Joint COMPASS and COMPASS++/AMBER TB

19 January 2021
AGENDA

- Introduction Joint TBs meeting
- Approval of the Agenda of the last TB
- Communications
  - Winter shutdown and presence on site
  - COMPASS new technician
  - COMPASS archive in 892
  - Entering CERN from 1 MARCH
  - Change of timing and dates of the TB
  - Flammable gas system renovation: Atex zone and Gas MW2
  - STRAW 3 HV modules
  - TRAKA box
  - Raw water/chilled water status at COMPASS
  - C$_4$F$_{10}$ Gas RICH-1 radiator delivery
  - PT Gunn Diode update
  - Clean Room update
  - ECAL0 Space storage area
  - Remote support devices
Joint COMPASS and COMPASS++/AMBER Technical Boards meeting

This meeting (and the next ones) sees the presence of experts/responsible persons of (sub)-detectors needed for the C++/AMBER phase I not yet in the COMPASS spectrometer setup. It is extended also to physics coordinator. Dynamic list.

The **approved C++/Amber** phase I includes the proton radius (PRM), the anti proton production cross section ($\bar{p}XS$) and Drell Yann measurements (DY).

For the PRM: physics coordinator Jan Friedrich,

1. TPC and its gas system Oleg Kiselev and Alexander Vasilyev
2. Fibre stations Martin Losekamm

ALPIDE silicon tracker and Triggerless DAQ Maxim Alekseev and Igor Konorov

$pXS$: physics coordinator Paolo Zuccon

DY: physics coordinators Paul Reimer and Marcia Quaresma

→ COMPASS TB members should “wear the hat” of AMBER TB members
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The COMPASS Spectrometer has been set in winter mode shutdown since the end of the DRY run. During the Christmas break only one intervention to verify its health due to the electrical network power glitch on 28/12/2022.

No intervention on the SPECTROMETER needed, all systems fine and still smoothly operating so far.

Regular refilling of PT target material by Nori during the break too.

At the moment on site: on daily basis Nori Doshita, Michael Pesek, Christophe Pirez, Vincent Andrieux, Marketa Peskova Moritz Veit, Martin Zemko and the TC.
Cyril Cot the former technician at COMPASS left.

We have a new technician since December 2020: Eric THABUIS.

He is not new to CERN (TE-CRG) but new to us. We went for a preliminary visit at COMPASS.

At the moment he is missing training courses, i.e. CRANE (He has subscribed for the courses that the moment are not possible/reduced due to COVID).

Keep in mind for the next month(s) interventions. In case we need crane.
Issue with COMPASS archive at 892: AMS is going to build a new clean room → soil reinforcement and storage removal

URGENT request of freeing the space.
Communications: Entering CERN from 1 MARCH

Stefano Levorato – CERN – 19 January 2021

CERN and Covid-19

Recent news
- Number of positive cases from CERN’s personnel since beg of pandemic: 281 (none contracted on-site)
- Current telework framework (100% telework mandatory for people who can telework and are not needed on site) extended until end of Feb. This is still aligned with recent (tighter) restrictions in CH and F.

Covid-19 testing at CERN
- RT-PCR tests started with support of a medical lab in Meyrin (Proxlis):
  - tested at Proxlis: suspected cases, close contacts and people coming from high-risk countries (the latter only when presence on site is crucial for CERN’s activities)
  - tested on-site (as of 25 Jan): vulnerable people or people who have to travel for professional reasons (once current restrictions lifted); periodic tests of exposed groups (e.g. control-room shifters)
  - duration of isolation (suspected cases) or quarantine (close contacts) determined by Medical Service based also on test results

Covid-19 vaccination
- Personnel, family members and retirees resident in France or CH will be called by the Host State in which they reside according to priority, i.e. vulnerable and exposed people first. CERN is making sure that our community is included in the national plans. Swiss-card holders resident in France can be vaccinated in CH.
- CERN is exploring with Host States possibility of on-site vaccination → will take time as current vaccine’s availability limited, and distribution restricted to few designated centres in the countries.

Proximeter
- Essential for rapid, comprehensive, sustainable contact-tracing → to break infection chain and protect health of people on-site. Mandatory as of 1 March.
  - 1000 out of 10000 distributed so far → please book a slot to collect yours:
    - http://www.cern.ch/proximeter-dist
### 2021 Calendar

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**Communications:** Change of timing and dates of the TB

**Stefano Levorato – CERN – 19 January 2021**

- **19 Jan** Morning
- **23 Mar** Afternoon
- **04 May** Morning
- **06 July** Morning
- **28 Sep** Afternoon
- **16 Nov** Afternoon
Communications: Flammable gas system renovation: Atex zone and Gas MW2

Flammable gas renovation ongoing, flammable system test foreseen at the end of February, flammable gas back in mid/end April.

Renovation in the COMPASS GAS area: new mechanical support installed for the racks; cable deployment ongoing

In the COMPASS hall, will start soon only one request from the installation company for the MW2 area.

Request to uninstall the F1 TDC cards. Stainless steel container for flammable gas to be moved below the detector.

Safer operation, can I/we proceed?
Replacement of the old ISEG HV power supply system → CAEN A7030DP

6 X 16 = HV cannels on EQN 20 025p

Modules and mainframe ordered. Modules received on January 2021, integrated in the LHC inventory, not yet tested at the EPOOL since they were out of the CAEN CERN convention. Preliminary tests from us (Christope) soon. Mainframe still to be received. Open issue the interface from the Redel to Radial connector type. Discussed the technical solution with CAEN →

To the A7030

Rack mounted device
Delivery expected beginning of March 2021
Agreement in the last TB for its payment and installation in the 888 hall. Installed next to the buffer zone of HN2, near the first large door of 888

Not yet operative, missing electrical connections and the training course for its use.
North Area

- Chilled water interruptions:
- Cooling towers (CT2, b 893):
  - Stop from 15 December 2020.
  - Maintenance from 4th to the 15th January 2021.
- Cooling stations (deminerallized water) will start:
  - BA80 ED: 22 January 2021.
  - BA82 ED: End of January, according to request by NA62.

Already with respect to the preliminary plan above presented delays have been accumulated, for the time being do not affect our scheduled operations. At the moment ~3 weeks delay (to be confirmed). Work performed in the framework of the technical galleries consolidation.
F2 chemicals bottle move in 888 R-024 next to RICH-1 Gas system

LHCb gas bottles at the moment stored in 888 R 413

10 Bottles in total
Fiber installation at COMPASS: update from Moritz

Update from Moritz yesterday. First Trunk towards SM2 as been installed and tested Successfully!
Saclay LASER system in DCS Barrack.

Request by safety of an update of the safety document of the device/installation
1) Gunn Diode tested → upgrade needed. Offer received from ELVA 6.8 kCHF, order to be submitted (this week), delivery time 4 weeks after order

2) EIO tubes (finally) sent to CPI CANADA for repair evaluation which costs 4.5 kUSD for each tube. Should receive the offer for the repair soon. Yamagata funds

3) For PT the 2021/2022 WP has been prepared by EP-DT: 5 kCHF
Request of moving the material stored there: ECAL0, ECAL0 electronics, LH target
Remote assistance devices have been tested, The first during the dry run, the second after it due to its availability. Both well performing, same price range ~ 2 kEuro, HMT superior performance and fully hands free. 3 kE with accessories. Extremely useful for remote operations. What is your opinion? Should we purchase a device? Only problem, needs network coverage not present everywhere at COMPASS.