

The Panda TS Solenoid

The route toward the procurement

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INFN

Were we are?

Coil design

- The Coil design is frozen since the magnet TDR Presentation on January 2009.
- Magnet TDR was approved as it is by the FAIR STI on May 2009, based on the report of the 4 referees:
 - Antoine Dael (Atlas CEA)
 - Walter Scandale (Magnet Group CERN)
 - Blazej Skoczen (TU Krakow)
 - Tom Taylor (Atlas-CERN)

Were we are?

Tender technical specs

- the technical specification for the solenoid tender (COIL+Cryostat) are included in the DRAFT of Interface Document prepared by the Magnet Group (Inti Leheman Chair) and updated till August 2011.
- The Specs are based on the Outline of the INFN tender for the BABAR solenoid.
- The only missing part is the part covering the administrative-legal Issues (the tough one)

Were we are?

Cryogenics

- September 2009 the Refrigeration needed for the operation of the panda TS is Agreed at the Juelich meeting, and the Juelich team started the discussion with LINDE.
- On this basis the preliminary footprint of the refrigeration system and the electrical and thermal requirements are set to define the loads for the PANDA_Hall

Were we are? S/C Cable

- October 2009 only one supplier for the aluminum stabilized cable is left
- FURUKAWA from Japan
- Luvata and Bruker answered back negatively to our inquiry for the production of the cable needed for the Solenoid winding (8000 meters)
- At the time no further action was taken
- INFN ,at the time, just had stepped back from the proposal to support the PANDA-Italy community with the “In Kind” contribution of the Solenoid.

Were we are? S/C Cable

- Furukawa is still interested in producing the cable.
- A pilot run for a cable section is under discussion
- Furukawa on this basis is able to offer a cable, meeting the Panda Specs, at ~ 100 Euro/meter.
- Also Hitachi (still Japan) appears to be a possible cable producer.

Time line for the solenoid construction

- the time needed for the solenoid construction is, in my opinion, ~ 3 years from the moment the Construction is Funded
- We estimate ~ 1 year for all the administrative procedure of the tendering and 2 full years for construction, commissioning, and tests.
- My outlook is based on the previous INFN experience on the procurements of the BABAR and FINUDA Coils