now that the two 4-m class telescopes plus a fraction of a 2-m class telescope is still not enough then this has to be well founded. It is difficult to argue that FEROS is hardly available to the ESO community and that is why ESO should build small telescopes. Following the continued high demand for FEROS, ESO has just successfully concluded negotiations with the Max-Planck-Gesellschaft to buy a share of 25% of the 2.2 observing time.

B. Leibundgut: No decisions should be made prior to the Astronet WG on 2-4 m telescopes delivering their report. ESO is participating in those discussions.

A. Kaufer: Such a deal with another observatory would mean an exchange of time, not a purchase of time, and it is not clear if that would be wise. J. van Loon: In the case of GEMINI the UK is interested in selling time. He appreciates that ESO might not want to invest in another observatory.

V. Hill: The UC is trying to give ESO a feeling for what users plan to apply for both for normal and large programs using current and near future instrumentation. She thinks this information should be considered (probably by the STC).

A. Kaufer: Of course people's planning is valuable input, but that it is a matter of time scales. Five to ten year lead times for new instruments have to be considered.

Further it is a difficult balance between instruments that have a high impact and instruments that are unique in some area. ESO has been quite flexible with the FORS1 de-commissioning in the sense that it was not decommissioned right in the moment when X-Shooter appeared in boxes but only two periods later. It should be further noted that swapping instruments between telescopes is a very time consuming and also risky operation. ESO looks at possibilities and issues continuously and tries to balance the pressure between telescopes.

V. Hill: The poll shows that the community awaits second-generation instruments. A. Kaufer: That was nicely demonstrated by the strong demand for X-Shooter.

J. van Loon: The UC appreciates this. He posits that ideally in the end every instrument should have the same over-subscription factor, in spite of the different scientific interests in the community. A. Kaufer: This is not the only way to look at the issue, since the time per science goal varies from instrument to instrument. ESO tries hard to balance the overall pressure per UT.

J. van Loon suggests closing the tour de table by quickly going around the table.

W. Zeilinger re-iterates the use of small telescopes in relieving the UT pressure.

W. Jaffe raises the issue of the difficulties in achieving VLTI imaging, suggesting an across-the-board system be established for handling problems associated with scheduling etc.

A. Kaufer: This issue was the subject of an open letter sent to the STC sub-panel on VLT and VLTI matters by the European Interferometry Initiative (with W. Jaffe as vice president). The STC and the sub-panel are discussing ways to address this issue, trying to accommodate the individual requests to maximize the return to all accepted science programs. His conclusion of this first discussion was that there is no right or wrong *a priori*.

M. Groenewegen: Perhaps OPC dissatisfaction can be minimised by imposing a structured A&A-style format on the feedback to users.

G. Mathys: This has, in fact, been considered and was not found very good. By having the turn around in the panels more and more of the community get exposed to serving on the OPC and the panels, so the knowledge of the process disseminates to the community, which helps.

B. Poggianti: ESO and the UC should find a way or at least gather suggestions to diminish the workload of the OPC members. G. Mathys: The UC is encouraged to inform the community that users who receive unsatisfactory OPC feedback should send an e-mail to OPO and the situation will be clarified with the referees. J. van Loon: He will discuss this topic the following day in his telecon.

J. Grygar: There is a general level of frustration in the Czech community and a lack of experience with big telescope science. He has hope that this will improve as a result of the recent seminar in Prague. F. Comerón: Collaboration with other European astronomers is a valuable means of addressing the problem.

S. Katajainen: The Finnish community is concerned about the move of EFOSC2 from the Cassegrain focus of the 3.6m telescope to the Nasmyth focus of the NTT. This

has caused serious troubles in the data reduction, because of the time and position dependent instrumental polarization. He suggests EFOSC2 is relocated back to the 3.6m. He asks about polarimetry at the E-ELT, pointing out that with the current 5-mirrors design this is going to be very difficult if not impossible.

A. Kaufer: The decision to move EFOSC2 to the NTT after just having received a new polarization unit was not optimal from the point of view of polarimetry. However, ESO has maintained the polarimetric capabilities at the VLT, moving the polarization optics from FORS1 to FORS2. ESO is further implementing a new polarimetry mode in HARPS, which offers new opportunities.

F. Comerón: The early plan to have an instrument at the intermediate focus of the E-ELT was dropped because of budgetary and operational reasons, but provision still exists for the installation of a half-wave plate for polarimetry in that focus.

