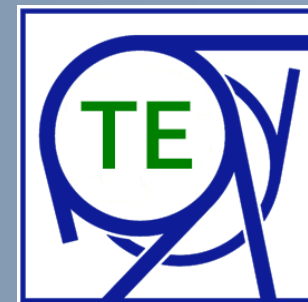




SMP System Status and Plans



I.Romera et al.

14th December 2010



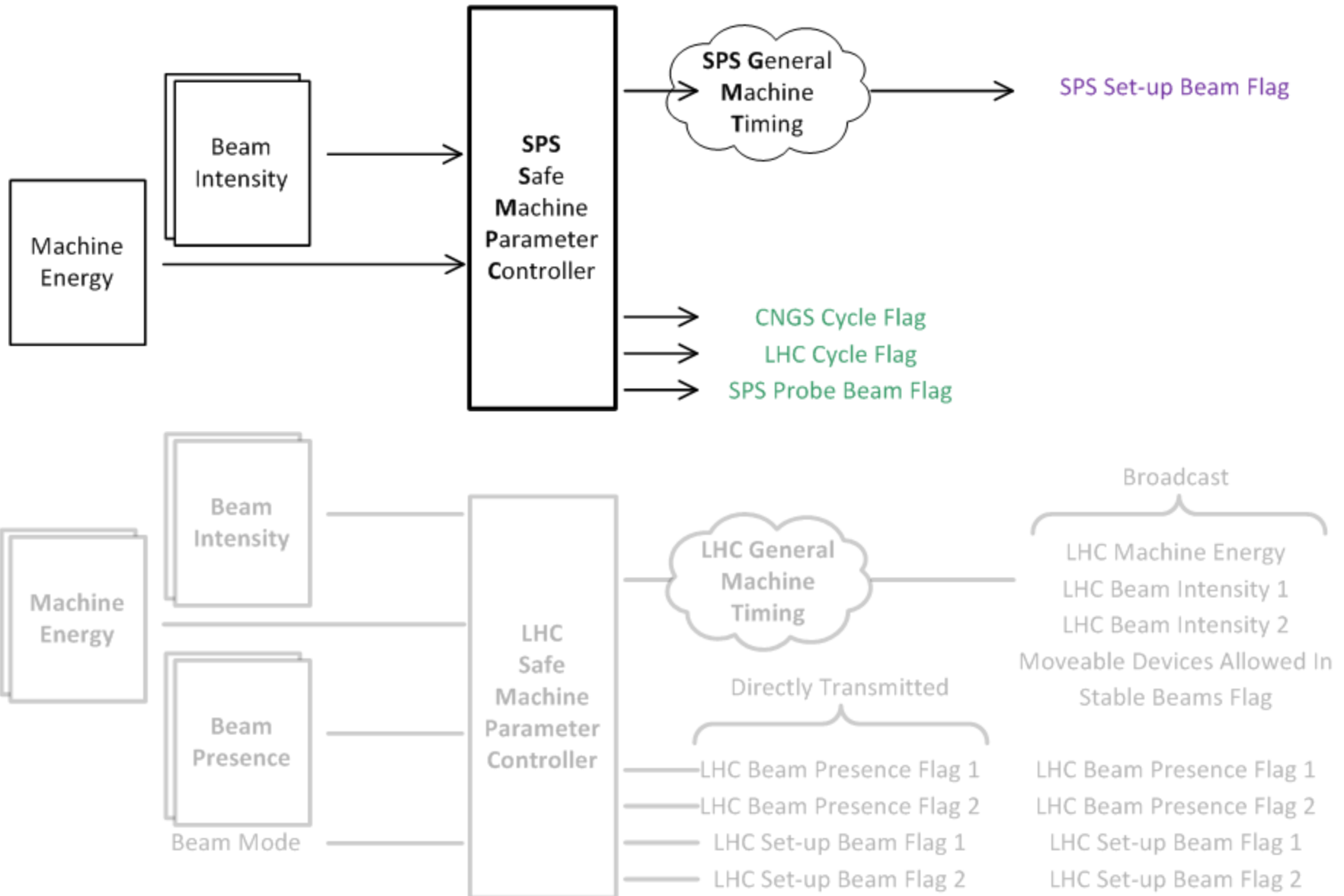
