



Australian Government

ICTNPL601 Plan the development and growth of the telecommunications network

Release: 1

ICTNPL601 Plan the development and growth of the telecommunications network

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 2.0.

Application

This unit describes the skills and knowledge required to analyse and evaluate forecast data to plan development and growth of the telecommunications network.

It applies to individuals with a high level of specialist technical skills and knowledge in optical telecommunications and IT networks using internet protocol (IP) systems.

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

Unit Sector

Telecommunications – Network Planning

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. Gather data related to existing and projected network usage	1.1 Access market intelligence for information on customer demand on the network and likely growth in network use 1.2 Obtain demand data to plan for potential network traffic quantity and flow 1.3 Access information relating to new and emerging technologies, facilities and features, and their specific applications 1.4 Access relevant legislation and associated operational codes and analyse impact on planning processes
2. Assess need for network	2.1 Evaluate capacity of existing network to absorb planned

growth	growth using network capacity usage and traffic measurements 2.2 Plan likely timing of necessary network increments to minimise impact on the network 2.3 Assess use of new or alternate technologies to meet forecast growth
3. Develop network plans	3.1 Assess overall planning parameters including approved business plan prior to commencement of planning process 3.2 Analyse gathered information and produce a project plan with specifications to meet network growth 3.3 Conduct appropriate investment study including cost benefit analysis, where required, with consideration of barriers that may affect project plan 3.4 Produce a network plan with detailed specifications and seek approval according to enterprise procedures

Foundation Skills

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

Skill	Performance Criteria	Description
Reading	1.1-1.4, 2.3, 3.1, 3.3	- Analyses and evaluates complex written and visual text in specialised workplace documentation to determine key information and specific requirements - Evaluates complex text to determine legislative, regulatory and project requirements, and their potential impact on the project
Writing	3.1, 3.2, 3.4	- Develops complex material for a specific audience using clear and detailed language and visuals while employing expected forms and conventions - Prepares reports which incorporate evaluation of information and specialised and cohesive language
Oral Communication	1.1, 1.3	Clearly articulates requirements using language appropriate to audience and environment, and participates in a verbal exchange of ideas and solutions
Numeracy	2.1, 2.2, 3.1,	Interprets numerical information and applies appropriate mathematical formulas to calculate

	3.2, 3.4	different future possibilities Analyses data to measure present and predicted usage and assess different scenarios
Navigate the world of work	1.4	- Ensures knowledge of legislative requirements and products is kept up-to-date to provide accurate information - Develops and implements strategies that ensures organisational policies, procedures and regulatory requirements are being met
Get the work done	1.1-1.4, 2.1, 2.3, 3.1-3.3	- Plans strategic priorities and outcomes within a flexible, efficient and effective context in a diverse environment exposed to competing demands - Gathers and analyses data and seeks feedback to improve plans and processes - Makes high-impact decisions in a complex and diverse environment, using input from a range of sources - Addresses complex problems involving multiple variables, using formal analytical, lateral thinking techniques experience and knowledge to focus in on the root cause - Uses digital technologies to manage business operations and actively investigates new technologies for strategic and operational purposes

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTNPL601 Plan the development and growth of the telecommunications network	ICTNPL6029A Plan the development and growth of the telecommunications network	Updated to meet standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

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

Assessment Requirements for ICTNPL601 Plan the development and growth of the telecommunications network

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Performance Evidence

Evidence of ability to:

- gather comprehensive data related to existing and projected network usage
- accurately assess need for network growth
- develop detailed network plans.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- outline the following general processes of network growth:
 - cost estimates and operating budgets according to enterprise policy
 - project management theory, associated databases and project management software programs
 - telecommunications industry in Australia
- outline economic and political influences on public and commercial enterprises
- outline economic and political influences on public and commercial enterprises
- identify relevant financial authorities and delegations
- outline the influence of local and international economic conditions on the telecommunications industry
- describe typical challenges and limits facing technology today and consideration of future needs
- identify relevant legislation
- explain the process for collating and writing project briefs, reports and project charters.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Telecommunications – Network Planning field of work and include access to:

- data from organisations involved in planning initiatives
- a range of software currently used in industry
- relevant regulations
- specifications that impact forecasting activities.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

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