J. van Loon: The community should use the opportunity to put these ideas in the Design Reference Plan presented by Markus Kissler-Patig.

N. Ryde: Swedish users feel the need of setting constraints on the relative execution times of OBs.

F. Patat: The new version of P2PP will feature time links, concatenations and other OB containers that should solve this issue. These new features are being implemented for VISTA and VST but they have been developed keeping in mind the VLT needs.

N. Ryde: The users feel the archive web interface should be improved to make raw data more easily accessible.

F. Grundahl: Some users report difficulties in selecting between a number of different institutes while choosing the codes for their affiliations during proposal preparation.

I. Negueruela: About 60% of the users complain about the comments they receive from the OPC. They also propose the proprietary period of long-term programmes is extended. Finally, they suggest making La Silla instruments more effective, for instance adding new holographic grisms and pooling small proposals together in order to facilitate the access of short-term proposals to 4-meter class telescopes.

B. Leibundgut: Extensions to the proprietary period can be in principle granted by the DG. But it is ESO's experience, there are very few cases where this is really justified.

G. Mathys: Allowing proposals shorter than three nights to be submitted and then pool them together afterwards is a bit complicated, because this makes the approval of a proposal dependent on the approval of other people's proposals. Users should rather broaden the scope of what they want to do.

B. Poggianti: The level of satisfaction in the Italian community is very high. There is some concern about the computing facilities at La Silla and Paranal. Most of the users that have been affected by the ToO are not satisfied with the compensation.

M. Zoccali: The Chilean community is happy and ESO appears to run extremely

smoothly compared to other observatories.

V. Hill: The French community in general is also extremely happy with ESO. Several users complain about the DDT time scale for response, suggesting the possibility of having a rapid response mode for DDT (less than 2 weeks reaction time).

G. Mathys: ESO is facing the same difficulty with the DDT proposals as the OPC faces with the regular proposals. The number has increased and the process is a bit overwhelming. ESO is aware of this and is looking for solutions.

J. Meléndez confirms the complaints on the restrictions of La Silla in regard to small programs and asks whether there is a chance ESO reconsiders it.

A. Kaufer: The restrictions are not so many and they are imposed by operational requirements. He agrees with the argument made by G. Mathys about the grouping of small proposals and he believes things will go better than some people in the community anticipate.

G. Mathys: Some restrictions have been relaxed, for instance by allowing the combined proposals for SOFI and EFOSC2, executing them on consecutive nights in a sequence that lasts at least three nights. During the next period constraints will be probably relaxed for the calibration programmes. ESO has to be careful in managing the resources in a proper way.

F. Courbin: Confirms the perplexities about the response times of DDTs. He reports that 80% of the users are not happy with the comments of the OPC. On the other hand, 80% of the users are happy with their own success rate. There is a strong concern about the decommissioning of FORS1, which has brought up the pressure on FORS2 at levels higher than for HST. Finally, he reports a case of failed installation for a pipeline.

P. Ballester: This could be due to very different reasons. One of them is related to the installation of pipelines in parallel. ESO is working on that.

J. van Loon thanks everyone for expressing their views and introduces the next item on the agenda, which are the old Action Items and Recommendations.

#### **14. OLD ACTION ITEMS AND RECOMMENDATIONS**

**Action Item 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: The response was that ESO is working on it, but there is no plan ESO would like to publish widely and to be committed to. He asks whether this is still the case.

M. Romaniello: ESO has identified themes in a certain order and is working on them. Some of the items are being implemented in the context of the in kind contribution, while some others will be addressed within the resources of ESO.

J. van Loon: The UC will discuss about this to see whether this has been addressed to satisfaction.

B. Poggianti: Once the UC has received the written answer she assumes that this Action Item can be closed.

*Recommendation 1: ESO should provide Reflex-based scientific quality data reduction tools for essentially all its instruments.*

J. van Loon: The response has been that this is probably not going to happen for all instruments, because of priority sets. He asks whether this is the case.

P. Ballester: ESO has been developing workflows for six instruments. During this process, some limitations of the platform have been encountered (for instance looping). Work is still ongoing.

