Users' Committee 30th Meeting Garching, April 3 and 4, 2006

Draft Minutes

UC Members present:

Chairperson: P. Jablonka (France) Vice-Chairperson: S. Feltzing (Sweden)

M. Bremer (United Kingdom)

N. Cardoso Santos (Portugal)
F. Courbin (Switzerland)
J. Heidt (Germany)

W. Jaffe (The Netherlands)

M. Tornikoski (Finland)
G. Van de Steene (Belgium)
W. Gieren (Chile)
U.G. Joergensen (Denmark)

Excused: U.G. Joergensen (Denmark)
B.M. Poggianti (Italy)

On behalf of ESO: C. Cesarsky

F. Comeron
O. Hainaut
R. Hook
A. Kaufer
B. Leibundgut
G. Mathys
M. Peron
M. Romaniello
J. Spyromilio
M. Sterzik

L. Tacconi-Garman

VLT Second Generation

Instruments: M. Casali

S. D'Odorico R. Gilmozzi M. Kasper M. Kissler-Patig A. Moorwood L. Pasquini

Minutes taken by: A. Beller

Secretariat: E. Hoppe

1. OPENING OF THE MEETING AND ADOPTION OF THE AGENDA

P. Jablonka opened the 30th meeting of the UC and introduced herself as the new chairperson and S. Feltzing, the new co-chair, as well as the new members in UC: F. Courbin (Switzerland), J. Heidt (Germany), and W. Jaffe (The Netherlands), before she passed the word to C. Cesarsky.

C. Cesarsky welcomed all participants to the meeting expressing her satisfaction and pleasure to see the meeting so well prepared by the UC members, which shows the commitment to steady improvement.

The chairperson requested an exchange of agenda points 10 and 11. After a short discussion of the obstacles and organizational problems this would impose on a number of participants, the agenda was adopted unchanged.

2. APPROVAL OF THE MINUTES OF THE 29th MEETING

The discussion of the minutes of the 29th meeting was postponed to take place after the presentations.

3. REPORT FROM THE OBSERVATORIES: LA SILLA PARANAL (including APEX)

- J. Spyromilio opened the reports from the Observatories (attachment 1).
- O. Hainaut continued, giving an overview over the VLT Instruments, Users and Science Operations (attachment 2).

With reference to the EOMR statistics J. Heidt inquired about the ratio of run completion in Service Mode (SM) as compared to Visitor Mode (VM), and it showed that the completion rate is slightly better in SM.

- M. Bremer remarked that there is always a high impact of weather conditions in VM.
- W. Jaffe remarked on the high targets acquisition overheads at the VLT. Fact is that shutter open time does not measure overheads, real science observing time overheads are created by the nature of the instruments.
- P. Jablonka expressed concern about the general support at the Observatory and inquired about the training of TIOs.
- O. Hainaut replied that 10 new fellows are being formally trained with the beginning of the year. The aim is to have at the Observatory always two support astronomers: 1 trainer + 1 trainee.

A further question from P. Jablonka dealt with documentation and how one can tell that people use the right document, and the reply was that high efforts are being made to keep all documents updated, but that they are hard to maintain without feedback about inconsistencies from the users.

- M. Sterzik continued with the report from the Observatory presenting details about La Silla (attachment 3).
- M. Bremer inquired about plans to use filters on Sofl in future, and the answer was that the procurement of Y-filters for ISAAC and Sofl is being investigated.

SM on La Silla includes DDTs and ToOs, but there are limits to SM on La Silla. J. Spyromilio explained the ideas about what the different sites do, and that La Silla should offer buffer time for ToOs and DDTs. He stressed the importance for young astronomers to go to the observatory as VM observers. The goal is to have only visitors on La Silla, and to offer SM only for ToOs and DDTs.

4. REPORT FROM THE OBSERVATORIES: ALMA

The last part of the report from the Observatories was delivered by T. Wilson who presented the status of ALMA, the science goals, the progress of the project, antenna procurement, the choice and financing (attachment 4).

W. Jaffe asked if the NRAO will ascertain the AIPS data reduction software and the answer was that the plan is to make it usable for a wide community.

