CNGS electronics test facility planning for 2010 **DRAFT**

Planning to be discussed in RadWG (RADWG 3 March 2010):

Official start	6 May 2010 (Injector schedule V1.3)
Discussed start	26 April 2010
Possible closure	31 March 2010
End of Beam	21 November 2010

			miniSUBD 2.5MHz	SUBD 31.25kHz	SUBD 1MHz	miniSUBD 1MHz
Slot #	**End in week**	Approx. date	TSG45-1	TSG45-2	TSG46-3	TSG46-4
1	23	31 May	CRYO			
2	27	28 Jun	CRYO	TE/EPC		
3	31	26 Jul	CRYO	TE/EPC		
4	36	30 Aug		TE/EPC		QPS
5	42	11 Oct				QPS
6	48	28 Nov				QPS

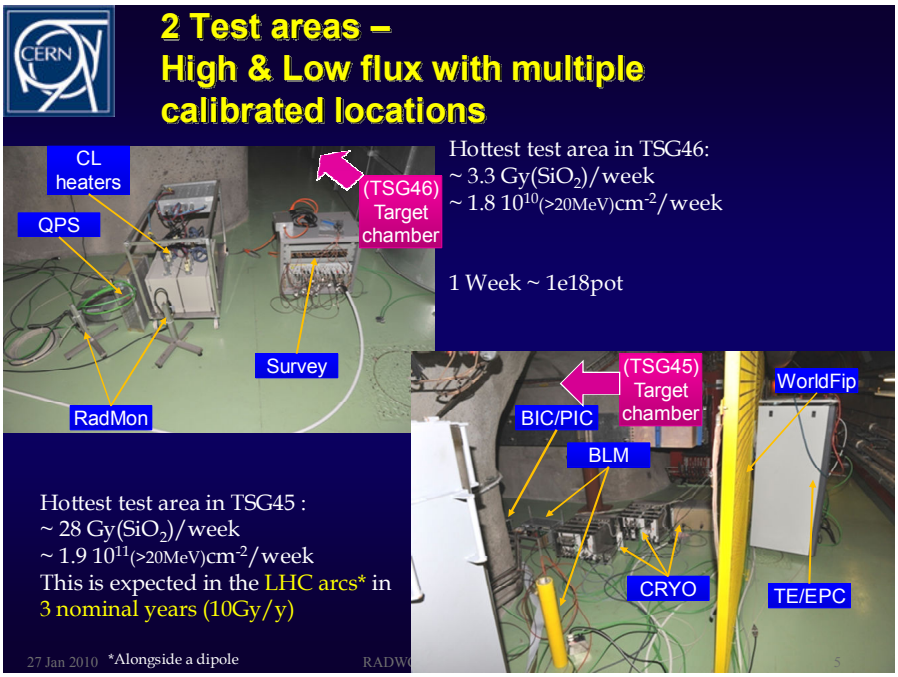
- **CRYO**
  - TSG45
  - 1MHz SUBD + 2xNE48
  - Two crates like in 2009
  - New cards ready for the April/May run
- **TE/EPC**
  - TSG45
  - NE48 only
  - The same installation size as in 2009
  - PS etc ready 2nd half of May or June
- **QPS**
  - TSG46
  - 1MHz miniSUBD
  - Later in the year (prototype boards for IP1,5)

Other systems to be tested in 2010 in CNGS

- **Fire detectors (2 modes of connection)**
  - ASD 516 – 2 DUTs
  - ASD 535 – 2 DUTs
  - Cables provided by the group
- **Collimator control rack**
  - Required cables
    - 2x Ethernet
- **Remote reset/ Timing crate with a PLC**
  - Timing crate
  - Remote reset crate
  - WorldFip needed
    - Speed ?
    - Connector ?
  - Required cables
    - 1x NE48?
    - 1x Ethernet
    - 1x VH4 timing cable + return to gateway?!!
- **Ethernet switch**
  - To be confirmed
- **WIC PLCs**
  - US85 crate
    - SIEMENS PLC 315F 2DP
    - ET 200M
    - Fast Boolean processor FM 352-5
  - Required cables
    - 1x Ethernet
- **CV PLC modules**
  - USV Simens Sitop 24VDC 10A (UPS)
  - Batterie 24VDC/7Ah (Pb!, acid)
  - Power supply 220VAC/24VDC Siemens Sitop 10A
  -
  - - Siemens S7-315-2DP CPU with (local) Profibus to connect:
  - - S7-200 with Profibus module - ET200M with
  - - 1xDI, 1xDO, 1xAI, 1xAO
  -
  - - Wago Remote IO with
  - - 1xDI, 1xDO, 1xAI, 1xAO
  - - pressure transmitter
  - - temperature transmitter
  -
  - - Power supply 220VAC/24VDC Schneider 10A ABL7
  - - Schneider CP57453 CPU with (local) FipIO bus to connect:
  - - PSY 5520 24VDC power supply
  - - 1xDI, 1xDO, 1xAI, 1xAO

Remote reset system to be chosen

- Standard LHC system
  - CB50 cables provided to the users
  - Web interface
- Private PLC like in UJ22
  - Relays on power supplies



Area in interface	Area number	Dose [Gy/pot] Updated 2010	HE Hadrons [cm^{-2}]	1MeV n eq. [cm^{-2}]	1MeV/dose [$10^9 cm^{-2}$/Gy]
BLM/WFip3/CRYO3	451	2.84e-17(Si)	1.9e-7	2.7e-7	9.5
BLM/WFip3/CRYO3	451	2.80e-17(N_2)			
TSG45 2008 wall	452	7.5e-18	5.6e-8	8.7e-8	11.6
BPM S2	454	1.24e-17	7.8e-8	1.11e-7	9.0
WFip S1,2	453	1.26e-17**	9.1e-8	1.26e-7	10
BPM S1	455	1.38e-18	7.49e-9 / 7.69e-8	1.07e-8	7.7
QPS S1	465	2.28e-19	1.43e-9	2.0e-9	
QPS S2	464	8.97e-19	7.26e-9	1.0e-8	
CRYO S1,2	463	3.27e-18	1.8e-8	2.56e-8	7.8
CRYO +2m		5.93e-18	3.3e-8	6.11e-8	10.3
TSG46 corner		9.84e-19	7.4e-9	1.04e-8	10.6
Station 1	S1	4.52e-20	2.63e-10 / 4.27e-9		
Station 4	S4	9.0e-20	3.75e-10 / 1.68e-8		
TSG46 floor -edge	461	2.4e-18	1.8e-8	2.4e-8	10.0
TSG46 wall	462	1.3e-18	9.1e-9	1.6e-8	12.3

** Dose scaled from the 1MeV eq. measurement

xx blue numbers are not measured but extrapolated

xx red values are measured with 3V (thermal fluence to be calculated)

New names to be put in the JAVA interface
Other areas will be added if necessary