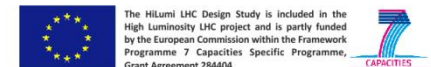


Baseline Documentation

C. Parente (Technical Quality Officer)



HL-LHC Standards and Best Practices
Workshop (11-13 June 2014)



Contents

- Definitions
- Systems life-cycle
- Baseline documentation
- EDMS structure
- Other documentation

Definitions

Baseline documents:

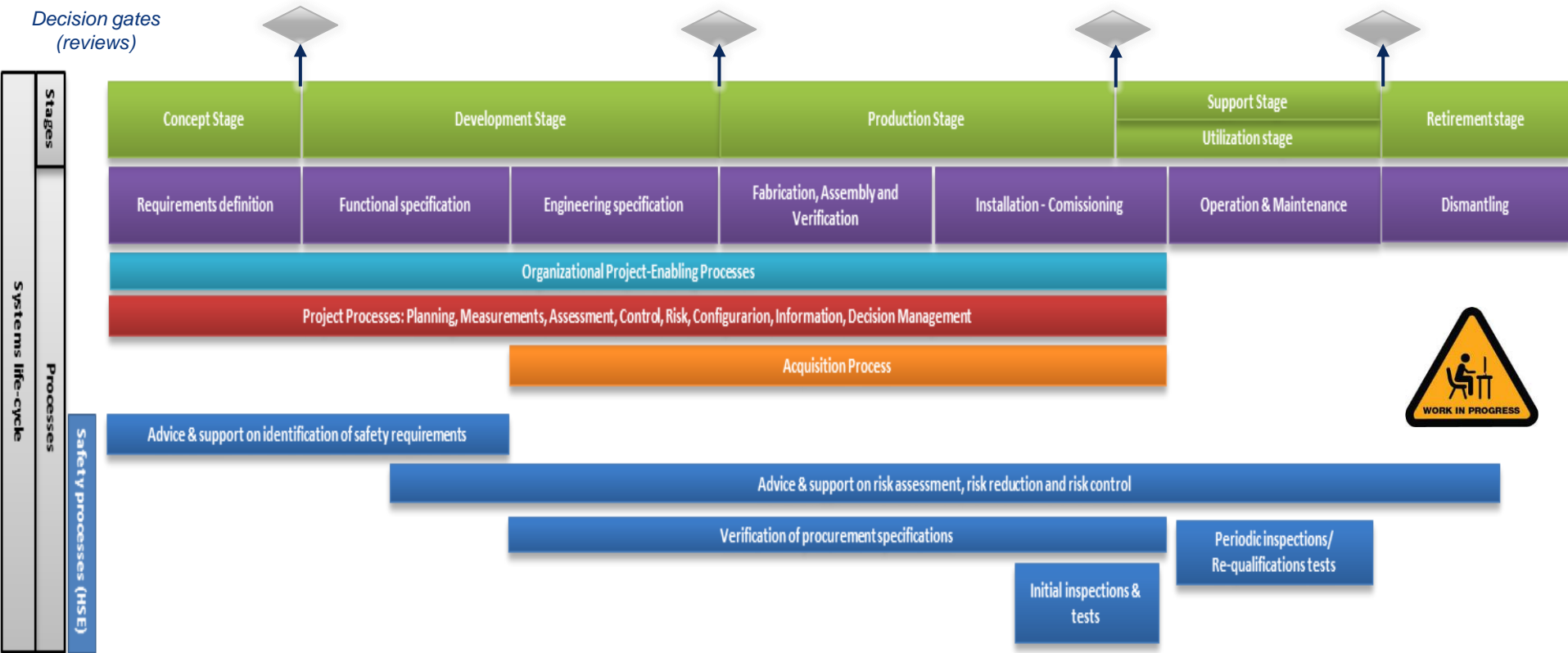
Documents that will have to be stored and updated until the dismantling of the LHC.

Non-baseline documents:

Documents that are required for the well functioning of the project but which storage will not be considered critical after the commissioning phase.

