

System Acceptance Review meeting for BIFROST

BIFROST Network Infrastructure =ESS.INFR.W02.W03.W47 BIFROST Timing system Infrastructure =ESS.INFR.K01.K113

PRESENTED BY JOHAN CHRISTENSSON 2025-08-26

Status Report

Network and Timing System Infrastructure

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System name	FBS	EPL	Delivered	Installed	Verification	Instrument Integration
Network Infrastructure Timing System infrastructure	=ESS.INFR.W02.W03.W47 =ESS.INFR.K01.K113	ePlan: ESS-5233564	Requirement specification: ESS-4390096	BIFROST Installation Drawings: <u>Chess link</u>	Verification report: ESS-5551568	Verification plan: ESS-5689547

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

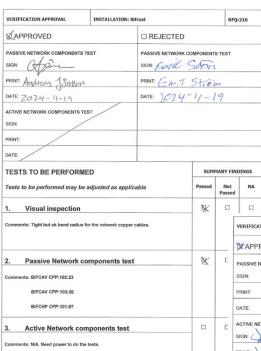
Network and Timing System Infrastructure

Verification:

- Inspection and test plan ESS-5551579
- Verification of passive and active equipment ESS-55521568
- Instrument integration test plan ESS-5689547

Status:

- · Installed and verified.
- Integrated and tested, at least one Chopper end device with confirmed data flow, synchronization with Timing System and access to Controls System.
- System working as intended.
- System ready for operation.





RIFICATION APPROVAL	INSTALLATION		RI	Q: 216				
APPROVED REJECTED								
		PASSIVE NETWORK CO	PASSIVE NETWORK COMPONENTS TEST SIGN:					
INT:		PRINT:						
TE: DATE:		DATE:						
\ al a .		ACTIVE NETWORK CON	ACTIVE NETWORK COMPONENTS TEST SIGN:					
NT: Johan Christen	sson	PRINT: Andrea	2 12	sser	^			
re: 2025-08-15		DATE: ZOZ- (
STS TO BE PERFORMED		SUMMARY FINDINGS						
sts to be performed may be adjusted as applicable		Passed	Not Passe	d N	ı			
Visual inspection								
nments:								
Passive Network components test					_			

Active Network components test

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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)