ALMA JAPAN NEGOTIATING TEAM

Notes of Videoconference at 9.00 on 25 February 2003

1. Participants:

At NSF: Dickman, Cesarsky, van der Kruit, Giacconi, Vanden Bout, Ishiguro, Hasegawa, Corbett.

At Mitaka: Kodaira, Kaifu, Miyama, Kawabe, Iguchi.

2. A revised **Agenda** was agreed upon, as follows: Report on Bilateral Project, Reaction of ALMA Board to NAOJ proposal, Japanese response, Actions to follow.

3. Progress with Bilateral project

The Bilateral Agreement is signed, scope and schedule of project is agreed. Funding for 2003 is in place and long term prospects looks good. Massimo Tarenghi has been offered appointment as Director.

4. ALMA Board's reaction to NAOJ Proposal

- It would probably be premature to open formal negotiations at this time;
- A meeting in Tokyo seems inadvisable in the short term, since lack of good progress could jeopardize Japanese funding prospects;
- More work is necessary if we are to achieve convergence.

The main areas of concern are:

- (i) Cost vs. "Delivered Value": before we can negotiate on observing time we need to agree on the value to the ALMA project of the hardware and contributions delivered by Japan.
- (ii) **Schedule:** the NAOJ proposal is success-oriented and will have a serious impact on the ALMA Bilateral project baseline schedule. Although this specific schedule may not be realizable, the Board believes that any reasonable schedule will have a cost impact for the baseline project, and that this must be factored into the net delivered value of Japan's contributions.
- (iii) Second Generation Correlator (2GC): There is widespread concern on the Board that the instrument proposed is not appropriate to the baseline project at this time. ALMA is looking into its needs for a 2GC, but this work is not yet finished; however, the proposed NAOJ correlator seems too early and appears to be over-capable for the current project. More work is required to define its role in ALMA. If acceptable to ALMA, it could only be at the lowest priority.
- **(iv) Operations:** the impact has not yet been addressed in detail, but the partnership with ALMA-J would clearly have an impact on costs. Since

- operations will be at least in part cash-funded this also raises the necessity of defining a mechanism for cash transfers.
- (v) Administrative structure: the fully integrated structure project proposed by NAOJ does not appear appropriate for Japan's proposed level of involvement and net delivered value. It would also carry with it additional costs to the baseline project, which would end up detracting further from the value NAOJ could deliver to the project. Japan is expected to join ALMA under Article 11 of the Agreement, but to start work on an ALMA-NAOJ Agreement at this stage would be premature.

Preparatory work would help in achieving agreement between ALMA and NAOJ, and the Board could give NAOJ a written summary of its impressions if that would be helpful.

There meeting to prepare for actual negotiations might help advance the process ahead. The meeting should take place in a "neutral" venue, *i.e.*, not Tokyo, Washington or Garching.

There was a break of about 15 minutes to allow the NAOJ people to discuss the Board's reaction amongst themselves.

5. NAOJ response

NAOJ agree to a preparatory meeting as soon as possible, and indicated a willingness to go anywhere. The meeting should take place as soon a possible.

Comment on specific areas of concern:

- (i) **Cost:** NAOJ recognizes that the numbers quoted in the proposal are higher than 'value' as recognized by ALMA, but this was a first attempt at setting out figures. The numbers are negotiable.
- (ii) **Schedule:** is open to adjustment, and interfaces and interactions between NAOJ and ALMA can be negotiated.
- (iii) The **2GC** is a "very difficult" issue. The 2GC is not new it is the same instrument proposed at, for example, Garching in September. The proposal has been seen by MEXT and has been given strong support. It is recognized that its 'value' may be less than in the proposal, but the need for a 2GC is a scientific decision which needs more work and discussion.
- (iv) **Operations** are still to be discussed and examined. NAOJ is fully prepared to pay for its share and this needs examination and negotiation.
- (v) The **structure** shown on p. 14 of the NAOJ proposal is just one idea and is recognized as preliminary and "too formal". NAOJ is ready and willing to discuss and negotiate.

Follow-up actions

- 1. The ALMA Board will prepare a written summary of its first impressions of the NAOJ proposals, which will be sent as soon as possible.
- 2. The ALMA Board will ask JAO to help in evaluating delivered values, as well as schedule and consequent cost impacts.
- 3. A preparatory negotiating meeting will be arranged, and May 8th was suggested as a possible date. It is recognized by ALMA that NAOJ cannot absorb much delay and teleconferences will be organized to speed things up.
- 4. The ALMA Board at its meeting on 26-27 May will review the situation and agree on the date of a formal negotiation meeting in Japan, and the mandate of the Negotiating Team.