

LIU-PSB Configuration Management

EDMS Documentation, Layout and ECRs

Thomas Birtwistle EN-MEF-DC



Content

- Documentation Changes (EDMS)
- Handling Documentation
- Hardware Baseline
- Layout Database
- Engineering Change Requests (ECRs)

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Documentation Changes (EDMS)

- All document references will now use PSB, as these documents will be relevant to the machine in the future.
 - Example: PSB-T-ES-0001
 - Existing files have dual references (PBU and PSB) to match existing file references, and for accurate EDMS searches.

	Number: PBU-T-ES-0001 v.1.0	
	EDMS Id: 1145567 v.1.0	External Reference PSB-T-ES-0001
	Released	

3 M. Hourican, **PBU-MSMIB-EP-0001**, EDMS 1170734

4 J. Borburgh et al., **PBU-MKBSW-ES-0001**, EDMS 1157402

- EDMS 'release procedures' reviewed and modified to match standard procedures for existing hardware baselines...

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Handling Documentation (1/3)

- As agreed with Bettina for this pilot project (PSB), Gian Piero Di Giovanni is the main point of contact for assistance with EDMS documentation.
- He can handle documents on your behalf... **OR**...
- Create a document in the appropriate EDMS node of the LIU-PSB Project

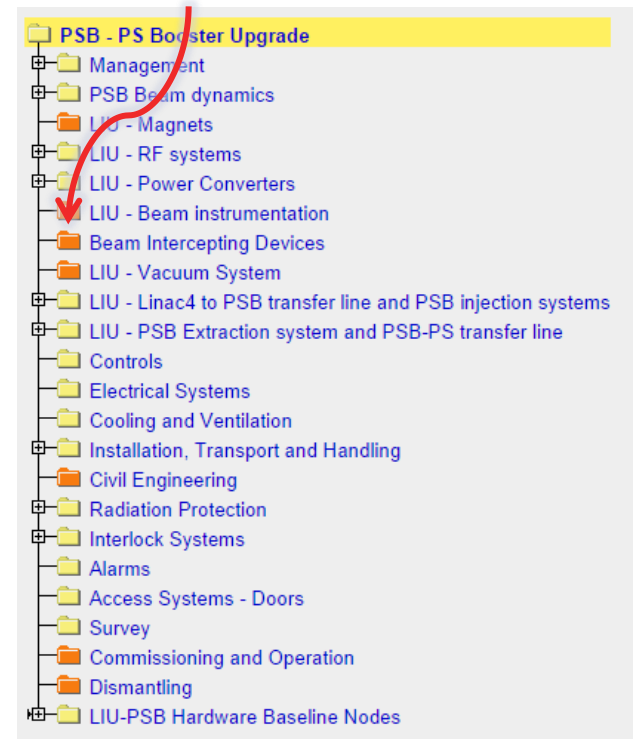


- Select the correct document type from the list


Document Type

Please select Document Type

- Assembly Procedure
- Assembly Report
- Beam Commissioning Procedure
- Contract
- Engineering Change Request
- Engineering Parameters
- Engineering Specification
- Engineering/Technical Note
- Engineering/Technical Report
- Fabrication Procedure
- Fabrication Report
- Hardware Commissioning Procedure
- Hardware Commissioning Report
- Installation Procedure



Handling Documentation (2/3)

 **INFO** Previous step has been automatically computed

Document Data
Please input the requested data (*mandatory field)

Title *
Max. 150 char.

Description
Max. 1000 char.
Filling this field is recommended

Version

Ext. Ref.

Keywords
Filling this field is recommended

Creation Date
Format: YYYY-MM-DD
2014-09-30

List of Authors
THOMAS WILLIAM BIRTWISTLE

Contact Person email
thomas.william.birtwistle@cern.ch

Equipment Code *
None

Associated URL
CDD Folders etc...

text to show

clickable text

< Prev Cancel Finish !

The first version should always be **0.1**
(not the default value!)
Future draft versions: 0.2, 0.3, 0.4 etc.
First released version: 1.0

See A&T Seminar from P. Bonnal on
15th May 2014 – Indico [317617](#)

Select an appropriate equipment code.
If a suitable code doesn't exist, cancel
the registration and contact:

Accelerators-naming.service@cern.ch

All equipment codes are stored [here](#)



If you encounter any problems,
please contact Gian-Piero or
Thomas Birtwistle

Handling Documentation (3/3)

