Slides from G.P. Di Giovanni's presentation at the PSB MPC meeting last week

# 2022 (draft) injectors schedule



- PSB HWC from 7<sup>th</sup> 21<sup>st</sup> February (2 weeks);
- PSB standalone BC from 21<sup>st</sup> 28<sup>th</sup> February (1 week);
- ISOLDE setting up to start 7<sup>th</sup> March (2 weeks after start PSB BC)

### Beam Sequence in Weeks

BEAM	READINESS By WEEK	COMMENT
INDIV TOF-Like R2 (100e10 ppr) MTE core 50e10 ppp	Week 9, starting 28/02	INDIV 4 rings (start with R3) TOF increasing with time MTE requires splitting
ISOLDE MTE 800-1000e10 ppp EAST/TOF (low int) LHC25/BCMS25	Week 10, starting 07/03	ISOLDE Max. Intensity TOF does not need to be nominal intensity LHC25 need end week10/beg week 11 for SPS scrubbing
LHC25/BCMS25 ~220e10 ppr (4R) [added a wee bit more for losses]	Week 11, starting 14/03	For SPS scrubbing needed 1.8e11 ppb
AD	Week 12, starting 21/03	PS setup



## Injection

### **FBCT:**

**R. Ruffieux** will replace some front end amplifiers on transfer lines and we will test this during hardware commissioning with calibration signal. For this we would also need fully functional timing and "noisy" equipment turned on (distributor, RF, magnets, ...). Final confirmation will be with beam (day 1 BC).

For beam commissioning, given that fast BCTs are "participating" in watchdog system anyway, it would be good if OP can host **R. Ruffieux** and **M. Bozzolan M. Dolenc** and **A. Topaloudis** from the start, so we can be on hand in case of watchdog trouble.

#### H0/H- Monitor:

Ferrite installed to screen EMI. Several checks to be done during HWC, when BI.DIS10, BI.KSW are pulsing (**A. Navarro/F. Roncarolo**) Final check with beam. If the ferrite configuration needs to be modified, it will need 1-2 hours on the surface. Recheck of the calibration to be done at the first available time (**A. Navarro**)

#### **BLM:**

Estimated at least 2 x days of reinstallation + 2 days of tests organized as follow:

- 1) Checking the HW connections by means of the High Voltage modulation (BLM Team)
- 2) Checking with beam that losses are where expected (OP + BLM Team).

In particular, the re-installation activities forced disconnecting/reconnecting and removing/reinstalling several BLMs along the machine. We count on the PSB HWC phase to help with the cables/signal debugging. Final confirmation with beam (progressing with the commissioning)





#### **TUNE Measurement:**

The system has been migrated to a **new FESA class**. So OP should check on their side that all of their OP GUIs/etc are still working.

#### **BTVs:**

Beam commissioning checklist (filters, gain, polarity) with **S. Burger** Particularly important for BTV1L1, to be done with **C. Bracco** depending on the commissioning advancements.

#### **LIU Wire-Scanners**

**FW upgrade to fix several issues encountered last year** BI needs dedicated time, before the scan can be used for beam qualifications. Initial estimate is 2 days, i.e. **2 slots of 8 hours**. In total **8 LIU WS** to check.

As soon as beam reaches extraction and the RF is stable enough, BI can start their parallel checks (J. Emery/A. Guerrero)

BI team would like to support the initial beam qualification to define which is the appropriate settings for a different range of intensities, beam sizes (S. De Carlo with ABP + OP)

