

ASAC January 4, 2005

Participants: Wootten, Beasley, Richer, van Dishoeck, Turner, Mundy, Testi, Emerson, Laing, Tarengi, Carrilli, Cox, Mardones, Balthazar Vila, Yamamoto

Excused: Schilke

#### Calendar

Meetings in AAS/Socorro system engineering group discussing plans for assembling/integration/science verification

The ASAC F2F will be held in Garching on Feb 24-25

Poster for the AAS: Quoted sensitivity on the poster are different from the web simulator.

We need a uniform set of numbers. Wootten explained the difficulties in knowing exactly the assumptions and algorithms used in the webpages calculator. It is agreed that we need a single source for quoting "official" sensitivities for ALMA. The webpages had been used for the DRSP because it was the only easily accessible tool provided by the project. It is proposed to check the code, possibly update it, and then provide a single public calculator that everybody will use.

#### Proj Updt

(Beasley)

Little happening since last meeting. Rebaselining on-going. Still work on hidden scope, information from all IPTs will be sent to the JAO in a 2-weeks time. There will be a good overview of hidden scopes and possible rebaselining paths by the beginning of February.

All information should be available for the ASAC meeting at the end of February, at least some basic general ideas on the possible options. ASAC will play a role in weighting the various options. This is a JAO positions (however, nobody seems to object). There is some overhead in producing an info package, JAO will try to produce it in time to be read before the meeting.

Site development ongoing (road). OSF building construction will start in Sept (tender in Feb). The project is still waiting for NSF approval of the AOS building. Probably we have lost 1 year on the AOS building schedule. This may be mitigated if we manage to build foundations and some limited structure by the end of the next austral summer.

Antennas: continuing prototype evaluation. There is no requirement that the prototypes meet the specs, only the final antennas have to. Some bids clearly show that the antennas will meet the specs, some other bids is unclear (that is why some more testing is required before the antenna contract is signed). Timescales have inflated, it is difficult to predict scenario, options are up to 1yr delay, the goal, however, is to place the contract in 4-6 months from now. The tests on the prototypes are scheduled to be completed by the end of February, however we do expect the first important answers by the end of January.

Frontend: frontend integration centers are a good item to scrutinize for possible rebaselining options. The goal is to try to optimize the planning in the most cost-effective way. ALMA-J contribution may be integrated in the baseline integration centers with possible considerable savings, however, this option has to be studied and evaluated in detail to assess feasibility and effective savings for the project. This is mostly an Executives rather than a Project problem.

Frontend/Site/Computing: an example of a hidden scope that was discovered recently is the handling of the fibers connection. This is now under detailed scrutiny and will be taken into account properly. A single trench will have to host all the connections (power, communication...) from OSF

to the site, this poses some problems (e.g. heating) that will have to be evaluated and solved with a multi-IPT approach.

Correlator is moving along, 1<sup>st</sup> quadrant is going on ok

Computing ok, but will be looked at in detail in a few months (to check the schedule of computing vs project), it may be affected by the rebaselining.

Sys Eng: Checking plans roles and responsibilities in a meeting just after the AAS

Board Communication: The new Board chair (Dickman) informed that there are no charges yet. The ASAC discussed whether the face to face meeting should still be at the end of February, we will have very little time to work on the charges. If the meeting will be postponed (note that it is already at the end of the period indicated by the Board) there will be very little time between the ASAC and Board meetings. It is agreed to ask the Board for clarification. The ASAC agreed that every opportunity should be taken to provide input to the Board/Project during the delicate process of rebaselining; nevertheless, it is clear there is no intention in the Board to proceed without evaluating all possible input (including the ASAC).

Sci IPT report

New EPR material available. Newsletter available. Project Scientist job is still top priority.

Assembly/Commissioning/SV plan is the big activity now, a meeting with the project Engineer is scheduled next week after the AAS (see above). Finding a 10% cut in the sci IPT for rebaselining is very difficult. One possibility is to stop the site testing activity. However, discontinuing it will produce a gap in the site testing data, so the Sci IPT would like to continue this effort.

Configurations/CalibrationPlan has not been scrutinized in detail yet; there will be a meeting with Tom Wilson and Dave Silva in Socorro next week.

“External Activity”, SAC reports

Turner reported on the possible coordination with JWST for a JointDiscussion at the IAU in Prague. Turns out that we were beyond the deadline, however the future large projects WG is very interested and it is possible to have this JD, expanded to more facilities. All future facilities will be discussed (i.e. this will include most probably OWL, SKA, ...), there will however be a focus on “almost” completed projects (ALMA, JWST, Herschel); for each of these projects it is proposed to have one scientific and one technical talk. It is suggested that at least one of the ASAC members should be part of the JD organizing committee. We are at a very early stage, however. More info will probably be available by next telecon.

Pan ALMA Science meeting.

Originally planned for Spring 2006. Carrilli agreed to lead the ASAC subcommittee. Chairman should be EU. Leonardo/Pierre volunteered to be on the ASAC subcommittee. It would be good to have Bachiller as Chairman, and certainly involve him in the discussions on the organization. It may be a good idea to delay the meeting a little bit given the Project delay. It is proposed to postpone it to the Fall of 2006. We need to avoid superposition with the IAU (second half of August 2006) and with the 50<sup>th</sup> anniversary of NRAO celebration meeting.

ESAC news: none since last telecon.

ANASAC news: not much. Sent a letter to Fred Lo trying to support NSF funding for ALMA observing (for US observers).

Japan: Meeting on Dec 11. Discussed ASAC issues, next meeting Jan 12. Development for antenna bids, technical evaluation in progress.

Next Telecon:

Board telecom Jan 27. More info from Jean on the F2F before next telecon.

Confirmed for Feb 1 usual time (15:30 UT)