SMP = Safe Machine Parameters

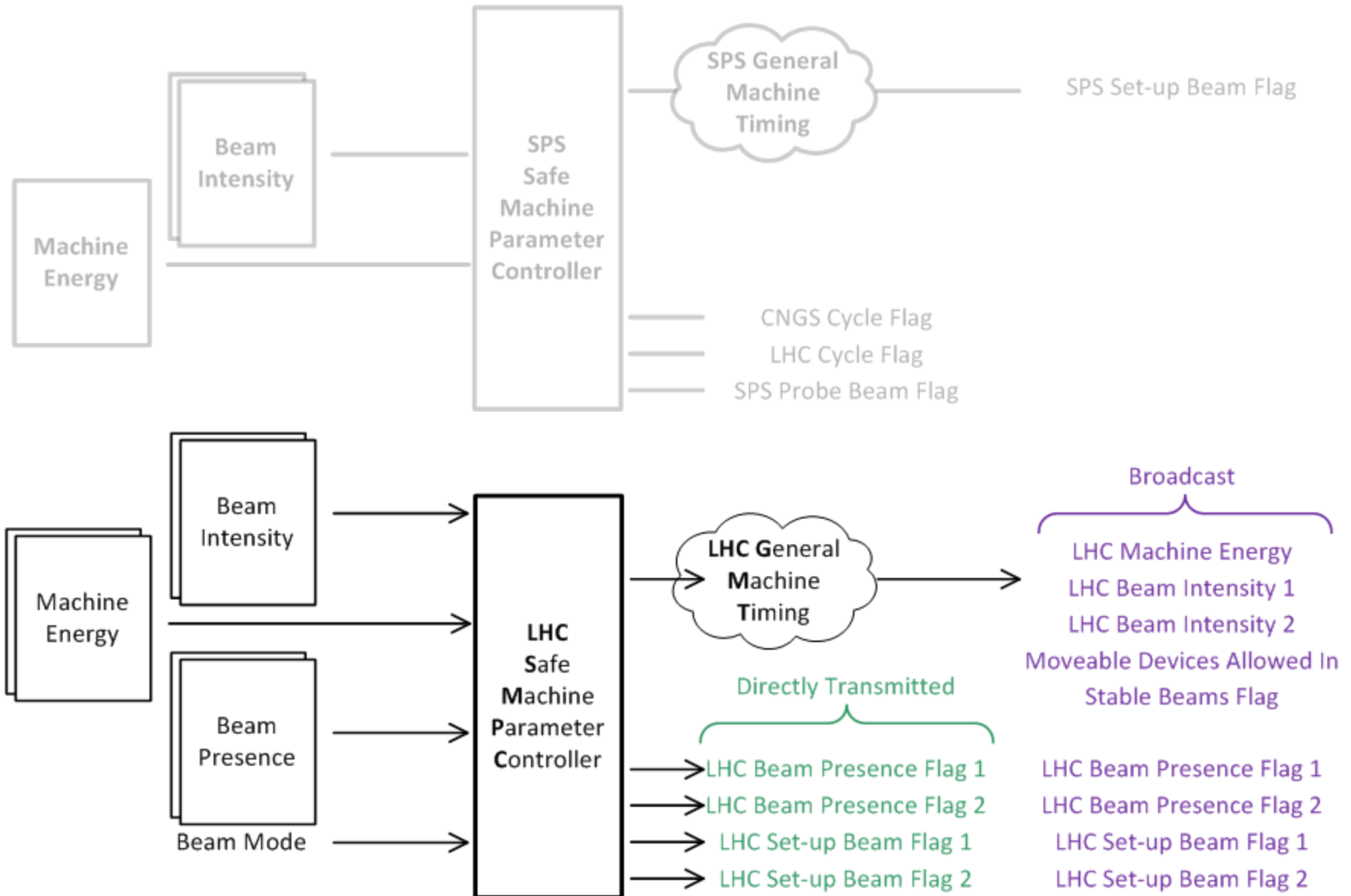
System which receives accelerator status information...

