

**Notes from
Dark Energy Survey (DES) DECam Project
Working Group Meeting (WGM)
Friday, Aug 17, 2007
10:00 – 12:00 Noon in the Snake Pit**

Attendees: Ed Temple, Wyatt Merritt, Jim Strait, Byron Clark, Greg Bock, Hugh Montgomery, Douglas Tucker, Jeff Appel, Scott Dodelson, Paul Philp, Brenna Flaughner, John Peoples, Dean Hoffer

- 1) HQ Interactions: Feedback on Discussions with Headquarters [Kathy Turner /Hugh Montgomery/John Peoples/Brenna Flaughner]

Details can be found in John's handout, which is available at http://www.fnal.gov/directorate/OPMO/Projects/DES/WGM/2007/08_17/ReporttotheDES-WGmeetingof17Aug07v3.pdf.

The status of the DES proposal to DOE and NSF has changed from "Under Consideration" to "Recommended" as of August 2, which means that the NSF-AST has recommended to the NSF Contracts and Grants Division that the DES DM part of the proposal should be funded. The change of status occurred the day after Wayne Van Citters and Robin Staffin talked on the phone. The proposal provides NCSA-UIUC with approximately \$650K for the 15-month period from August 1, 2007 to October 30, 2008.

- 2) Report on August 10 meeting at NSF [John Peoples]

Details can be found in John's handout, which is available at http://www.fnal.gov/directorate/OPMO/Projects/DES/WGM/2007/08_17/ReporttotheDES-WGmeetingof17Aug07v3.pdf.

The purposes of the August 10 super-JOG meeting were the following"

1. *To present the DES-FNAL-NCSA-NOAO MOU to DOE and NSF,*
2. *To give the 3 Directors the opportunity to comment on DES and the MOU,*
3. *To present the DES Plan for Data Management (DES DM) and to describe the DES plan to use the 15 months of funding directly to some of the key leadership of the NSF-AST and DOE-HEP,*
4. *To demonstrate that science working groups have been organized and that they are working on defining the requirements for the interfaces between the science software that each working group must produce and the DES DM system software, and*
5. *To highlight recent progress on DECam.*

There was very good turnout. John, Mont, and Paul all reported that the August 10 meeting went well.

John reported that, at the August 10 super-JOG meeting, the 3 Directors stated that the MOU is pointed in the right direction but it needed more work before it could be signed. On Friday afternoon, after the super-JOG meeting, John Peoples, Joe Mohr, Cristina Beldica, Chris Smith, and Todd Boroson met at URA HQ, at which time they agreed that the DES DM team had two deliverables that needed to be clearly described in the MOU: the DES DM system and the Community Needs Pipeline.

At the August 10 super-JOG meeting, Mont suggested that there be a section in the MOU that defined a Resource Board that would act as a point of contact between the DES institutions and the funding agencies.

ACTION ITEM [Mont] Draft a paragraph for the MOU regarding the Resource Board.

Mont also stated that the MOU should incorporate some language describing a mechanism in which DES could request additional observing time if it appears that circumstances would prevent DES from attaining its goals within the allotted time of the Observing Plan. John noted that there is plenty of contingency in the Observing Plan (only about 250 of the 525 allotted nights need be photometric), but perhaps there could be a re-assessment of halfway through the survey.

ACTION ITEM [John] Prepare next version of MOU for distribution (proposed deadline: August 24).

During the discussion of this Agenda Item, John reported that, at the August 14 DES Management Council telecon, there was a discussion of how to help universities to get funding for DES. Jon Thaler noted that LSST is having the same problem, and that LSST has organized a big tour of DOE and NSF-Physics. They plan to argue at this meeting that LSST will make notable contributions to particle physics.

3) DES/DECam Status Update [15 m; Brenna Flaughner]

Details can be found in Brenna's handout, which is available at http://www.fnal.gov/directorate/OPMO/Projects/DES/WGM/2007/08_17/PMG-Aug1707.pdf.

