



- Update -

ESO Responses to Recommendations

from

40th Users' Committee

May 2017

19. UC40 RECOMMENDATIONS

These recommendations are based on the poll that the UC runs every year. The goal of the poll is to collect users' opinions about several specific topics and in general about their experience interacting with ESO. The UC is glad to confirm that also for this year the level of satisfaction of our community is very high, reflecting a general high consensus that ESO is, and has to be for the future, a cornerstone facility for astronomy in Europe.

The UC recommends to ESO:

UC40.R.01: to extend APEX operations in view of the successful results and efficient organization.

The support of the UC is appreciated. A proposal to extend ESO's participation in the APEX agreement at an increased level of 32% till the end of 2022 was unanimously supported by STC, leading to a positive Council decision in December 2016. The extension agreement will be formally signed at the APEX Board meeting early May 2017.

UC40.R.02: to make the abstracts of accepted proposal publicly available after the proposals are accepted (only 25% of the users replying to the UC poll were against it); this procedure is already in place for ALMA.

This recommendation was discussed with the Director General and the Director for Science. They are not in favour of proceeding along the line proposed by the UC, because it gives an unfair competitive advantage to non-ESO astronomers with access to fast-turnaround time on e.g. Gemini and Keck. No compelling arguments were provided as to why it is important to anticipate the release of the abstracts, given the above concern.

UC40.R.03: to schedule GTO & LP times flexibly to avoid blocking right ascension ranges and targets for contiguous periods of time.

The Observing Programmes Office will keep this recommendation into account when running the GTO scheduling, trying to optimize the needs of the wider community. At the same time, OPO also acknowledges that Large Programmes do usually come from that same community and rightly have a high priority, which ensures some balance.

UC40.R.04: to consider penalizing teams with large allocations of time (LP, GTO) that do not deliver on the contract/ agreed terms.

ESO is considering how best to implement an admin-light method of tracking whether responsibilities are being met by Large Programmes, including GTO Large Programmes, and also Public Surveys. As a last resort, following discussions with the party responsible, a variety of sanctions will be considered by the DG for those that fall short of their responsibilities, including the suspension of a new or an existing ESO observing programme.

UC40.R.05: to explore the statistics of how often a significant fraction of time is lost in visitor mode due to technical issues and if possible to compensate for it.

Those cases are very rare, precise statistics will be presented in the UC 2017 meeting. Compensation for major technical losses in visitor mode (~2/3 of the time or more) is assessed on a case by case basis, typically upon request of the visiting astronomer. In the 2017 meeting we will present more formalised guidelines for such cases.

UC40.R.06: to maintain up-to-date documentation about observing priorities used for service mode observations executions at Paranal.

Observing priorities for service mode observations executions are described in the Phase 2 Proposal Preparation Tool version 3 (P2PP3) User Manual, which is available from:

<http://www.eso.org/sci/observing/phase2/P2PP3/P2PP3Documentation.html>

UC40.R.07: to encourage observations in visitor mode, that are not limited to technically challenging programs, or to increase use of Designated Visitor mode.

With the ongoing update of our Phase 2 tools for Visitor Mode (VM) it is expected that VM support can become more agile and may thus require less preparation time on Paranal itself. As a result, the total trip length may become shorter and make VM more attractive for users. Likewise, we are investing resources to make the dVM experience closer to that of actual VM due to the implementation of an eavesdropping functionality, in combination with the more agile Phase 2 tools.

ESO changed the proposal form, swapping the previous request to justify observing modes with a more generic milder request for information on the proposer's preference as it was previously identified that this might inhibit VM requests.

Further clarification from the UC on issues that are addressed by further encouraging VM/dVM could help ESO identify other possible actions.

UC40.R.08: to check for and/ or enable users to find possible conflicts of targets between approved and/ or carried-over programs and newly proposed programs.

This recommendation touches upon the policies that regulate the access of information for approved programmes. Possible policy changes will be reviewed. Any such review/consideration would need to consider that making available information on targets that have been approved (but not yet observed) could again give unfair advantage to people who then could apply to observe them at other facilities.