J. van Loon: The UC may recall this Recommendation but it is not an Action Item.

*Recommendation 2: There is a great deal of information on how to optimally reduce data, which is not embodied in documents and pipelines. We anticipate that it will be highly beneficial to new users of ESO instruments if ESO organized data reduction schools, teaching the essential reduction concepts and the usage of scientific quality data reduction tools for individual ESO instruments or sets of instruments.*

J. van Loon asks whether ESO is taking steps in training the community or this is mostly done through tutorials on the web.

F. Comerón: A number of activities took place in 2008, like the CASA Workshop, participation in interferometric schools, VO promotional activities in the community, participation in the Finnish graduate school of astronomy, in the NEON 3-D school in Potsdam, in the NEON archive school here in Garching, in the VLTI workshop, the FLAMES workshop on six years of FLAMES operation and the workshop for PIs on public surveys. If ESO needs to make efforts in the direction of data reduction, that means that ESO has to drop some of these activities.

J. van Loon: The UC will get back to it tomorrow, to see whether this should still stand on as a Recommendation.

*Recommendation 3: ESO should open an electronic forum with respect to data reduction issues, and ensure that it is advertised.*

J. van Loon: The forum is in place and will be advertised soon.

**Action Item 2:** *Presentations made at the UC meeting should become available within two weeks after the UC meeting, and the minutes of the Users' Committee should be approved before the following Council meeting.*

J. van Loon: This was the case last time. The UC is happy with that.

*Recommendation 4: It would be helpful if ESO informed the UC Chairperson whenever a Recommendation or Action Item has been addressed.*

J. van Loon: This is not happening at the moment. Sometimes the UC is running a

little bit after the facts as ESO puts something in place. Hence this is a Recommendation not an Action Item.

F. Primas: The ESO e-Newsletter or the ESO Messenger always gets featured articles, when something really major is accomplished or announced. The e-forum has been set up and has been worked on. Some of the UC Action Items and Recommendations do require work from different departments and groups across divisions. Therefore ESO would also like to understand the need to receive this type of feedback on regular intervals.

J. van Loon: The UC would like to know about new achievements, so that it can immediately start using and advertising them.

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

J. van Loon: They are now available. The UC wishes to convey the idea that users often would like to see the outcomes shortly after the meetings.

**Action Item 3:** *ESO should consider designing an alert system to inform the users of potentially high-impact changes in the ESO documentation and instruments. In a first step, ESO may consider targeting the PIs of ongoing large programs, i.e., the ones most affected by unexpected changes in instruments/policy/documentation. Alerts may be controlled through the ESO User-Portal user-profile in order to allow users to unsubscribe when desired.*

J. van Loon: The UC will check the implementation of these alerts.

L. Tacconi-Garman: The User Support Department has set up an e-mail list of those people, who are running large programs. USD will broadcast the changes in software, instrumentation, and procedures to their PIs.

**Action Item 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: The delegation system, probably in place in one year from now, will solve this issue.

M. Romaniello: ESO is in the process of making available the associated calibrations, associated calibrations products and associated science products through the User Portal.

*Recommendation 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: The UC understands this is quite a major investment, which will probably not happen if the current system still holds for a few years.

**Action Item 5:** *ESO should propose an implementation by which generic target lists can be included in observing proposals.*

G. Mathys: This has been discussed, but is not compatible with the current policies,

which ensure there is no undue duplication of observations and targets are properly distributed along the period. For these reasons no action has been taken.

B. Leibundgut: ESO asks the GTO teams to be very specific about their targets, because that information is required for everybody else to apply.

### **Action Items on the UC**

*1) The UC Chairperson should ask the OPC to consider the possible advantages of reducing the page limit of normal proposals.*

J. van Loon: This will be brought up during tomorrow's telecon.

*2) UC Members should advertise widely the many usages of usd-help within their constituencies.*

J. van Loon: The UC have advertised usd-help@eso.org among their constituencies whenever possible. Mentioned at the JENAM Conference.

*3) The UC should meet by telecon half a year after the UC meeting at ESO, and the Chairperson should ask ESO for updates in preparation for that meeting.*

J. van Loon: Meeting took place half a year ago and it was very useful. To be repeated in a half year time.

## **15. CLOSED SESSION**

### **16. SPECIAL TOPIC: "ToOs and RRM's FROM BEGINNING TO END"**

#### **16.1. SPECIAL TOPIC: INTRODUCTION BY ESO**

Presentations given by G. Mathys ([attachment 10](#)) and C. Dumas ([attachment 11](#)).

