



## Report by the Director General

*R. GIACCONI*

In the first week of December, several important events will occur in Chile. It is planned that instruments of ratification and approval will be exchanged between the Government of Chile and ESO for the new Agreement which will then come into force. A foundation ceremony will take place on Cerro Paranal in the presence of high Chilean authorities, honoured guests and the ESO Council. A time capsule will be walled into the foundations of unit telescope 1. Finally, the Council will meet and decide on important budgetary matters regarding the ESO budget for the year to come.

Taking the last point first, ESO is making excellent progress in carrying out the VLT programme within the schedule and cost anticipated, which have not changed in the last several years. Thanks to the outstanding efforts of the VLT team, led by Professor Massimo Tarenghi, and all other elements of the ESO organisation, we are sufficiently advanced that we believe there remain no major technical issues to the successful completion of the project except for integration, commissioning and operation. The ESO Science and Technology Committee visited the Ansaldo factory in Milano during their 41st meeting on October 30 and 31, where they attended a demonstration of the VLT telescope structure smoothly pointing under software control. Since 1995 we have also improved on our cash flow situation, showing a positive balance as early as 2001 rather than 2003, as foreseen at the end of 1995.

However, the announcement in August 1996 by the German Government of their intention to decrease contributions to all scientific international organisations in 1997, 1998, 1999 and 2000 has created a substantial problem for ESO and changes the situation considerably. Since the other member states did not wish to alter the percentage of contributions because of a reduced German support, the decision was made by the ESO Council to reduce all contributions by the same proportional amount as requested by Germany. This results in a very substantial shortfall in contributions in the period 1997–2003, amounting to 7.4%.

In attempting to cope with this financial crisis we must take into account several factors:

The construction and commissioning of the VLT/VLTI is an activity which extends over several years. We have therefore adopted as our operating guideline a detailed technical, managerial, personnel and financial plan for our activities from 1996 to 2003. Within this plan, peak VLT capital expenditures occur in 1997 because of the advanced state of delivery of contracts and procurements already committed (85%). Any attempt to substantially shift VLT expenditures results in very severe damage to the project and increases its costs without substantially improving the total fiscal profile in the 1997–2000 period.

The ESO Executive has come to the conclusion that the only feasible alterna-

tive is a multi-year, multi-faceted plan to reduce ESO costs in this period.

Certain items which have small technical impact can be deferred to improve cash flow and interest payments. Small delays in the VLT/VLTI could be tolerated (3–6 months) to avoid overtime payments. Some reduction in activities could be foreseen at ESO Headquarters in Garching. However, it is clear that the bulk of the saving must occur in the area of personnel cost.

Here, the situation is also quite difficult since the ESO Council and Executive had already embarked in a containment of personnel costs over the last few years. Some small reduction on head counts could still be made but most of the savings can occur only by further reducing yearly increases below inflation growth levels.

A plan along these lines was discussed with the Committee of Council in Basel on October 22, and was proposed by the Executive to the Finance Committee which met on November 6 and 7 in Garching and approved it. The plan, if approved by Council, will result in an appropriate decrease of expenditures at ESO over the period 1997–2003. It retains the basic technical content of VLT/VLTI and La Silla operations. It requires substantial sacrifices and co-operation by the staff who will hopefully understand that at the moment, the only alternative to salary growth containment is a reduction in staff complement.

The Executive believes that further reductions could not be sustained with-

out irreparable long-term damage to ESO and the VLT. Containment of personnel costs, in particular, can only be sustained till the point where salaries are no longer competitive and result in loss of experienced staff and demotivation of the remainder.

Returning now to a happier subject, the ratification and approval by the Chilean Government and by ESO of the Interpretative, Supplementary and Modifying Agreement to the Convention of 1963 has important consequences for the scientific communities in ESO Member States and Chile.

It gives ESO a certainty of stability for our future activities in Chile and the operations of the VLT observatory for many decades. At the same time, Chilean astronomers will have direct access to this new and powerful tool for astronomical observations by means of guaranteed observing time.

Now that the Agreement is coming into force, it is important that Chilean and European Scientific Communities at large are informed of some details of the Agreement regarding observing time:

To this purpose, some items of Article 11 of the Agreement, which are directly relevant to the subject, are reproduced in full below.

