HotJava browser, among others, offer new prospects and challenges for the communication of ideas. Various projects are quite advanced, which will allow image processing, symbolic mathematical manipulation, and other data treatments to be dealt with purely in the Web environment.

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The ESO STC in Times of Change

J. ANDERSEN, Chairman, ESO Scientific Technical Committee

The Role of the STC

The charge of the ESO Scientific Technical Committee (STC) is to advise the ESO Council on "... policy matters of long-range scientific and technical importance ...". It consists of 12–16 members appointed "... for their scientific and technical eminence, with at least one member from each Member State ..." (plus observers from Portugal and Chile, pending their full STC membership).

Four years ago, the writer found himself appointed to this august body. And three years ago, the then Director General asked if I would accept a nomination to chair the STC, the extra workload estimated to be about two days per year.

As 1995 draws to a close under a new Director General, a quick status shows that neither ESO, the STC, nor its chairman look much like we did then. One thing has remained constant, however: Chairmanship of the STC is limited to three years. As my term thus comes to an end, the Editor has asked me to summarise my impressions of life in the STC for the readers of The Messenger.

The STC's Modus Operandi

As I joined the STC, veteran members discreetly aired a certain frustration that meetings were somewhat formal affairs and the communication mostly one-way. Not known for letting tact get in the way of change – and with the active encouragement and support of the new ESO Management – I have tried to modify certain aspects of the STC's working modes and style.

First, new Terms of Reference have been approved by Council, which clarify the role of the STC as dealing with general policy matters, as a two-way information channel between ESO and its community, and also the relative roles of the STC and the Users Committee (UC). The STC can now have 12-16 members, so new ESO members or scientific fields can be quickly accommodated. And terms are now for three years (renewable once) rather than the previous fixed five-year terms, also in the interest of flexibility.

The STC also equipped itself with a Vice Chairman, elected annually by the STC itself to replace the regular chairman as needed; Klaas de Boer, Bruno Marano, and Andre Blecha were elected in 1993-95.

At the meetings, the previous lengthy oral status reports by the ESO staff have been replaced by "fact sheets" sent out in advance (a "sheet" is a piece of paper with no more than two sides!), time at the meetings being devoted to two-way discussions. And each day starts and ends with a half-hour informal session (STC members only) where potential problems or misunderstandings can be identified and prevented, resolutions drafted and/or modified, etc.

It is not for the writer to judge whether efficiency has improved. But the consensus seems to be that the meetings have at least become rather more lively, culminating in the May 1995 meeting in the magnificent Council Room at Observatoire de Paris, with a subsequent visit to REOSC and a first live glimpse of the 8.2-m VLT primary mirrors.

Contact to other ESO Bodies

The STC's direct reference is to the Council, and the STC chairman is invited to attend its meetings. During my term, Council has expanded the scope of the debates at which the STC chairman is present to include matters of such direct scientific impact as, e.g., the future of ESO in Chile. I am glad to convey the STC's appreciation of this sign of Council's confidence in its main advisory committee.

In order to improve coordination with the UC and minimise the work of the ESO staff in preparing the meetings, the UC Chairman now has a standing invitation to attend the STC meetings. Similar mutual invitations between the STC and the Finance Committee were suggested by certain humorous souls, but might be too much of a cultural shock for both sides... Still, I hope the STC has been able to provide useful technical advice on some of the major contract decisions in the VLT project (see, e.g., The Messenger 81, 3).

Finally, the STC has invited all the ESO committees and the astronomical members of Council for the discussion in November 1995 of the long-term plans for La Silla (see below). I hope very much that discussing such a long-term policy issue in this broad and representative forum will have been found useful.

Planning for the VLT

The first task for the new Director General in early 1993 was to re-establish a realistic schedule for the VLT project and re-structure ESO to carry out the project according to that plan. The magnitude of this task was well illustrated by the 1994 Audit Team: While the LEP project corresponded to three annual CERN budgets, the VLT is equivalent to five annual ESO budgets. As the corresponding refurbishment of the ESO structure proceeded, part of the task of continuing the long-term scientific planning fell, appropriately, to the STC.

The previous concept of having the four VLT telescopes in place almost simultaneously, complete with instruments, avoided the need to discuss priorities. With the new schedule, this was no longer possible. Hence, the STC appointed a Working Group on Scientific Priorities for the VLT Observatory, ably chaired by Dr. L. Vigroux, to reconsider the most urgent science to be done with the VLT.

One of their initiatives was the first of what is now a series of ESO Workshops, „Science with the VLT". Their report, issued on that background, was unanimously endorsed by the STC. The STC - indeed all of us – owe Dr. Vigroux and colleagues our cordial thanks for their efforts and dedication in placing the VLT planning on a firm scientific basis.