#### **16.2. SPECIAL TOPIC: REPORTS BY 2 FREQUENT USERS**

Presentations given by S. Covino ([attachment 12](#)) and E. Pian ([attachment 13](#)).

#### **16.3. SPECIAL TOPIC: GENERAL DISCUSSION**

J. van Loon: The response by the community is that only 26% percent of the overridden PIs felt that they were compensated adequately, although the reason is not clear. For rapid response mode visitors are compensated in service mode. Thus, it is not clear why PIs are not satisfied.

C. Dumas: The observatory is taking care of having the OBs actually submitted by the PI before she/he leaves the mountain and the observations are executed with a very high priority. Therefore, this comes as a surprise.

J. van Loon: 3 out of 4 users who answered were not satisfied.

C. Dumas: It is important to understand whether they did not get the quality of the data they expected or whether they did not get the amount of the data expected. It might happen that the PI was on the mountain when the weather conditions were

actually better and then in the end was compensated with data that had lower quality but still within the required constraints.

J. van Loon: That can happen in some cases but 3 out of 4 is a large number. Is the observatory asking for feedback after the compensation observations have been taken?

C. Dumas: No. Unless the PI complains we consider the problem closed and we do not ask for feedback.

F. Comerón: It is important to know whether the problems occurred in La Silla or in Paranal.

J. van Loon: The UC does not have this info. The UC could target the affected people (if ESO provides an e-mail list) and ask for more details.

F. Patat: Given the way compensation works for Service Mode in Paranal, most likely these problems occurred in La Silla.

A. Kaufer: This most likely refers to the GROND case, where actually no compensation is given because as of Period 83 the 15% compensation is already built into the schedule. This has created quite some discussions in the past with individual affected visitors.

G. Mathys: ESO could probably make this more transparent and explain to the visitor what the allocation means.

J. van Loon: The dissatisfaction could be due to a variety of reasons. It could also be that observations taken out of context of a night program might be less useful than whenever taken out of full nights.

J. Meléndez: Are non-standard setups also compensated?

C. Dumas: Compensation is done using the same setup as for the original observations.

M. Romaniello: The new system for associating calibrations to ToO data is being tested for a couple of months now. We are creating statistics on the associations and they have been tracked both on Paranal and here in Garching for completeness. So as soon as we are confident that they are satisfying, we will release it. Essentially every hour you get the most updated calibrations as they come in.

S. Covino: Is the PI told when the association is final?

M. Romaniello: Currently not, but this is doable.

S. Covino: There are now in a few cases effective pipelines. Why not adding this reduced data without any guarantee to the data flow?

M. Romaniello: This is conceivable. However, it will introduce a delay because only certified calibrations to calibrate the data for the pipelines are used. It could be some working days, depending on the circumstances.

S. Covino: Could quick look reduced data produced during the night made be available to the PI?

M. Romaniello: Those use static calibrations that could be a month old or more, and they are currently not transferred. ESO will look into that.

C. Dumas: In some cases the PI had actually requested these data. If there is time during the night, these files are exceptionally transferred manually to the same ToO account.

J. van Loon asks S. Covino how long it takes to be on top of the target.

S. Covino: Typically five minutes. In the case of RRM the triggering is automatic, although there is always a member of the team watching what is going on.

J. van Loon asks E. Pian about her suggestion to have some kind of long-term status for ToO programmes, particularly relevant for rare events.

E. Pian: It would be ideal to have a long baseline because one does not tweak the strategy too often with this kind of programs and this would also allow more flexibility. What is needed is a "rare" target of opportunity.

F. Courbin: A similar problem occurs for monitoring programs that require not much time at the telescope, but spread over several years. These would profit by the introduction of a new programme type.

B. Leibundgut: ESO is already offering several types of programmes and is not in the conditions of introducing a new programme type. The time restriction on ToOs was introduced because the field is moving very rapidly. ESO is aware of these problems.

E. Pian: For rare events, though, this would certainly make the telescope time more effective.

B. Leibundgut: ESO has to keep a balance. Many of the over 1000 proposals ESO deals with have similar problems.

J. van Loon: There was a mention of a very large consortium leading all this work. This is potentially dangerous, lack of competition and the exclusion of individuals from this kind of science.

E. Pian: The formation of a large consortium in the case of GRB supernova is an outcome of history. Single individuals that wish to join are welcome.

