



**Australian Government**

# **ICTOPN605 Manage optical ethernet transmission**

**Release: 1**

# ICTOPN605 Manage optical ethernet transmission

## Modification History

| Release   | Comments                                                                                                     |
|-----------|--------------------------------------------------------------------------------------------------------------|
| Release 1 | This version first released with ICT Information and Communications Technology Training Package Version 7.0. |

## Application

This unit describes the skills and knowledge required to manage ethernet optical transmission systems. It includes analysis of fault conditions that may occur.

It applies to individuals, who work as members of a team with carrier networks and use optical technologies. Individuals in these roles are excellent communicators and skilled technicians.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

## Unit Sector

Telecommunications – Optical Networks

## Elements and Performance Criteria

| ELEMENT                                          | PERFORMANCE CRITERIA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|--------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Elements describe the essential outcomes.</i> | <i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>                                                                                                                                                                                                                                                                                                                                                                                                               |
| 1. Plan to test optical ethernet link            | 1.1 Obtain and review required legislation, codes, company work practices, regulations and standards, work health and safety (WHS) and environmental requirements, personal protective equipment, and hazard identification tools for scoped work<br>1.2 Confirm that worksite adheres to safety requirements and organisational guidelines<br>1.3 Determine the technical environment and required network components<br>1.4 Report on infrastructure and confirm that ethernet link meets performance requirements |
| 2. Specify architecture requirements for         | 2.1 Discuss architecture requirements for managing optical ethernet transmission with relevant personnel                                                                                                                                                                                                                                                                                                                                                                                                             |

|                                        |                                                                                                                                                                                                                                                                            |
|----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| managing optical ethernet transmission | 2.2 Verify and list required architecture components<br>2.3 Determine functions and frameworks for the system to operate across network boundaries in consideration of performance criteria                                                                                |
| 3. Manage optical ethernet link        | 3.1 Conduct work in compliance with testing requirements and agreed upon procedures<br>3.2 Document and analyse test results in comparison with industry benchmarks<br>3.3 Report test results to relevant personnel according to organisational procedures and guidelines |

## Foundation Skills

*This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.*

| SKILL                   | DESCRIPTION                                                                                                                                                                                                                                                                                                            |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Numeracy                | <ul style="list-style-type: none"> <li>Uses mathematical formulae to evaluate technical data and interpret results</li> </ul>                                                                                                                                                                                          |
| Oral communication      | <ul style="list-style-type: none"> <li>Uses listening and questioning skills to confirm technical and operational requirements</li> <li>Participates in verbal exchanges of ideas and solutions and uses required, detailed and clear language to address internal and external personnel and clients</li> </ul>       |
| Reading                 | <ul style="list-style-type: none"> <li>Interprets textual information from required sources to identify and plan for all job requirements and adhere to procedures and standards</li> </ul>                                                                                                                            |
| Writing                 | <ul style="list-style-type: none"> <li>Completes standard reports and documentation using clear and technically specific language and numerical data</li> </ul>                                                                                                                                                        |
| Teamwork                | <ul style="list-style-type: none"> <li>Identifies requirements of important communication exchanges, selecting required channels, format, tone and content to suit purpose and audience and monitoring impact</li> </ul>                                                                                               |
| Planning and organising | <ul style="list-style-type: none"> <li>Sequences and schedules complex activities, monitors implementation and manages required communication</li> <li>Takes responsibility for high-impact decisions in complex situations involving many variables and constraints</li> </ul>                                        |
| Problem solving         | <ul style="list-style-type: none"> <li>Works independently within parameters with a strong sense of responsibility and ownership of goals, plans, decisions and outcomes</li> <li>Monitors adherence to legal and regulatory rights and responsibilities with specific reference to safe industry practices</li> </ul> |
| Technology              | <ul style="list-style-type: none"> <li>Identifies systems, devices and applications with potential to meet current and/or future needs</li> </ul>                                                                                                                                                                      |

## Unit Mapping Information

Supersedes and is equivalent to ICTOPN601 Manage optical ethernet transmission.

## Links

Companion Volume Implementation Guide is found on VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>