HL-LHC is an upgrade of LHC and therefore all documents will be stored and managed according to LHC procedure

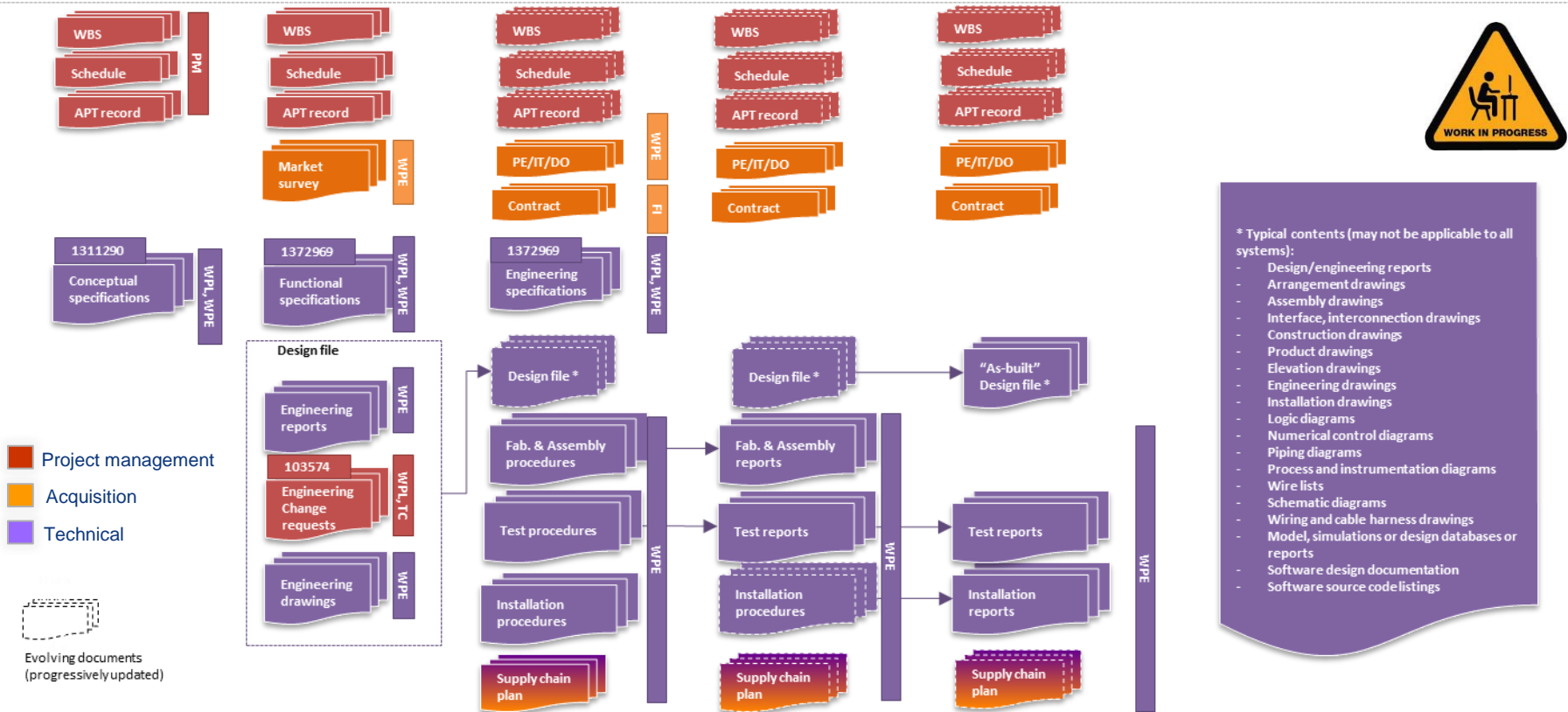
Systems life-cycle



Baseline documentation (1/2)

EDMS: [1361462](#)

Concept Stage	Development Stage		Production Stage		Support Stage	Retirement stage
					Utilization stage	
Requirements definition	Functional specification	Engineering specification	Fabrication, Assembly and Verification	Installation - Commissioning	Operation & Maintenance	Dismantling



