# EHN1 extension coordination meeting

Minutes of the 72<sup>th</sup> meeting held on 13<sup>th</sup> July 2017

Present: J. Rodary EN-CV, P. Dewitte EN-ACE, G. Cumer EN-ACE, J. Creus TE-CRG, N. F. Resnati EP-NU, T. Octave EN-EL, S. Girod EN-EA, Q. Bouirek EN-EA, G. Gros EN-EL, L. Di Giulio EP-DI, L. Gatignon EN-EA, M.Arnaud EN-ACE, P. Sala EP-NU, D. Vaxelaire BE-ICS, P. Schwarz TE-MSC, J. Etheridge EN-ACE, M. Jeckel EN-EA.

Agenda: http://indico.cern.ch/event/651507/

- 1. Approval of minutes
- 2. Follow-ups
- 3. Safety
- 4. Cryogenics report
- 5. Progress report by EN/EL
- 6. Progress report by EN/CV
- 7. Integration
- 8. Coordination and planning
- 9. News from EP

## 1. Approval of minutes

The minutes of the last meeting were approved.

#### 2. Follow-ups

(See the list of actions on indico page.)

- Groups have to finalize/validate their EN-EL request for the next cabling campaign, no needs were identified during the meeting.
- Concerning the September cabling campaign, G. Gros said that some DIC, made since a long time should be checked and updated if necessary.
- ODH risk in the galleries, M. Jeckel can provide 3 ODH-CO2 detectors in order to access galleries. Traka box will be installed soon. The risk analisis for the galleries is still ongoing.
- The drawings of the Cryo plateforms were given to D. Parchet.
- The firefighting network is finished and commissioned.
- It was confirmed that the Jura stairs must be built.



#### 3. Safety

(See transparencies on indico)

- J. Etheridge reminded that the situation in the pits during the last week was unacceptable because of the lake of housekeeping/tidying. This has improved by now, everybody is asked to maintain the worksite in a clean and tidy situation.
- L. Di Giulio reminded everybody to ask the access to the EHN1 extension and to follow the associated course on SIR. The separation between old and new EHN1 will become operational in the coming days. the dosimeter readers on the external doors will be replaced by a card reader soon. EP has to inform D.Vaxelaire to whom alarms must be sent.

## 4. Cryogenics report

(See transparencies on indico)

Joaquim said that he obtained confirmation from Sarvadon concerning the installation of the last two Cryo platforms. The drawings have been received for all platforms, calculations are missing for the last two.

The next delivery will be the NP04 40 AP ST platform on the 17<sup>th</sup> of July

Concerning the metallic structures, the racks supports have to be ordered by EN-EA for a delivery week 36. The external gas fence huts are in manufacturing phase by EN-ACE, delivery for the week 38. The inox support for the field boxes have to be delivered week 36, from a Slovakian supplier.

Joaquim then talked about the crane cabin exclusion zone, where elements have a height to ground higher than 7.1m. At the current stage the interfering objects are fencing and could be removed if the exclusion zone required more time.

Joaquim explained his need for a permanent opening of the trench for the cables trays passage, to the stairs on the Jura side. He proposed the installation of permanent fences around this opening.

#### 5. Progress Report by EN/EL

(See transparencies on indico)

T. Octave presented an overview of the EN-EL progress since the last meeting. The cable trays in the pits, in the barracks, for the safety box are installed, the equipment of the NP04 Clean room is done at 75%, two barracks are equipped and commissioned (HNA807-809) and the drawings for the Cryo cable trays are done. The execution will be done and paid for by EN-EL.

The following works are planned in July:

- NP04 clean room finishing
- Power commissioning for the hall
- Safety lighting + AUG
- Emergency stop
- Exchange of the actual alimentation of Fire Detection racks by diesel rescued power.

The following works are planned in August and September:

- Cabling 48V and AUG
- Cable trays Cryo NP04
- Cable trays Cryo NP02
- Cable trays Cryo outside slab
- Equipment and commissioning power for beam lines
- Cabling Cryo UPS 20kVA

Finally, T. Octave explained the need of one day with the AUG in EHN1 out of service, for interconnect the new AUG in EHN1\_NP, (no powercut). This must be presented at EATM on the 25<sup>th</sup> of July.

## 6. Progress Report by EN/CV

(See transparencies on indico)

J. Rodary gave a status report on the EN-CV activities. He confirmed that by now all firefighting systems are operational. The X-ray tests have been completed.

He also presented the responsibilities of TE-VSC and EN-CV concerning the magnets cooling:

- Water flexible hoses remain in TE/MSC scope
- Manual balancing valves, fittings and 'Walther' connectors will be in EN/CV scope

Concerning the new argon ducts installation, J. Rodary warned us that the resulting extrapressure drop would decrease the extraction flowrate in emergency mode. This must be discussed with HSE and EP.

Here is the status of the HVAC activities:

- WL2 (SW pipework)
  - o X-rays controls & pressure tests OK
  - Insulation works timeslot TBD (September ?)
- WL1 & WL2 (Tests / Commissioning phase)
  - o Loop tests / I-O tests OK
  - Commissioning report pending
- WL3 (Air-conditioning for the barracks)
  - o Fan-coils & fan units installed
  - o Temporary electrical supply for air-conditioning
- WL1 (Argon extraction system)
  - Extension of the argon ducts in the pits (September ?)
  - o Completion of the pulsion duct under beam line structure (September ?)

Below the status of the Cooling workshop:

- All WL: pipework works are completed
- Cooling system (Raw water) for CENF racks is operational
- WL1 (Demi water) : all welds are now conform (no more X-rays)
  - o DW piping pressure test foreseen end of August

#### 7. Integration

(See transparencies on indico)

S. Girod presented few change on the shielding of the beam lines. On H2 in PPE 182 the thickness of some steel shielding blocks have been reduced of 200mm due to interference with the magnet.

Concerning H4 PPE 174, the dump at the end of the beam line have been moved around the collimator and the QPL. This changes still have to be validated/budgeted.

#### 8. Coordination and planning

(See transparencies on indico)

Q. Bouirek reminded the planning of the next activities, particularly concerning the installation of the H4 quay.

#### 9. News from EP

(See transparencies on indico)

F. Resnati gave us a progress report of the EP activities.

- NP04 isolation is finished. Welding of the corrugated membrane is ongoing.
- Rail system in the NP04 clean room is installed.
- NP04 clean room floor is painted.
- Cold box construction is progressing well.
- First Anode Plane Assembly arrived 13<sup>th</sup> of July. Procurement of the lifting tool. Careful crane handling needed
- Ready to install detector ground racks
- Metal structure for the NP02 clean room arriving on the week of the 17th of July
- Walls and roof installation on the week of the 24th of July.

Minute reported by Q. Bouirek 17th July 2017