

CCC 2019

# Tools

- Keep collecting requirements for tools in general and forward requests to adequate forum
- Discussed and prepared in CCC:

What	details	End date
Check lists	Upgraded version	June 2019
Planning tool	Discuss ASM vs. EN/ACE tool	Beginning of April
Performance tracking	Requirements and possible implementation	December 2019
Reference measurements	Final feedback. <b>First version of viewer</b> What is the future of it?	July 2019

# LIU Integration Status

- Another round through integration of LIU systems
  - Includes beam production questions
  - News on system integration for large/complex systems:
    - E.g.: LINAC4-PSB connection, SPS RF, SPS beam dump + interlocking,...
    - Procedures to test
    - Software readiness
    - ...
- Will dedicate one CCC to establish latest list of system that need attention/broader communication:
  - E.g. SPS injection interlocking with BHZ377 → PS should know about this

# Hardware commissioning period

- IST, HWC, Check-out
- Sub-working groups: collect from EN/ACE and complete IST list by July 2019

What	details	End date
IST	Definition Conditions, shifts/no shifts Lists per machine Planning by EN/ACE and OP	March 2019 September 2019 July 2019 September 2019
<b>Switch yard</b>	Several options plan with all experts	End of March 2019
HWC and dry runs planning	LBE line LINAC4; with check lists	June 2019
Switch yard	Final plan with POPS capacitors	August 2019

# Hardware commissioning period

What	details	End date
HWC and dry runs planning	The rest of the complex; <b>including resources</b>	December 2019
Feedback LINAC4 HWC	News on planning and check lists	October 2019
<b>HWC check lists</b>		3 months before HWC start

# Beam commissioning period

What	details	End date
Injector schedule with FT start up	First version	July 2019
Injector schedule	Refined version	December 2019
Christmas shutdown 2020/21 plan	Critical items; strategy for rapid start-up in January 2021	December 2019
Feedback LBE run	Lessons learned and consequences for 2020 startup	January 2020
Beam commissioning details	Detailed planning with resources <b>Experts shifts and piquets start dates</b> Cross-machine interdependencies	February 2020 November 2019 March 2020



LHC Injectors Upgrade

Deadlines for sub-working groups

# Deadlines for Sub-working groups (1)

What	details	End date
Discussion on integration status and topics	Prepare lists per machine: new systems, processes to be defined, algorithms to be prepared,...	April 2019
List of software	Per machine (requires definition of integration, algorithms, processes → might be first version). Man power – collaboration?	June 2019
HWC+ dry runs LBE run	Planning + check lists	June 2019
List of performance tracking parameters	Per machine (to start with)	June 2019
IST lists	Per machine; complete	July 2019
List of beam readiness dates → towards injector schedule	Focus on FT community. What is max intensity required in 2021? Readiness dates with initial beam parameters. When max intensity?	July 2019

to define series of integration talks





# Deadlines for Sub-working groups (2)

What	details	End date
FESA class readiness dates	Negotiate with groups (estimate for OP development required) per machine	August 2019
IST planning	EN-ACE + OP. Final lists and conditions (e.g. access system SPS)	September 2019
Feedback LINAC4 LBE: HWC	Planning, new check lists. Sufficient preparation for beam?	October 2019
Dry run and HWC planning	<b>Plus DSO tests</b> , power permits	December 2019
Christmas shutdown 2020/21	List of critical items per machine. Piquet requirements. Which state of machine during X-mas.	December 2019

# MERRY CHRISTMAS



...and see you next year to finish off the other half.