J. van Loon: Are all triggers leading to useful data?

S. Covino: A very high percentage, more than 80-90% of the triggers produce data that are published.

E. Pian: This applies also to GRB-SN. In 95% of the cases the data has been useful.

J. van Loon: On the charts other types of observations were mentioned, such as micro-lensing, which may require different strategies. Has ESO been able to collect some information from those teams?

F. Patat: 75% of the ToOs are for SNe, GRBs and X-ray binaries. But there are several other cases. Whether the data are useful or not may be due to two reasons. One is that the data were taken out of specs (but this is rare, due to the very loose constraints set in the ToO/RRM triggers); the other is that the data do not show what the scientists were looking for (i.e. no afterglow). But that is just nature playing games.

J. van Loon: Are there further development plans for RRM/ToO operations at ESO?

F. Patat: ESO is investigating the possibility of offering some additional features to the ToO and RRM like an assisted ToO, in the framework of the EVALSO project. But ESO is just a partner in that enterprise, and so there is no commitment.

J. van Loon: Is ESO investigating remote observing (like the one once offered at the NTT)?

F. Comerón: This is being included in the science operation plan for the E-ELT. The amount of science cases that can benefit from real time interaction is broader than in the case of the VLT. There is a possibility this has some effect on the long-term VLT operations plan.

J. van Loon: Paranal might be used for testing these new observing procedures.

F. Comerón: It is in the benefit of new operation facilities in particular of the E-ELT, to test as much as possible tools and operational scenarios at the VLT (as it was the case for the NTT before the start of VLT operations).

V. Hill: It was mentioned that up to 5% of the total time is allocated to ToOs. How many of these are actually granted by the OPC?

G. Mathys: ESO tries to apply this 5% on a telescope by telescope basis. There is a huge preference for some instruments hence for some telescopes. The OPC evaluates and ranks proposals on a pure scientific basis. ESO gets the ranked list and, based on this, builds the schedule fulfilling the 5% limit. On average about half of the time that is allocated, is actually used for triggers. Scheduling takes this into account, by allowing an oversubscription of the 5% ToO time by a factor of 2.

V. Hill: Does ESO expect the percentage of actual triggers to increase significantly with the arrival of X-Shooter?

S. Covino: No, because the number of triggers is basically limited by the number of targets. Therefore there will be more a change of pressure on certain instruments than a change in the overall number of activations.

B. Leibundgut: It was asked before, why ESO has chosen this special topic. It has been quite an investment by the observatory to make this happen. For RRM there was a substantial effort by Paranal. This is only possible through service observing. It is comforting to hear that this is such a success.

J. van Loon: Could the frequent users say something about how they see this evolve over the next few years? What developments are they looking forward to or would they wish?

E. Pian: The GRB-SN science is still in its infancy. For instance, the addition of the infrared provided by X-Shooter will be definitely beneficial to make a sense of these very rapid energetic X- and gamma ray events and their associated supernovae as well as to study their diversity.

S. Covino: G. Mathys has shown that the number of proposals for ToOs is increasing, but the amount of time does not change so much. We expect there will be an increasing specialisation in the scientific goals, requiring much more time for a lower number of events.

J. van Loon: Do you have any views on the use of E-ELT and ALMA in these fields?

E. Pian: ALMA will open a totally new window on the environment of these objects. It will give a very good handle on the unobscured star formation rate of the close environments of GRBs.

J. van Loon: Are there any specific requirements on the way ALMA and E-ELT will operate?

E. Pian: I do not know how ALMA will be organized for ToOs and I am a bit pessimistic on the ability of the E-ELT, due to its large structure, to react promptly. However, on the other hand it will be much more sensitive.

F. Comerón: The E-ELT has a planned pre-set time of a few minutes. So in principle it is possible also with the E-ELT to follow up transients with a similar reaction time scale as for the VLT at the present. One important fact is that in the design reference mission of the E-ELT there is no case that addresses observations of transients. Thus if this could be advertised among the community that can prepare Design Reference Science Plan proposals, it would be very important for ESO, in order to have an estimate of how the community intends to use it.

Both frequent users promise to send their feedback.

S. Covino: The ToO/RRM observations of high-redshift GRBs in the E-ELT era will enable science cases that are now not accessible (host galaxies, re-ionisation, cosmology).

J. van Loon: These fields are also good examples of synergy between various observatories across the electromagnetic spectrum. How does that work and how could it improve in the future?