Highlights include:

- *It appears that MIE funds might be used on a limited basis for final design activities between CD-1 and CD-2 approvals. This provides some flexibility in the DECam budget that could prove useful. This will likely be most useful in the Spring of FY08, when DECam is running out of R&D funds and is waiting for CD3a approval. The point here is not to supplement R&D funds; rather this could be the key to starting that MIE work which is indeed final design. This is important because it provides the ability to move forward with the MIE work based only on CD1 approval (if necessary).*
- *There is a Cooling Review planned for mid- or late-September.*
- *Brenna, John, and Darren are going to CTIO August 19-24 to work on DECam integration issues and preparations for the CD2 review.*

- *There will be a Front End Electronics workshop September 17-19.*
- *Current CD2 Review Plans are the following:*
 - *DECam Cost and Schedule Review October 30-31*
 - *CD2/3a Directors' Review week of December 11-13*
 - *Joint NSF/DOE CD2/3a Review January 29-31.*
 - *Approval expected by April 1, 2008?*
 - *Joint NSF/DOE CD3b Review June(?) 2008. This would focus on the rest of the DECam project and integration with DM and CFIP.*
 - *Goal is full CD3 approval by end of FY08.*

4) Plans and Activities for Supporting a DECam CD-2 Review [Wyatt Merritt / Brenna Flaughter]

Details can be found in Wyatt's handout, which is available at http://www.fnal.gov/directorate/OPMO/Projects/DES/WGM/2007/08_17/DECamCD2Preparations-081707_v2.pdf.

a) Status/Plans/Schedule for Preparing the Technical Design Report

There have been updates to Part I and text for Part II, WBS 1.6. Work on Sections I and III are on schedule; the work on Section II (which is the responsibility of the L2 managers) is slightly behind schedule.

b) Status/Plans/Progress Update on DECam CD-2 Documentation, MOUs

Version 1.0 of the Preliminary Safety Assessment Document (PSAD) has been created. A zeroth draft of the University of Michigan MOU is now complete. The first draft of the UIUC MOU has gone to the Directorate for comment.

5) CD-2 Requirements [Ed Temple]

See slide 3 of Ed and Dean's handout, which is available at http://www.fnal.gov/directorate/OPMO/Projects/DES/WGM/2007/08_17/OPMO_Slides_for_DES_WGM_17-Aug-07.pdf.

Ed discussed CD-2 Requirements with Steve Tkaczyk, who suggests that DES DECam pay attention to the 16 Lines of Inquiry (LOIs) for an DOE External Independent Review as described in Order 413.3 (see, e.g., Chapter 1 of the document, "Assessment of the Results of External Independent Reviews for U.S. Department of Energy Projects," available at http://management.energy.gov/DOE_EIR_Reviews_Assessment_Report.pdf). Ed quickly stepped through these 16 LOIs. The DECam Project is in pretty good shape with regards to most of these LOIs.

- 6) Discussion on proposed Director's Cost and Schedule Review of DES DECam on Oct. 30-31. [Ed Temple / All]

Current plans are to respond to the CD-1 review comments in the morning and to have a drill down of the cost and schedule in the afternoon of the first day (October 30), and to have the closeout on the afternoon of the second day (October 31). Ed indicated that the TDR is a pre-requisite for this review. Brenna stated that the TDR is scheduled to be ready before October 30, although there may still be stubs included for items that are not quite complete.

- 7) Review Timeline [Dean Hoffer]

See "Current CD2 Review Plans" under Agenda Item 3 above.

- *Director's Cost & Schedule CD-2/3a Review of DECam (Oct 30-31, 2007)*
 - *Has a partial list of reviewers*
 - *Needs charge*
- *Director's Performance Management System Review (EVMS) (Nov 2007)*
 - *Concentrates on structure of EV*

ACTION ITEM [Ed/Dean] -- Talk with Brenna about what NOvA did for their EVMS review.

- 8) Next Meeting; Sept. 7 [Dean Hoffer]

September 7 was confirmed as the date of the next meeting.

Action Items

New

- 1) Send comments on current draft of the MOU to John Peoples [Hugh Montgomery]

Done.

Rollover

- 2) Continue consulting with Kathy and Nigel to identify all documents that will be needed from the non-DECam components of DES (i.e., DES DM and CFIP) for the joint CD2 review. [Peoples]

In progress.

- 3) Meet to discuss / understand the separate need for obligation profile and cost profile information [Flaugher/Sarlina/Knapp/Hoffer]

In progress. Brenna has met with TJ and Dale, but they have not met with Dean yet.