The justification for building ALMA is that there is a demand, and W. Jaffe asked if the people polled by the Users' Committee are representative of the community of potential ALMA users, since this community may be different from the one of the "tradtitional" ESO instruments. C. Cesarsky answered that she herself was approached with questions and expectations about ALMA in every country she visited in the recent past. She experienced a strong demand for ALMA, as it is expected to be a major tool for cosmology. The information about the science which will be possible with ALMA should maybe be more widely advertised, e.g. taking advantage of the ALMA Days in Madrid in November 2006. W. Jaffe stated that the people who push and build an instrument are normally not the ones who use it, and this would make two communities. Instrument builders have a strong interest in using the instruments, answered C. Cesarsky, and there are several committees to bring the two groups together.

5. REPORT FROM VISAS

G. Mathys gave the presentation about VISAS (attachment 5).

Being head of the department since 1 March 2006 only, he has been facing a transition period, which has its impact in many areas.

P. Jablonka expressed her appreciation about how the difficulties encountered during the last two days of P78 Phase 1 proposal submission had been overcome.

The discussion turned to the new reviewed OPC procedure, especially regarding conflicts of interest. C. Cesarsky answered that she is happy with the Nominating Committee, which will guarantee continuity in the OPC composition. P. Jablonka asked about experiences in comparison with the HST where TAC members change every year. C. Cesarsky answered that the period of service was widely discussed before, also in ESO Council. The terms of service should not be too short, in order to keep the memory and in consideration of the learning phase for new members.

It was the general opinion of the UC Members, that users do not have enough information about what is going on in ESO and at the OPC. The answer was that reports on all new developments or changes, new instruments, or the reviewed regulations concerning the OPC can be found in the ESO web page and in the ESO Messenger, which is on the web and available in print as well. Admittedly, the information may sometimes not be easy to retrieve if a person is not so familiar with the ESO Web. The solution could be to index the contributions.

6. USERS' PORTAL

- L. Tacconi-Garman presented the new ESO Users' Portal meant to unify access to the ESO services (attachment 6).
- N. Cardoso Santos inquired how the community would be informed about the new feature, and B. Leibundgut answered that it would be announced through the electronic newsletter, which is planned to distribute important information to the community.
- W. Jaffe said that it might be wise to collect input from the communities concerning the services to be offered through the User Portal. J. Spyromilio pointed out that a global user survey is very difficult; therefore, a collection of input from a big group is not feasible. However, a committee as the UC might be good to be consulted before making new features available. F. Comeron added that one goal is to have a clean user database, and to achieve this, a first step of user profile is important. Further services may then be incorporated later step by step.
- S. Feltzing said that for the moment being and as long as the new feature is not operational yet, it would be good to have at least one page giving all the buttons needed for the steps related to proposal submissions.

7. SAMPO

With regard to software development and improvements R. Hook reported on SAMPO (attachment 7), which is an in-kind contribution of Finland, mainly the provision of software engineers.

- W. Jaffe inquired about the availability of resources to finish the project successfully, and R. Hook answered that the new tools take time, as this is a development process. P. Quinn added that one would have to look at further requirements in the future, and then review and maybe apply changes.
- P. Jablonka asked if the future infrastructure would be on a JAVA platform, to which the answer was positive.

8. CLOSED SESSION

9. TOUR DE TABLE DISCUSSION

GENERAL INFORMATION OFFERED BY ESO

- P. Jablonka opened with the statement that users would like to see on the ESO Web front page lists of meetings and summaries, of which many are not public. C. Cesarsky answered that this would be a task, which is too heavy. J. Spyromilio added that there are national representatives in the meetings who could inform their community in short, and C. Cesarsky remarked that ESO makes a great effort to put all information into The Messenger.
- P. Jablonka confirmed that everybody is happy with The Messenger, and G. Mathys acknowledged that it should be possible to index the contents and/or to install a search function to facilitate the search for special information.

About the suggestion that presentations given during the Users' Committee meeting should be put on the Web, J. Spyromilio commented that he considered this not so good, as it should be kept in mind that presentations often need interpretation and can only be understood correctly within a given context.