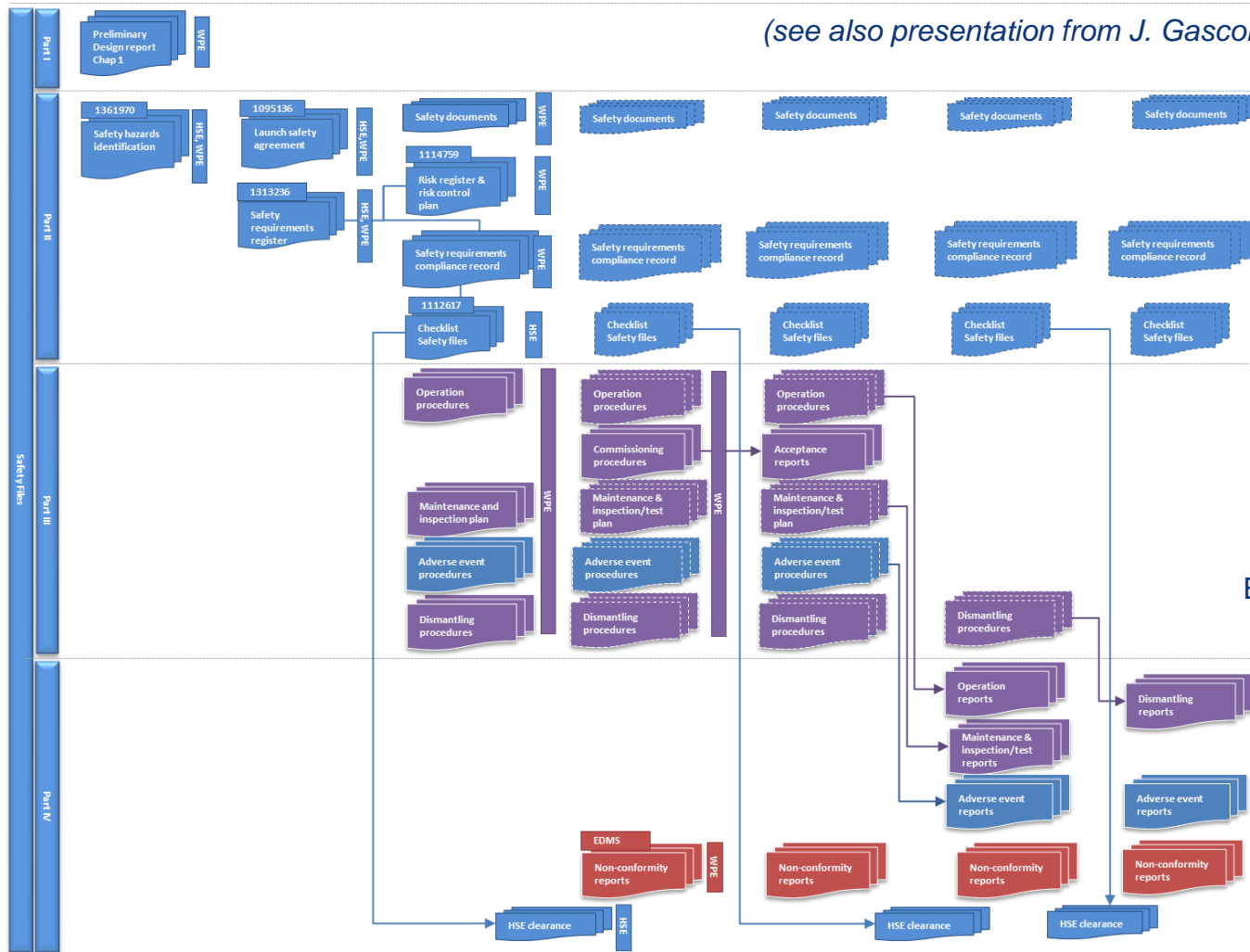
Baseline documentation (2/2)

