System Acceptance Review meeting for ODIN

LOKI Network Infrastructure
=ESS.INFR.W02.W03.W51
Timing System Infrastructure
=ESS.INFR.K01.K311

**PRESENTED BY JOHAN CHRISTENSSON**

2025-12-15

Status Report

Network and Timing System Infrastructure

| System name	FBS	CIDL	EPL	Delivered	Installed	Verification	Instrument Integration
Network Infrastructure Timing System Infrastructure	=ESS.INFR.W02.W03.W51 =ESS.INFR.K01.K311	CIDL OS-0000038 CIDL OS-0000036	ePlan: ESS-5233564	Requirement specification: ESS-4390092	ODIN Installation Drawings: Chess link	Verification report: ESS-5551584	Verification plan: ESS-5689547
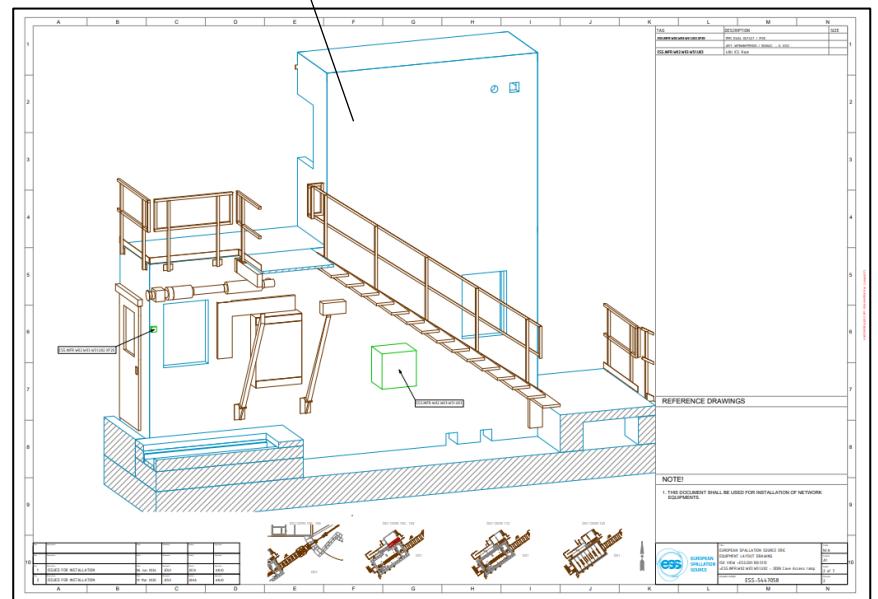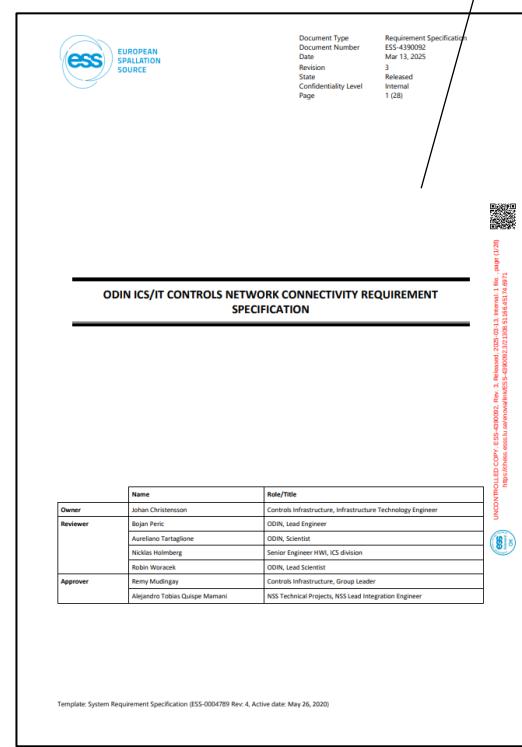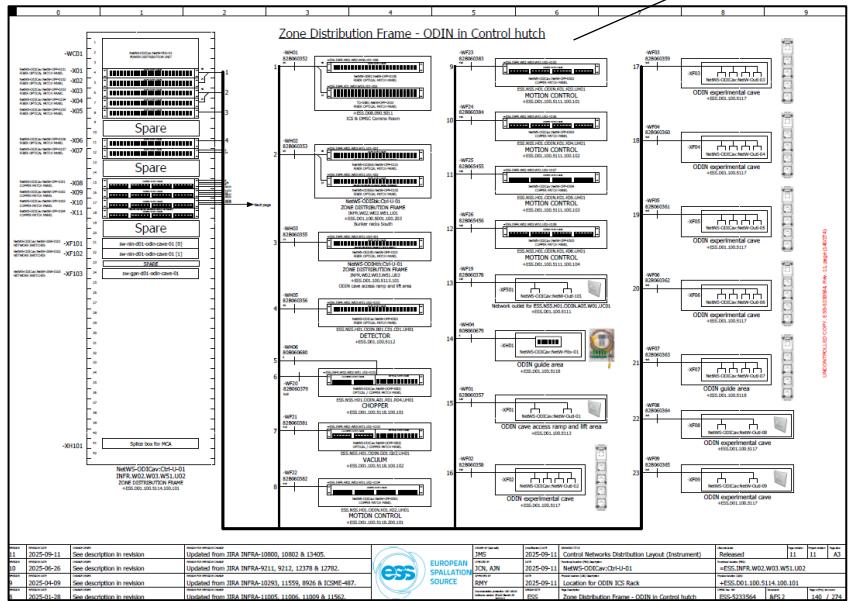
Status Report

Network and Timing System Infrastructure

System scope:

- Infrastructure for **GPN** (General Purpose Network) - Groups of office sub-networks. Used for general use by all ESS users. Access to services like E-mail, ESSOn, Confluence, Internet access, etc. Available on both wired and wireless networks

- Infrastructure for **NIN-CN** (Neutron Instrument Network- Controls Network) - Grouping of sub-networks for the operational technologies. Includes the controls network (EPICS/SCADA systems), including PLC networks, either for facilities control and monitoring (HVAC) or for the machine (LINAC, Cryogenics, Target or Neutron Instrument), as well as radiation and environment monitoring and interfaces to safety or safety related systems. Available on wired networks

- Infrastructure for **NIN-DAQ** (Neutron Instrument Network- Data Acquisition) - Experimental Data acquisition/curation networks. Data analyses, high-performance computing clusters. Available on wired networks

- Infrastructure for Timing system.

Status Report

Network and Timing System Infrastructure

Verification:

- Inspection and test plan ESS-5551586

- Verification of passive and active equipment ESS-5551584

- Instrument integration test plan ESS-5689547

Status:

- Installed and verified.

- Integrated and tested, two Chopper end devices with confirmed data flow, synchronization with Timing System and access to Controls System.

- System working as intended.

- System ready for operation.

Table 1: Verification Approval Overview

Hot commissioning
Network and Timing System Infrastructure

Network and Timing System Infrastructure ready for hot-commissioning – verification passed.

ICS/IT planned activities for hot commissioning:

- Support instrument team with network infrastructure related issues
- On-call support (part of Controls infrastructure regular on-call schedule)

Maintenance

- Power Distribution units in ICS/IT racks to be included in EAM maintenance plans (Yearly basis).
- Software for Active equipment updated according to maintenance schedule.
- All other equipment -> replace if broken