

REQUEST FOR PROPOSAL

IMPROVEMENT
INFRASTRUCTURE
PROJECT

021 – 5200 434 Chase Plaza, 16TH Floor JL. Jend Sudirman Kav 21 Jakarta Selatan 12920



1. Executive Summary

1.1. Overview

PT Woori Finance Indonesia Tbk (WFI) is a finance company established in 1994 and commenced operations in 1995. The company obtained a business license from the Minister of Finance of the Republic of Indonesia No. 90/KMK.017/1995 dated February 15, 1995 to engage in leasing, factoring, credit cards, and consumer financing.

In 2022, Woori Card Co. Ltd, a South Korean company, acquired WFI as part of Woori Group's expansion into the Indonesian market. WFI synergizes with Woori Saudara Bank, which is also a member of Woori Group.

The company offers various financing products, including multipurpose financing for new and used cars, heavy equipment financing, and refinancing for working capital. WFI prioritizes speed, efficiency, and excellent service to its customers and partners.

WFI has approximately 75 branch offices spread throughout Indonesia. The company's head office is located at Chase Plaza 16th Floor, Jalan Jenderal Sudirman Kav.

1.2. RFP Goals

Improvement of network architecture through introducing of new network equipment and response to aging of existing equipment.

2. RFP Guidelines

Copies of proposal for the requested services must be delivered to:

PT Woori Finance Indonesia Tbk

Chase Plaza 16th Floor

Jln. Jend. Sudirman Kay. 21, Setiabudi

Jakarta Selatan 12920

Subject: PT Woori Finance Indonesia Tbk — Improvement Infrastructure

Ref No.xxx

Up: IT Department

Any inquiry could only be made by emailing to heru.woorifinance.co.id Any other means of communication is not allowed to make the inquiries.



2.1. RFP Questions and Answers

The vendor is fully responsible for obtaining clarifications on the scope and requirements of the RFP and must not take advantage in any way of missing or incorrect information in the present document. If the vendor is uncertain regarding the meaning of a portion of the RFP or believes that portions of the RFP are inaccurate, ambiguous, and contradictory or lack information the Supplier should clarify during the Q&A session. If vendor wish to clarify any other question after the pre-bid meeting, vendor shall contact heru@woorifinance.co.id.

2.2. RFP Timeline

Schedule	To Do
14.04.25 ~ 16.04.25	Procurement announcement to vendors
17.04.25 ~ 22.04.25	Meeting with Vendors
23.04.25	Legal Document submission from vendors
25.04.25 ~ 28.04.25	Submit Proposal, Presentation and Evaluation Vendors
30.04.25 ~ 06.05.25	Final and Negotiation
08.05.25	Send PO to Vendors
13.05.25	Kick Off

Meeting & Presentation Sessions will be held on Offline Schedule may change upon confirmation from PT Woori Finance Indonesia

3. RFP Evaluation

PT Woori Finance Indonesia Tbk is currently seeking vendor with proven history, commitment to continuous improvement, superior quality in products and/or service delivery and a willingness to work in partnership to support PT Woori Finance Indonesia Tbk.

RFP evaluations will be based on, but not limited to, the following criteria as below. While cost will be considered in the review of proposals, a decision will not be made solely on the fee estimate. The selection criteria used to evaluate proposals are shown below:

- Lower Prices: 20%
- Technology, Warranty, Maintenance Support and Service delivery: 80%

4. Required Proposals

As part of your response, all vendors must provide detail proposal on each criteria as listed and defined below:



4.1. Company Background

Provide details of your company to assist us in determining your company's strengths including, but not limited to:

4.1.1 Supplier's Account Team

Provide single-point-of-contact information and describe how your organization would support PT Woori Finance Indonesia Tbk requirements. Identify how many employees would be assigned to the PT Woori Finance Indonesia Tbk account and their roles.

4.1.2 Vendor Qualification

- Have own resources of expertise team in the organization and shall not delegate or subcontract the project and the job to the other party.
- Have a representative office in Jakarta.
- Have good support and fast respone
- Have experience working together in supporting us.
- Prominent vendor in network architecture and infrastructure improvement with experience in financial industry.

4.1.3 Vendor Qualification

Provide a customer list from which PT Woori Finance Indonesia Tbk can select 3 references and contact the references.

4.2. Implementation Plan

Provide a detailed implementation with concept, timeline, man-hours of effort, and their sources to PT Woori Finance Indonesia Tbk base on 5.2 Requirement.

4.3. Warranty

Provide details on warranty for all services and devices

4.4. Maintenance Support

Provide information on maintenance support or service levels exclusive of warranty programs including specifics around any support packages. For example, the support is 24/7, when is support over phone versus on site technician, 2 hours response time in email, what are the escalation path and timelines to resolve problems. Include information on frequency of patches and whether patches are included in warranty.



4.5. Service Delivery

Provide a proposal on delivery and timelines as stated in the Scope of Work (SOW). It is important to communicate your methodology pertaining to delivery and list the actual deliverables along with expected dates.

