Control signal need (timing) for HiRadMat exp.area and control room

Meeting in BA7 (876/R-020) 6\textsuperscript{th} of August 2010.

Present: Christoph Hessler, Michel Arruat, Roland Chery, Ans Pardons

Following the email exchange between Malika and Ilias (below in annex), the request of the experimental area users w.r.t. beam timing signal is the following:

- Timing signal and “fixed display” type screen available in future user’s control room at the surface (location being studied by Philippe Trilhe, but will be no more than 300m away from BA7)
- Time signal available underground in TJ7 (“preparation zone”)

The timing signal is available in 876/R-020 from rack RA 3316. As long as the distance remains below 1 km, the copper cable can be used, no need for transition to optical fiber. Two cables need to be pulled from this rack: one to the future user’s control room, one to the underground preparation area. Both cables and the underground display screen need to be available for the dry run in April 2011.

All material and work costs can be charged to the HiRadMat experimental area budget code.

A meeting will be organized by Christoph with Ilias and the control people involved on 24\textsuperscript{th} or 25\textsuperscript{th} of August to better understand the control signals needed in the preparation area (none?) and future control room (location still to be defined).

-----Message d’origine-----
De : Ilias Efthymiopoulos
Envoyé : 28 July 2010 02:52
À : Malika Meddahi
Cc : Ans Pardons; Sebastien Evrard
Objet : Re:

Malika,

As we discussed, some specifications for the "HiRadMat control room"

HiRadMat control room
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Purpose : house the experimental teams doing test work in the HiRadMat facility.
Capacity : space for about 10 people from one or two teams (two teams new/old)
Equipment :
o PCs and other from the experiment.
o Space for one-two racks for electronics.
o one beam control terminal with information on the status of beam line, configuration for the next shot etc. The HRM-CR won’t have any write/control action on the beam line. This will be done by the CCC only.
o at the HRM-CR and at the experimental area down in TJ7 the SPS timing signals will be needed to trigger and gate experimental equipment (fast cameras, vibrometers, and others)

At the BA7 surface the HRM-CR should be attached to a preparation lab where a replica of the underground experimental area is prepared. The users will setup, align and test their equipment there, test them with the electronics in the racks and verify everything works. Then the test stand(s) will be lowered to the TJ7, taken by the crane and installed in the TNC. One important issue here I discovered only yesterday!

To lower the new test setup in the TNC we would need to use the equipment lift. However once we open the door of the lift the area patrol fails! This is rather penalizing as would imply a complete search of the area or sector which may be rather difficult and costly in dose.

Many thanks Malika for following it up!

Thanks,

Ilias

On Jul 22, 2010, at 5:33 PM, Malika Meddahi wrote:

> Hi Ilias,
> 
> Can we please meet next week to discuss the need of this experimental Control Room which you are thinking about in BA7?
> There would be implications in terms of information/communication with the CCC.
> I'm unsure this is really needed to have it there in BA7 rather then allocate some space in the SPS island during the beam tests. It would ease the communication wrt beam quality, timing, interlocks...
> 
> Cheers,
> Malika