UC40.R.09: to explore the possibility of increasing the number of participants or occasions for workshops/schools that are highly successful and oversubscribed.

For most workshops the acceptance rate is very high, meaning that almost all are accepted to attend. The SOC are attentive in terms of the diversity (including seniority) and guidelines for workshops organization reflect that. ESO organized several schools and hands-on workshops recently: e.g. Observational School in La Silla and NEON Archive School in Garching in 2016; APEX-ALMA Band 5 workshop and VLTI School in 2017. Such schools and workshops are part of ESO activities, which have to be balanced with programme and operations demands in terms of resources.

UC40.R.10: to improve transparency of the OPC selection process (sometimes grades do not correspond to comments) by feeding back to the users the individual comments of panel members, together with the consensus comment from the panel.

In the current implementation, the Panel Chairs (and, in the case of Large Programmes, the OPC chair) are responsible for checking the integrity and the consistency of the comments sent to the PIs. In addition, there is an official channel via which PIs can ask them to give more information if there is an ambiguity or discrepancy between a proposal science case, ranking and the panel's comments. ESO is strongly against distributing individual comments, as this defeats the whole purpose of a panel discussion, which is behind the consensus report and the final rank that is sent to the PI (and of course used when preparing the long-term schedule).

UC40.R.11: to allow the identification of moving targets (solar system) in the archive by taking into account their ephemerides.

The recommendation was included in the requirements for the upgrade of the Science Archive Facility user services. It will likely not be part of the first release, though, because of higher priority services of more general interest and impact, including several suggestions from UC39. The first release is scheduled for Q1 2018.

UC40.R.12: to advise the users via the Call for Proposals to provide, in case of resubmissions, sufficient clarity to the comments received on previous evaluation(s).

This is already addressed in the Call for Proposals (CfP), Section 1.2 Important reminders and Section 2.2.1 ESOFORM Important notes (pages 8 & 14 in the P99 CfP). In general, the points made by the OPC should be addressed in the Scientific rationale, with explicit mention and reference to the OPC feedback. In addition, this can be signaled in the Special Remarks box (in the current implementation). If the UC thinks this would be useful, ESO could make this more explicit in the newsletter that announces the release of the CfP.

UC40.R.13: to add to the Call for Proposals the statistics of the over/ under subscribed right ascension range(s) for all the instruments including APEX.

It is assumed the request refers to telescopes (and not to instruments). In this case, the oversubscription averaged over the last 5 semesters (on an even/odd basis) for non-APEX telescopes, is already available:

<https://www.eso.org/sci/observing/phase1/p99/pressure.html>.

Given that, as part of the extension agreement, the instrument suite of APEX will be upgraded (and ESO's share increased to 32%), we propose to include a general overview of the LST pressure on APEX at that moment (starting P101 in 2018). Because of scheduled major telescope maintenance activities, P100 at APEX will end 3 months earlier than usual, making an LST pressure plot based on previous even periods unreliable.

The UC recognizes the effort made by ESO on the following aspects and would like to recommend their continuation:

UC40.R.14:

- **To provide cookbooks and/ or video tutorials for data reduction for all instruments;**
- **To reach the community % of females in ESO advisory bodies (where ESO has control over selection);**
- **To guarantee a quick reply to DDT proposals;**
- **To support all critical software (data pipelines, Phase 2 preparation software) on both Linux and MacOS, and to provide detailed installation guidelines for both;**
- **To engage the UC in the development and testing of the new Phase 1, and Phase 2 tools.**

On cookbooks and/or video tutorials: A first draft Reflex video tutorials were produced and are available at: <https://www.youtube.com/channel/UCCq4rxr30ydNyV94OWmLrMA> (or search "ESO reflex" on YouTube). Work is ongoing on cookbooks that include best practices on data reduction for different instruments. Furthermore, as part of the April release of the pipeline kits there is a new release of the FLAMES GIRAFFE workflow with an updated cookbook/tutorial as well as a thoroughly revised cookbook for KMOS. The latter includes a step-by-step description of the data processing sequence aimed at non-experienced users, as well as a detailed description of the most important processing parameters geared towards optimizing the output data products. Telluric correction, which is, of course, critical in the infrared, is also dealt with in some detail, with practical examples on how to optimize the use of molecfit. The documentation of molecfit was also improved, with hands-on example on, e.g. X-Shooter.

