



ITALY, Member of ESO

On May 24, 1982, the Italian Ambassador in Paris deposited the instrument of accession with the Ministry of Foreign Affairs of the French Republic, as foreseen by Art. 13 of the ESO Convention. With this act Italy has become a member of ESO.

Perhaps it is of some interest to summarize the main historical steps which in the end led to this very positive conclusion. Apparently the main reason why Italy did not participate in the foundation of ESO is because Italian astronomers in the early '60s were essentially divided between the desire to participate in the founding of ESO and the equally strong desire to have a national telescope. It was of course believed, and perhaps rightly so, that the Italian Government was not willing to finance both enterprises. Eventually, priority was given to the national telescope project. This turned out to be a historical mistake. Ironically enough, it is the participation in ESO which will probably permit funding of the Italian national telescope (3.5 m) in the northern hemisphere. However, subsequently many Italian astronomers maintained a strong interest in ESO but no real step forward was taken until late 1977 when for the first time an Italian representative named by the Italian Research Council (CNR) was allowed to participate in the ESO Council meetings as an observer. This was a very important decision which finally led to a meeting between an Italian delegation headed by the Minister of Research and Technology, Mr. V. Scalia, and an ESO delegation headed by the President of Council, Prof. F. Denisse. The meeting took place in January 1980 in the town of Taormina (Sicily), the beautiful and inspiring surroundings of which assisted in the

signing of the basic agreement for the participation of Italy. The detailed agreement was ready by May 1980, and on December 19 of the same year the Italian Government approved and sent to Parliament the law establishing the participation of Italy to ESO. The formal approval of the Italian Parliament was obtained on March 2, 1982 and the law published in the "Supplemento ordinario alla Gazzetta Ufficiale No. 92" (Legge 10 Marzo 1982, n. 127).

The hope and wish is that the new membership of Italy will not only satisfy the legitimate wishes of the Italian astronomers and astrophysicists who will now have access to the optical observations in the southern hemisphere, but will also contribute to strengthening the Organization and to further increase its basic role in the development of European astronomy.

Per aspera ad astra!

G.S.

With Italy and Switzerland as new members of ESO, the annual contribution level has been increased from 32.5 to 40 million DM and the shares of the contributions of the various countries have changed as follows:

	Before	Shares in %	Now
Belgium	8.81		6.28
Denmark	4.71		3.35
France	33.33		26.75
Fed. Rep. of Germany	33.33		26.75
Italy	—		17.16
Netherlands	11.68		8.33
Sweden	8.14		5.81
Switzerland	—		5.57
	100.00		100.00

The ESO Observing Programmes Committee

B.E. Westerlund, Astronomical Observatory, Uppsala, Chairman of the OPC

Since 1978 the ESO Observing Programmes Committee (OPC) has "the function to inspect and rank the proposals made for observing programmes at La Silla, and thereby to advise the Director General on the distribution of observing

time". The members (one from each member country) and their alternates are nominated by the respective national committees for five-year terms (not immediately renewable). The terms are staggered so that each year one or two persons are

replaced. The Chairman is appointed annually by the Council. He is invited to attend Council meetings and to report to its members.

The OPC meets as required by the schedule for the award of observing time. It may invite persons from the ESO staff or from among the alternates to attend if required.

The history of the OPC goes back to 1967 when the ESO Council established a Scientific Programmes Committee (SPC). Each of the member countries had a representative, and the Scientific Director of ESO acted as the Secretary and as liaison with the Directorate. The Committee's principal tasks were (1) to advise the Directorate and the Council about the general scientific policy of ESO and (2) to advise the Directorate about the applications for observing programmes of visiting astronomers. The SPC held its first meeting on May 2, 1968.

With respect to its task (2) the SPC proposed rules of procedure which were formally adopted by the ESO Council in its meeting of July 2/3 1968: Allocation of time was to be arranged for intervals of 6 months; applications by visiting astronomers had to be submitted to the Directorate at least 6 months before the beginning of these periods; and the applicant should be informed about the decision by the Directorate about 4 months before these dates. One third of the time was to be allotted to the ESO staff; the SPC was not supposed to advise on these programmes but merely to be kept informed.

During 1968 and 1969 the SPC proposed allocations to the Directorate, but from its meeting in November 1970 it presented ratings of the scientific value of the applications to the Directorate to serve as the base for drawing up a suitable observing schedule.

The importance of ESO and its observatory on La Silla for the European astronomers became soon obvious; during 1971 the amount of time requested in the numerous applications was more than double the amount of time available. The SPC also found it "evident that ESO should contemplate the acquisition of more instruments up to the size of 150 cm diameter".

