

ESS project tools

In-kind project NIK5.3#5
Test Package for Linear Motion Technology

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Project Kick-Off Meeting, FZ Juelich,
21st November 2017

Overview with reference to chapters in the TA

- 5.1 - Planning tool – Milestones – Earned Value (EV)
- 5.2 - Risk Management
- 5.3 - Configuration Management
- 6.0 - Documents
- 5.5 - Quality Plan

Milestones – Earned Value (EV)

Table in 4.5.2 of the TA (v1-0-1)

Milestone ID	Short description	Planned/Baseline date	Location	Weighting/ Value	Comment
MS0	Kick-off meeting	T0 + max. 4 weeks	FZ Juelich	0	
MS1a	Procurement review	T0 + 14 weeks	IKON 14	0	Stage 1
MS1b	Design Review (CDR)	T0 + 28 weeks	ESS Lund	40% / 124 kEUR	Stage 1
MS2a	Procurement complete	T0 + 40 weeks	FZ Juelich	0	Stage 2
MS2b	Commissioning Equipment	T0 + 52 weeks	FZ Juelich	0	Stage 2
MS3	Measurement Review (MR)	T0+ 68 weeks	FZ Juelich	45% / 140 kEUR	Stage 2
MS4	Documentation Package	T0+ 76 weeks	FZ Juelich	0	Stage 3
MS5	System Acceptance Review (SAR)	T0 + 82 weeks	ESS Lund	15% / 47 kEUR	Stage 3

Risk Analysis – Simple Risk Matrix

- Keep it simple
- List of risks, impact + likelihood
- Most probably all risks are insignificant
- Need to identify template and send to partner
- More in ESS-0000263

Configuration Management

- Configuration of project planning processes on the interfaces of ESS projects
- At the start of the in-kind project:
 - Specifications (from ESS)
 - Budget, Milestones (from ESS)
- During execution:
 - Planning Documents (to ESS)
 - Reports (to ESS)
- For changes above a certain level:
 - Change requests (to ESS)
 - Change orders (from ESS)