4.6. Price Ouotations

Price quotations are to include development, maintenance Fee, license cost, delivery, installation, taxes, surcharges, and the provision of all labor and services necessary or proper for the completion of the work, except as may be otherwise not expressly Provided in the contract documents.

4.7. Document Requirement

No.	Part	Remark
1	Legal Document	NPWP, SIUP, NIB, Domisili, KTP PIC,
		Company Profile
3	List of Experience	Draft letter will be provided to the Vendor
4	Supplier Declaration	Signed
5	Other Documents to be submitted	- Project Structure (dedicated PIC)
		- Project Proposal
6	Non-Disclosure Agreement (NDA)	Signed

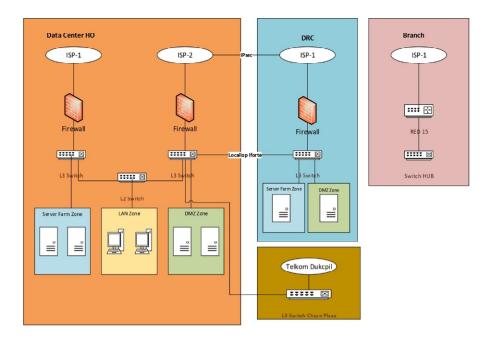
All parts of this section must be numbered. Each proposal must be organized in the manner described below to facilitate comparison among vendors:

5. Overall Requirements

5.1. Existing Infrastructure

Category	Hardware	Unit
	HP DL380 Gen 10	6
Server	HP Store Easy	1
	Storage Nimble HF 20	3
	Storage Alletra 6000	1
	Core Switch HP	4
Network	Distribution Switch	2
Network	Access Point Cisco	4
	ISP Internet	2
Security	Firewall Device	





5.2. Requirements

Category	Requirements	Description / Purpose
Internet Connection & Redundancy	Dual ISP	The company has 2 ISP lines that need to be configured for load balancing and failover.
	Device redundancy	Some devices/core switches do not have failover; vendors may recommend additional devices (active/active).
	1G/10G interface speed	All new devices must be compatible with 1G and 10G speeds.
Network	Single Core Switch	Evaluation and potential additions to support availability & resilience.
Devices & Infrastructure	Sophos main firewall	Consisting of 2 units in the main data center and 1 unit in the DRC.
Network Segmentation	Service segmentation	Services are separated by user: internal (customer/internal user), external, branch, etc.
	IPS (Intrusion Prevention System)	Our current status is we do not have IPS, Vendor can suggest using IPS to securely separate services and control traffic between segments.
	VLAN	Creating a Virtual Local Area Network to logically separate networks.
	TRUNK	Inter-VLAN configuration to support cross-network communication.
	DMZ Zone	Implementation of DMZ zone for services that must be accessed from the internet, but still secure from internal
	Server Farm (Production & Development)	Provisioning and managing separate server farm infrastructure for production and development



