

Follow-Up on ECal Review

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ECal Review

- **We had a full ECal Meeting dedicated to the response on the review comments and recommendations**
- **Some of the most critical recommendations were addressed even before the report was final**

- **Comments**

- 1. We did not plan to make any cross talk simulation for the mother boards. However, the experience with the test run ECal and the CLAS12 FT calorimeter gives no reason for such work.
- 2. The mechanical constraints for both APDs and the LED system have been checked *in situ* during the dismantling of the ECal in November. We took pictures of the critical points and have now all the information to finalize the design.
- 3. Similarly to 2. *in situ* test have been performed and the position of the APD is now confirmed
- 4. The groups working on the cosmic trigger and apparatus are ODU and Jlab. Full design will be developed based on MC simulation to be performed in the near future.
- 5. The specific design characteristics of the various subsystem are clearly defined. In particular documentation for the LED subsystem are similar to the one in the CLAS12 FT documentation

- **Comments**

- 1. The LMS has indeed many interfaces, they are already identified. A. Celentano, who wrote the firmware, is the contact person with the JLab experts for these interfaces.
- 2. Monitoring through slow controls are mostly defined. This task is still on going.

- **Recommendation**

- We have now a specific coordinator for the software and have defined a specific schedule. The connection with DAQ is planned, but manpower won't be available before next year for this task.

- **Comments**

- 1. The staged delivery possibility has been discussed with success with Hamamatsu. 300 APDs will be delivered after 2.5 months (end of Feb.) the rest after 4 months (early April). More detailed installation program will be worked out after order are passed.
- 2. Manpower issues are worked out by institutes independently. No major constraint appears in early 2014 when most of the work will be carried on.

- **Comments**

- 1. It appears to be too early to have detailed plans for the off-beam calibration and commissioning.
- 2. No clear interest for a secondary target has been identified yet. More simulation is planned in order to evaluate precisely the use we could make of such a target.
- 3. People involved on the various subsystem are expected to be the ones doing the calibration based on those subsystems (LED and cosmics system in particular)

- **Recommendations**

- 1. See comment 2
- 2. See comment 3

- **Comments**

- 1. Measurement of the light yield has been confirmed with new measurements from A. Celentano (Talk during HPS weekly couple of weeks ago). More measurements are planned with new crystals sent from JLab.
- 2. Changing the gain of the pre-amplifiers seem to be lot of trouble for very limited gain. This option has been therefore discarded.
- 3. More radiation tests are planned to test the LED resistance.

- **Recommendation**

- See comment 1.

- **Comments**
 - The most important spending is based on a firm quote. Necessity for contingency funds is therefore reduced.
- **Recommendation**
 - The ECal Coordinating group has been created with the goal to track the schedule and spending of the project.

- **Comment**
 - We feel that numerous quality checks are already proposed at various level in the schedule. It is unclear what should be added.

- **Comments**

- 1. We do plan to continue to use the coordinating committee active.
- 2. It is indeed always possible to have some part of the project moved from one institute to the other in case of needs.

- **Recommendation**

- The members of the ECal coordinating group are the regional coordinator.