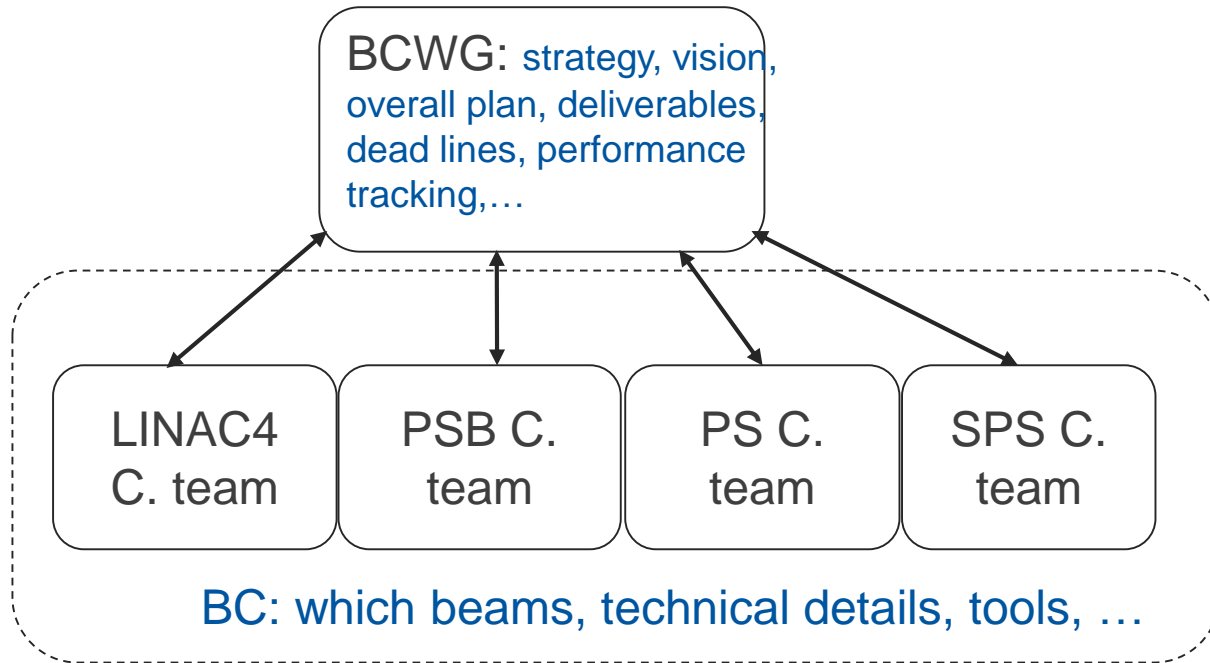




Commissioning Organization ~~2020~~ - a proposal

A. Huschauer, V. Kain, G. Rumolo

Commissioning aspects – the current structure



+

- Per machine: technical coordination meetings
- Per machine: beam dynamic meetings
- Beam dynamics coordination meeting