environments, system testing without interrupting production services. Implementation and configuration of a disaster recovery system (Disaster Recovery Center) that is synchronous with the main data center, including data replication, system failover, and periodic testing. The DRC strategy will be customized according to the architecture, capacity, and geographic location of the existing infrastructure to ensure continuity of service in the event of a major disruption. System System access control System Active Directory (AD) Data center room temperature Virtualisasi & Backup Physical Environment Virtualisasi & Recovery Power Redundancy Physical & Power Infrastructure UPS Addition environment and configuration of a disaster recovery system (Disaster Recovery System (Disaster Recovery System (Disaster Recovery System (Disaster Recovery Centralized according to the existing infrastructure and configuration of a number and are periodic testing. The DRC strategy will be customized according to the architecture, capacity, and geographic location of the existing infrastructure and integration of a number according to system to manage user identity, authentication, as well as centralized access control to network resources, centralized login, and integration with other internal services. Implementation of network traffic monitoring system to monitor performance, and analyze bandwidth utilization, network capacity Vendors recommend that the room temperature meet the standard (18–27°C). Implementation of network security according to ISO 27001 standards: - Identification of security risks - physical and logical access control - monitoring and logiging - network and system security policies) Implementation of failover on VMware virtualization environment to ensure service availability in the event of a disruption to network devices (core switches, firewalls, servers) to ensure operational continuity in the event of a disruption to one of the power sources. Addition of an Uninterruptible Power Supply (UPS	INDUNESIA	•	
Implementation and configuration of a disaster recovery system (Disaster Recovery Center) that is synchronous with the main data center, including data replication, system failover, and periodic testing. The DRC strategy will be customized according to the architecture, capacity, and geographic location of the existing infrastructure to ensure continuity of service in the event of a major disruption. System System access Implementation of a network activity logging system.			
Disaster Recovery Center (DRC) DRC strategy will be customized according to the architecture, capacity, and geographic location of the existing infrastructure to ensure continuity of service in the event of a major disruption. System access control Implementation of a network activity logging system. System access control Time management (NTP) Server. Active Directory (AD) Active Directory inplementation to manage user identity, authentication, as well as centralized access control to network resources, centralized login, and integration with other internal services. Implementation of network traffic monitoring system to monitor performance, and analyze bandwidth utilization, network capacity Vendors recommend that the room temperature meet the standard (18–27°C). Implementation of network security according to ISO 27001 compliance Security according to ISO 27001 standards: - Identification of security risks - physical and logical access control - monitoring and logging - network and system security policies) Implementation of failover on VMware virtualization environment to ensure service availability in the event of a disruption. Evaluate versions and upgrade if necessary to be compatible with the latest high availability (IHA) systems and features Veam Backup & Recovery Provision of dual power feeds for core network devices (core switches, firewalls, servers) to ensure operational continuity in the event of a disruption to one of the power sources. Addition of an Uninterruptible Power Supply (UPS) System to support device uptime during outages, as well as protection from power surges or sudden power			1
System Center (DRC) Syslog Implementation of a network activity logging system. System Management & Security System Management & Synchronize the entire network system time with NTP server. Active Directory (AD) Active Directory implementation to manage user identity, authentication, as well as centralized access control to network resources, centralized login, and integration with other internal services. Implementation of network traffic monitoring system to monitor performance, and analyze bandwidth utilization, network capacity Vendors recommend that the room temperature meet the standard (18–27°C). Implementation of network security according to ISO 27001 standards: - identification of security risks - physical and logical access control - monitoring and logical access control - monitoring and logical and system security policies) Wirtualisasi & Backup Virtualisasi & Backup Physical & Power Backup & Recovery Physical & Power Redundancy Physical & Power Redundancy Physical & Power Redundancy Physical & Power Redundancy UPS Addition Standardization & System Security according to ISO 27001 standards: - identification of security risks - physical and logical access control - monitoring and logical ac			Implementation and configuration of a disaster
Disaster Recovery Center (DRC) Center (DRC) DRC strategy will be customized according to the architecture, capacity, and geographic location of the existing infrastructure to ensure continuity of service in the event of a major disruption. Syslog System access control Time management (NTP) Server. Active Directory implementation to manage user identity, authentication, as well as centralized access control on the event of t			recovery system (Disaster Recovery Center) that is
Disaster Recovery Center (DRC) Center (DRC) DRC strategy will be customized according to the architecture, capacity, and geographic location of the existing infrastructure to ensure continuity of service in the event of a major disruption. Syslog System access control Time management (NTP) Server. Active Directory implementation to manage user identity, authentication, as well as centralized access control on the event of a method to manage user identity, authentication, as well as centralized access control to network resources, centralized login, and integration with other internal services. Standardization Physical Environment Standardization Compliance Virtualisasi & Backup Virtualisasi & Recovery Physical & Power Redundancy Physical & Power Redundancy Physical & Power Infrastructure UPS Addition Disaster Recovery replication, system failover, and periodic testing. The DRC strategy will be customized accoming to the architecture, capacity, and people octation of the exiting infrastructure on the exitation of a network activity logging system. Implementation of a network activity logging system. System devent of a major disruption. Implementation of a network activity logging system. System devent of a major disruption. System to amajor disruption. System to amajor disruption, system time with NTP exits of the exits in the event of the exits number access rights. Active Directory implementation to manage user identity, authentication, as well as centralized access control of the exits number with NTP server. Active Directory implementation to manage user identity, authentication, as well as centralized access control represented the standard (18–27°C). Implementation of network security policies of physical and logical access control represented the standard (18–27°C). Implementation of failover on VMware virtualization environment to ensure service availability in the event			synchronous with the main data center, including data
Center (DRC) DRC strategy will be customized according to the architecture, capacity, and geographic location of the existing infrastructure to ensure continuity of service in the event of a major disruption.		Disaster Recovery	· ·