Configuration Management

Figure 2 from ESS-0003688

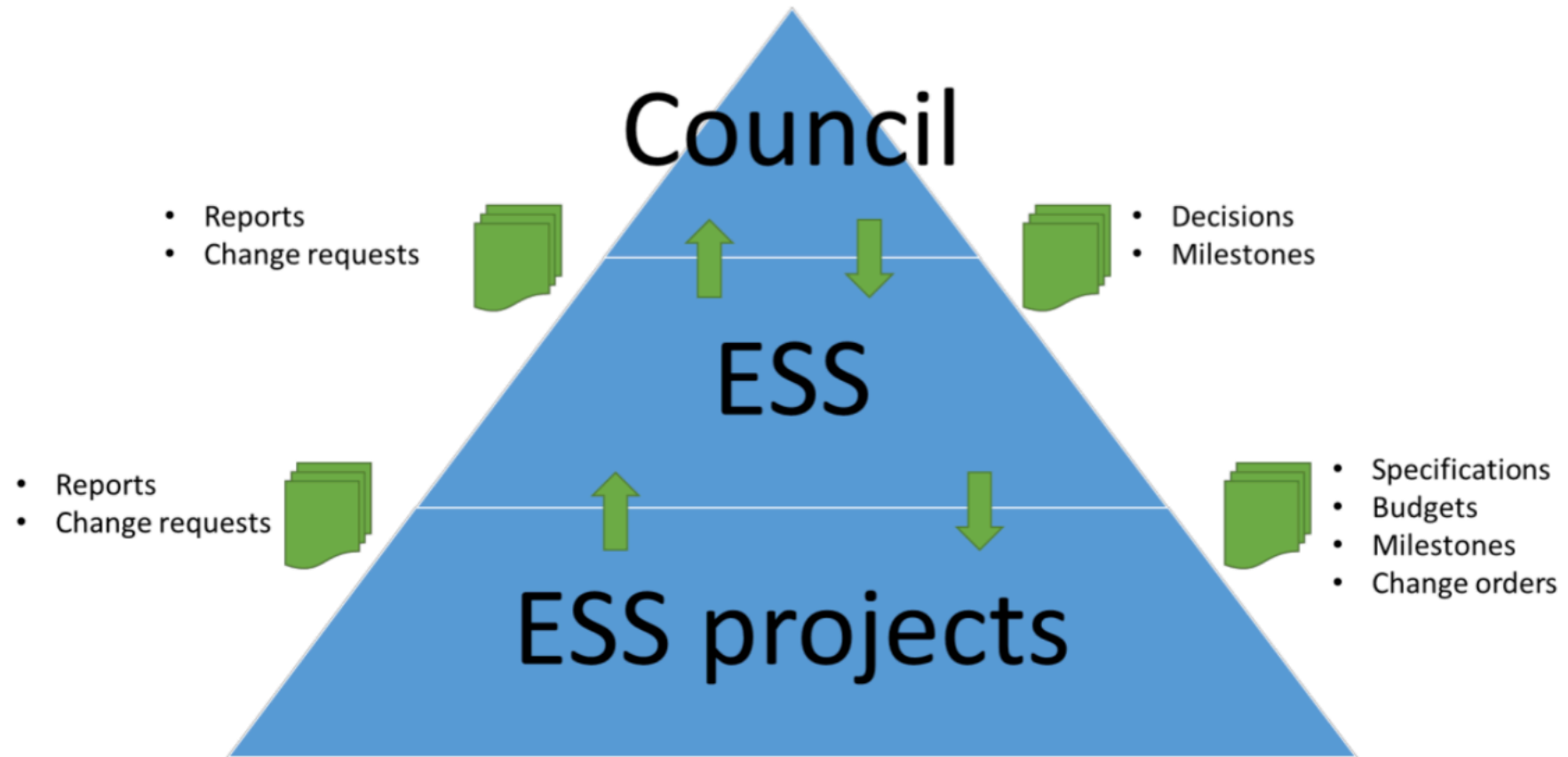


Figure 2: ESS CM interfaces are vertical in nature.

Changes to IKCs are subject to up to three Change Control Processes

1. All changes to IKCs shall be under the Internal ESS Change Control, conforming to the ESS Change Procedure (ESS-0001879).
2. The Main In-Kind Agreement and Technical Annex are controlled items and shall be under Change Control. This follows an additional process that is not currently covered by the ESS Change Procedure (ESS-0001879).
3. Depending on the partner's governance chain the partners may have additional bodies that should be notified and/or will need to approve change requests.

Configuration Management

Change control in in-kind contributions (IKC)



1. ESS Internal Change Control

- Follows ESS Change Procedure (ESS-0001879).
- Four levels of importance with
 - Level A needing ESS Council approval
 - Level B for Technical Manager, Project Manger or Director General approval.
 - Level C is project approval at the project CCB
 - Level D is WP Manager.
 - Thresholds are described in ESS Change Procedure (ESS-0001879).
- All change request fill out the ESS template for CR (ESS-0012363).

Configuration Management

Change control in in-kind contributions (IKC)



- **2. Handling of Variations as defined in the main In-Kind Agreement**
- The Main IK Agreement defines a “Variation” as “*change in nature, scope or timing of the Scope of Works*”.
- Article 8.1 states that ESS may order a Variation or may as the Partner to propose a Variation. If required, following an IKRC recommendation a partner may be entitled to a change in delivery times and receive compensation for additional costs related to the preparation and submission of proposals and performance of the Variation.

Levels of Changes for a Technical Annex

Level	Description	Amendment compiled	IKRC involvement	ESS Council
1	Cost book value or major scope change	YES	Endorsement	Approval
2	Moderate change to TA	YES	Information Only during IKRC <u>Meetg.</u>	
3	Minor change to TA	YES	Quarterly report	