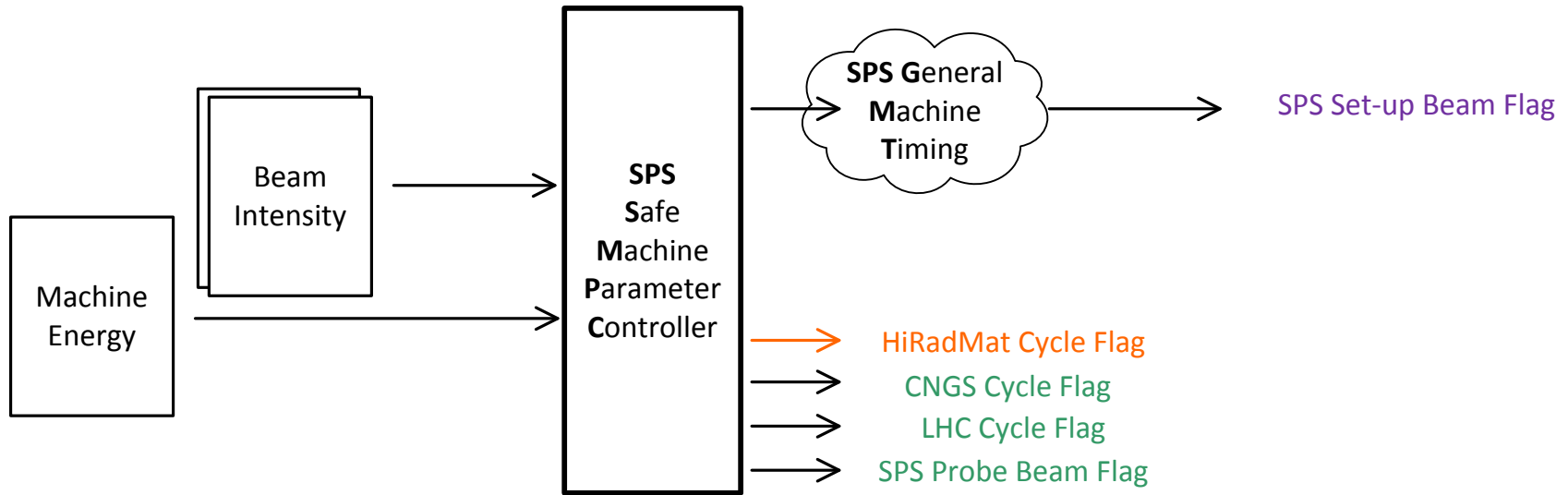
Uses it to generate flags and values...

Transmits it to machine protection systems in the accelerator complex...

*fast *safe *reliable *available







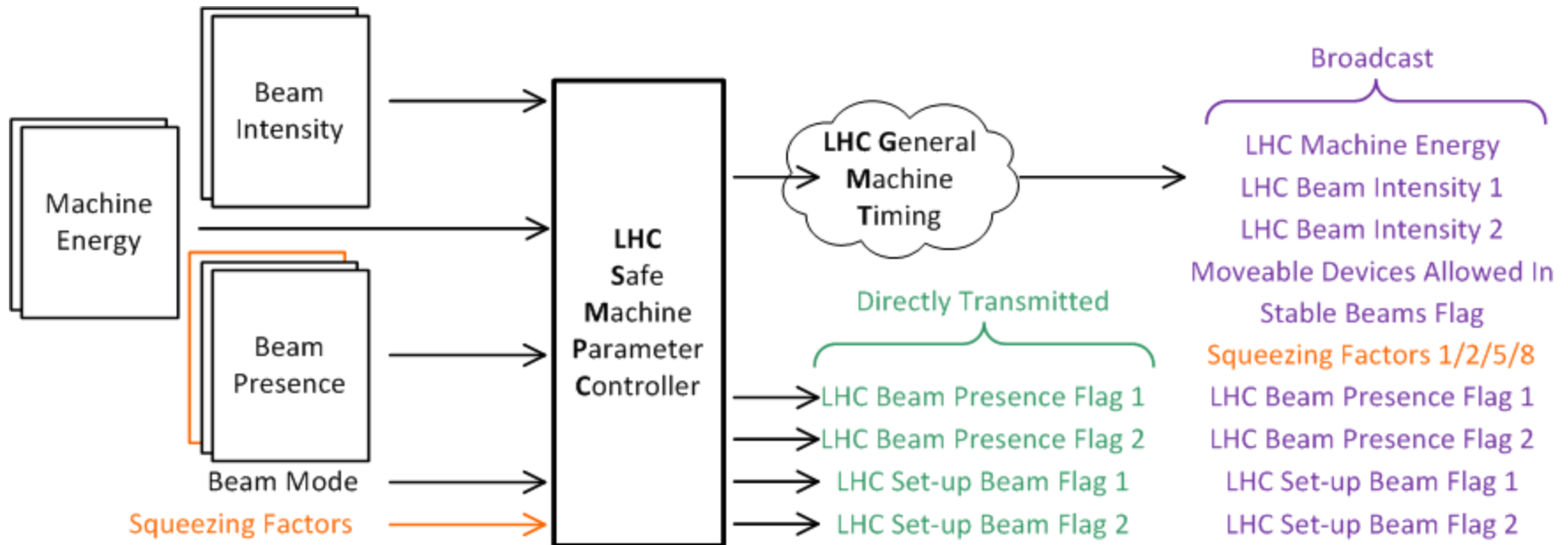
HiRadMat Cycle Flag
new VHDL – “system-safety approach”

