



Australian Government

ICTNPL412 Apply business acumen to network planning

Release: 1

ICTNPL412 Apply business acumen to network planning

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 consider business drivers in decision-making processes for network planning and investment. It prepares individuals for entry into planning and design for network additions and implementations to accommodate network growth and incorporating new technologies.

It applies to individuals with diverse telecommunications networking skills and extensive knowledge of core and access network capabilities of service providers.

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. Analyse network usage forecasts	1.1 Obtain work details and scope from relevant personnel and arrange for network access in compliance with required security arrangements, legislation, codes, regulations, standards and organisational requirements 1.2 Organise network information concerning customer service and usage data, according to organisational requirements 1.3 Determine trends in customer network demands, and operating environments and markets, according to organisational requirements 1.4 Assess key measures of capacity and customer demand, according to organisational requirements

ELEMENT	PERFORMANCE CRITERIA
2. Build models to develop business cases	2.1 Construct network model and represent key options and strategic network plan proposals 2.2 Determine rights of carriers and service providers in installing facilities under required legislation 2.3 Produce strategic network plan with key variables, and communicate plan to relevant personnel 2.4 Determine key economic measures, business risks and values, and available resources for network planning strategies 2.5 Recommend network planning strategies to relevant personnel
3. Analyse financial trends	3.1 Determine and confirm extent of financial analysis required to plan network 3.2 Apply required economic measures in financial analysis and develop recommended network strategy 3.3 Obtain required financial investment tools and determine financial viability of network plans
4. Analyse demographic trends	4.1 Determine and confirm extent of demographic analysis required to plan network 4.2 Gather demographic data and determine impact of demographic diversity on network planning strategies 4.3 Analyse data and produce demographic trends for use in strategy developments in network planning
5. Analyse technological trends	5.1 Determine and confirm extent of technological analysis required to plan network 5.2 Determine unit costs associated with required network technologies and products 5.3 Research the advantages and implementation requirements of network technology bases stipulated in the recommended network strategy
6. Evaluate network deployment architecture	6.1 Evaluate network deployment architecture according to architectural and network deployment rules 6.2 Produce a network business model in consideration of commercial considerations and exemption processes

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance but not explicit in the performance criteria.

SKILL	DESCRIPTION
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SKILL	DESCRIPTION
Reading	Identifies and evaluates text to determine key information and specific requirements and responsibilities
Writing	- Develops material for a specific audience using clear and detailed language - Uses expected forms and conventions to present required information
Oral Communication	Articulates specific information using a tone and vocabulary for intended audiences
Numeracy	- Interprets numerical information and applies mathematical calculations relating to time durations and financial consequences - Applies different financial models to planning processes
Teamwork	- Uses strategies to establish a sense of connection and build rapport with clients and co-workers - Selects and uses required conventions and protocols to communicate with clients and co-workers in a range of work contexts
Self-management	- Takes responsibility for planning, sequencing and prioritising tasks - Makes routine decisions and implements standard procedures for routine tasks, using formal decision-making processes for more complex and non-routine situations - Addresses less predictable problems and initiates standard procedures in response, applying problem-solving processes in determining a solution

Unit Mapping Information

Supersedes and is equivalent to ICTNPL401 Apply business acumen to network planning.

Links

Companion Volume Implementation Guide is found on VETNet -

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

Assessment Requirements for ICTNPL412 Apply business acumen to network planning

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Performance Evidence

The candidate must demonstrate the ability to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including evidence of the ability to:

- analyse financial, demographic, technological and usage trends and document for at least two networks.

In the course of the above, the candidate must:

- analyse forecasts using customer demand
- build models to develop business cases
- apply financial analysis
- analyse demographic trends for strategy development
- assess technology implementation
- communicate with customers
- evaluate network deployment architecture.

Knowledge Evidence

The candidate must be able to demonstrate knowledge to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including knowledge of:

- methods of organising network information and usage data
- methods to determine trends in customer network demands, operating environments and markets
- emerging telecommunications and networking technologies
- principles and techniques of:
 - network planning strategies
 - analysing financial, demographic and technological trends in networks
 - constructing network models
 - financial modelling

- forecasting trends
- legislative rights of required telecommunications network carriers and service providers
- commercial considerations of implementing network plans, including:
 - capital expenditure (CAPEX)
 - operational expenditure (OPEX)
 - product revenue and demand versus network costs
 - return on investment (RoI)
 - time to market
- principles and techniques of financial investment tools, including:
 - cost-benefit analysis
 - investment management systems
 - net present value (NPV)
- legislation, codes, regulations and standards, work health and safety (WHS) requirements and organisational requirements for scoped work, including:
 - Australian competition and consumer affairs
 - telecommunications industry regulatory accounting
 - universal services obligations.

Assessment Conditions

Skills in this unit must be demonstrated in a workplace or simulated environment where the conditions are typical of those in a working environment in this industry.

This includes access to:

- network planning data
- relevant databases
- business and financial models
- systems and deployment rules and relevant legislation
- planning processes and regulatory frameworks.

Links

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