Documents lifetime

Table 2 from ESS-0003688

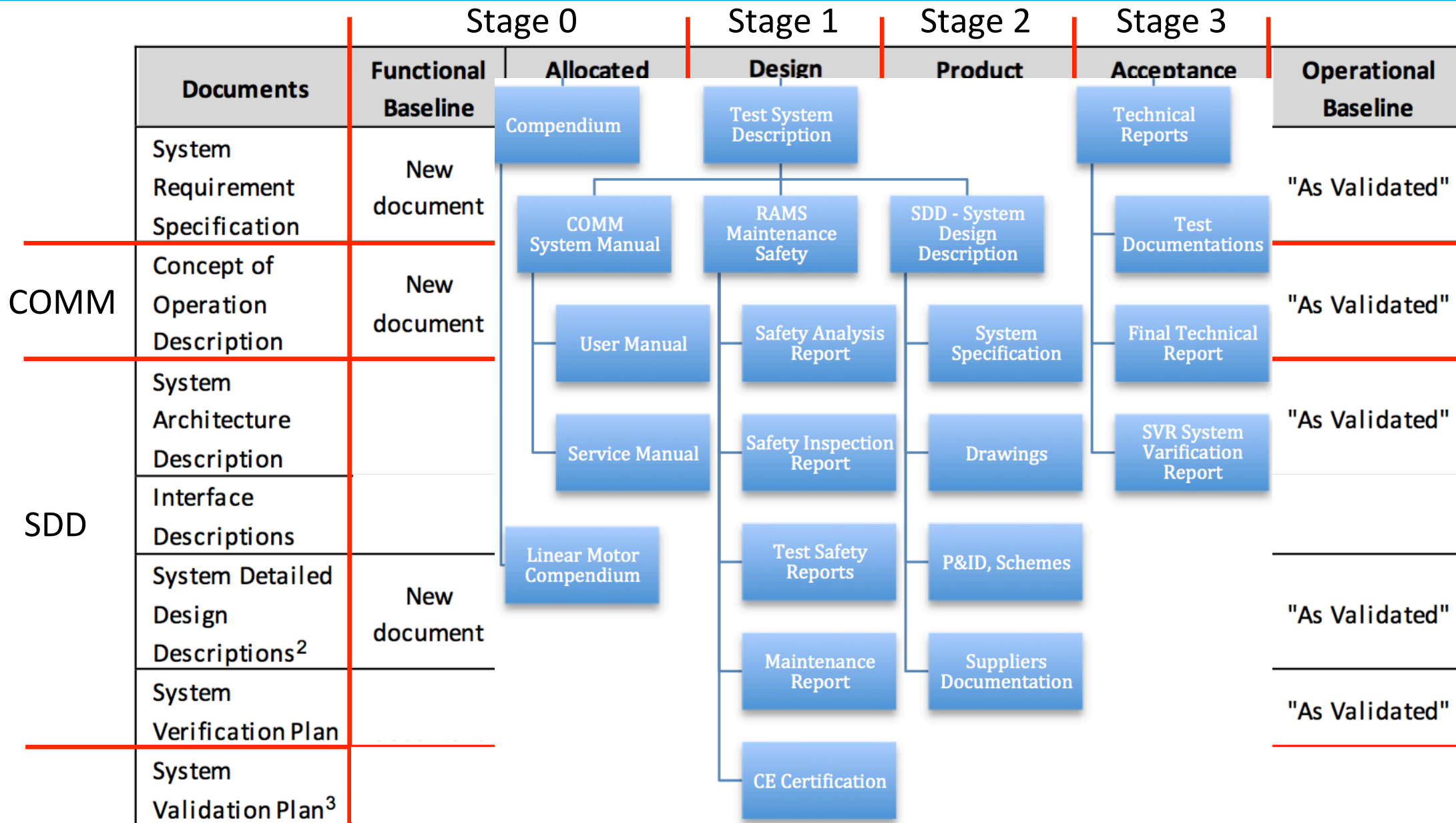
Documents	Functional Baseline	Allocated Baseline	Design Baseline	Product Baseline	Acceptance Baseline	Operational Baseline
System Requirement Specification	New document	"As-allocated"	"As Designed"	"As Built"	"As Verified"	"As Validated"
Concept of Operation Description	New document	"As-allocated"	"As Designed"	"As Built"	"As Verified"	"As Validated"
System Architecture Description		New document	"As Designed"	"As Built"	"As Verified"	"As Validated"
Interface Descriptions		New document	"As Designed"	"As Built"	"As Verified"	"As Validated"
System Detailed Design Descriptions ²	New document	"As-allocated"	New documents	"As Built"	"As Verified"	"As Validated"
System Verification Plan	New document	"As-allocated"	"As Designed"	"As Built"	"As Verified"	"As Validated"
System Validation Plan ³				New document	"As Verified"	"As Validated"

Documents lifetime

Table 2 from ESS-0003688

		Stage 0		Stage 1	Stage 2	Stage 3	
Documents		Functional Baseline	Allocated Baseline	Design Baseline	Product Baseline	Acceptance Baseline	Operational Baseline
COMM	System Requirement Specification	New document	"As-allocated"	"As Designed"	"As Built"	"As Verified"	"As Validated"
	Concept of Operation Description	New document	"As-allocated"	"As Designed"	"As Built"	"As Verified"	"As Validated"
	System Architecture Description		New document	"As Designed"	"As Built"	"As Verified"	"As Validated"
SDD	Interface Descriptions						
	System Detailed Design Descriptions ²	New document	"As-allocated"	New documents	"As Built"	"As Verified"	"As Validated"
	System Verification Plan		New document	"As Designed"	"As Built"	"As Verified"	"As Validated"
	System Validation Plan ³						

Documents



Documentation formats

Chapter 6 of TA

6. DOCUMENTATION FORMAT

All documentation and correspondence shall be in English.

All office documents shall be in a MS Word and PDF format.

The electrical drawings shall be in editable EPlan format.

All mechanical models and drawings shall be done in an editable CAD format.

Mechanical models shall be also provided as step-file, drawings shall be provided as PDF.

All technical information stipulated to be delivered to ESS shall be submitted through ESS PLM system, CHES.

Quality Plan

- Quality plan 4 weeks after the kick-off meeting