

Schedule for Acquisition of the Land Required for ALMA in Region II

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Approvals: None

Purpose: Information to the ALMA Executives

INTRODUCTION

This document is intended to provide information to the ALMA Executives for purposes of planning actions that may be required of the Executives on a timely basis during the process of acquiring the land needed for ALMA. This schedule is driven by the requirement to have access to the ALMA by 1 April 2003.

Only certain tasks in this schedule are under the control of the ALMA Project. Many key tasks depend on the Chilean government. The dates for completion of those tasks are estimates. Experience has shown that our ability to make accurate estimates of completion dates for Chilean Government tasks is very poor. Slow progress and surprise requirements have proven to be the rule. Nevertheless, sufficient progress has been made to make us cautiously optimistic of achieving the 1 April 2003 deadline.

In stating this optimism, we are making a major assumption, namely, that the agreement signed between ESO and the Ministry of Foreign Affairs granting ESO the right to open a new observing center will *not* require the approval of Parliament. If the approval of Parliament is required, we will surely fail to meet the 1 April 2003 deadline, as ESO may not be able to sign one or more of the concession contract, the memoranda of understanding with CONICYT and Region II, or contribute their share to the purchase of the land for the Operation Support Facility (OSF).

It is important to clarify for both North America and Europe which approvals will be necessary and how long those approvals will take to obtain. In addition, it would be helpful to establish which if any of the documents requiring Executive signature could be signed by ESO in advance of Parliamentary approval (see questions with task descriptions below).

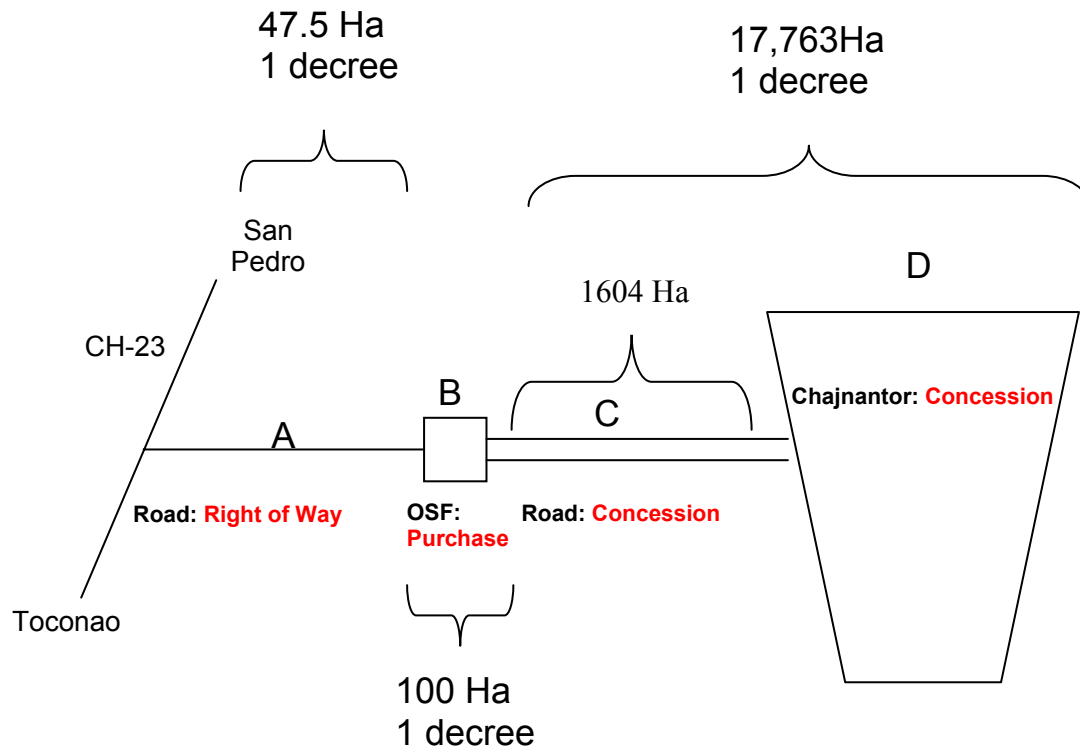
ELEMENTS OF THE LAND NEEDED FOR THE SITE

The land required for ALMA, ignoring land for offices in Santiago for the time being, consists of three elements: the high site ("D" in the figure below) where the Array will be constructed together with land ("C") for an access road to the OSF, the land ("B") for the OSF, and a right of way (ROW) for an access road ("A") from the OSF to Highway 23.

The prices shown below the figure are the prices fixed by the Acquisition Committee of Bienes Nacionales (BN), perhaps more accurately described as the prices these parcels of land would carry were the Government of Chile to sell it at commercial value.