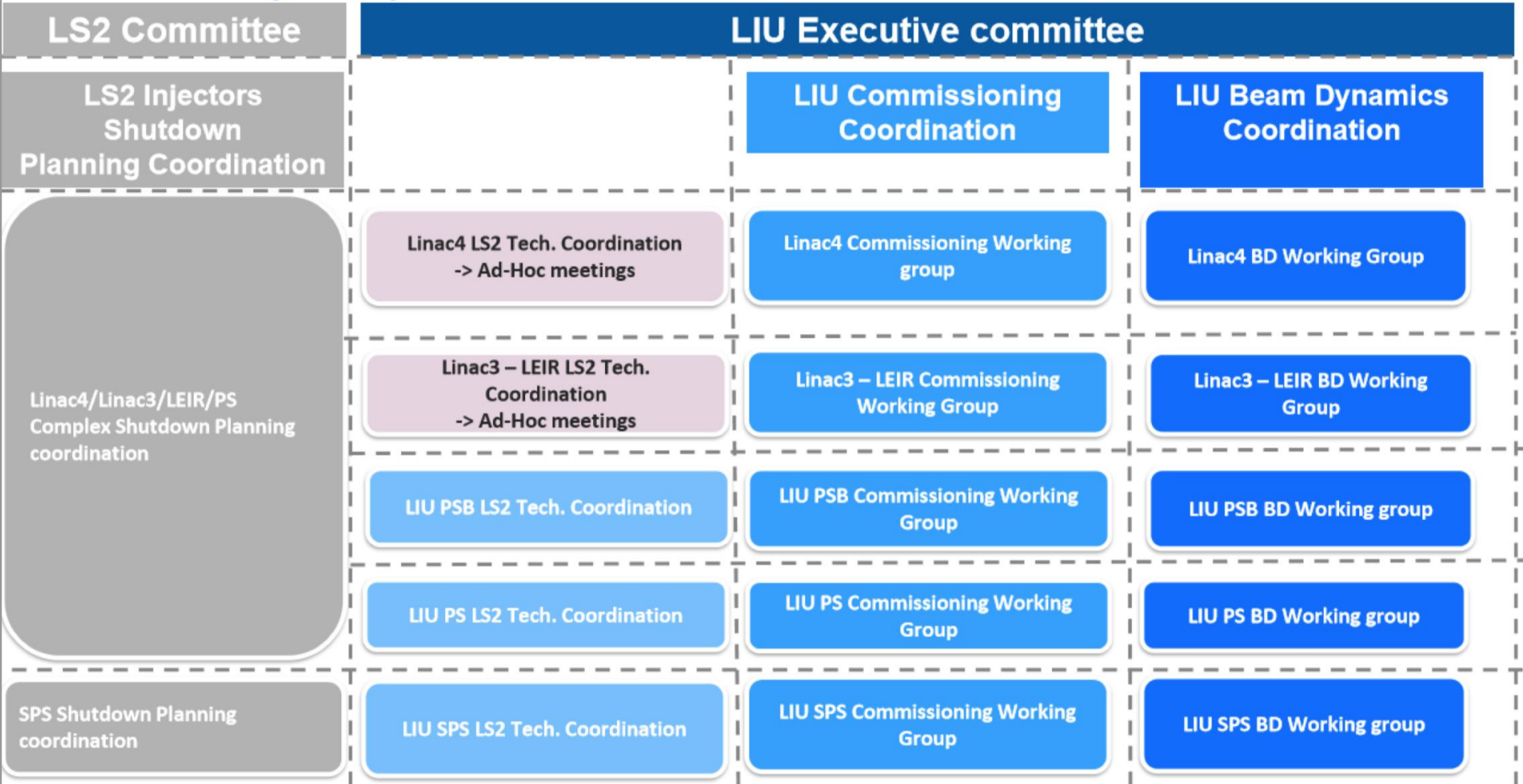


Also here some preparation for start-up

Overall LIU structure

LIU meetings organisation in LS2

24 June 2019 Complete LIU Work Breakdown Structure @ EDMS Id 1146814 – LIU-PM-QA-0007
 EDMS Id 1403771
 LIU-PM-PP-0030



Feedback from past and LINAC4 prep

- Coordination meetings during HWC pre-LS2
 - Daily at time defined by individual machines, attendance not enforced
 - Informal
 - Run by re-commissioning coordinators
 - → worked very well
- LINAC4 ISTs 2019:
 - Execution needs to be coordinated and tracked
- Whatever we come up with now, needs to reduce the number of meetings
 - People will have to be in the control room more and more

What structure is required for optimal commissioning?

We believe, it needs (1):

- FOM light (only injectors, no EA, but equipment people)
 - During the FOM slot
 - Status of ISTs of previous week
 - (Re-)communication of planning of ISTs for week to come
 - all, not only the ones in IST periods
 - Announce dry runs for the coming week
 - Will start one week before IST period in the PSB?
 - ISTs are already ongoing...

- HWC:
 - As pre-LS2; no need to change
 - Will start with HWC start date

What structure is required for optimal commissioning and future operation?

- We believe, it needs (2):
- A new meeting that is fusion of:
 - Machine coordination meeting from now
 - Beam dynamics WG
 - Technical coordination
 - Beam and HW commissioning WG

→ To drive commissioning with sufficient detail. A la Tuesday LHC commissioning meeting.

 - **weekly** meetings during the machine coordination meeting slot
- For the LINACs:
 - LINAC4 should be treated together with PSB
 - LINAC3 together with LEIR

What structure is required for optimal commissioning?

- We believe, it needs (3):
- Overall **Accelerator Performance Meeting**:
 - Technical
 - Guide and lead overall commissioning and operation according to performance
 - Peak and reproducibility
 - Efficiency (e.g. LHC beam preparation, injector impact on LHC turn-around-time)
 - Target beam dynamics, operational aspects, software, algorithms, hardware
 - Bi-weekly
 - Should target the performance of all beams across the complex

From when on would we need this structure?

- FOM light and HWC meetings: as said before
 - FOM light: before PSB IST period; will become FOM later
 - HWC meetings: during HWC periods
- Machine coordination meeting++ per machine
 - From HWC period of specific machine
- Accelerator Performance Meeting:
 - September 2020 (or January 2021?)
 - Until then report through current LIU committees

Summary

- Idea for LIU commissioning structure based on following principles:
 - Bring discussion and coordination of topics relevant for commissioning and performance together
 - Meetings should be technical
 - To cover aspects in sufficient detail: meetings per machine → machine coordination++
 - Overall consistency, synergies and feasibility of overall LIU goal, performance of non-LIU beams → Accelerator performance meeting
 - Given the fusion culture of the latter two proposed meetings → chair teams (?)