NWC OT Cybersecurity Physical Security Procedure

Document Number:	A01001045-PRO-PHYSEC
Issue Date:	August 16, 2021
Revision Number:	00
Issued For:	Review

Revision Details

Name	Title/Dept.	Signature	Date
Prepared by:			
Sidrat Mehreen	Senior OT Cybersecurity Analyst		August 08, 2021
Reviewed by:			
Sameen Ullah Khan	OT Cybersecurity Lead		August 09, 2021
Approved by:			
Farhan Rasheed	Operations Manager		August 14, 2021

Name	Title/Dept.	Signature	Date
Issued by:			
Syed Ali Raza	Planning Engineer		August 16, 2021

History Page

Issue No.	Issue Date	Prepared By (Name)	Reviewed By (Name)	Owned By (Name)	Endorsed By (Name)	Approved By (Name)
Change Description						
Change Description						
Change Description						

Reference Documents

Document Number	Document Title
ECC-1:2018	National Cybersecurity Authority Essential Cybersecurity Controls (NCA ECC)

Document Roles and Responsibilities

	Prepare/ Update/ Amend	Review	Approve	Publish
Owner	YES	YES		
Cybersecurity Steering Committee		YES		YES
Corporate Strategy & Performance Management VP			YES	

Table of Contents

Glossary

Word or Phrase	Explanation
Asset	General support system, major application, resources, high impact program, physical plant, or a logically related group of systems
Audit	Independent review and examination of records and activities to assess the adequacy of system controls, to ensure compliance with established policies and operational procedures.
Backup	Copying data to protect against loss of Integrity or Availability of the original.
Compliance	Ensuring that a Standard or set of Guidelines is followed. A means of conforming to a rule, such as a specification, policy, standard or law.

1.   Introduction

This document provides the procedure to handle physical security of different OT Assets in OT environment.

This procedure is only applicable to NWC OT infrastructure.

2.   Roles and Responsibilities

Roles	NWC Representative	Responsibilities
Request Initiator	OT User	Initiates the request for physical access to OT Asset
Request Approver	OT Asset Owner Information Security Security Dept.	Requester's Line manager, Information Security and Security dept. analyses and accepts or rejects the request based on business needs
Access Provider	Security Dept. Smart Operations OT Asset Owner	Designated Person who is authorized provide physical access to OT Asset. Active Monitoring of OT Asset during the time physical access is provided. Closing of Physical Access Request Reporting of any violation
Request Tracking & Recording	OT Asset Owner Information Security	OT Asset Owner and Information Security will track and record all physical access requests to OT Asset.

3. Physical Security – Physical Access Procedure

Guidance Notes:

1. All OT Assets Physical Access shall be recorded and documented.
2. Only authorized personnel shall be granted physical access to OT Asset.
3. All buildings/rooms/buildings housing OT Asset (local or remote) shall be physically secured using industry best practices.
4. Minimum physical security controls (such as CCTV, Access Control Systems, Motion Detection Systems, Security Guards, Access Systems (ID or Biometric based), Locked Doors & etc.) shall be evaluated for every site/plant/building/room and OT asset.
5. Access Provider shall be trained to meet requirements of cyber physical security of OT Assets and Cabinets/Buildings housing it.

Following steps shall be taken to provide physical access to an OT Asset:

1. Requester prepares and submits Physical Access Request form to department line manager with following information:
   a. Requestor details
   b. BU and department details
   c. Line Manager details
   d. OT Asset details
   e. Physical Access Justification
   f. Certification or Authorization for use of External Tools/Equipment (such as laptop, switches, cables, tools, etc.)
   g. Site/Location specific safety requirements
   h. Physical Access Time Duration
2. Department line manager analyses and provide approval.
3. Information Security evaluates and provide approval.
4. NWC Security evaluates and provide approval.
5. Access Provider (i.e., NWC Security, Smart Operations or OT Asset Owner, designated as Access Provider) will provide physical access to the OT Asset for approved time duration.
6. Access Provider will actively monitor and report status to OT Asset Owner for the time during for which physical access was provided to OT User or access requester.
   a. Access Provider to report and record all access violations.
   b. Access Provider to notify all about closure of physical access.
7. Request approvers to maintain record of physical access to OT asset.

