



ICT10 Integrated Telecommunications Training Package v1

Frequently Asked Questions (FAQs)

**Prepared by Innovation and Business Skills Australia (IBSA)
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Readers please note: These FAQs are based on a range of questions stakeholders have asked about the Telecommunications Training Package. Our responses are based on the best information available at the time of writing and on policy information from DEEWR. We have taken every care to ensure these FAQs are accurate, but imply no warranty of the accuracy of the advice. You are advised to check our website for regular updates of these FAQs or contact the relevant State or Territory Training Authority, details of which can be found on the DEEWR website:

www.deewr.gov.au

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What is the ICT10 Integrated Telecommunications Training Package v1 and why is it important?

The ICT10 Integrated Telecommunications Training Package v1 provides national competency standards, assessment guidelines and qualifications framework to support the skills and knowledge development and assessment required within the telecommunications industry.

How did the ICT10 Integrated Telecommunications Training Package v1 come about and evolve?

In 1997 the Telecommunications Training Package ICT97, developed by the Information Technology and Telecommunications Advisory Board (IT&TITAB), was endorsed by the National Training Framework Committee.

In December 2002, ICT02 Version 1 was endorsed and was a complete revision to replace the original ICT97.

ICT02 Version 2 was a minor upgrade to include some additional units.

ICT02 Version 3 introduced new qualifications in Digital Reception Technology, Telecommunications Networks, Telecommunications Computer Telephony Integration, Telecommunications Radio Communications and the Broadcast Technology from the CUF07 TP. Many new additional units were included as part of the new qualifications. Employability skills were added to all units of competency and qualifications. Additionally, the Customer Contact qualifications and associated units were deleted from this Training Package and moved to the BSB07 Training Package.

ICT10 that incorporates many changes to the Training Package to bring it to the forefront with industry requirements was endorsed by the National Quality Council on 13 April 2010.

With the Federal Government driving the agenda with a number of initiatives including the National Broadband Network (NBN), Digital Education Revolution (DER) and sustainability practices to reduce carbon emissions and greenhouse effects on the environment there has been major work to refresh this Training Package to meet the needs of the Australian industry and the community.

The emerging technologies coupled with convergence of many industry sectors has been the reason for the traditional name change of this Training Package.

What is the composition of the ICT10 Integrated Telecommunications Training Package v1?

The ICT10 Integrated Telecommunications Training Package v1 contains 238 units of competency, a total of 26 qualifications and 20 Telecommunications Skill Sets.

What are the main changes in ICT10?

- **Revised qualifications**

Eleven (11) qualifications from the ICT02 Version 3.0 Training Package were revised and updated to include current practices and technologies in:

- Cabling (CPE and Access)
- Digital Reception Technology
- Network Planning
- Radio Communications
- Telecommunications.

- **New qualifications**

Fifteen (15) new qualifications were developed to provide pathways in skill shortage areas in new and emerging technology areas and internet protocol (IP) convergence in:

- Broadband and Wireless Networks
- Network Planning and Design
- Optical Frequency Networks
- Rigging Installation
- Radio Frequency Networks
- Telecommunications Management
- Telecommunications Networks Engineering
- Telecommunications Technology for VET in schools program.

- **Skill sets**

Twenty (20) new skill sets have been developed to provide pathways for skill update in new technology areas.

These are in:

- Broadband Networks
- Optical and Wireless Networks
- Radio Technology

- Digital Reception Technology
- Rigging Installations
- Emerging Technologies
- Convergence Technologies
- Sustainability
- ICT Networking
- Customer Premises Networks
- Digital Home Integration
- Small Medium Enterprise Networks
- Customer and Access Cabling
- Help Desk Support.

In reviewing ICT02, 111 new units have been added to ICT10 Integrated Telecommunications Training Package v1.

Why have some units been deleted?

Some units have been deleted from the Training Package. This has occurred where there was significant overlap with other units in the training package (in some cases units were merged), where consultation showed that the unit was out-of-date or no longer relevant to industry needs, or where there was a unit from another training package that was identified as better or more appropriate.

What qualifications are in ICT10?

There are now 26 qualifications in the training package.

- ICT20110 Certificate II in Telecommunications Technology
- ICT20210 Certificate II in Telecommunications
- ICT20310 Certificate II in Telecommunications Cabling
- ICT20410 Certificate II in Telecommunications Digital Reception Technology
- ICT20510 Certificate II in Telecommunications Rigging Installation
- ICT30110 Certificate III in Broadband and Wireless Networks Technology
- ICT30210 Certificate III in Telecommunications
- ICT30310 Certificate III in Telecommunications Cabling
- ICT30410 Certificate III in Telecommunications Digital Reception Technology
- ICT30510 Certificate III in Telecommunications Rigging Installation
- ICT30610 Certificate III in Broadband and Wireless Networks
- ICT40110 Certificate IV in Optical Networks
- ICT40210 Certificate IV in Telecommunications Network Engineering
- ICT40310 Certificate IV in Telecommunications Radio Communications