- S. Feltzing suggested having the fact sheets on the web shortly after the return from the meeting for direct information, to which C. Cesarsky commented that the fact sheets are put on the web for users.
- B. Leibundgut pointed out that the planned electronic newsletter would be just a pointer to information and provide a link to e.g. minutes, which otherwise may take until to the next meeting to be approved.
- J. Spyromilio asked that it be kept in mind that not every detail should come into the open, and that the representatives of the communities should act as a kind of "distillers".
- S. Feltzing insisted on the newsletter to come soon, and N. Cardoso Santos confirmed that The Messenger was a wonderful information tool, but that there remains the necessity of offering a way to easier access.
- M. Bremer agreed that all information is there, but he underlined the necessity for indexing to give a hint or link to articles.
- B. Leibundgut said that such a search function would come soon.
- P. Jablonka wanted to know how one could know if the problems and wishes of the users that appear in the fact sheets are taken care of, and which method exists to make users know.

- M. Peron remarked that issues, which are addressed, are also taken care of.
- P. Jablonka asked if it was possible to have at least a summary of the information, and the answer was that all general information is on the Web.

The fact that all information is there but seems to go unnoticed or is difficult to find would call for an editor to address the question how information should be organised and how it can be found.

C. Cesarsky answered that the ESO Web is currently under restructuring and these concerns will be considered.

THE WORK OF THE OPC

It was confirmed that users are in general happy with the OPC work. The ones who are not so happy are all for the same reasons, namely that their proposals get a good ranking, but no time. More effort should be put in the comments, as these are often not helpful.

- B. Leibundgut asked if the UC would allow ESO to review the OPC comments.
- S. Feltzing answered that the comments should in any case be given more attention, maybe they should be provided in a more structured way.
- G. Mathys explained why it happens that good proposals do not get time. This is often because a given region of the parameter space (right ascension, Moon phase, seeing, transparency) has already been filled by higher-ranked proposals. This scheduling information is available only when the time allocation process is completed, and including it in the observing time notifications would imply a delay in their release, in contradiction with the users' wish to get these notifications as soon as possible.

Including an edited version of the OPC comments in the Webletters after their release would be a problem, as two versions of the Webletters would have to be created. W. Gieren suggested that it should be made known to the OPC, that providing meaningful feedback is vital. M. Bremer agreed that there should be a certain form for the OPC reply.

- B. Leibundgut emphasised the high workload of the OPC panel members. Two more panels were created for P78 to try to make it a little lighter.
- W. Gieren inquired what would happen if the OPC comments came later, and G. Mathys answered that this is not possible, as the comments are needed for some scheduling decisions.

It was agreed that the comments should be edited by the panel chairs before being sent out.

- M. Bremer underlined that the number of proposals per referee is higher in the OPC panels than in other TACs.
- F. Courbin asked why the OPC does not give grades and numbers to make the ranking clear, and C. Cesarsky answered that this is an old issue, but that such a system would not help with understanding the scheduling constraints.
- P. Jablonka concluded this point of discussion with the statement that the users who are unhappy are all for the same reason, but that the majority of users are happy.
- M. Bremer stated that the OPC is a black box for many people and P. Jablonka agreed that the OPC rules should be on the web pages.
- C. Cesarsky answered that a description of the OPC process was published in The Messenger and in the Annual Report, and thus can be accessed on the web.

VISITOR MODE OBSERVATIONS

A. Kaufer explained that calibrations should be taken before the night and that requests for such calibrations are generally fulfilled. J. Spyromilio added that sometimes (especially in winter) there is not enough time to execute all calibrations before the beginning of the night, but per policy, they should normally be executed.

Referring to multiple observer requests P. Jablonka suggested that the practice might be relaxed to admit three observers. W. Gieren, who underlined that this was not an economical matter, also stressed this point. J. Spyromilio said that additional observers were to his knowledge not denied once when they were duly justified, and that justified requests have always been approved. He did not support the idea of a change in policy at this point, and explained that especially at the VLT multiple observers are often not useful. Three become unrealistic, as the limited space in the control room is rather working against the intended learning effect.

W. Jaffe pointed out that there was one case where he was rejected for three observers. J. Spyromilio stressed again that the policy is one observer per run, that a second if requested by a justification is normally approved, and that a third one, if justified, is not impossible.

