SPES - Specific Services for CMS

Minutes of the meeting n° 24 held on 13/02/2002

Presents	:	A.Herve, R.Schmidt / EP-CMO G.Faber, P.Ingenito / EP-HC S. Bally, A.Gaddi, L.Isaksen, C. Schaefer, W.Van Doninck / EP-CMI O.Teller / EP-CMA P.Baillon / EP-DEE JF.Michaud / EST-ME R. Pintus / EP-TA3 N.Bangert, M.Jeske, R.Principe, I.Wichrowska-Polok / ST-CV J.Greenhalgh, T.Lodge / RAL

1. Status on EB/EE Piping Layout (S.Bally)

Stephane has shown the hydraulic layouts of power and regulating circuits proposed by Arnauld Hormiere. He has asked a question who will continue ECAL cooling project. It has not been decided yet. The layouts from USC to UX , from cooling rack to detector and inside detector for power and regulating circuits have been shown (see annexe 1) Each cooling station will supply 50% of the detector (18 SM and 2 Dees). There will be no manifolding for EB. The services scheme in inner coil and cross section of cables and pipes in 53^{o} crack were presented (page 7,8 and 9 in annexe1). On the page 7 we can see: Ecal cooling in blue colour, trigger in pink, LVC in green and tracker in black.

In the part concerning EE, the hydraulic layout (proposed by Daniel Gasser) and layout inside Dee (A. Surcov) have been shown (page 10 and 11). Finally, Stephane has presented the tables with pipe characteristics for both circuits in EB and EE (page 12 and 13).

2. Evolution of EE Services Space Needs (J.Greenhalgh)

Justin has presented the graph showing the services cross sections in one Dee for different values of heat dissipation. It has been discussed how to reduce the space taken by services (see annexe 2) Justin has proposed to place the heater close to detector. It can reduce the space taken by insulation.

Justin has asked a question concerning materials used in power circuit. Why Stainless Steel has been chosen as a pipe material for EB? Cooper is cheaper and can be also used. There is two separate power circuits for EB and EE so EE can choose any material but he would like to know the reasons of this choice.

In regulating circuit the situation is different: there is a single circuit for EB and EE. In EB there is aluminium, so in EE stainless steel has to be used.

3. Tracker Piping on the Yoke (L.Isaksen)

Lasse has made a report from the meeting concerning Tracker cooling. For this subdetector, the separate call for tender has to be prepared (different temperature conditions). The piping layout has been shown (see annexe 3). The total length of the cable trays for Tracker cooling will be about 600-800 m. The piping installation will start by the end of 2002.

4. AOB

Point 5 will be closed during vacation period (26 July - 14 August).

Next meeting: 13/03/2002
at 10:00, conference room 54/2-035

I. Wichrowska-Polok