E. Pian: As far as GRBs are concerned, there has been a historically good synergy among different facilities, like for example ESO and HST. GRB triggers come from space, but later on the Space Telescope has done a very good synergetic work with the large ground base telescopes. In the future there will certainly be synergies with JWST.

J. van Loon: Is there anything you would wish for, that does not exist yet (modes, facilities...)?

E. Pian: Although the polarimetric and spectro-polarimetric mode is already in place at the VLT, the signal is generally too low for GRBs. Having it on a much larger

telescope would enable the study of asymmetries in GRBs and SNe.

J. van Loon: The importance of spectropolarimetry seems to be in contrast with the larger number of triggers on UVES.

S. Covino: This was probably due to a mixture between coincidence and a larger amount of time used by UVES (so that chances to get UT2 using UVES were higher than for FORS1).

G. Mathys: The fact that a RRM trigger is accepted only when the instrument is in use is in line with the whole RRM idea.

S. Covino: In principle we can always activate the ToO within 10-15 minutes. But this is too big a delay for this kind of science.

S. Katajainen: As polarimetry of gamma-ray burst would be very fertile for studies it is a little bit sad that the E-ELT will not feature polarimetric capabilities.

J. van Loon: The UC pointed out last year that polarimetry seems to be a bit neglected by ESO. But this might be due to a scarce interest in the community. If you think polarimetry is an important issue, you should make this clear, for instance through the Design Reference Science Plan (DRSP; see M. Kissler-Patig presentation). Are the E-ELT problems with polarimetry inherent to its optical design? Are there any solutions?

S. Katajainen: With five mirrors it is almost hopeless to do absolute polarimetry. I do not know whether it is somehow possible to include at the E-ELT design some instrument after M3 or M2.

## **17. CLOSED SESSION**

J. van Loon: The discussion has focused on two topics: a) the community might be disappointed to realize that with a 5-mirror design the E-ELT is not going to be useful for polarimetry; b) users see the need of long-term short programs.

J. van Loon is confirmed as UC Chair, while W. Zeilinger will act as vice Chair.

## **18. ACTION ITEMS AND RECOMMENDATIONS**

### **18.1. REVISION OF OLD ACTION ITEMS AND RECOMMENDATIONS**

**Action Item 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.*

*Written answer of the UC: Action Item (1) upheld: we appreciate ESO's efforts and progress towards science grade data reduction. However, no written plan was presented with goals and time scales.*

J. van Loon: the UC feels they were not presented a real plan, therefore they would like to keep this Action Item open. It would still be very useful for the users to know what is happening and what they can expect. AI is upheld.

**It is hereafter referred to as UC32.AI.1.**

*Recommendation 1: ESO should provide Reflex-based scientific quality data reduction tools for essentially all its instruments.*

*Written answer of the UC: Recommendation formally closed: The UC trusts ESO's intentions to have (and maintain) reduction tools in place to process any ESO data, be it obtained with new or current instruments and instrument modes.*

J. van Loon: the UC has seen that ESO is trying to support as many instruments and modes as possible.

*Recommendation 2: There is a great deal of information on how to optimally reduce data, which is not embodied in documents and pipelines. We anticipate that it will be highly beneficial to new users of ESO instruments if ESO organized data reduction schools, teaching the essential reduction concepts and the usage of scientific quality data reduction tools for individual ESO instruments or sets of instruments.*

*Written answer of the UC: Recommendation formally closed, with the expectation that some of the workshops organised by ESO will be devoted to data reduction.*

J. van Loon: there has been lots of activity. The UC expects that some of the workshops organized by ESO will address data reduction issues, maybe on an instrument basis or specific technique.

*Recommendation 3: ESO should open an electronic forum with respect to data reduction issues, and ensure that it is advertised.*

*Written answer of the UC: Recommendation formally closed, with the expectation that ESO will indeed proceed to advertise this forum. The UC have been given sufficient information to advertise it too.*

J. van Loon: the electronic forum is now in place and ESO as well as the UC will start advertising this. The UC finds it could be more prominently placed on the User Portal.

**Action Item 2:** *Presentations made at the UC meeting should become available within two weeks after the UC meeting, and the minutes of the Users' Committee should be approved before the following Council meeting.*

*Written answer of the UC: Action Item formally closed, with the expectation that this will now be the norm.*

J. van Loon: this was done quickly and some of the presentations have been already put on the agenda. The UC believes they will approve the minutes when they will receive it, which is expected to happen in one month or two.