SERVICE MODE OBSERVATIONS

P. Jablonka reported cases where calibration files had not been delivered, and J. Spyromilio answered that more details are needed to find out if (and where) there was a glitch.

She asked if there was a possibility to have a quick look at the data immediately (perhaps a jpg picture as well) as soon as they arrive in the archives and F. Comeron replied that this was difficult as there are policy issues on proprietary time, etc..

- J. Spyromilio clarified that a basic quality control is carried out on all data, and that feedback is given to users as needed. Another approach would require changing the operations model.
- S. Feltzing said that undetected errors lead to unsuccessful observations, and B. Leibundgut replied that there would always be mistakes like this in SM, but that this is a small number.

SECOND GENERATION INSTRUMENTS

The knowledge of second-generation instruments by users is found good in general.

New instruments for La Silla are not planned, but visitor instruments are encouraged.

Information about second generation instruments is often obtained by the users through informal channels, i.e. by chatting to each other, and here is again the need for a newsletter. It should offer the possibility of quick registration.

- B. Leibundgut pointed out that it was difficult to decide which kind and which level of information should be put on the web, and P. Jablonka replied that this could be the name of the instrument and the stage of approval or development. What to put on the web remains the difficult question, especially as all the information is to be found in the Messenger.
- A. Kaufer emphasised again that all the information is there, most of it on the first page. What else can be done to attract people's attention?
- C. Cesarsky explained about the development and the different steps of new instruments. All is documented and easy to find, and F. Comeron confirmed that The Messenger is the main source of information.
- C. Cesarsky herself is always spreading information in many countries in many presentations to representatives of the community. In addition, there are the big conferences such as the SPIE on all instrumentation, and again all information is on the web.

Therefore, the main concern is how to get to the information easily. A solution may rest with the restructuring of the ESO web, which is in progress.

How do instrument builders and the general community communicate?

W. Jaffe remarked that the instrument builders, the smaller group, tend to be fanatic about the technical challenges, whereas the user community is larger, but sometimes does not understand the choice of new instruments.

One important committee to decide is the STC, who discuss and approve of upgrades. But input can also be communicated in an informal way.

- N. Cardoso Santos inquired about established ways to ask the users for suggestions and improvements, and J. Spyromilio answered that the "Remarks" field in the EOMR is one possibility, which is often used. These remarks are read as they come in. Generally, all channels of communication are open.
- N. Cardoso Santos found that there could be a communication problem and asked if a question aiming especially at instrumentation can be added to the EOMR.
- P. Jablonka added that information about the possibilities with ALMA should be better communicated.

A few remarks about the UC poll itself followed.

The UC pointed out that they find the rules of the UC, in their current form, unclear and of limited relevance to the actual procedures.

C. Cesarsky answered that ESO is open to reviewing them based on input by the UC.

ACCEPTANCE OF THE MINUTES OF THE LAST MEETING

A mismatch was found between points i) and j) of the review of the old action items (Section 7), and there remained the question if point j) was closed.

The minutes of the last meeting were accepted.

10. OLD ACTION ITEMS AND RECOMMENDATIONS

Action items:

- a) The action item concerning the design of FIMS to become more user friendly was postponed to P78.
- b) The ALMA progress report has been included in the agenda of the UC meeting. Closed.
- c) The UC received the email addresses of their national Pls. Closed.
- d) The UC and ESO fact sheets can be made available on the web, but the discussion remains open if this is useful for the presentations. These are meant to provide information for the memory of the participants and can be handed out. The issue remains open.
- e) ESO aims to provide software tools and not data, there are plans to have one tool, which is easy to handle and works for all instruments.

A requirement to instrument builders is that algorithms have to be delivered to ESO together with the instrument. ESO fits them into the software system.

ISAAC, SINFONI, and VISIR pipelines were released in the past months. GIRAFFE was certified for the users.

Recommendations:

- a) The issue to simplify browsing through the ESO web pages is ongoing and thus kept open.
- b) VLT/VLTI Project Scientists have become involved in schools: there is support to Les Houches in France, and contributions are made in Leiden and in Chile. A certain number of supported schools are probably enough. The message should however be more widely spread, as it seems there is not enough knowledge about these facts. This could possibly be communicated by a PR campaign. Conferences and schools where ESO is involved could be advertised on the newsletter to come.

