



### KEY PROGRAMMES ON LA SILLA: First Round

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#### RESPONSE TO THE PRELIMINARY ENQUIRY

My request in the *Messenger* No. 51 for reactions has met an ample response. Numerous letters, phone calls and visiting astronomers dropping by in my office supplemented some sixty preliminary proposals on the forms designed for that purpose. In this article I wish to report briefly about the composition and extent of this response.

#### Apprehensions and Possible Misunderstandings

As announced earlier, the deadline for the first round of ESO's Key Programmes is 15 October 1988. Because the timespan between the moment ESO's users first saw my March article and 30 April 1988 was rather short, some people could not respond to the preliminary enquiry at all or not as well as they would have preferred. Let me emphasize that this in no way prejudices their opportunity for participation. The chief goal of the preliminary enquiry was to establish whether there is a deep and broad interest in the concept I have proposed, and if so, what the main themes and trends of that interest are.

The sixty or so principal investigators and some two hundred and fifty co-investigators who did respond and submitted a preliminary proposal achieved more than helping me reach the goal just stated. Their work goes a long way towards preparing the actual proposal

for the deadline appropriate for them. (As will become clear below, that could be one or two years later than the next deadline.) Moreover, we can now identify affinity and/or overlap between many separate initiatives; by informing PI's of such common elements, new combinations may result.

That brings me to another worry expressed by some: "Will we be forced to work in large consortia with merged

programmes?" The answer is no. All ESO will do is inform investigators of mutual interests and overlapping proposals, evident from the response to the preliminary enquiry. Whether they wish to collaborate is entirely the proposers' decision. Obviously, telescope time will be granted in a manner that is effective and economical, serving the stated purposes of the Key Programmes concept. In cases of clear overlap, the best pro-



In mid-May 1988, the unusual shape of the NTT building stands out against the observatory skyline. (Good news about the NTT on page 10 and 51.)



gramme will get all, the others nothing. It is that risk which forms, among others, an incentive for collaborations.

Finally the fear, heard here and there, that Key Programmes will lead to monopolies on some subjects or areas. This is an understandable concern which I share. ESO's archiving policy, described elsewhere in this issue, will go some way to reduce this risk. The OPC will undoubtedly help to minimize detrimental effects on this score.

Key Programme Initiatives

Approximately sixty tentative proposals reached us in response to the preliminary enquiry. In Table 1 an overview is provided of the distribution of the 3,400 nights required over the six telescopes involved. Also shown is the variation in team sizes and the internationality of these plans (Fig. 1).

I find the response very satisfactory. Evidently, there exists a good deal of collaboration already among astronomers in member states. Within each category there may be overlap and strong affinity among proposals. In the next month or so these will be analysed and PI's will be informed of such circumstances. The involvement of ESO staff at Headquarters and on La Silla is widespread, a desideratum I expressed in the March article.

A few words about the different proposal groups, without, at this stage, specifying their contents (see OPC Classification; "K" signifies Key Programme):

- K1 has 14 proposals, seven of which involve deep redshift surveys of galaxies, all using the 3.6-m and the NTT. Some reconfiguration of teams seems logical and discussions among PI's will be suggested from ESO.
- K2 concerns both quasar surveys and gravitational lense studies as major activities, sketched in 15 proposals.
- K3 is concerned with the Magellanic Clouds, including SN 1987A, and the half dozen proposals aim at a significant use of the smaller telescopes as well.
- K4, interstellar matter, is heterogeneous, but the six proposals thus far request primarily big telescope time.
- K5, on star clusters and galactic structure, has two proposals and
- K6 for X-ray sources has two initiatives for satellite programme follow-up: ROSAT and SIGMA.
- K7 is for stars and contains twelve proposals for this major area, with small telescopes heavily contributing.
- K8 is a sole comet programme involving five telescopes.

TABLE 1: Distribution of number of proposals (figures given within brackets) and of required nights - distinguished by 3.6 m plus NTT on the one hand, and the smaller instruments on the other - over the nine categories distinguished by the OPC. An overview of the distribution of the nights over the six telescopes is also provided. Not included in this table are the 130 nights requested at the 1-m telescope which was not involved in the inquiry.

Telescope Category	3.6 m	3.5 m NTT	2.2 m	1.5 m	1.5 mD	1.4 m CAT
K 1	(10) 590	← (4) →			110	
K 2	(5) 465	← (8) →			(2) 460	
K 3	(1) 170	← (4) →			110	
K 4	(4) 200	← (1) →			40	
K 5	(2) 120					
K 6	(1) 120	← (1) →			50	
K 7	(3) 180	← (3) →			(3) 475	
K 8		← (1) →				
	15				240	
K 9					(1) 45	
TOTAL	1075	785	480	660	315	75
Note: Only the 54 proposals in which both the telescopes and the number of nights required were indicated have been taken into consideration for constructing this table.						

- K9 concerns HST follow-up and a major speckle programme.

Call for Proposals

The harvest of sixty initiatives, numerous individual reactions as well as the endorsement by the Users Committee and the Scientific Technical Committee of ESO together form a very encouraging base for a good start. However, given the rather modest availability of

the NTT in Period 43 and the continued commissioning of instrumentation in Period 44, the time available for Key Programmes in the first round is correspondingly limited. The allocation space that has been set for these two semesters is given in Table 2.