*Recommendation 4: It would be helpful if ESO informed the UC Chairperson whenever a Recommendation or Action Item has been addressed.*

*Written answer of the UC: Recommendation formally closed with the note that this would in principle constitute good practice, but no formal mechanism was suggested.*

J. van Loon: It would be a nice-to-have feature, but the UC does not reckon that this was an important item to be kept.

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

*Written answer of the UC: Recommendation 5 is upheld: This applies to UC, STC, and OPC.*

It is hereafter referred to as UC32.R.5.

J. van Loon: Several of these committees meet twice a year, some once a year. If the minutes can be made available to the public within a month or two after the meeting, that would be highly appreciated by the users. Recommendation is upheld.

**Action Item 3:** *ESO should consider designing an alert system to inform the users of potentially high-impact changes in the ESO documentation and instruments. In a first step, ESO may consider targeting the PIs of ongoing large programs, i.e., the ones most affected by unexpected changes in instruments/policy/documentation. Alerts may be controlled through the ESO User-Portal user-profile in order to allow users to unsubscribe when desired.*

*Written answer of the UC: Action Item formally closed: The UC appreciate ESO's efforts in using the electronic newsletter as the tool of choice to inform users on a regular basis of new development, and their alerting of LP PIs of changes that could affect them.*

J. van Loon: Large program PIs are now being alerted of changes. The UC sees the electronic newsletter as the preferred medium for communicating things to the users. AI closed.

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

*Written answer of the UC: Action Item 4 upheld: The UC took note of ESO's plans to implement this, on a projected time scale of about a year.*

**It is hereafter referred to as UC32.AI.4.**

J. van Loon: Plans were described for this delegation of authority to access data and Phase II preparation. This will probably take about a year. AI remains open.

*Recommendation 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.*

*Written answer of the UC: Recommendation 6 upheld: The ESO proposal submission system is perceived as cumbersome by some users – notes of specific issues as well as suggestions for improvement were included in the UC fact sheet summary.*

It is hereafter referred to as UC32.R.6.

J. van Loon: The UC recommends ESO to improve to the proposal form and its

submission.

T. de Zeeuw: The reported difficulties in preparing/submitting proposals are in contrast with the more than 1100 proposals submitted during last round.

J. van Loon: There still are a couple of things that probably could be improved.

**Action Item 5:** *ESO should propose an implementation by which generic target lists can be included in observing proposals.*

*Written answer of the UC: Changed into a Recommendation: The UC recognizes that this may lead to conflicts between proposals, but it upholds this belief that procedures can be put in places that resolve such conflicts.*

It is hereafter referred to as UC33.R.1.

J. van Loon: The UC would like to turn this Action Item into a Recommendation, because they are not sure this can be implemented within a year. The UC feels ESO should consider the possibility for generic target lists. Users will be asked about it in the next poll.

### **Action Items on the UC**

a) The UC Chairperson should ask the OPC to consider the possible advantages of reducing the page limit of normal proposals.

b) UC Members should advertise widely the many usages of `usd-help` within their constituencies.

c) The UC should meet by telecon half a year after the UC meeting at ESO, and the Chairperson should ask ESO for updates in preparation for that meeting.

*Written answer of the UC: Action Items formally closed, with the expectation that the UC continues to advertise the usage of `usd-help`.*

J. van Loon: a) This was discussed but it was not clear whether it would make any difference. Nothing has been done in this respect. b) The UC did advertise `usd-help@eso.org` and will continue to do so. c) They met by telecon half year ago and the intention is to do the same in half-year time. Action Items are closed.

## **18.2. ANNOUNCEMENT OF NEW ACTION ITEMS AND RECOMMENDATIONS**

**UC33.AI.1:** *ESO should clarify their plans for the continued usage of Reflex as the chosen data reduction environment.*

J. van Loon: The UC has understood that Reflex is no longer seen as the preferred data reduction environment. ESO should clarify this, the plans and the status of Reflex. This is something that the UC considers quite important.

M. Péron: Contrarily to what had been announced, Reflex was not released by the end of 2008. ESO has discovered some problems related to missing functionalities in the course of this development. These functionalities have been partly developed, but there still are some technical problems to be solved, including an open issue with

the last version of Taverna. In addition the project had to be reassigned within SDD because of resources issues. For all these reasons, no date of delivery can be given now.