architecture, capacity, and geographic location of the existing infrastructure to ensure continuity of service in the event of a major disruption. Syslog Implementation of a network activity logging system. System access control Time management (NTP) Server. Active Directory (AD) Security Active Directory (AD) Network Traffic Monitoring Data center room temperature Standardization & Physical Environment Standardization & Physical Environment Virtualisasi & Backup Virtualisasi & Backup Physical & Power Redundancy Physical & Power Infrastructure UPS Addition Active Directory implementation to manage user identity, authentication, as well as centralized access control to network resources, centralized login, and integration with other internal services. Control Active Directory implementation to manage user identity, authentication, as well as centralized access control to network resources, and analyze bandwidth utilization, network capacity Vendors recommend that the room temperature meet the standard (18–27°C). Implementation of network security according to ISO 27001 standards: - Identification of security risks - physical and logical access control - monitoring and logging - network and system security policies) Implementation of failover on VMware virtualization environment to ensure service availability in the event of a disruption. Evaluate versions and upgrade if necessary to be compatible with the latest high availability (IHA) systems and features Use Veeam Backup as a backup and recovery solution for VM and server data. upgrade to the latest version supporting full features (deduplication, encryption, granular restore, etc.) Provision of dual power feeds for core network devices (core switches, firewalls, servers) to ensure operational con			· · · · · · · · · · · · · · · · · · ·
Syslog Implementation of a major disruption.		Center (DIC)	
Syslog			
Syslog Implementation of a network activity logging system.			,
System access control Time management (NTP) Synchronize the entire network system time with NTP server. Active Directory (AD) Network Traffic Monitoring Standardization & Physical Environment Virtualisasi & Backup Virtualisasi & Recovery Physical & Power Infrastructure Physical & Power Infrastructure Physical & Power Infrastructure UPS Addition Synchronize the entire network system time with NTP synchronize the entire network system time with NTP synchronize the entire network system time with NTP server. Synchronize the entire network system time with NTP server. Synchronize the entire network system time with NTP server. Active Directory implementation to manage user identify, authentication, as well as centralized access control to network resources, centralized login, and integration with other internal services. Implementation of network traffic monitoring system to monitor performance, and analyze bandwidth utilization, network capacity Vendors recommend that the room temperature meet the standard (18–27°C). Implementation of network security according to ISO 27001 standards: - Identification of security risks - physical and logical access control - monitoring and logging - network and system security policies) Implementation of failover on VMware virtualization environment to ensure service availability in the event of a disruption. Evaluate versions and upgrade if necessary to be compatible with the latest high availability (HA) systems and features Use Veeam Backup as a backup and recovery solution for VM and server data. upgrade to the latest version supporting full features (deduplication, encryption, granular restore, etc.) Provision of dual power feeds for core network devices (core switches, firewalls, servers) to ensure operational continuity in the event of a disruption to one of the power sources.			
System Management & Security Active Directory (AD) Network Traffic Monitoring Data center room temperature Synchronize the entire network system time with NTP server. Standardization & Physical Environment Virtualisasi & Backup Virtualisasi & Recovery Physical & Power Infrastructure Physical & Power Infrastructure UPS Addition Control Time management (NTP) Synchronize the entire network system time with NTP server. Active Directory implementation to manage user identity, authentication, as well as centralized access control to network resources, centralized login, and integration with other internal services. Implementation of network traffic monitoring system to monitor performance, and analyze bandwidth utilization, network capacity Vendors recommend that the room temperature meet the standard (18–27°C). Implementation of network security according to ISO 27001 standards: - Identification of security risks - physical and logical access control - monitoring and logging - network and system security policies) Implementation of failover on VMware virtualization environment to ensure service availability in the event of a disruption. Evaluate versions and upgrade if necessary to be compatible with the latest high availability (HA) systems and features Use Veeam Backup as a backup and recovery solution for VM and server data. upgrade to the latest version supporting full features (deduplication, encryption, granular restore, etc.) Provision of dual power feeds for core network devices (core switches, firewalls, servers) to ensure operational continuity in the event of a disruption to one of the power sources. Active Directory implementation to manage user identification, and integrative analyzed access control remover with a provision of dual power feeds for core network devices (core switches, firewalls, servers) to ensure operational continuity in the event of a disruption to one of the power sources. Active Directory identification, and provides analyzed access control removed that the roo			
System Management & Security Active Directory Active Directory implementation to manage user identity, authentication, as well as centralized access control to network resources, centralized login, and integration with other internal services. Implementation of network traffic monitoring system to monitor performance, and analyze bandwidth utilization, network capacity Vendors recommend that the room temperature meet the standard (18–27°C). Implementation of network security according to ISO 27001 tompliance Implementation of network security according to ISO 27001 standards: - Identification of security risks - physical and logical access control - monitoring and logging - network and system security policies) Implementation of failover on VMware virtualization environment to ensure service availability in the event of a disruption. Evaluate versions and upgrade if necessary to be compatible with the latest high availability (HA) systems and features Use Veeam Backup as a backup and recovery solution for VM and server data. upgrade to the latest version supporting full features (deduplication, encryption, granular restore, etc.) Provision of dual power feeds for core network devices (core switches, firewalls, servers) to ensure operational continuity in the event of a disruption to one of the power sources. Addition of an Uninterruptible Power Supply (UPS) system to support device uptime during outages, as well as protection from power surges or sudden power		-	If necessary manage access rights.
