

Draft 20 June 2002

ALMA Proposal to CONICYT Regarding ALMA-CONICYT Scientific Agreement

Proposal: The ALMA Project seeks to establish a stable and mutually beneficial partnership with the Chilean astronomical community for ALMA. ALMA recognizes also the specific need of collaboration with the Chilean community to prepare itself for the advent of this new Observatory. To these ends, the ALMA Project proposes the following package to involve fully Chilean astronomers in the scientific life of ALMA:

1. Observing Time

Ten percent of the observing time on ALMA will be reserved for the use of Chilean Astronomy. The time assignment procedure will be proposed by the Chilean side in consultation with ALMA prior to the start of ALMA scientific operations.

2. ALMA Fund for the Development of Astronomy

ALMA will commit to making an annual contribution for the development of millimeter astronomy in Chile of an amount on a par with the amount presently contributed annually to Chile by the European Southern Observatory, approximately 350 thousand monetary units (MU¹). [See note below]. The development of astronomy in Chile will focus on scientific and technical cooperation between ALMA and Chilean institutions and scientists through its components (see also attached diagram). With participation by Chile, ALMA will provide and administer the contribution for the development of astronomy in Chile in the manner ESO presently administers its contributed astronomy development funds.

The contribution by ALMA to the funding will begin with the signature of the ALMA Agreement by Chile and the ALMA partners. The amount of the initial contribution and the growth of the contribution with time to the annual amount noted here will be agreed by Chile and the ALMA partners in a manner to be determined and will reflect the growth of the ALMA investment in Chile.

Cooperative Components of the Fund:

a) Education Program in Engineering

In collaboration with Chilean universities, ALMA will establish a cooperative education program in engineering. The emphasis of this program will be on those fields of electrical, mechanical, and software engineering for which ALMA staff abroad may serve as suitable tutors. The scale of the program (number of students involved) and the duration of a given student's participation is to be determined.

¹ A "Monetary Unit" is defined here as: 1.0 MU = 0.5 U.S. dollar + 0.5 euro.

b) Education Program in Millimeter Astronomy

In collaboration with Chilean universities, ALMA will establish a cooperative education program in millimeter wave astronomy. The emphasis of this program will be in the preparation of Chilean professional astronomers and graduate students in the field of millimeter astronomy by providing access to research groups in this field in the many institutions abroad associated to ALMA.

3. Participation on the ALMA Committees

- a) **ALMA Board:** One member to vote on all matters except those involving budgetary obligations of the partners or relations of ALMA with the Republic of Chile.
- b) **ASAC:** One member; in addition, the Chilean project scientist will participate in the ASAC on the same basis as the North American and European project scientists participate.
- c) **AMAC:** One observer

4. ALMA Presence in Chile

ALMA will require the presence of a scientific staff in Santiago to carry out operational functions in cooperation with the staff at the Operations Support Facility (OSF) near San Pedro de Atacama and to conduct their individual research programs. The manner in which the operational tasks will be divided between the OSF and Santiago is still to be determined. However, ALMA will provide Chilean astronomers locally with full access to the ALMA research facilities in Santiago and to the core functions of the regional support centers.

*Note: Assuming a total annual support of 500k M.U. including rent of the land and assistance to Region II.