ICT40410	Certificate IV in Radio Frequency Networks
ICT40510	Certificate IV in Telecommunications Network Planning
ICT40610	Certificate IV in Telecommunications Networks Technology
ICT50110	Diploma of Optical Networks
ICT50210	Diploma of Telecommunications Network Engineering
ICT50310	Diploma of Telecommunications Management
ICT50410	Diploma of Radio Frequency Networks
ICT50510	Diploma of Telecommunications Planning and Design
ICT60110	Advanced Diploma of Optical Networks
ICT60210	Advanced Diploma of Telecommunications Network Engineering
ICT70110	Vocational Graduate Certificate in Telecommunications Network Engineering
ICT80110	Vocational Graduate Diploma of Telecommunications Network Engineering

What are the pathways and entry points for these qualifications?

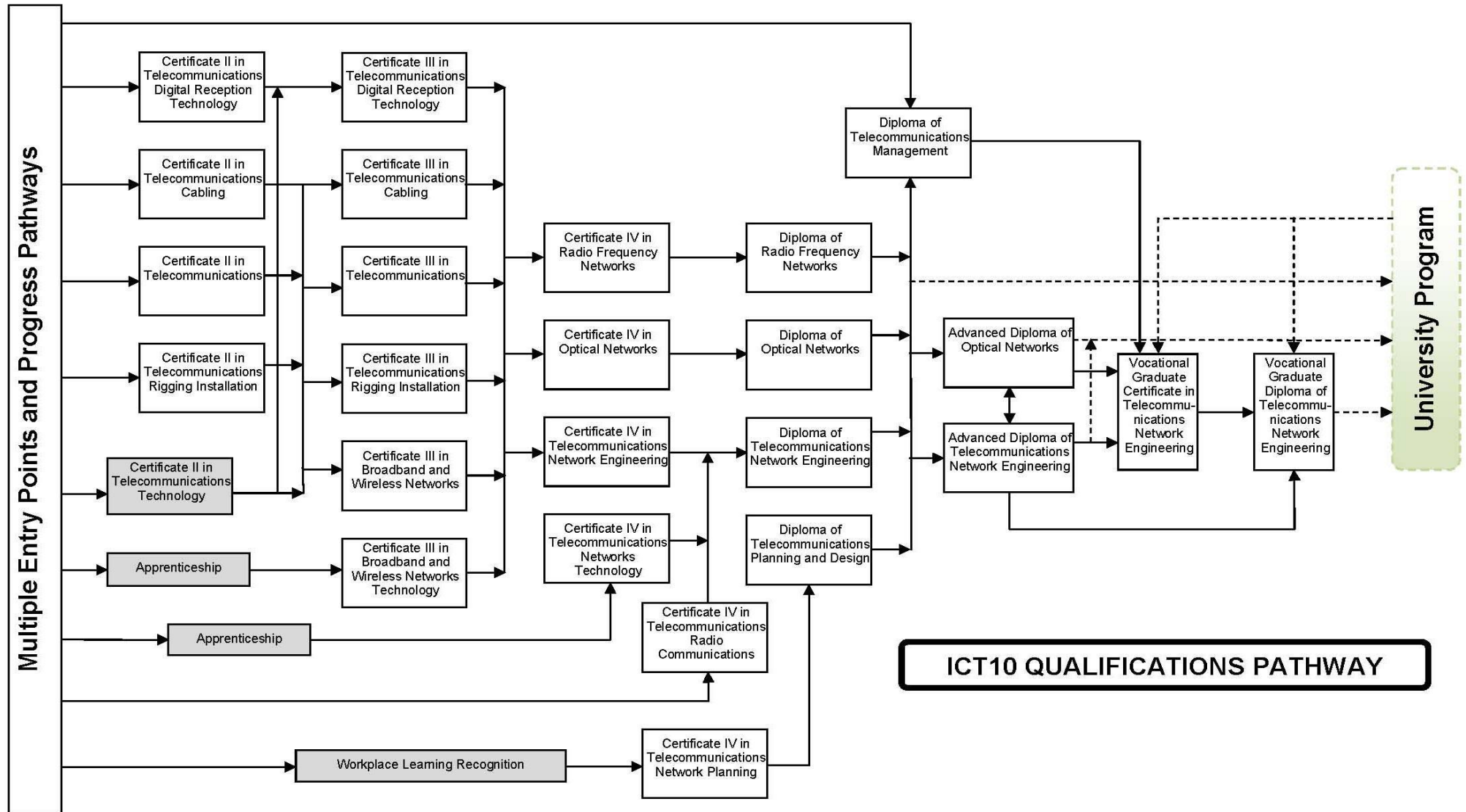
Pathways

Pathway advice provides information on suggested entry levels for learners. Advice is provided for each qualification on how a candidate may enter a qualification. The pathway into a qualification is generally expressed as requiring the candidate to have:

- completed a qualification at a level immediately prior to the qualification to be undertaken (e.g. the Certificate III for entry into the Certificate IV), or
- evidence of demonstrated equivalence, and/or
- relevant vocational experience.