4. Process

	Activity	Responsible	Description
1.1	Initiate request for physical access	OT User	Initiate the request for physical access to OT Asset
1.2	Request Approval	OT Asset Owner Information Security Security Dept.	Requester's Line manager, Information Security and Security dept. analyses and accepts or rejects the request based on business needs
1.3	Physical Accessing OT Asset	OT User Access Provider	Access Provider will provide Physical Access to OT User or Requester based on approved Physical Access Request
1.4	Monitoring of OT Asset	Request Approvers Access Provider	Use CCTV to monitor OT Asset and all permitted personnel to work OT Asset OT Asset shall be continuously monitored Any anomaly or deviation from normal or expected operations must be reported and logged. Access Provider to ensure that OT Asset is restored to Operational
1.5	Tracking & Recording of Physical Access	Request Approvers Security Dept.	Request Approvers shall track and record all physical access request from initiation till closeout.

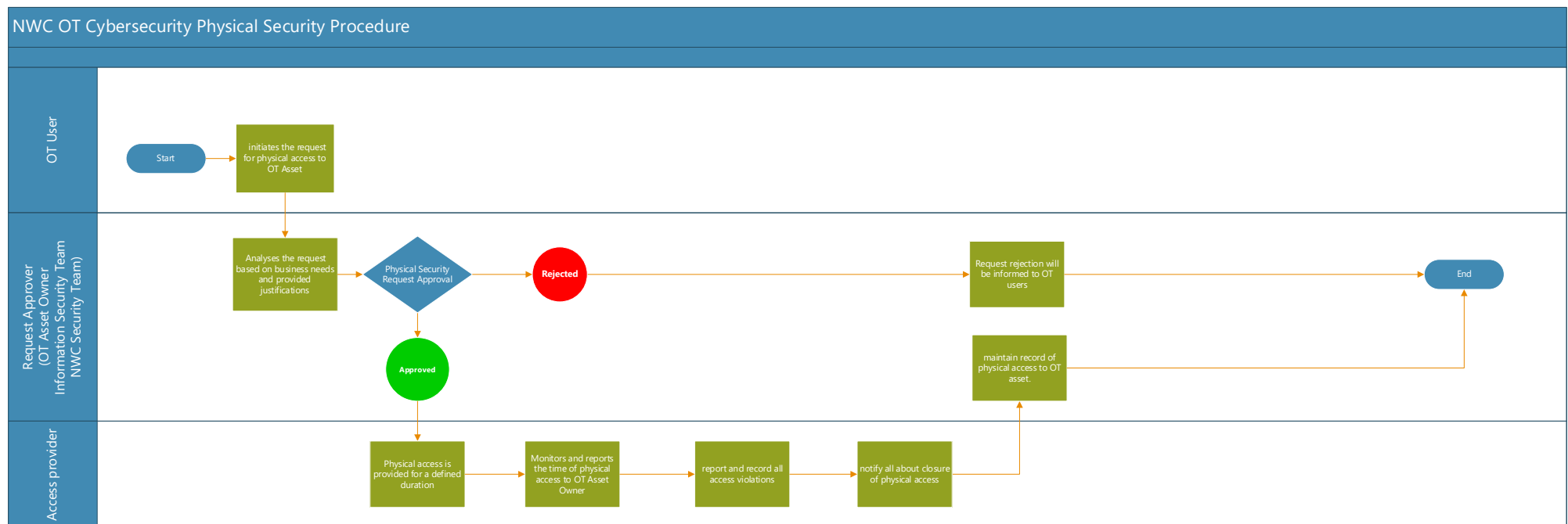## 5. Physical Security – Physical Access - Compliance

1. NWC Information Security will conduct periodic audit of sites physical access records

6. Process Flow Chart

NWC OT Cybersecurity Physical Security Procedure

OT User
- Start
- initiates the request for physical access to OT Asset

Request Approver (OT Asset Owner Information Security Team NWC Security Team)
- Analyses the request based on business needs and provided justifications
- Physical Security Request Approval
- Rejected
- Approved
- Request rejection will be informed to OT users
- maintain record of physical access to OT asset.
- End

Access provider
- Physical access is provided for a defined duration
- Monitors and reports the time of physical access to OT Asset Owner
- report and record all access violations
- notify all about closure of physical access