

## Overview

This standard is concerned with providing upgrades and new technology roll-out activities.

It includes reviewing updates, assessing their impact to existing systems, planning, undertaking and testing upgrades.

## Perform digital telecommunications technology upgrades

---

### Performance criteria

*You must be able to:*

1. Maintain an up-to-date list of available upgrades
2. Assess the impact of each upgrade on existing systems in line with organisational procedures
3. Develop an upgrade implementation plan which identifies any dependencies and includes contingency and back-out
4. Assess the impact of the proposed plan to identify any customer service outages
5. Advise customers of any planned service outages to obtain their approval to proceed.
6. Notify the customer and other relevant stakeholders prior to implementing planned upgrades
7. Undertake pre-testing of upgrades in a suitable test environment prior to implementation
8. Undertake implementation of the upgrade in a live environment according to manufacturer's instructions and organisational standards
9. Monitor the progress of upgrade activity to identify any results which are not in line with expectations
10. Comply with the defined service level agreement for carrying out upgrade
11. Monitor network alarms and system functionality in co-ordination with the customer to confirm effectiveness of the change process
12. Carry out all upgrade operations following organisational safety procedures, manufacturer's instructions and any site-specific requirements
13. Notify all relevant parties of the results of the upgrade activity
14. Record all work undertaken and test results to organisational standards

## Knowledge and understanding

*You need to know and understand:*

1. The need to maintain a list of upgrades available from vendors and third parties
2. The industry standard telecommunications networks and equipment system architectures and their traffic handling capabilities and characteristics
3. Why it is important to liaise with other technical staff and customers on operational matters concerned with upgrading technology and systems
4. The factors involved in implementing upgrades of Telecoms equipment hardware and software
5. The parameters based on which success of upgrade activity would be tested
6. The organisational procedures, manuals and specifications and where to find them
7. Key features of the telecom equipment being upgraded
8. The key features of IP based networking and network monitoring systems
9. Safety awareness and how to apply precautions to minimise, control or eliminate hazards
10. The process to follow when dealing with unexpected situations regarding safety
11. The technical requirements, constraints and manageability issues for a given customer upgrade requirement
12. Why it is necessary to test upgrades following their implementation
13. The need to check hardware requirements as part of software upgrades

## Perform digital telecommunications technology upgrades

---

<b>Developed by</b>	Tech Partnership
<b>Version Number</b>	1
<b>Date Approved</b>	March 2018
<b>Indicative Review Date</b>	November 2020
<b>Validity</b>	Current
<b>Status</b>	Original
<b>Originating Organisation</b>	Tech partnership
<b>Original URN</b>	TECIS1101309
<b>Relevant Occupations</b>	Information and Communication Technology Professionals; Information and Communication Technology; Information and Communication Technology Officer
<b>Suite</b>	IT and Telecoms
<b>Keywords</b>	Telecommunications, Telecoms, Radio

---