Active Directory inplementation to manage user identity, authentication, as well as centralized access control to network resources, centralized login, and integration with other internal services. Network Traffic Monitoring Uniterperformance, and analyze bandwidth utilization, network capacity Vendors recommend that the room temperature meet the standard (18–27°C). Implementation of network security according to ISO 27001 (27001 standards: - Identification of security risks - physical and logging - network and system security policies) Implementation of failover on VMware virtualization environment to ensure service availability in the event of a disruption. Evaluate versions and upgrade if necessary to be compatible with the latest high availability (HA) systems and features Veam Backup & Recovery Vendors recommend that the room temperature meet the standard (18–27°C). Implementation of network security according to ISO 27001 standards: - Identification of security risks - physical and logging - network and system security policies) Implementation of failover on VMware virtualization environment to ensure service availability in the event of a disruption. Evaluate versions and upgrade if necessary to be compatible with the latest high availability (HA) systems and features Veeam Backup & Recovery Use Veeam Backup as a backup and recovery solution for VM and server data. upgrade to the latest version supporting full features (deduplication, encryption, granular restore, etc.) Provision of dual power feeds for core network devices (core switches, firewalls, servers) to ensure operational continuity in the event of a disruption to one of the power sources. Addition of an Uninterruptible Power Supply (UPS) system to support device uptime during outages, as well as protection from power surges or sudden power		~	Synchronize the entire network system time with NTP
Active Directory (AD) Active Directory (Inplementation to manage user identity, authentication, as well as centralized login, and integration with other internal services. Implementation of network traffic monitoring system to monitor performance, and analyze bandwidth utilization, network capacity Physical Environment ISO 27001 Implementation of network security according to ISO 27001 standards: - Identification of security risks - physical and logical access control - monitoring and logging - network and system security policies) Implementation of failover on VMware virtualization environment to ensure service availability in the event of a disruption. Evaluate versions and upgrade if necessary to be compatible with the latest high availability (IHA) systems and features Veeam Backup & Recovery Physical & Power Redundancy Physical & Power Redundancy Physical & Power Redundancy Physical & Power Infrastructure UPS Addition Active Directory inplementation to manage user identification of network resources, centralized login, and integration with other internal services. Implementation of network traffic monitoring system to monitoring and notice and integration of network security policies Implementation of network security according to ISO 27001 standards: - Identification of security risks - physical and logical access control - monitoring and logging - network and system security policies) Implementation of network security according to ISO 27001 standards: - Identification of security risks - physical and logical access control - monitoring and logging - network and system security policies) Implementation of network security according to ISO 27001 standards: - Identification of security risks - physical and logical access control - monitoring and logical access control - monitoring and logical access control - monitoring and logical access control - monit	Syctom	(NTP)	server.
Security Active Directory (AD) Identity, authentication, as well as centralized access control to network resources, centralized login, and integration with other internal services. Implementation of network traffic monitoring system to monitor performance, and analyze bandwidth utilization, network capacity Vendors recommend that the room temperature meet the standard (18–27°C). Implementation of network security according to ISO 27001 standards: Identification of security risks - physical and logical access control - monitoring and logging - network and system security policies) Implementation of failover on VMware virtualization environment to ensure service availability in the event of a disruption. Evaluate versions and upgrade if necessary to be compatible with the latest high availability (HA) systems and features Veeam Backup & Recovery Physical & Power Redundancy Physical & Power Redundancy Power Redundancy UPS Addition Identity, authentication, as well as centralized access control internal services. Implementation of network resources, and analyze bandwidth utilization, network capacity Vendors recommend that the room temperature meet the standard (18–27°C). Implementation of network security according to ISO 27001 standards: - ldentification of security risks - physical and logical access control - monitoring and logging - network and system security policies) Implementation of network security according to ISO 27001 standards: - ldentification of security risks - physical and logical access control - monitoring and logging - network and system security policies) Implementation of failover on VMware virtualization environment to ensure service availability (IA) systems and testures in the event of a disruption to necessary to be compatible with the latest high availability (IA) systems and features Use Veeam Backup as a backup and recovery solution for VM and server data. upgrade to the latest version supporting full features (deduplication, encryption, granular restore, etc.) Pro			Active Directory implementation to manage user
CAD Control to network resources, centralized login, and integration with other internal services.		Active Directory	identity, authentication, as well as centralized access
integration with other internal services. Network Traffic Monitoring Data center room temperature Standardization & Physical Environment Virtualisasi & Backup Virtualisasi & Recovery Physical & Power Infrastructure Power Infrastructure Integration with other internal services. Implementation of network traffic monitoring system to monitor performance, and analyze bandwidth utilization, network capacity Vendors recommend that the room temperature meet the standard (18–27°C). Implementation of network security according to ISO 27001 standards: - Identification of security risks - physical and logical access control - monitoring and logging - network and system security policies) Implementation of failover on VMware virtualization environment to ensure service availability in the event of a disruption. Evaluate versions and upgrade if necessary to be compatible with the latest high availability (HA) systems and features Use Veeam Backup as a backup and recovery solution for VM and server data. upgrade to the latest version supporting full features (deduplication, encryption, granular restore, etc.) Provision of dual power feeds for core network devices (core switches, firewalls, servers) to ensure operational continuity in the event of a disruption to one of the power sources. Addition of an Uninterruptible Power Supply (UPS) system to support device uptime during outages, as well as protection from power surges or sudden power	Security	•	
Network Traffic Monitoring Network Traffic Monitoring Implementation of network traffic monitoring system to monitor performance, and analyze bandwidth utilization, network capacity Vendors recommend that the room temperature meet the standard (18–27°C). Implementation of network security according to ISO 27001 standards: - Identification of security risks - physical and logical access control - monitoring and logging - network and system security policies) Implementation of failover on VMware virtualization environment to ensure service availability in the event of a disruption. Evaluate versions and upgrade if necessary to be compatible with the latest high availability (HA) systems and features Veeam Backup & Recovery Power Redundancy Power Redundancy Power Redundancy UPS Addition Implementation of network traffic monitoring system to monitoring and the standard (18–27°C). Implementation of network security according to ISO 27001 standards: - Identification of security risks - physical and logical access control - monitoring and logical access control - m			