Gender balance in ESO advisory bodies:

In OPC and Panels: the female/male fraction (30/70) is fully consistent with that of the PI community (see [Patat 2016, Messenger 165](#)). The Observing Programmes Office is very proactively promoting female participation and has the 50/50 balance in its goals. For P99 the gender balance is 33/67.

In the UC: Currently the UC female fraction is higher than 50%, exceeding the community fraction of female astronomers. It may fluctuate from year to year, depending on candidates proposed to represent the country in the UC.

In the STC: the female/male fraction (37/63) is fully consistent with that of the community or even possibly slightly higher considering the fraction of senior members of the astronomical community in this committee.

On response time-scale for DDT proposals: The median time for replies is 9 days (including weekends). The aim for ESO is to respond within 7 days. The urgent requests, requiring shorter response timescale are handled accordingly and, when needed, responses can be and were given within a day of submission.

On MacOS software support: Data pipelines and Reflex are publicly available for both Linux and MacOS. Installation is provided via RPM/MacPort packages and via command line scripts. Detailed instructions are available at www.eso.org/pipelines.

All observations preparation software (Phase 1/Phase 2/ETCs) is available for Linux and MacOS, except the observation preparation for some of the FORS2 observing modes (those requiring FIMS) and the MOS observation preparation for VIMOS. The FLAMES preparation software (FPOSS) is now available both on Linux and MacOS. Detailed installation guidelines are provided in all cases.

All the tools for upcoming instruments are planned to be platform independent.

Phase 1/Phase 2 tools development and testing: We plan to present the status of the tools at the next UC meeting. There is still a plan to engage the UC to provide feedback. What needs to be clear is that we will not be receiving feedback from single users, but unified users' view channelled through the UC. The recommendations will have to be based on general needs, and not on single-person tastes/preferences.

The UC has also identified the following minor issues:

UC40.R.15:

- **The computers in the Paranal visiting astronomer rooms run under “old” versions of the operating systems;**
- **The choice of afternoon breakfast for night workers is limited;**
- **The bed sheets in La Silla are not changed weekly;**
- **There are no postcards of the observatory;**
- **It is difficult to find the transfer bus at the Antofagasta airport;**
- **The Skype video call from the guest house is slow;**
- **Some telephones in the La Silla dormitories do not work.**

Paranal related points: Computer replacements in the visiting astronomer offices were budgeted for 2017, but will be put on hold to give preference to computing infrastructure in the control room. Instead, it is expected that with the roll out of the new web-based p2 tools for Visitor Mode the necessity for visiting astronomer offices and computers on Paranal will decrease, because those will not be necessary anymore for preparing and sending OBs to the control room. We plan to stay with two (instead of four) visiting astronomers' offices plus a large visiting astronomer's meeting room with a couple of machines, for which the library room in the Residencia will be refurbished. The two visiting astronomers' offices freed up will be re-assigned to the ELT project.

Afternoon breakfast indeed has more limited choices available, by design, given the lower demand for afternoon breakfast vs. the preparation for the evening dinner. However, the selection is still very reasonable including cereals and a selection of fresh fruit and juices. The location of the bus at Antofagasta airport is indicated to everyone by the person with the 'ESO' sign waiting at the airport exit for the passengers.

La Silla related points: it is hard to comment without knowing the exact dates related to reported problems. However, the one telephone problem that we are aware of, was fixed soon after the End of Mission report was

received. The bed sheets are changed for each new visitor, or weekly for long runs. The best way of notifying about these problems is in End of Mission reports, which are all read and any reported issue is followed-up and corrected as fast as possible.

Postcards of the observatory are available in the ESO online shop: <https://www.eso.org/public/shop/>

Guesthouse network speed: there is an ongoing project to replace the old IT equipment. We expect to have the new equipment in place in the second part of 2017.