ESO will write a brief summary about the handling of Reflex.

***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: The UC feels the users should know how the Regional Centre nodes will work together.

*UC33.R.2 (see previous page for UC33.R.1):* Over-subscription rates on some telescope/instruments have now risen beyond a level typical of 8m-class telescopes. ESO should continue to endeavour to balance the pressure on telescope time between different VLT instruments, and to minimize excessive over-subscription rates.

J. van Loon: Over-subscription rates have gone up significantly and some of the instruments are too hard to get time on. The UC reckons ESO should study ways of balancing/reducing the pressure on those instruments.

*UC33.R.3:* ESO should continue to maximize the availability of telescopes and instruments at La Silla to the ESO User Community, including the 2.2m telescope.

J. van Loon: This is a recommendation to endorse ESO's commitment to keeping La Silla open and to maximize the availability of the telescopes (including the 2.2m).

T. de Zeeuw: The agreement with the Max Planck Society for the 2.2 has been extended for several years. There is not much more ESO can do about it.

*UC33.R.4:* ESO should consider allowing and endorsing La Silla proposals that combine different small programmes (each <3 nights) to be executed by one common observer.

J. van Loon: This is one possibility for maximizing the use of La Silla and maybe release some of the pressure on Paranal by allowing small programs to be put together and to send one common observer out. It may not need a new category of proposals.

### **New Action Items on the UC / UC Chair**

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

***UC33.AI.4:*** The UC should advertise amongst its constituencies the E-ELT Design Reference Science Plan.

***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.*

**UC33.AI.7:** *The UC should ask ESO in timely fashion for questions they would like to be included in the Annual Users Poll.*

J. van Loon: The last Action Item is to ask ESO for input in the questionnaire, for instance about the special topic. Next year we have the intention to get this done much earlier, most probably in early January.

## **19. ANY OTHER BUSINESS**

W. Zeilinger: First time Austria is being represented in this committee. The community is very satisfied with all kind of services ESO provides. The number of proposal is increasing and this will particularly affect small countries like Austria. This will have to be discussed internally, to find a way to tackle this problem.

J. Grygar: After the first two years it is now clear that the older generation has practically no training with really large projects. The effort made by ESO in this respect was highly appreciated.

J. van Loon: ESO is going to switch soon to Blu-rays for data distribution. What are the timescales and how is the community going to be informed?

F. Comerón: This is going to happen by the end of the year. The price for the equipment necessary for reading Blu-ray disks is of the order of a few hundred EUR, which we believe is affordable for any astronomical institute in Europe. Note that the same happened when ESO moved from CDs to DVDs. This will be announced in the next ESO newsletter.

M. Romaniello: Besides being advertised on the Archive web pages since a few weeks, it will be advertised in the standing column about the Archive in the Messenger as well as in the electronic newsletter according to the latest news of the Archive. The reason why Blu-ray has been chosen is not only due to the high volume of data, but because Blu-ray is the standard now.

W. Zeilinger: Is the hardware for Blu-ray supported by Linux or are there any problems?

F. Comerón: ESO is using Linux systems to write them. So this is definitely no problem.

J. van Loon: Is ESO considering the opportunity of generating electricity with renewable sources at its observatories?

T. de Zeeuw: The issue of power generation by various means, including flexibility for future developments, is taking the organization an extraordinary amount of time and it is going in the right direction.

W. Jaffe: Would the Director like to comment on the results of ESO's reorganization?

T. de Zeeuw: ESO is continuing to tune the organization and gearing up for the next step. There will be further changes, if and when the Council approves the E-ELT project.

J. van Loon thanks everyone on all sides of the table for their participation, especially the users who came and the UC Members having their last term, namely Frédéric Courbin, Bianca Poggianti, Walter Jaffe and Jochen Heidt.

## **20. CLOSING REMARKS BY THE DIRECTOR GENERAL**

T. de Zeeuw states that he is pleased with the time and effort spent by and the attitude of the UC in representing the community, and in taking away homework as well for themselves. He notes that the UC has appreciated the complexity of what ESO is doing. It must always be understood by the UC that even though we might want to do even more it is not always possible. Sometimes tough choices have to be made and priorities set, at least partially driven by outside influences. He concludes with the words, "So thank you very much and come again."

J. van Loon closes the meeting officially.