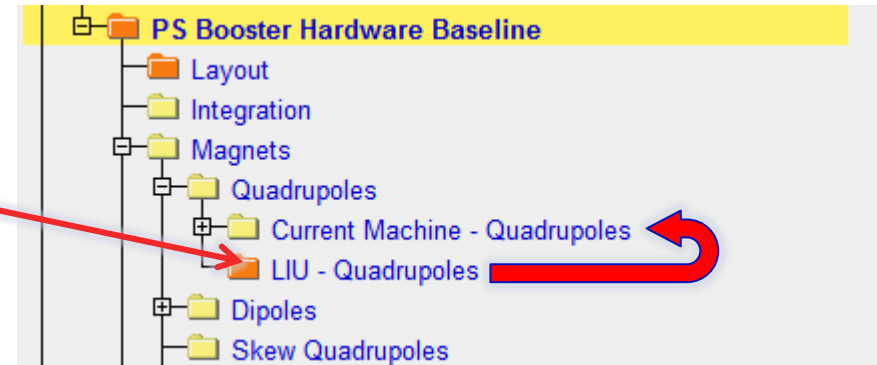
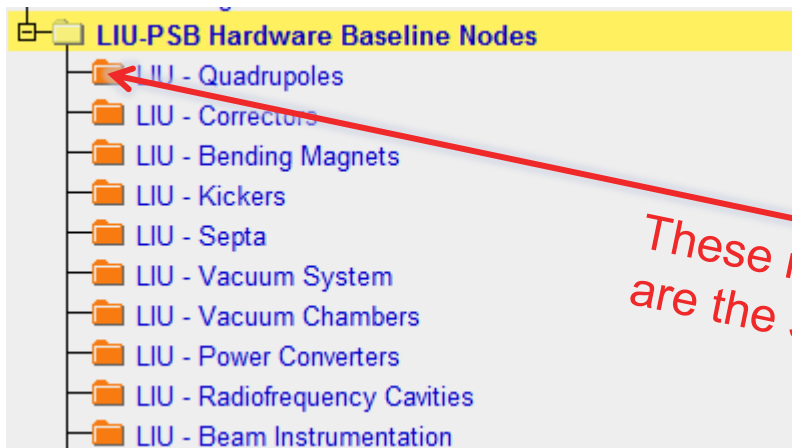
- Access rights allow all project members to create documents.
- Project members can put documents through an 'engineering check' process.
- A decision is made as to whether a document is long term or not by Project Management.
 - All long term documents (e.g. engineering specifications, reports etc.) must undergo a formal approval ('under approval') before 'release'. The approval process is handled by a restricted group.
 - First point of contact is Gian-Piero for this pilot project, then Configuration Management (EN-MEF-DC), or Cecile Noels.

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Hardware Baseline Organisation

- Long term 'archive' for documentation relevant to a machine.
- If an LIU document is considered 'long term' (i.e. it is still applicable after the project finishes), it will be stored in the appropriate LIU Hardware Baseline Node.
- When the project is completed, and the machine is updated:
 - All LIU documentation in the LIU nodes will be copied to the operational machine Hardware Baseline.