This total of 125 nights on the two big telescopes is a rather modest start, leaving room for new proposals next year. For the second round, deadline October 15, 1989, Periods 45 and 46

TABLE 2: Number of nights to be allocated to Key Programmes

Telescope	3.6 m	3.5 m NTT	2.2 m	1.5 m ESO	1.5 m Dan.	1.4 m CAT CES
Period 43	40	15	20	25	15	30
44	40	30	20	25	15	30

(April 1, 1990–March 31, 1991), we expect the number of nights devoted to Key Programmes on the 3.6 m and the NTT to increase to a level of about 200 nights. The amount of time on the smaller telescopes will be more elastic, depending on proposal pressure. With EFOSCII on the 2.2-m a shift of some 3.6-m work to this intermediate size telescope may be expected.

**ESO community astronomers, whether they responded to the preliminary enquiry or not, are invited to submit proposals to the Visiting Astronomers Section at ESO Headquarters before October 15, 1988. Copies of a form designed for this purpose will soon be available from this Section on request.**

With the great reservoir of plans and the modest beginning just outlined, many potential proposers may wish to postpone their initiative by one or two years: Key Programmes are long term . . . Proposals not successful in any round may be resubmitted in identical or modified form for later rounds. Proposals for the first round will be sent to referees outside ESO's OPC. Their reports, gradings plus explicit commentaries supporting the grade, will be submitted to the OPC for preparing its recommendations to me.

After the first round the whole process will be evaluated and, if necessary, adapted. Through the *Messenger* the community will be informed of progress. Successful programme proposals will

OPC Classification	
1 –	GALAXIES
2 –	QUASARS, SEYFERTS, RADIO GALAXIES
3 –	MAGELLANIC CLOUDS
4 –	INTERSTELLAR MATTER
5 –	CLUSTERS AND GALACTIC STRUCTURE
6 –	X-RAY SOURCES
7 –	STARS
8 –	SOLAR SYSTEM
9 –	MISCELLANEOUS

be summarized by the PI's in future issues of the *Messenger*.

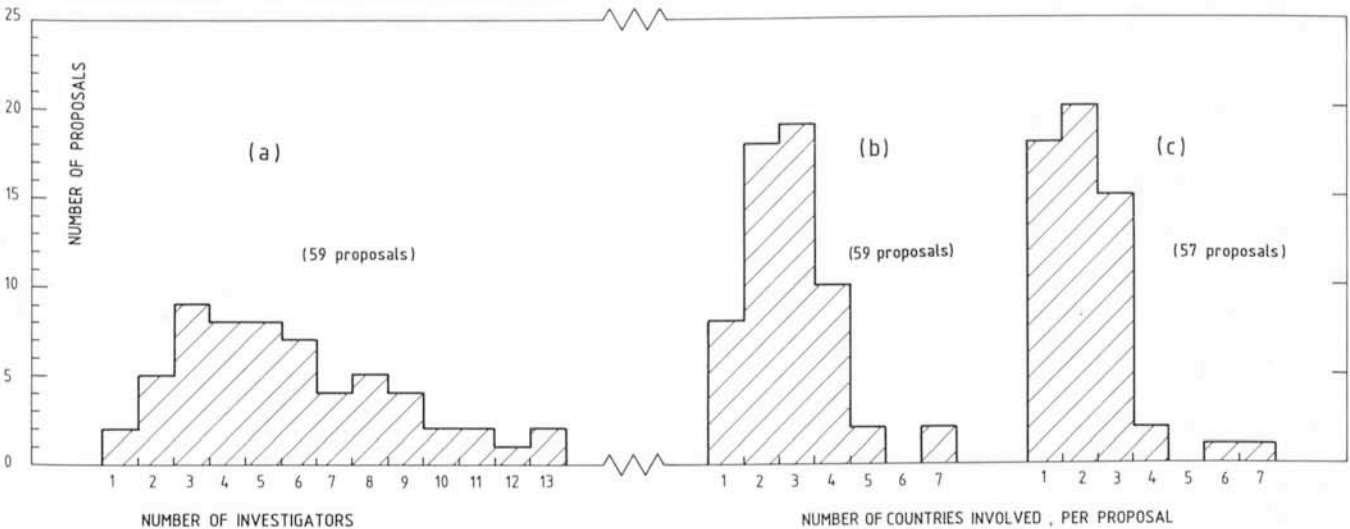


Figure 1: Histograms showing the distribution of the proposals, (a) as a function of the number of investigators involved; (b) as a function of the number of institutional nationalities per proposal when ESO and ESA institutes are included, (c) when ESO and ESA institutes are excluded. The programme related to HST follow-up, which involves 32 investigators from 19 institutes, is not included.

## ESO Archiving Policy

The following statement is a set of premisses and principles for a data-archiving policy which ESO will implement gradually in the next several years. It has been discussed in the Users Committee, in the Scientific-Technical Committee and in the Observing Programmes Committee. All three committees approve of this policy intent.

### Introduction

It is important to archive data obtained at ESO's La Silla Observatory. The three main reasons for maintaining an archive are:

- (a) to keep a historical record of objects. This enables the investigation of long-term changes in ob-

jects which otherwise could not be performed;

- (b) to re-use the data for other programmes or purposes. By avoiding duplication of observations the effective use of telescope time can be increased;
- (c) to enable archival research such as surveys of different types of objects. A homogeneous archive with well defined calibrations will open the possibility to study large numbers of objects for statistical purposes.

An indispensable requirement for the archive is very high quality of the data both in terms of good documentation of the individual observations and reliable calibration data. Only when this is

achieved will the archive serve its purpose to fully utilize data acquired at ESO.

The archive consists of two main parts, namely

- the *data archive* which contains the actual data
- and
- the *catalogue of observations* holding sufficient information to allow astronomers to locate data and judge their usefulness for a given programme.

### Data Archived

Spectroscopic and imaging data obtained during ESO observing time are archived. All scientific data are saved in