new FESA
new Java GUI

Changes in LHC after Xmas

- new Setup-Beam Flag equations
- new Beam Presence Flag sources
- Squeezing Factor integration
- redundant Energy and Intensity sources
- new VHDL – “system-safety approach”

- new FESA
- new Java GUI



deploy 2011 system for SPS & LHC

add new HW functions

SW Cross-checking

HW Cross-checking

CIBU/F remote tests

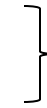
diagnostic tools

GUI extra screens

system tester

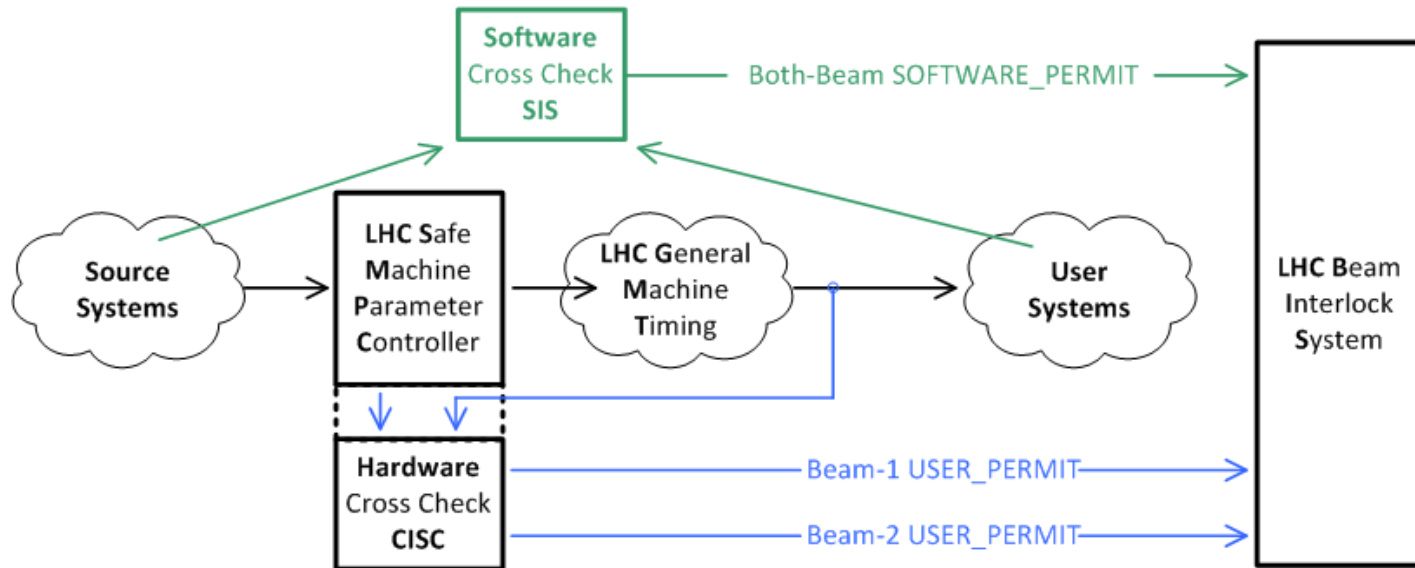
back panel tester

support Operation

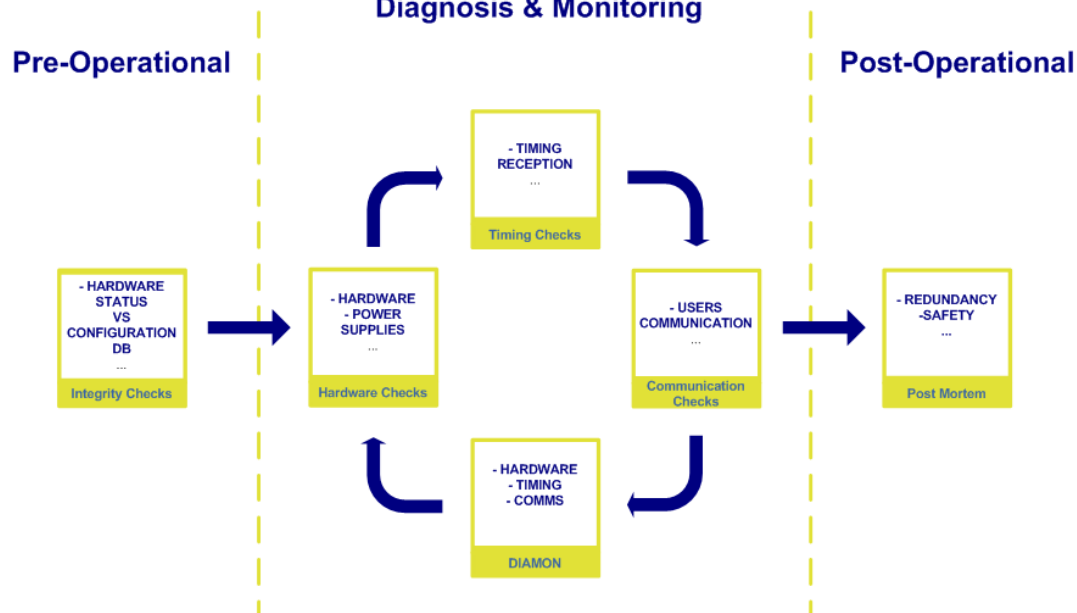


During technical stop

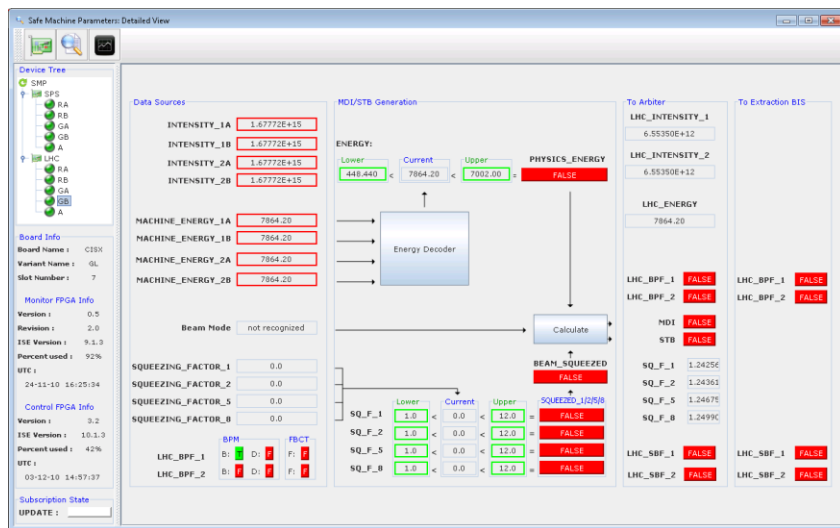
- deploy 2011 system for SPS & LHC
- add new HW functions
 - SW Cross-checking
 - HW Cross-checking
- CIBU/F remote tests
- diagnostic tools
- GUI extra screens
- system tester
- back panel tester
- support Operation



deploy 2011 system for SPS & LHC
 add new HW functions
 SW Cross-checking
 HW Cross-checking
CIBU/F remote tests
 diagnostic tools
 GUI extra screens
 system tester
 back panel tester
 support Operation
Diagnosis & Monitoring



- deploy 2011 system for SPS & LHC
- add new HW functions
- SW Cross-checking
- HW Cross-checking
- CIBU/F remote tests
- diagnostic tools
- GUI extra screens
- system tester
- back panel tester
- support Operation



	M.A	J-P.B	A.G	S.G	M.K	I.R	Staff members	
							B.T	N.T
Hardware				●	●		●	
Software	●					●		
FESA								●
Documentation			●	●	●		●	●
Metalwork		●						
Testing			●	●	●	●	●	
OP Support							●	

- High reliance on temporary resources
- Expect downtime: safety vs availability tuning
- Small margin for unforeseen events

M.A: Maxime Audrain
 J-P.B: Jean-Philippe Boudonnat
 S.G: Stephane Gabourin
 A.G: Amanda Garcia
 M.K: Maciej Kwiatkowski
 I.R: Ivan Romera
 B.T: Benjamin Todd
 N.T: Nikolai Trofimov

Thanks a lot for your attention