Safety File



Links to already existing documentation will be made, whenever required

(see also presentation from J. Gascon & Th. Otto)



- Project management
- Safety
- Technical

Evolving documents (progressively updated)



EDMS: [1361462](#)

EDMS structure (1/2)

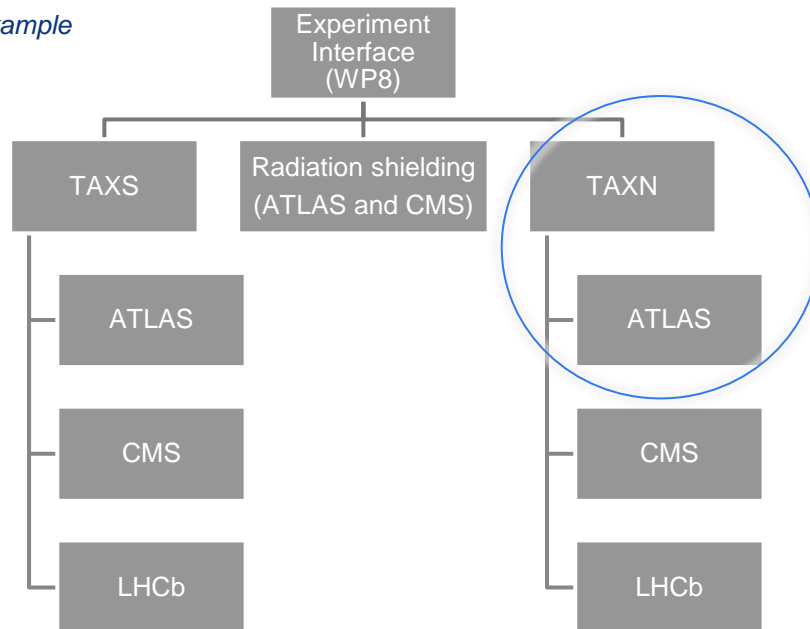
- Repository of the HL-LHC baseline documentation (under the LHC hardware baseline, for which specific nodes will be created in case of new equipment)



EDMS structure (2/2)

- Each Work Package will have a pre-created EDMS structure based on its systems architecture and on the required contents of the baseline documentation

Example



- WBS
- Schedule
- APT
- Procurement
- Specifications
- Design
- Fabrication, Assembly and Verification
- Installation-Commissioning
- Operation & Maintenance
- Dismantling
- Safety File
- (links to documents in upper nodes whenever required)*

Other documentation

The screenshot shows the EDMS Portal interface. The top navigation bar includes 'PROJECTS', 'DOCUMENTS', 'EQUIPMENT', and 'BUY'. A search bar is located below the navigation bar. The left sidebar contains a list of categories such as 'Accelerators', 'CERN Departments', 'Computing', 'Design & Equip. Catalogues', 'EU Projects', 'Experiments', 'LHC Machine', 'HL LHC - High Luminosity LHC', 'LIU - LHC Injectors Upgrade', 'Management & Committees', 'Operation', 'Health, Safety & Environment', 'External Collaborations', and 'Others'. The main content area displays a 'Work Package Workspace' tree structure with the following items:

- Work Package Workspace
 - Accelerator Physics and Performance (WP2)
 - Magnets Design (WP3)
 - Crab Cavities (WP4)
 - Collimation (WP5)
 - Cold Powering (WP6)
 - Machine Protection (WP7)
 - Collider-Experiment interface (WP8)
 - Cryogenics (WP9)
 - Energy Deposition and Absorber (WP10)
 - 11T Dipole Two in One for DS (WP11)
 - Vacuum (WP12)
 - Beam Diagnostics (WP13)
 - Beam Transfer & Kickers (WP14)
 - Integration & De-installation (WP15)
 - Hardware Commissioning (WP16)
 - Safety
 - Technical Infrastructure
 - Logistics

- Non-baseline, documentation (e.g., follow-up meetings, scientific publications) can be stored in the WP workspace
- Structure will be defined with each WP

Thank you for your attention !

Questions?

