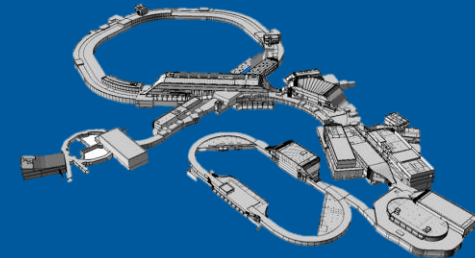


2nd joint BINP FAIR meeting

Training Module: Required Documents



Tuesday, May 21, 2019

Agenda



Motivation

- We all must meet the requirements of the FAIR project in terms of function, reliability, safety and costs
- **Documentation and technical function have equal priority**
 - Documentation is necessary due to **legal reasons**, but also for **internal usage**
- The required documents are determined by underlying specs and regulations
- WPLs shall **plan the documentation** for their components based on the associated specifications

Agenda



Applicable Documents

General

- F-GS-F-01e (General Specification)
<https://edms.cern.ch/document/1365092>
- DGUV Information 202-002 (former BGI/GUV-I 5139e)
(Manufacturing and operation of equipment designed for research purposes)
<https://publikationen.dguv.de/dguv/pdf/10002/202-002eng.pdf>
- F-TG-MDS-en-KRL (Design Guideline for Mechanical Design)
<https://edms.cern.ch/document/1229367>

Template

- Q-FO-QA-0013_Required_Documents
<https://edms.cern.ch/document/1732710>

Agenda



Processes & Methods

- WPL has to consider in which role (s)he acts:
 - **As company**
The company orders the design, manufacturing and commissioning (the company is the future operator of the facility)
 - **As supplier or provider or manufacturer**
 - **As contract manufacturer** (a manufacturer working with released as-built production documents)
- Check the contract: Are there any special agreements?
- With the *safety related risk assessment* (e.g. acc. ISO 12100) finalized, the standards to be met are defined
- Use Q-FO-QA-0013 *Required Documents Template* as a documentation plan for the next milestones (see next slide)

Template „Required Documents“

Header to enter the metadata (e.g. PSP Code)

Document Title: Required Documents
 Document Type: Template / Test Record
 System:
 PSP Code:
 CID Code:

Q-FO-QA-0013:
Required Documents

WPL synchronizes with the supplier / partner the set of required documents latest at the Final Design Review

BGI/GUV-I 5139e (Manufacturing and operation of equipment designed for research purposes)
 General Specification for the FAIR Accelerator Facility Project
 General Technical Specifications for Experiments at FAIR

Normative origin

Dokumentengruppe / Document Group
Unterkapitel / Subchapter
 Als Selektionshilfe zur Identifizierung der konkret benötigten Dokumente sind die wichtigsten Richtlinien in den rechtsstehenden Spalten aufgeführt. Details zu den Dokumentengruppen sind in den jeweiligen Richtlinien bzw. auch in zusammengefasster Form in der BGI/GUV Schrift aufgeführt. Geforderte Dokumente aus weiteren Richtlinien können unter "Weitere benötigte Dokumente" mit aufgeführt werden.
 The most important guidelines are listed in the columns on the right as a selection aid for the identification of the specific documents required. Details on the document groups are given in the respective guidelines or in a summary form in the BGI / GUV guide. Requested documents from other guidelines can be added under "Further required documentation".

Maschinenrichtlinie / Machinery Directive
 Niederspannungsrichtlinie / Low Voltage Directive
 Druckgeräterichtlinie / Press. Equip. Directive
 General Specifications (Accelerator & Experiments)

Zutreffend / Applicable
 [Yes / No]

Verfügbar / Available
 [Yes / No]

Geeignet / Suitable
 [Yes / No]

Auszufüllen spätestens M10 SAT Ab
 Fill in latest M10 SAT Ab
 Link to document within EDMS (incl. chapter)

Funktionsbeschreibung / Description of function	x		x	
Liste der angewandten Normen / List of standards applied	x		x	
Gefahrenanalyse bzw. Risikobeurteilung / Hazard analysis and/or risk assessment	x		x	
Beschreibungen des angewandten Verfahrens / Description of the method employed	x			
Liste der ...			x	x
Liste der ...	x			x
Beurteilung ...			x	x
Beschreibung der durchgeführten Schutzmaßnahmen / Description of the protective measures performed	x		x	
Beschreibung des Restrisikos / Description of the residual risk	x		x	x
Betriebsanleitung / Operating manual	x	x	x	x
Allgemeine Beschreibung des Arbeitsmittels / General description of the work equipment	x	x		x
Erstellung und Zusammenbau / Assembly	x	x		
Montage einschließlich Verbindung verschiedener Druckgeräte / Mounting including assembly of different pieces of pressure equipment			x	

Document type

Applicable ? (CDR/FDR)

Available ? (SAT Aa)

Suitable ? (SAT Ab)

Link to file storage location (EDMS)

Agenda



Experiences & Tips

- Look for **comparable projects** of various specialist departments and get in touch
- **Ask QUA** for help
→ Examples and experiences from various projects are available
- Use the **Guideline DGUV Information 202-002**
(former BGI/GUV-I 5139e)
- If necessary: consult external specialists

Agenda



Summary

- Underlying **specs** and **regulations** determine which documents are required
- The mandatory *safety related risk assessment* is prepared for the **CDR** – this **specifies many required documents**
- At the **FDR**, the WPL takes care of **the content** of the required documents being detailed
- At latest for **SAT**, the WPL takes care of these **documents being finalized** and creates a list of applicable documents and their versions
- To support this, FAIR QUA has designed a template of a **checklist for these required documents**

Спасі́бо за внима́ние!