EUROPEAN ORGANISATION FOR ASTRONOMICAL RESEARCH IN THE SOUTHERN HEMISPHERE

For Information

COUNCIL

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European ALMA 6 Monthly Progress Report

March 2016

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Council is requested to note this report
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1. **Summary**

This report covers the two remaining and ongoing ALMA construction activities at ESO for the period 1 October 2015 to 31 March 2016:

- The construction and outfitting of the ALMA Residence, and
- The procurement of an AOS Security Surveillance System.

2. **ALMA Programme Financial Status**

The ESO ALMA Construction financial data, Table 1, remain unchanged since the report of March 2015.

<table>
<thead>
<tr>
<th>ALMA Cost</th>
<th>baseline as of Sept 2006 [k€]</th>
<th>CtC as of Sept 2014 [k€]</th>
<th>CtC as of Mar 2015 [k€]</th>
<th>change to CtC since baseline</th>
<th>change to CtC since Sept 2014</th>
<th>remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALMA Ceiling</td>
<td>498,791</td>
<td>512,145</td>
<td>523,124</td>
<td>24,333</td>
<td>10,980</td>
<td>Site works including provision</td>
</tr>
<tr>
<td>FTE</td>
<td>39,560</td>
<td>54,286</td>
<td>54,303</td>
<td>14,743</td>
<td>17</td>
<td></td>
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<tr>
<td>Contingency</td>
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<td>0</td>
<td>0</td>
<td>-42,629</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Income available as contingency</td>
<td>0</td>
<td>3,443</td>
<td>0</td>
<td>0</td>
<td>-3,443</td>
<td>added to provision for site works</td>
</tr>
<tr>
<td>ALMA Construction</td>
<td>416,602</td>
<td>457,859</td>
<td>468,822</td>
<td>52,219</td>
<td>10,963</td>
<td></td>
</tr>
</tbody>
</table>

Table 1: ESO ALMA Cost Summary

Since the report from September 2014 the overall budget has been increased to fund and provide margin for the construction of the ALMA Residence at the OSF. This sum incorporates the previously separately reported “income available as contingency”.

No changes to the Cost to Completion (CtC) for ALMA have occurred since the ALMA 6-monthly Progress Report of March 2015 (ESO/Cou-1596, Table 2). The final Cost to Completion will be known once the ALMA Residence construction and outfitting are finished and the AOS Security Surveillance System has been procured.
3. **ALMA Residence Construction**

3.1 Procurement

The first Call for Tender for the ALMA Residence construction, issued in 2013, did not result in an acceptable offer, despite lengthy negotiations with a possible contractor. The second Call for Tender, issued in 2014, limited to Chilean bidders and based on revised documentation adapted to the local market and language, resulted in seven bids being received by end of August 2014. The evaluation was completed in time and the proposal for contract award was approved by ESO Finance Committee in November 2014. The contract was signed in December 2014 and construction started on site in February 2015.

3.2 Construction progress

The construction work progressed well during the reporting period. All buildings have been erected, the cranes removed from the site, and exterior and interior work on the buildings continues. Figures 1 and 2 give an impression of the status. Overall, as of mid-March 2016, the contractor reported 70% total progress versus 77% scheduled, possibly leading to a small delay in final delivery.

The two webcams at the OSF continue to take pictures every 10 minutes from two different perspectives. The latest images are available in real time at [http://www.eso.org/public/teles-instr/alma/residencia/](http://www.eso.org/public/teles-instr/alma/residencia/).

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**Figure 1** – Overall view of the ALMA Residence construction (March 2016).

**Figure 2** – Dormitory buildings.
3.3 Residence outfitting

In relation with the ALMA Residence construction, there are two tasks funded by the ESO-ALMA construction budget which are managed by JAO (as was done for the SCO). This concerns the outfitting of the Residence with kitchen, furniture etc. and the outfitting with IT infrastructure and telephones. The latter was a shared budget between NA and EU, as for the SCO. Due to constraints on the NA construction project, which did not allow new commitments beyond 30 September 2014, the NA funds (equal to 50% of the shared budget) have been transferred to ESO and thus kept available for the project.

Procurement activities for the outfitting have started during the reporting period.

4. AOS Security Surveillance System

Another remaining construction task is the procurement of an AOS Security Surveillance System. The ESO-ALMA construction budget holds funds for such a system. JAO has started to collect requirements and investigate concepts. Procurement by ESO will be initiated once the overall concept and requirements have been defined by JAO. It is expected to have the final requirements for the procurement by June 2016.