Standardization & Physical Environment Standardization & Physical Environment Network reading to the standard (18–27°C). Implementation of network security according to ISO 27001 standards: - Identification of security risks - physical and logical access control - monitoring and logging - network and system security policies) Implementation of failover on VMware virtualization environment to ensure service availability in the event of a disruption. Evaluate versions and upgrade if necessary to be compatible with the latest high availability (IHA) systems and features Physical & Recovery Power Redundancy Power Redundancy UPS Addition Wendors recommend that the room temperature meet the standard (18–27°C). Implementation of network security according to ISO 27001 standards: - Identification of security risks - physical and logical access control - monitoring and logging - network and system security policies) Implementation of failover on VMware virtualization environment to ensure service availability in the event of a disruption, availability (IHA) systems and features Use Veeam Backup as a backup and recovery solution for VM and server data. upgrade to the latest version supporting full features (deduplication, encryption, granular restore, etc.) Provision of dual power feeds for core network devices (core switches, firewalls, servers) to ensure operational continuity in the event of a disruption to one of the power sources. Addition of an Uninterruptible Power Supply (UPS) system to support device uptime during outages, as well as protection from power surges or sudden power			3
Standardization & Physical Environment Standardization & Physical Environment Virtualisasi & Backup Physical Backup Physical Physical Environment Virtualisasi & Backup Physical Backup Physical Backup Physical & Power Infrastructure VIPS Addition Virtualisasi & Power Infrastructure VIPS Addition Data center room temperature Vendors recommend that the room temperature meet the standard (18–27°C). Vendors recommend that the room temperature meet the standard (18–27°C). Implementation of network security according to ISO 27001 standards: - Identification of security risks - physical and logical access control - monitoring and logging - network and system security policies) Implementation of failover on VMware virtualization environment to ensure service availability in the event of a disruption. Evaluate versions and upgrade if necessary to be compatible with the latest high availability (HA) systems and features Use Veeam Backup as a backup and recovery solution for VM and server data. upgrade to the latest version supporting full features (deduplication, encryption, granular restore, etc.) Provision of dual power feeds for core network devices (core switches, firewalls, servers) to ensure operational continuity in the event of a disruption to one of the power sources. Addition of an Uninterruptible Power Supply (UPS) system to support device uptime during outages, as well as protection from power surges or sudden power			The state of the s
Standardization & Physical Environment Standardization & Physical Environment ISO 27001 Compliance Virtualisasi & Backup Physical & Recovery Physical & Power Infrastructure ISO Addition Data center room temperature ISO 27001 ISO 27001 Compliance ISO 27001 Compliance ISO 27001 Compliance ISO 27001 Implementation of network security according to ISO 27001 standards: - Identification of security risks - physical and logical access control - monitoring and logging - network and system security policies) Implementation of failover on VMware virtualization environment to ensure service availability in the event of a disruption. Evaluate versions and upgrade if necessary to be compatible with the latest high availability (HA) systems and features Use Veeam Backup as a backup and recovery solution for VM and server data. upgrade to the latest version supporting full features (deduplication, encryption, granular restore, etc.) Provision of dual power feeds for core network devices (core switches, firewalls, servers) to ensure operational continuity in the event of a disruption to one of the power sources. Addition of an Uninterruptible Power Supply (UPS) system to support device uptime during outages, as well as protection from power surges or sudden power			
Standardization & Physical Environment ISO 27001 Implementation of network security according to ISO 27001 standards: - Identification of security risks - physical and logical access control - monitoring and logging - network and system security policies) Implementation of failover on VMware virtualization environment to ensure service availability in the event of a disruption. Evaluate versions and upgrade if necessary to be compatible with the latest high availability (HA) systems and features Veeam Backup & Recovery Physical & Power Redundancy Power Redundancy UPS Addition temperature the standard (18–27°C). Implementation of network security according to ISO 27001 standards: - Identification of security risks - physical and logical access control - monitoring and logical access c		D-tt	· -
Implementation of network security according to ISO 27001 27001 standards: - Identification of security risks - physical and logical access control - monitoring and logging - network and system security policies) Implementation of failover on VMware virtualization environment to ensure service availability in the event of a disruption. Evaluate versions and upgrade if necessary to be compatible with the latest high availability (HA) systems and features			•
Recovery Security according to ISO 27001 27001 standards: - Identification of security risks - physical and logical access control - monitoring and logging - network and system security policies) Implementation of failover on VMware virtualization environment to ensure service availability in the event of a disruption. Evaluate versions and upgrade if necessary to be compatible with the latest high availability (HA) systems and features Use Veeam Backup as a backup and recovery solution for VM and server data. upgrade to the latest version supporting full features (deduplication, encryption, granular restore, etc.) Provision of dual power feeds for core network devices (core switches, firewalls, servers) to ensure operational continuity in the event of a disruption to one of the power sources. Addition of an Uninterruptible Power Supply (UPS) system to support device uptime during outages, as well as protection from power surges or sudden power	Standardization	temperature	
Environment ISO 27001 compliance Physical and logical access control - monitoring and logging - network and system security policies) Implementation of failover on VMware virtualization environment to ensure service availability in the event of a disruption. Evaluate versions and upgrade if necessary to be compatible with the latest high availability (HA) systems and features Use Veeam Backup as a backup and recovery solution for VM and server data. upgrade to the latest version supporting full features (deduplication, encryption, granular restore, etc.) Provision of dual power feeds for core network devices (core switches, firewalls, servers) to ensure operational continuity in the event of a disruption to one of the power sources. Addition of an Uninterruptible Power Supply (UPS) system to support device uptime during outages, as well as protection from power surges or sudden power			
Virtualisasi & Backup Physical & Power Infrastructure Compliance Physical & Power Infrastructure Physical & Power Infrastructure Power Redundancy Physical & Power Redundancy Physical & Power Redundancy Power			The state of the s
Virtualisasi & Backup Virtualisasi & Backup Veeam Backup & Recovery Physical & Power Infrastructure VIPS Addition Vimualisasi & Dackup Virtualisasi & Backup Virtualisasi & Backup Veeam Backup & Core switches, firewalls, servers) to ensure operational continuity in the event of a disruption to one of the power surges or sudden power system to support device uptime during outages, as well as protection from power surges or sudden power	Liviloriniene		physical and logical access control - monitoring and
