

PPDIOO Lifecycle Approach to Network Design and Implementation





PPDIOO Phases

- **Prepare** – establish organizational requirements.
- **Plan** – identify initial network requirements.
- **Design** – comprehensive, based on planning outcomes.
- **Implement** – build network according to design.
- **Operate** – maintain network health.
- **Optimize** – proactive management of network.



Lifecycle Approach

- Lowering the total cost of network ownership
- Increasing network availability
- Improving business agility
- Speeding access to applications and services
- Identifying and validating technology requirements
- Planning for infrastructure changes and resource requirements
- Developing a sound network design aligned with technical requirements and business goals
- Accelerating successful implementation
- Improving the efficiency of your network and of the staff supporting it
- Reducing operating expenses by improving the efficiency of operational processes and tools



Lifecycle Approach (1)

■ Benefits:

- Lowering the total cost of network ownership
- Increasing network availability
- Improving business agility
- Speeding access to applications and services

■ Lower costs:

- Identify and validate technology requirements
- Plan for infrastructure changes and resource requirements
- Develop a sound network design aligned with technical requirements and business goals
- Accelerate successful implementation
- Improve the efficiency of your network and of the staff supporting it
- Reduce operating expenses by improving the efficiency of operational processes and tools



Lifecycle Approach (2)

■ Improve high availability:

- Assessing the network's security state and its capability to support the proposed de-sign
- Specifying the correct set of hardware and software releases, and keeping them operational and current
- Producing a sound operations design and validating network operations
- Staging and testing the proposed system before deployment
- Improving staff skills
- Proactively monitoring the system and assessing availability trends and alerts

■ Gain business agility:

- Establishing business requirements and technology strategies
- Readyng sites to support the system that you want to implement
- Integrating technical requirements and business goals into a detailed design and demonstrating that the network is functioning as specified
- Expertly installing, configuring, and integrating system components
- Continually enhancing performance

■ Accelerate access to network applications and services:

- Assessing and improving operational preparedness to support current and planned network technologies and services
- Improving service-delivery efficiency and effectiveness by increasing availability, resource capacity, and performance
- Improving the availability, reliability, and stability of the network and the applications running on it
- Managing and resolving problems affecting your system and keeping software applications current



Planning a Network Implementation

- **Implementation Components:**
 - Description of the step
 - Reference to design documents
 - Detailed implementation guidelines
 - Detailed roll-back guidelines in case of failure
 - Estimated time needed for implementation
- **Summary Implementation Plan** – overview of implementation plan
- **Detailed Implementation Plan** – describes exact steps necessary to complete the implementation phase, including steps to verify and check the work of the network engineers implementing the plan