ASAC Charge

The ASAC is requested to consider the following topics, and make appropriate recommendations to the Board:

1. Critically evaluate the specifications for total power and phase stability for ALMA and assess the implications for ALMA science goals. (Explanation to the Board: this has been modified from the original to reflect the changes noted in the Q4 Quarterly Report)

2. The ALMA Calibration Plan, including:
   a. the science loss as a function of the relative and absolute amplitude calibration accuracy of ALMA; and
   b. astronomical source calibration activities that should be started before or during early science operations, whether on other facilities or (when available) ALMA.

3. Comment upon the modes being proposed for Early Science Operations in comparison to contemporary ground and space facilities planned for those years. (Explanation to the Board: the Project is now addressing the need for, and possible content of, an Early Science DSRP, which in turn will depend upon the phasing of Early Science modes of operation. ASAC advice on those modes would materially assist the ES-DSRP effort.)

4. The ALMA Operations Plan (if it becomes available in sufficient time), commenting particularly on issues that impact the Early Science.

5. Review the prioritization of the Science Software Requirements in response to the PDR committee's recommendation to:
   a. prioritize the requirements in light of schedule and cost drivers, and
   b. science priorities, and the importance of achieving early-science operations.

   This should be done in the context of the science operations plan, not independent of it.