Dissemination of scientific results on the web is already done to an extent where the resources do not allow more.

- c) See action item 10.e)
- d) This item will be solved with establishing the ESO newsletter, which should happen soon.

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 e) To enter the email addresses of Cols in the proposal form turned out to be too difficult to manage. This item is closed.
- The process of proposal submission and processing will have to be shortened, f) but it will take time to find the appropriate solutions. The item remains open for investigation.

CLOSED SESSION 11.

12.1. SPECIAL TOPIC: VLT SECOND GENERATION INSTRUMENTS

- A. Moorwood opened the topic with an introduction and overview (attachment 8).
- M. Kissler-Patig opened the more detailed introductions of the instruments presenting HAWK-I (attachment 9).
- S. D'Odorico followed with his presentation of X-SHOOTER (attachment 10).
- M. Casali continued in the sequence, presenting KMOS (attachment 11).
- L. Pasquini presented MUSE (attachment 12).
- M. Kasper presented SPHERE (attachment 13).

12.2. SPECIAL TOPIC - GENERAL DISCUSSION

- J. Heidt inquired why there were so many GTO nights.
- A. Moorwood replied that this was the only way to pay the contribution to these very expensive instruments, and that the provided time represents a large fraction of the money due. For the first generation instruments, consortia which provided manpower could do this in the past by exploiting free capacities, but today all capacities have to be paid for, which is only facing the current reality. It is taken care though, that not more than 10% of the observing time goes to GTO. GTO go typically over a period of 5 years.
- M. Bremer asked if 10% is enough in the future, and the answer was that four main second generation instruments on four different telescopes would help to cope.
- J. Heidt inquired if it will be possible to provide the calibrations on time and in advance. J. Spyromilio said that providing calibrations for the night is done regularly, and that this should be possible for individual instruments. He demonstrated confidence that the observatory will be able to handle X-SHOOTER and HAWK-I, whereas KMOS will be a big challenge.
- F. Courbin asked if there was an AO ground layer direct testing, and the answer was that AO testing is done on one telescope, but that it is at present not planned to do it on all telescopes, maybe in the future.
- P. Jablonka asked when and how the decommissioning of the first generation instruments would take place, and she was answered that FORS1 should be replaced first and second ISAAC by KMOS.
- W. Jaffe inquired if there was time and money to upgrade the VLTI. PRIMA times four is under discussion in the STC. There are proposals at present, but there are also concerns about manpower and resources.

The plans are to receive the deliveries of complete packages, including software, from the consortia at a certain cost.

C. Cesarsky put in that there are many issues about money, technical solutions, and the competition of resources, and that all the processes will have to be re-assessed.

12.3. SPECIAL TOPIC - DISCUSSION ON POSSIBLE CANDIDATES TO START DEVELOPMENT AROUND 2010

A. Moorwood explained that we have to start thinking about second generation instruments beyond the ones already approved. In ten years the first generation instruments will have to be replaced, they will decommission themselves.

The STC and ESO have started discussing future ELT instruments. Studies are going on Europe-wide, but there is nothing concrete, and there is no funding.

One could think of moving HARPS from the 3.6 to the VLT. FORS would have to be replaced as a basic instrument of this generation, and there is the question what will be beyond UVES. It has to be checked if an upgrade is a useful thing to do.

Typically, there is a submission to the STC on upgrades and completion and a request for recommendations.

Proposals for upgrade of first generation instruments are discussed regularly; either when technical possibilities arise (e.g. new detectors) or when new scientific requirements appear. There was e.g. a discussion whether FORS1 should be equipped with tunable filters. But the project was cancelled as it did not make sense technically. New detectors are still on the list. A VIMOS upgrade has been done.

One has to be careful about the change of detector systems, as this might have farreaching implications, e.g. on the data reduction pipeline.

Generally it can be said, that an upgrade programme exists, and that there is an effort to find the necessary funding and resources.

It should always be evaluated carefully what makes sense in the future and what is the relative role of the VLT versus other technologies.