The ROW would cost ALMA 90% of this price in a one-time payment of 78,799 US\$ were the ROW to be granted today. (The fixed amount is given in UF for all three elements.) The OSF land would cost ALMA 239,200 US\$ in a one-time payment were it to be purchased today. The rent for the site and high access road land is fixed by law at 2% of the "price," which comes to 111,000 US\$ per year, were the concession contract to be signed today. These figures are unofficial until confirmed in a letter of offer from the Minister of Bienes Nacionales.

ALMA land sections



Land Prices

Section	UF/Ha	USD/Ha (now)	Total USD (now)
A	80 ^a	1840	78,700
B	104	2392	239,200
C+D	~13.6 ^b	313	5,560,000 ^{b,c}

^a "Right of way" value is 90% of this. Paid once.

^b Assumes price for D is valid for C as well. C might be higher. To be set by the BN Acquisition Committee on 20 Feb 2003. Paid once.

^c Rent is 2% of commercial value = 111,000 US\$. Paid annually.

DESCRIPTION OF TASKS

1/ Verify that the documentation at BN (Santiago) is accurate and complete, that BN intends to ship this documentation to BN (Antofagasta) by 7 Feb 2003, and confirm that shipment was made. (E. Hardy)

2/ Verify by 14 Feb 2003 that the Acquisition Committee of BN in Region II will meet on 20 Feb 2003 with ALMA on the agenda. Verify that all documents were received by BN (Antofagasta). (E. Hardy)

3/ Verify on 21 Feb 2003 that the results of the Acquisition Committee have been sent to BN (Santiago). (E. Hardy)

4/ Push for the issuance of the letter of offer from the Minister of BN by 28 Feb 2003. (E. Hardy)

5/ ESO and AUI should agree on the By-Laws for the corporation to hold the land concession for ALMA, "Chajnantor Radioastronomia" (CR), by 28 Feb 2003, so that the corporation can be formed promptly when required. (Executives)

6/ Language in the contract between BN and CR should be drafted and approved by parties involved by 28 Feb 2003. (Executives and BN)

NSF must approve this contract and has seen draft language already.

7/ E. Hardy and D. Hofstadt sign a letter accepting the letter of offer for the land, all three elements, from the Minister of BN. This assumes the letter will be received by the end of February. Deadline for responding has been set for 7 March 2003.

Is this enough time? Can Daniel sign a suitable letter prior to Parliamentary approval, if that is required? Other ESO approvals? NSF does not need to approve this provided the language does not imply a binding acceptance. Does BN require binding language? A suitable letter should be drafted as soon as possible. AUI must review.

8/ Sign MOUs with CONICYT and Region II. Same deadline as sending response to letter of offer from Minister of BN. (Executives)

Can ESO sign these MOUs prior to Parliamentary approval, if that is required? Sign contingent on Parliamentary approval? Will other ESO approvals be necessary? What approvals will AUI require? NSF must approve these and has seen early drafts. How much time will be required? Only one week is allocated.

9/ Deposit letters of credit with BN within one week of responding to letter of offer. Could be done simultaneously with response to offer. (Executives)

Week allocated in the schedule is merely the time span when deposit should occur. Work should begin as soon as possible on the process to obtain letters of credit and any approvals that might be required.

10/ In the week following response to Minister of BN and signing of MOUs with CONICYT and Region II we push for rapid publication of the decree. The concession decree does not require signature above BN, so this should be possible. (E. Hardy)

11/ Create Chajnantor Radioastronomia by 14 March 2003, well in advance of anticipated contract signing date, should any problems arise. (Executives)

12/ Sign contract between BN and Chajnantor Radioastronomia by 24 March 2003. (Executives)

The same questions: are approvals required? which ones? how long will that take? can preparatory work be started sooner for these approvals? NSF will need to approve and has seen drafts.

13/ Sign contract between Chajnantor Radioastronomia and the Executives by 31 March 2003. This allows for no contingency. (Executives)

14/ Sign the contract between BN and the Executives granting the Right-of-Way for the access road linking the OSF to Highway 23 by 31 March 2003. Note – it is possible to do this because BN is not insisting that the Executives own the OSF before granting this right of way to the OSF land. The letter accepting BN's offer of the land together with the letters of credit are sufficient for them to sign the ROY contract. (Executives++)

All the same questions: are approvals required? which ones? how long will that take? can preparatory work be started sooner for these approvals? NSF will need to approve.

15/ By 31 March 2003 we obtain provisional permits for access to the OSF. This step is necessary, because the sale of the OSF land requires a Presidential signature on the decree, a process likely to require three months before publication of the decree. BN states that this provisional access permit is standard procedure for commercial venture like mines. (E. Hardy and D. Hofstadt)

16/ Complete purchase of the OSF land by the end of May 2003. . The completion date for this task is the earliest possible, given the length of the decree process for the sale of government land. (Executives++)

GANNT CHART

The attached Gantt chart illustrates the schedule.