



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

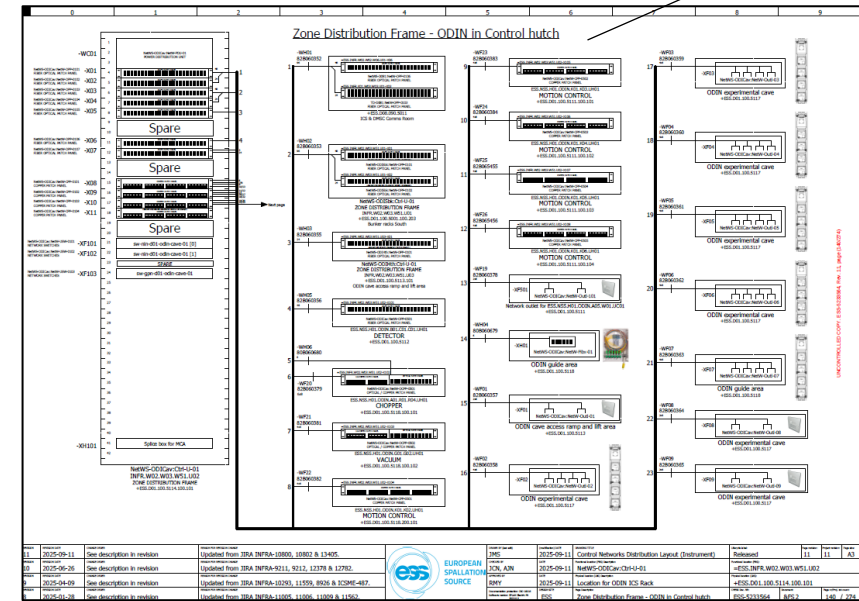
2025-12-15




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-000038 CIDL OS-000036	ePlan: ESS-5233564	Requirement specification: ESS-4390092	ODIN Installation Drawings: Chess link	Verification report: ESS-5551584	Verification plan: ESS-5689547



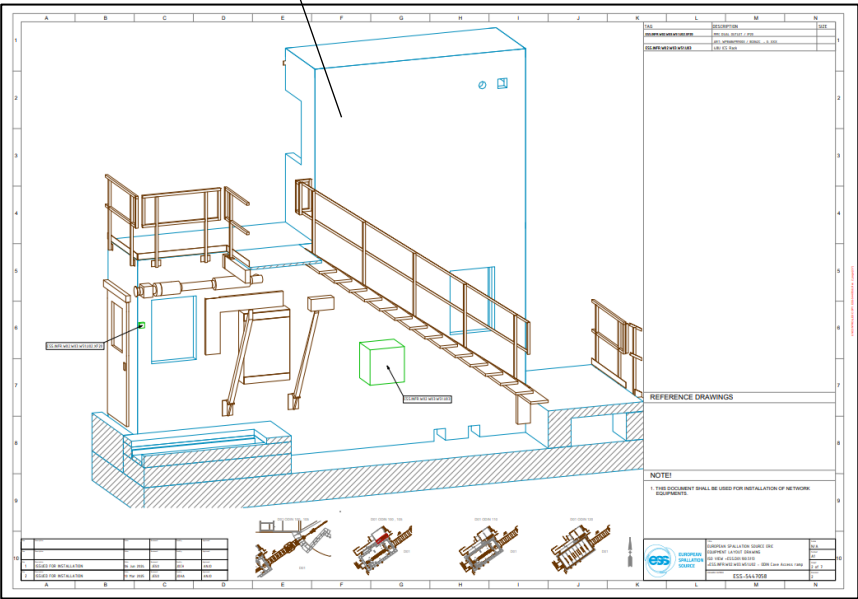


Document Type: Requirement Specification
Document Number: ESS-4390092
Date: Mar 13, 2025
Revision: 3
State: Released
Confidentiality Level: Internal
Page: 1 (28)

ODIN ICS/IT CONTROLS NETWORK CONNECTIVITY REQUIREMENT SPECIFICATION

Name	Role/Title
Owner: Johan Christenson	Controls Infrastructure, Infrastructure Technology Engineer
Reviewer: Bogdan Petric	ODIN, Lead Engineer
Aureliano Tartaglione	ODIN, Scientist
Nikolus Holmberg	Senior Engineer HW&I, ICS division
Robin Wistrarck	ODIN, Lead Scientist
Benny Muddingay	Controls Infrastructure, Group Leader
Alexander Tobiasz Gunja Mariani	NSS Technical Projects, NSS Lead Integration Engineer

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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.

VERIFICATION APPROVAL	INSTALLATION: ODIN	RFQ:218
<input checked="" type="checkbox"/> APPROVED	<input type="checkbox"/> REJECTED	
PASSIVE NETWORK COMPONENTS TEST	PASSIVE NETWORK COMPONENTS TEST	
SIGN: <i>[Signature]</i>	SIGN: <i>Emil Ström</i>	
PRINT: <i>Andreas Jonsson</i>	PRINT: <i>Emil Ström</i>	
DATE: <i>2024-11-19</i>	DATE: <i>2024-11-19</i>	
ACTIVE NETWORK COMPONENTS TEST		
SIGN:		
PRINT:		
DATE:		

Table 1: Verification Approval Overview

VERIFICATION APPROVAL	INSTALLATION: ODIN	RFQ:218
<input checked="" type="checkbox"/> APPROVED	<input type="checkbox"/> REJECTED	
PASSIVE NETWORK COMPONENTS TEST	PASSIVE NETWORK COMPONENTS TEST	
SIGN:	SIGN:	
PRINT:	PRINT:	
DATE:	DATE:	
ACTIVE NETWORK COMPONENTS TEST	ACTIVE NETWORK COMPONENTS TEST	
SIGN: <i>[Signature]</i>	SIGN: <i>[Signature]</i>	
PRINT: <i>Johan Christensson</i>	PRINT: <i>Andreas Jonsson</i>	
DATE: <i>2025-09-03</i>	DATE: <i>2025-09-03</i>	
TESTS TO BE PERFORMED		SUMMARY FINDINGS
Tests to be performed may be adjusted as applicable		Passed Not Passed NA
1. Visual inspection		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Comments:		
2. Passive Network components test		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Comments:		
3. Active Network components test		<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Comments: N/A. Need power to do the tests.		



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