P. Jablonka asked by whom these matters will be addressed. Consortia with interest have to be found as well. There is a lot of input in many open workshops.

The question arose about the future share of ALMA, the optical telescopes and the ELT.

There is no clear answer possible at present. There is the interest of the community on the one side and the resources on the other. The community will have to decide where they want the priority. It can be said with certainty though, that the VLT will die if the instruments are not upgraded.

M. Bremer inquired about the expected impact of the survey telescopes VISTA and VST. The reply was that surveys have a strong scientific impact and that a lot can be done with the results.

Surveys should have realistic requests; surveys which are too complex cannot be accommodated up to now.

13. ELT REPORT

R. Gilmozzi reported on the status of the ELT. (http://www.eso.org/gen-fac/pubs/messenger/archive/no.123-mar06/The-Messenger123-status.html).

14. CLOSED SESSION

15. ACTION ITEMS AND RECOMMENDATIONS

Recommendations:

- a) ESO should use the lessons learned from the SAMPO project to formulate standards for contributed reduction software that will allow a higher degree of integration of the software into ESO supported packages.
- b) The Instrument Web pages should include a specific "tool" allowing and encouraging users to report errors or inaccurate statements in manuals.
- c) The End of Mission reports should have a specific section, allowing and encouraging observers to suggest hardware and software upgrades to the instruments.
- d) The UC highly appreciated the announcement of the forthcoming ESO email based Newsletter and strongly supports this project. Indeed, such a channel of information will be very important to disseminate information to the ESO community. The UC encourages ESO to launch the Newsletter as soon as possible.
- e) The new ESO portal is highly valued by the UC. The possibility for the user to modify his/her profile, to access all ESO web tools including data retrieval from the archive, and the definition of phase II via a unique login and password will be particularly appreciated by the users. The UC recommends that the new ESO portal is released to the community as soon as possible.

f) In the course of the UC meeting, ESO should provide as much as possible of updated information about future projects and instruments. This can be done as part of the fact sheets or as an oral presentation.

Action items:

a) The UC wishes the following message to be communicated to the OPC.

The UC recognizes the strong and very valuable effort of the OPC to recommend observing proposals to ESO. Some reservations have been however expressed concerning the quality of the feedback provided to the proposers by the referees (the UC Fact Sheets are available to the OPC). The UC suggests that this feedback should explicitly mention the -strength- and the -weakness- of the proposals.

- b) ESO should provide the proposers with information of the scheduling constraints of the Period and their consequences for the observing programs.
- c) ESO should post on the Web the rules of the OPC and the selection procedure for both the OPC and the Panel members.
- d) The ESO Poll on service observing should be made available to the UC national representatives, in the same way the visitor observer reports are.
- e) The WEB is ESO's principal mode for propagating information. The organization and presentation of ESO documentation should be optimized for this medium.
- * Specifically,
- the Messenger articles, which are the prime references for information on current and new instruments, and whose accuracy and completeness are acknowledged, should be formatted for optimal WEB access, including internal and external linkages.
- the user manuals should be similarly formatted for optimal WEB usage, with the additional possibility for printing, e.g. with a "reformat for print" option.

16. OTHER BUSINESS

The UC appreciated the excellent presentations on the second generation instruments and requested to have them on the web soon.

- C. Cesarsky pointed out that this will be considered and that a way has to be found to make them available in a concise version.
- P. Jablonka informed about the results of the election of the UC chair and the Vice-chair for the coming period. She announced that she will remain the chairperson for the next period and introduced the new Vice-chair W. Jaffe.

She expressed her thanks and her recognition to the participants of the meeting.

17. CLOSING REMARKS BY C. CESARSKY

C. Cesarsky said she had understood that the main point was communication, and she thanked the UC for the hints on possible improvements. The Messenger, being the main medium to disseminate information, will be made easier to access.

The information on OWL should also be available on the web soon.

The fact sheets can be made available in a UC page, but this has to be re-considered for the presentations. A solution could be to have special password protected pages just for the UC, which will be considered for next year.

She expressed her thanks and her appreciation to the UC and to the participants.

P. Jablonka closed the meeting.