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# NETWORK DESIGN PROJECT CHECKLIST

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Based on the principles you have identified, complete the checklist template according to the headings provided.

## 1. Requirements Gathering and Planning

- Identify business needs (scalability, security, reliability and efficiency))
- Define network scope (headquarters, branch offices, remote users)
- Decide on which protocols to use
- Identify current network status and future growth expectations
- Decide on the appropriate design model
- Plan IP addressing

## 2. Network Architecture and Design

- Apply the Hierarchical model (Core layer, Distribution, Access Layer)
- Use VLANs to segment traffic
- Use scalable routing protocols (OSPF, BGP)

## 3. Security and Compliance

- Implement VPNs and Firewalls
- Use Access Control Lists (ACLs) to control network traffic
- Use strong password on devices

## 4. Performance and Scalability

- Enable redundancy by using Spanning Tree Protocol, Dual links and redundant devices
- Implement EtherChannel to avoid traffic bottlenecks
- Reduce congestion by using WAN optimization techniques

## 5. Implementation and Deployment

- Deploy and configure all the devices used on the network
- Configure routing and switching protocols for optimized performance
- Document all network configurations and settings for troubleshooting and future upgrades
- Test all configurations before deployment

## 6. Monitoring and Maintenance

- Enable logging and alerting by using SNMP and NetFlow
- Conduct regular network audits
- Schedule regular security updates and firmware upgrades

#### 7. Evaluation and Optimization

- Regularly analyze the network performance reports and logs
- Modify QoS and ACLs based on network performance
- Gather user feedback for potential improvements

#### Group Commitment Statement

We, the undersigned members of Corelink Networks, hereby commit to delivering a network design that aligns with the highest standards of reliability, scalability, and security.

By signing this statement, we commit to upholding these principles and delivering a network design that meets expectations and delivers measurable value to the organization.

GROUP MEMBER	SIGNATURE
NKUNA THEO	T NKUNA
MANALA LESEDI	
RESEGO CHUKUCWANE	R CHUKUCWANE
MZIMNI TULANI	T MZIMNI
RAMPEDI TSHEGOFATSO	TP RAMPEDI