Virtualisasi & Backup Virtualisasi & Backup Veeam Backup & Recovery Physical & Power Infrastructure Virtualisasi & Power Infrastructure Virtualisasi & Backup Virtualisasi & Backup Veeam Backup & Recovery Power Redundancy Power Redundancy Veeam Backup & Power Infrastructure Environment to ensure service availability in the event of a disruption. Evaluate versions and upgrade if necessary to be compatible with the latest high availability (HA) systems and features Use Veeam Backup as a backup and recovery solution for VM and server data. upgrade to the latest version supporting full features (deduplication, encryption, granular restore, etc.) Provision of dual power feeds for core network devices (core switches, firewalls, servers) to ensure operational continuity in the event of a disruption to one of the power sources. Addition of an Uninterruptible Power Supply (UPS) system to support device uptime during outages, as well as protection from power surges or sudden power			logging - network and system security policies)
Virtualisasi & Backup Virtualisasi & Backup Veeam Backup & Recovery Physical & Power Infrastructure Virtualisasi & Discovery Virtualisasi & Backup Veeam Backup & Recovery Power Redundancy Power Redundancy Power Infrastructure Veeam Backup & Recovery Veeam Backup & Recovery Veeam Backup & Supporting full features (deduplication, encryption, granular restore, etc.) Provision of dual power feeds for core network devices (core switches, firewalls, servers) to ensure operational continuity in the event of a disruption to one of the power sources. Addition of an Uninterruptible Power Supply (UPS) system to support device uptime during outages, as well as protection from power surges or sudden power			Implementation of failover on VMware virtualization
Virtualisasi & Backup Neeam Backup & Use Veeam Backup as a backup and recovery solution for VM and server data. upgrade to the latest version supporting full features (deduplication, encryption, granular restore, etc.) Physical & Power Infrastructure Physical & Power Infrastructure Power Redundancy Provision of dual power feeds for core network devices (core switches, firewalls, servers) to ensure operational continuity in the event of a disruption to one of the power sources. Addition of an Uninterruptible Power Supply (UPS) system to support device uptime during outages, as well as protection from power surges or sudden power			environment to ensure service availability in the event
Virtualisasi & Backup Veeam Backup & Use Veeam Backup as a backup and recovery solution for VM and server data. upgrade to the latest version supporting full features (deduplication, encryption, granular restore, etc.) Physical & Power Redundancy Physical & Power Infrastructure UPS Addition Necessary to be compatible with the latest high availability (HA) systems and features Use Veeam Backup as a backup and recovery solution for VM and server data. upgrade to the latest version supporting full features (deduplication, encryption, granular restore, etc.) Provision of dual power feeds for core network devices (core switches, firewalls, servers) to ensure operational continuity in the event of a disruption to one of the power sources. Addition of an Uninterruptible Power Supply (UPS) system to support device uptime during outages, as well as protection from power surges or sudden power		VMware Failover	of a disruption. Evaluate versions and upgrade if
Availability (HA) systems and features Use Veeam Backup as a backup and recovery solution for VM and server data. upgrade to the latest version supporting full features (deduplication, encryption, granular restore, etc.) Physical & Power Redundancy Physical & Power Infrastructure UPS Addition Availability (HA) systems and features Use Veeam Backup as a backup and recovery solution for VM and server data. upgrade to the latest version supporting full features (deduplication, encryption, granular restore, etc.) Provision of dual power feeds for core network devices (core switches, firewalls, servers) to ensure operational continuity in the event of a disruption to one of the power sources. Addition of an Uninterruptible Power Supply (UPS) system to support device uptime during outages, as well as protection from power surges or sudden power			,
Veeam Backup & Recovery Physical & Power Infrastructure Use Veeam Backup as a backup and recovery solution for VM and server data. upgrade to the latest version supporting full features (deduplication, encryption, granular restore, etc.) Provision of dual power feeds for core network devices (core switches, firewalls, servers) to ensure operational continuity in the event of a disruption to one of the power sources. Addition of an Uninterruptible Power Supply (UPS) system to support device uptime during outages, as well as protection from power surges or sudden power			,
Physical & Power Redundancy Infrastructure Veeam Backup & for VM and server data. upgrade to the latest version supporting full features (deduplication, encryption, granular restore, etc.) Provision of dual power feeds for core network devices (core switches, firewalls, servers) to ensure operational continuity in the event of a disruption to one of the power sources. Addition of an Uninterruptible Power Supply (UPS) system to support device uptime during outages, as well as protection from power surges or sudden power			
Physical & Power Redundancy Infrastructure Recovery Recovery Power Redundancy Provision of dual power feeds for core network devices (core switches, firewalls, servers) to ensure operational continuity in the event of a disruption to one of the power sources. Addition of an Uninterruptible Power Supply (UPS) system to support device uptime during outages, as well as protection from power surges or sudden power		Voorm Brokum &	·
Physical & Power Redundancy Physical & Power Infrastructure Power Addition granular restore, etc.) Provision of dual power feeds for core network devices (core switches, firewalls, servers) to ensure operational continuity in the event of a disruption to one of the power sources. Addition of an Uninterruptible Power Supply (UPS) system to support device uptime during outages, as well as protection from power surges or sudden power		•	. •
Physical & Power Redundancy Physical & Power Infrastructure Power Redundancy Power Infrastructure Power Redundancy Power Redundancy Provision of dual power feeds for core network devices (core switches, firewalls, servers) to ensure operational continuity in the event of a disruption to one of the power sources. Addition of an Uninterruptible Power Supply (UPS) system to support device uptime during outages, as well as protection from power surges or sudden power		Recovery	
Physical & Power Redundancy Physical & Power Infrastructure Power Redundancy Infrastructure Power Redundancy (core switches, firewalls, servers) to ensure operational continuity in the event of a disruption to one of the power sources. Addition of an Uninterruptible Power Supply (UPS) system to support device uptime during outages, as well as protection from power surges or sudden power			
Physical & Power Redundancy Continuity in the event of a disruption to one of the power sources. Power Infrastructure UPS Addition Addition of an Uninterruptible Power Supply (UPS) system to support device uptime during outages, as well as protection from power surges or sudden power			
Physical & power sources. Power Infrastructure UPS Addition Addition of an Uninterruptible Power Supply (UPS) system to support device uptime during outages, as well as protection from power surges or sudden power	•	Power Redundancy	
Power Infrastructure UPS Addition Addition of an Uninterruptible Power Supply (UPS) system to support device uptime during outages, as well as protection from power surges or sudden power			
Infrastructure UPS Addition Addition of an Uninterruptible Power Supply (UPS) system to support device uptime during outages, as well as protection from power surges or sudden power			
UPS Addition system to support device uptime during outages, as well as protection from power surges or sudden power			Addition of an Uninterruptible Power Supply (UPS)
well as protection from power surges or sudden power	וווומאנועננעופ	LIDS Addition	system to support device uptime during outages, as
		UPS AUUILION	well as protection from power surges or sudden power
1			interruptions.