These nodes are the same

Content

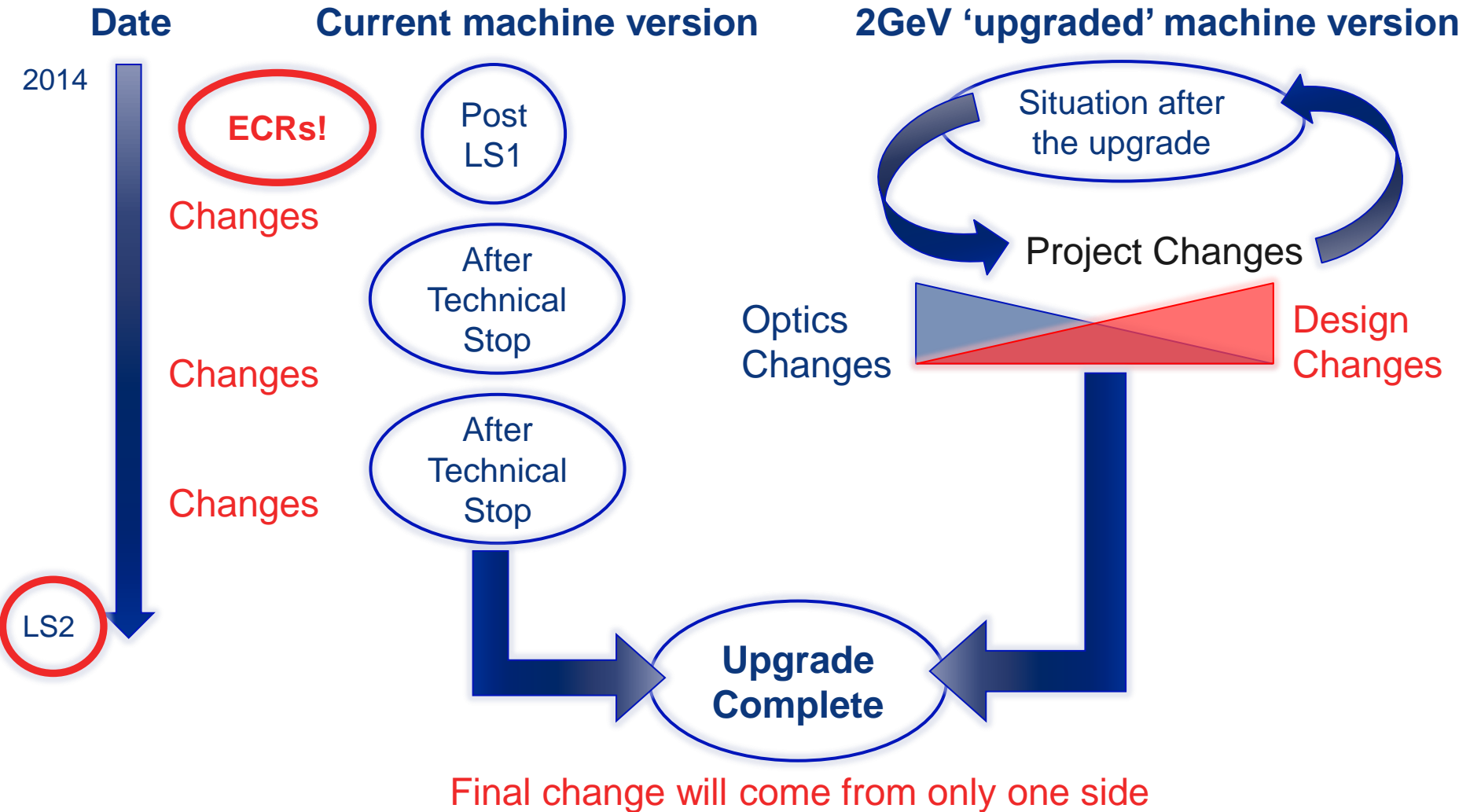
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Layout Database (LIU-PSB)

- The current machine and transfer lines are available in the layout database: <https://www.cern.ch/layout/>
- A parallel study version for the future PSB and transfer lines (and also HL-LHC) is being developed (BE-CO), and will be available ~end November.
- Data entry is planned to be completed ~end January 2015.
- At the moment it is foreseen only to contain the main optics information in the future study version
- More detailed information could be added as the project develops.

See next slide

Layout Database Versioning

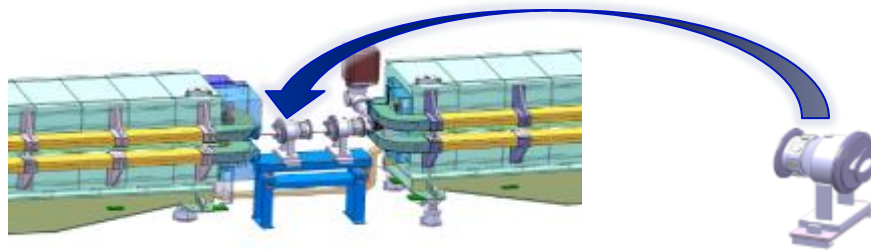


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- **Engineering Change Requests (ECRs)**

ECRs – Machine and Project

- Important tool to ensure that all changes are captured and the impact properly assessed in advance
- All changes to the machine (and project) that will impact the beam should be documented by ECRs
 - Includes: powering, vacuum, re-naming...
- Templates are available on MS Word, 'New', 'My Templates', PS Complex tab (LIU and operational machine templates)
- Send to ecr-configuration@cern.ch



Large Changes (e.g. Injection Section)

- One ECR detailing the overall layout changes and describing what will be changed and why.
- It can reference existing documentation for the 'sub-parts'
- Integration study should be included and documented with a dedicated drawing.
- Written by whoever is managing the specific change (or by someone mandated on their behalf) – they should collect the required information from the concerned equipment groups.
- Circulated to the entire project team for review and comments collection (by ecr-configuration@cern.ch).
- Approval by the project leader prior to release and implementation.

Conclusions

- Pilot project for PSB, to ensure that information is captured and the machine correctly documented and represented. Part of the MEF-DC mandate.
- The points presented here are in line with other upgrades (e.g. HL-LHC).
 - Dividing hardware baselines (operational and upgrade nodes).
 - Parallel layout database machine versions.
 - ECR scope (operational machine and project)
- Also in line with other operational machines.
 - Configuration, layout and integration should remain consistent.

Thank you for your attention

Questions?



ENGINEERING
DEPARTMENT