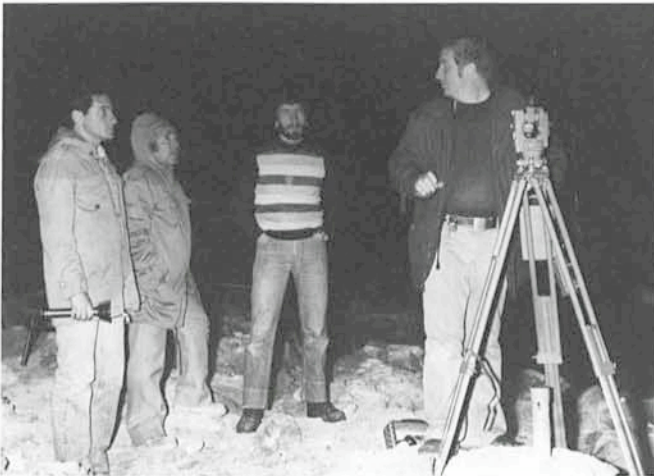
In 1971 the Council decided to establish a Scientific Policy Committee for ESO. The Scientific Programmes Committee

accepted "Observing Programmes Committee" as its new name.

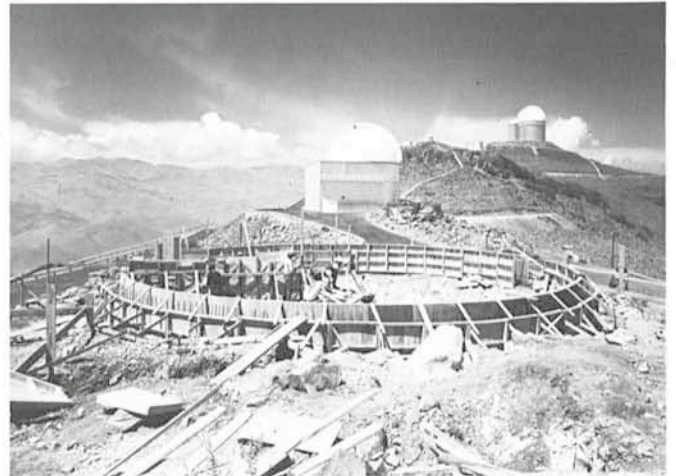
In the early days of the OPC (SPC) each application for observing time was reviewed by one of its members who then presented his rating at the meeting for acceptance by the OPC. The applicants were treated in alphabetic order, and as the proposals mostly described the observations desired, not much discussion was necessary. During the first few years practically all proposals were granted observing time. This was possible as the number of proposals was rather low; it was also an ESO policy to have as many European astronomers as possible get acquainted with ESO, La Silla, as soon as possible. From 1971 on, when overdemand for observing time became the normal state of affairs, the OPC has, rather regularly, discussed the general policy to be followed in allotting time.

In 1972 the OPC found it preferable to assign ample observing time to the more outstanding programmes rather than attempt to satisfy more or less all acceptable applications. It also proposed that outstanding programmes should be allotted time "irrespective of nationality". This should be read in the light of the principles in allocating time as explained by the ESO Directorate in the Annual Report 1972: It follows first of all the advice of the OPC, expressed in the scientific rating of the proposals. However, a number of other circumstances are taken into account, such as: oversubscription for certain seasons and a relative scarcity of applications for others; instrumental feasibility of execution of a programme; and the aim to arrive, in the long run, at relative shares of the available nights approximately proportional to the financial contributions of the Member States.

In 1976 the number of ESO staff astronomers stationed in Europe began to increase appreciably. It was felt that they were more similar to visiting astronomers than to the ESO astronomers directly involved in the operations on La Silla; consequently their applications for observing time ought to be treated in the same way as those by visiting astronomers. After some experimenting the OPC arrived at its present procedure in which all ESO staff applications are evaluated in the same way as for visiting astronomers. Even if by necessity some staff applications may receive a special treatment in the final scheduling—one third of the time is still reserved for the



Determination of the North-South line for the 2.2-m telescope (24. 1. 1982).



The 2.2 m telescope building photographed on April 4, 1982. In the background, the Schmidt and the 3.6 m telescopes.

staff—the OPC knows by its evaluation that the scientific quality of all proposals obtaining observing time is high. The question is, however, still occasionally a hot item at the OPC meetings; due to the increased frequency of joint proposals by ESO staff and visitors the soundness of the present procedure becomes more and more obvious.

During 1978 and 1979 the OPC attempted to express its evaluation also in the number of nights reasonable to allot to a programme. This has now been abandoned; it is left to the Directorate to decide on the number of nights for each programme.