Planning for VLT Instrumentation

With a VLT construction period extending beyond the year 2000, it was clear that the instrumentation plans defined in 1988-89 needed review and updating. The Vigroux committee addressed also this question as a corollary of their high-level review. As a result, certain adjustments of the existing plans were made, and new instruments for an ambitious push at the frontiers of modern cosmology are now under active study by several groups.

As part of this move, the STC was gratified by ESO's decision to launch an aggressive programme in the field of optical detectors, with the prospect of ESO becoming a leader in the field within a short time.

Planning for La Silla (I)

Already in late 1992, it had become clear that the ESO staff was overcommitted with the multitude of tasks at hand, and that a review of scientific priorities for La Silla operations was needed. A Working Group was appointed to this task and issued a set of recommendations that were later approved by the STC and Council (see The Messenger 74, 29) and are now being implemented.

These recommendations have been seen by some as discriminating blindly against small telescopes. This is a misunderstanding: Much valid science can be done with small telescopes, hopefully including some perpetrated by the present writer. But it does not necessarily follow that any instrument of any size and age must continue to run forever, regardless of cost and – yes, sorry – quality of the science.

In actual fact, those instruments able to prove their worth are happily continuing operation, if perhaps under different boundary conditions, while others are making way for new, more exciting science (see, e.g., The Messenger 81, p. 10).

One, to me, unexpected result of this first planning exercise was the extent to which the actual cost of running La Silla was independent of the scientific facilities actually offered. This meant that efforts by management to contain costs were less dependent on the details of the scientific planning than on the organizational setup, a useful lesson for the following exercise.

Planning for La Silla (II)

While the first review of La Silla operations was mostly in the nature of urgent firefighting, thought also needs to be given to the long-term role of La Silla in the VLT era. The Working Group set up for this task, and the rationale for its work, have been described in these pages (The Messenger 78, 3, and 80, 4). At the time of writing, its recommendations are being finalised for joint review by the ESO committees as noted above.

One aspect of this planning for the future was to identify the needs for new powerful instruments for La Silla. E.g., an ambitious near-infrared imager and spectrometer (SOFI) to go on the NTT after the „Big Bang" has already been approved. Another aspect, however, is to rank the facilities in order of importance for the future scientific productivity of ESO as a whole, given the financial constraints and the need to concentrate on keeping ESO's top-rank instruments competitive. Identifying the facilities that must survive will involve choices that will be felt as unpleasant by many.

Yet, at a time when the price of the VLT has gone up, however modestly compared to e.g. typical space projects, and the demands on those who fund us are multiplying, it will be deadly to our credibility if we cannot decide which of our wishes are more or less important. Decisions will be taken whether we like them or not; if we want to be able to guide them, there is homework to be done, also by the astronomers.

Epilogue

These three years on the STC, at the interface between colleagues keen to pursue front-line science and beleaguered administrators forced to keep costs under control, have been a fascinating and busy time.

Becoming a bit philosophical at the end is probably a sign of old age. But I have come to regard committee chairmen as disposable commodities, perhaps a bit similar to paper towels: One serves for a while, picks up some of the dirt, hopefully leaves a clean slate, is replaced by a fresh one, and life goes on.

In conclusion, I wish to offer my thanks to all colleagues on the staff, Council, and committees of ESO for their excellent cooperation under sometimes difficult conditions, and for bearing with my initial inexperience – and occasional impatience.

News and Views from the Users Committee

M. DENNEFELD, Chairman of the UC
Institut d'Astrophysique de Paris (IAP) and Universite Pierre et Marie Curie (Paris 6)

The structure and function of the Users Committee (UC) have been defined as early as 1978 and are adequately described in a previous article about the UC by B. Marano (The Messenger, 55, March 1989). UC is composed of one representative per member country, to which have been added recently an observer from Australia (pending Australia's expected membership) and a Chilean observer who will become a full member as soon as the updated agreement between ESO and Chile has been ratified by both parties. UC is therefore a group of people with various scientific and cultural interests, and it is exciting to see that always more countries are keen to join ESO's venture.

The Terms of Reference of the UC state that its task is: "to advise the Director General (DG) on matters pertaining to the functioning of the La Silla observatory from the point of view of the Visiting Astronomers". The practical interpretation of this statement has, however, evolved significantly during my term as Chairman of the UC. This is due to the convergence of several facts: the emergence of the VLT which drives a redefinition of the role of La Silla; the multiplication of instruments and telescopes which has stretched the requirements on technical staff to their limits; the financial situation which translates into a decreased budget for La Silla; the energetic impetus of a new DG; and, last but not least, the dedicated work of the UC members, backed up by their community. As a consequence, the single, annual UC meeting has now a heavy agenda, spreading over two days and dealing with matters ranging far beyond the simple "functioning" of the La Silla observatory. This also has consequences for the working procedure.

Working Method, and Program

The meeting is opened, naturally, by a presentation of ESO's global situation and perspectives by the DG. This report sets the tone of the meeting, and presents the boundaries which limit the possibilities to satisfy all the users' wis-