



Australian Government

ICTOPN608 Analyse optical transmission systems

Release: 1

ICTOPN608 Analyse optical transmission systems

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 verify the characteristics of Next Generation Networks (NGN) to ensure they will support the new modulation requirements of the equipment.

It applies to individuals who are experienced technicians from networking carriers, service providers, or other private and public organisations, who have experience in the optical transmission area.

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. Prepare to conduct characterisation tests on optical networks	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 1.2 Construct test procedures according to organisational guidelines and requirements 1.3 Obtain specifications for characterisation tests on optical networks from relevant personnel
2. Conduct link characterisation tests and analyse optical	2.1 Perform optical tests to characterise existing fibre link 2.2 Analyse results of optical tests, and determine extent and nature of future upgrades

networks	
3. Document analysis of optical networks with recommendations	<p>3.1 Produce final drawings and plans of proposed upgrade requirements for optical transmission and submit to project manager according to enterprise policy</p> <p>3.2 Prepare a report on the networks measured performance and recommendations of future upgrades</p>

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"> • Uses mathematical equations to evaluate all required technical data
Oral communication	<ul style="list-style-type: none"> • Uses listening and questioning skills to confirm technical and operational requirements • Participates in verbal exchanges of ideas and solutions and uses required, detailed and clear language to address team members, supervisors and customers
Reading	<ul style="list-style-type: none"> • Interprets textual information from required sources to identify and plan for all job requirements and adhere to procedures and standards
Writing	<ul style="list-style-type: none"> • Prepares standard documentation using clear and technically specific language, numerical data, drawings and plans
Planning and organising	<ul style="list-style-type: none"> • Develops plans to manage relatively complex, non-routine tasks with an awareness of how they may contribute to longer term operational and strategic goals • Takes personal responsibility for adherence to legal and regulatory responsibilities required to own work, with specific reference to workplace safety • Understands main tasks, responsibilities and boundaries of own work
Problem solving	<ul style="list-style-type: none"> • Recognises and addresses complex problems involving multiple variables • Makes a range of critical and non-critical decisions in relatively complex situations, taking a range of constraints into account
Technology	<ul style="list-style-type: none"> • Identifies systems, devices and applications with potential to meet current and/or future needs

Unit Mapping Information

Supersedes and is equivalent to ICTOPN604 Analyse optical transmission systems.

Links

Companion Volume Implementation Guide is found on VETNet -

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