Note: These requirements may change during the project if there are adjustments to needs, infrastructure conditions, or recommendations from vendors or us.



5.3. Scope of Work

No.	Scope	Description
1	Current Network Infrastructure Analysis	Conduct an assessment of the condition of existing network devices, including ISPs, firewalls, core switches and current network topology.
2	Redundancy & Failover	Redesign the network architecture to support dual ISP and device failover configuration (firewall, switch).
3	Network Segmentation, DMZ, DRC and Server Farm	Planning and implementing VLAN, trucking, DMZ, and traffic separation based on services (internal, external, branch, vendor). Establish DRC zones to support disaster recovery with data replication configuration, failover, and periodic testing, adjusted to geographical conditions and infrastructure capacity as well as the construction of separate server farms for production and development to improve the control, security, and efficiency of the system environment.
4	Security Enhancements	Implement IPS, system access control, syslog management, and time management (NTP) to support secure operations and Active Directory as a centralized authentication system that also supports policy management and group-based access.
5	Physical Infrastructure Adjustment	Recommended server room temperature settings to meet industry standards (18–27°C).
6	Implementation of ISO 27001 Standard	Implement information security policies based on ISO 27001, including access control, activity logging, and risk management.
7	Documentation & Policy Creation	Prepare technical policy documents related to networks, segmentation, security, failover procedures, and DMZ zone access and protection policies.
8	Additional Device Recommendations	Vendors will provide a list and specifications of additional devices to meet failover, performance, segmentation, and DMZ zone requirements.
9	Virtualization & Backup Implementation	Evaluate and configure VMware failover to ensure VM availability, and implement Veeam Backup & Recovery solution to maintain data integrity. A version upgrade will be performed if the current system does not meet the performance and feature standards.
10	Physical & Power Infrastructure	Evaluation and implementation of redundant power lines and UPS systems for key network devices and critical systems, to support stability, continuity of service, and protection against damage due to power interruptions.