#### Article Eleven

1. *The Chilean Scientist shall continue to have access to the instruments of observing of ESO on the basis of competitive projects, on equal conditions with the astronomers of the member countries of ESO. There are no limits to the percentage of time which can be acquired in this way.*

2. *In recognition of the role of Chile as the host country and to assist in the development of astronomy in Chile, ESO is prepared to make observing*

*time available to scientifically meritorious Chilean proposals, independent of the competitive pressure, up to the fractions of observing time specified in this Article.*

3. *Consequently, Chilean scientists who present meritorious projects, shall have the right to obtain additional time up to 10% of observing time in each and every telescope installed or to be installed by ESO, without prejudice to the statements in paragraphs four and five of the present Article.*

4. *Chilean scientists who present meritorious projects shall have the right to obtain up to 10% of the observing time of the VLT/VLT1 telescopes (defined in Article Two), it being understood that at least one half of this 10% shall be dedicated to projects of Chilean astronomers in co-operation with astronomers of ESO member countries. This percentage shall be acquired over a period of five years starting from the beginning of the functioning of the first telescope as agreed upon between the parties through an exchange of Notes. In case of an increase in the request for observing time by Chilean scientists for projects of special scientific merit, the Director General of ESO may assign additional observing time for these projects, within the fraction of observing time devoted to co-operative projects.*

5. *The percentage of time indicated for the telescopes presently functioning, 10%, shall be established on the basis of total time available to ESO and in accordance with the distribution by the Observing Programmes Committee of ESO (OPC). In the case of telescopes presently in operation, for which a Member State of ESO contributed financially, in total or in part, in addition to its ordinary contribution, the Organisation shall make its best efforts to ensure that a similar percentage to that*

*mentioned in the second paragraph shall be granted.*

6. *Any proposal whose principal investigator is a Chilean scientist or is a foreign scientist affiliated to a Chilean institution included in a list to be approved by the Joint Committee mentioned in Article Nine\*, shall be considered as a Chilean proposal.*

7. *The proposals for observation submitted by Chilean scientists, which respond to the regular calls for competition, shall be qualified in accordance with ANNEX A\*\* for all of the telescopes installed or to be installed.*

8. *Those proposals from Chilean scientists which have obtained a classification higher than 3.0, within the percentage specified in this Article, shall be accepted. The Chilean scientists whose proposals are accepted shall be subject to the same rules and shall have the same facilities and obligations as the scientists of ESO member States.*

9. *It is understood that the limiting value specified as 3.0 is a part of the current scheme of evaluation. In case there are changes in the scale of evaluation, the corresponding limiting value on the new scale shall be equivalent to the one specified here, which shall be determined by the parties.*

10. *Meritorious projects shall be selected by the ESO Observing Programmes Committee (OPC) in which a Chilean scientist shall be incorporated as a full member. Similarly, a Chilean scientist shall be incorporated as a full member in the Scientific Technical Committee of ESO (STC) and a Chilean scientist as a full member in the Users' Committee (UC).*

\* This Joint Committee will consist of three representatives of the Chilean Government and three representatives of ESO.

\*\* ANNEX A provides the evaluation system for the applications.

## TELESCOPES AND INSTRUMENTATION

### VLT Status Report

M. TARENCHI, ESO

The VLT Programme is now in an advanced stage. Nearly all major contracts for the Unit Telescopes have been concluded and the remaining contracts will be signed in the next few months. Some of the first parts for UT #1 have already been delivered and others are in or nearing their test periods prior to delivery to ESO. Activities in Europe and on Paranal are reaching the final stages, in particular for the first Unit Telescope (UT #1).

The first enclosure on Paranal is almost completed and the acceptance testing is planned for January 1997. The remaining enclosures are in an advanced erection phase, see Figure 1 (cover page) and Figure 2. In parallel, SKANSKA completed the final adjustment and casting of the embedded beams and rings within the specified tolerances, and in a very smooth operation the first rotating platform was installed in the coudé station of UT #1.

The erection of the main structure of UT #1 on Paranal has started (see Fig. 3). The azimuth tracks have already been aligned; the cable wrap, the oil pumping station and the oil recovery system have been installed. Even though some manufacturing problems by subcontractors have caused delays in the delivery of the base frame, AES is confident that they will be able to keep to the contractual delivery date.