The number of applications for observing time has continued to grow. For the present period, No. 29, beginning on April 1, 1982, 211 applications had been submitted; for period 21, beginning on April 1, 1978, the number was 124. It has become impossible for the OPC to discuss each application in detail and a new procedure had to be developed. From period 23 on the OPC did its evaluations with two of its members reviewing each application for 3.6 m telescope time; this shortened the discussions at the meetings and was found to work so well that it is now applied to all applications.

The applications for observing time are now evaluated in the following way: The OPC members receive them listed by the ESO Visiting Astronomers Section according to subject (there are at present 10 groups covering everything from "galaxies" to "the solar system"). For each application two OPC members have been chosen as referees. Their ratings, which cover the scientific quality of the proposal and also consider its requests in the likelihood of a reduction in time, are sent to ESO well before the OPC meeting. The complete list of ratings is given to the OPC members, usually on arrival at Garching. Those applications for which the two referees have arrived at the same ratings need not be discussed much further, and the OPC can concentrate on those where discrepancies occur. The discussions may be very extensive in these cases, and they continue until a unanimous decision has been reached. Occasionally it may happen that an OPC member, who was not a referee for a particular application, disagrees with a proposed rating; then the application will be extensively discussed. This is most likely to happen in the intercomparison of

applications of similar nature within the various subject groups with the aim of reaching the highest possible degree of fairness.

Among particular questions that have been dealt with in the OPC the long-range programmes have often been on the agenda. Should special programmes be allotted observing time in advance for several observing periods? In 1971 the OPC decided not to attribute a certain percentage of time to long-range programmes in order to keep sufficient flexibility for handling short-term projects. Normally, a long-range programme once found acceptable would in principle be allocated telescope time over several observing periods; it would, however, in each period be in competition with the other applications submitted. These principles are still followed, and it may be stated that special attention is paid to all programmes that have a tendency to become long range; they have to show progress and it has to be made convincingly clear that more material is really needed. In deciding this the OPC has to rely on the information given in the completed application forms, in particular on the report over previous observations. It may be said in this connection that most applications are nowadays very well written with the scientific aim well presented and the feasibility of the observations clearly established. The importance of a superb Abstract on page 1 of the form should be emphasized.

At all its meetings the OPC discusses the activities on La Silla. Reports on the condition of telescopes and auxiliary instrumentation are presented and discussed as well as other matters of importance for the observing programmes. Thus, for instance, the OPC has recently considered the large number of change-overs of auxiliary instrumentation—in one year almost 200 change-overs had occurred, not including minor items such as changes of filters, multipliers, IR detectors, etc.—and decided to support the Technical Research Support Group on La Silla by recommending as large a reduction of change-overs as feasible without limiting the flexibility for observers unreasonably much; keeping instrumentation on the telescopes for longer periods will improve its performance.

The OPC has also at a recent meeting recommended that the limits for stoppage of observations be reviewed. It was felt that much observing time would be gained by even a very slight increase in the limits now applied for wind velocity and humidity.

The OPC recommended already in 1972 that observational material collected at La Silla and of interest to other astronomers, after analysis by visiting astronomers at their home institutes, be centralized in Europe. At that time the material under consideration consisted mainly of photographic plates. Now, with much material available in digitized form only, on magnetic tape, this question will have to be reconsidered and a new kind of storage problem faced.

As a consequence of its main function, the OPC obtains a clear picture of the progress in optical astronomical research in the ESO member countries. As the proposals frequently describe how the observations planned for La Silla are supported or supplemented by observations in other spectral ranges—X-ray, UV or radio—this picture becomes rather complete. I may conclude by saying that even if the OPC members may feel the pressure of evaluating twice a year about 60 proposals each, they also feel greatly stimulated by reading the high-quality scientific rationales and far-reaching aims that are presented nowadays. They certainly also share the gloom expressed sometimes in a "no-progress" report: "The weather was too bad", and most definitely prefer to read "Results published in . . .".

The Proceedings of the Symposium

"EVOLUTION IN THE UNIVERSE"

held on the occasion of the inauguration of the ESO Headquarters in Garching on 5 May 1981 are

now available

The Proceedings contain the following contributions:

- "Space Sciences and Geosciences: Evolution of Two Interactive Fields of Knowledge". H. Curien.
- "The Origin of the Solar System". H. Alfvén.
- "The Early Evolution of Life on Earth" (1-page summary). M. Eigen.
- "Particle Physics in the Early Universe". L. Van Hove.
- "The Evolution of Large-scale Structures in the Universe". J.H. Oort.
- "Evolutionary Aspects of the Cosmic Black Body Radiation". D.W. Sciama.

The 122-page volume (cloth) may be obtained from ESO-Garching. The price is DM 20,— and has to be prepaid.