The Telecommunications qualification framework provides a number of pathways comprised of entry points, lines of progress through various streams and exit points (qualifications) that can be followed to reach a required competency level.

Pathways for Telecommunications Qualification Framework



Will I need to expand my scope of registration in order to deliver the revised qualifications?

The Training Package itself contains a list of the qualifications and their relationship to previous qualifications. If the qualification is equivalent it will generally not be necessary to change your scope of registration. However if there is no equivalent qualification, or if you want to add additional qualifications, skill sets or units you will need to apply to expand your scope of registration. You need to check the details of this with your local state/territory registration authority regarding specific advice for the transition arrangement applicable in their jurisdiction.

What are Skills Sets?

Skill sets are one or more units of competency which meet a licence or regulatory requirement, or a defined industry need. For more information about skill sets go to www.nqc.tvetaustralia.com.au All of the skill sets in ICT10 have been developed as a result of a defined industry need.

How will Skill Sets be reported?

On being assessed as competent in all the units specified in a skill set, an RTO can award a Statement of Attainment citing the skill set. The definition of Statement of Attainment has been revised in the AQF Implementation Handbook:

What Skill Sets are in ICT10?

ICT10 has the following skill sets:

- **Cabler Registration Skill Set**
 - This skill set is for customer premises cablers working in the telecommunications industry and provides credits towards a Certificate II in Telecommunications.
- **Radio Technician Skill Set**
 - This skill set is for new entrants learning radio fundamentals and provides credits towards a Certificate IV in Telecommunications Radio Communications.
- **Access Network Skill Set**
 - This skill set is for carriers and contractors in the access network to perform core work on both sides of the network boundary and provides credit towards a Certificate II in Telecommunications Cabling and a Certificate III in Telecommunications Cabling.
- **Digital reception Technology Skill Set**
 - This skill set prepares individuals for entry into the digital and subscription TV and related sectors of the telecommunications industry and provides credit towards a Certificate II in Telecommunications Digital Reception Technology.

- **Broadband Skill Set**
 - This skill set is for cablers who have an open ACMA Cabler Provider Registration wanting to work in the telecommunications industry dealing with broadband implementation. This skill set also prepares individuals for entry to the Telecommunications industry and provides credit towards a Certificate II in Telecommunications Cabling and a Certificate III in Telecommunications Cabling.
- **Wireless LAN and IP Network installation Skill Set**
 - This skill set is for experienced personnel in the installation of modern ICT networks using converging technologies of wireless and IT networks. This skill set provides credit towards ICT40210 Certificate IV in Telecommunications Network Engineering qualification.
- **Domestic Digital Television Antenna Installation Skill Set**
 - This skill set is for personnel wanting to install basic terrestrial antenna system in single dwelling installation for the digital reception telecommunications industry. This set of units has been approved by the Department of Broadband for the antenna installer endorsement. This skill set provides credit towards ICT20410 Certificate II in Telecommunications Digital Reception Technology and the ICT30410 Certificate III in Telecommunications Digital Reception Technology qualifications.
- **Commercial Digital Television Antenna Systems Installation Skill Set**
 - This skill set is for experienced personnel wanting to install commercial antenna installation for the digital reception telecommunications industry. The more complex antenna installations include Master Antenna TV (MATV) and Communal Antenna TV (CATV) systems. This set of units has been approved by the Department of Broadband for the antenna installer endorsement. This skill set provides credit towards ICT20410 Certificate II in Telecommunications Digital Reception Technology and the ICT30410 Certificate III in Telecommunications Digital Reception Technology qualifications.
- **Satellite Digital Television Antenna Installation Skill Set**
 - This skill set is for experienced personnel in the installation of free-to-air satellite antenna systems for the digital reception telecommunications industry. This unit has been approved by the Department of Broadband for the antenna installer endorsement. This skill set provides credit towards ICT20410 Certificate II in Telecommunications Digital Reception Technology and the ICT30410 Certificate III in Telecommunications Digital Reception Technology qualifications.
- **Fibre To The Premises (FTTP) Installation Skill Set (Base level installers)**
 - This skill set is for personnel in the installation of optical FTTx network equipment for national broadband implementation. This skill set provides credit towards ICT30610 Certificate III in Broadband and Wireless

Networks and ICT30110 Certificate III in Broadband and Wireless Networks Technology qualifications.

- Fibre To The Premises (FTTP) Test and Commission Skill Set (Advanced level installers)
 - This skill set is designed to develop relevant experienced personnel in the testing and commissioning of optical FTTx network equipment for national broadband implementation. This skill set provides credit towards ICT30110 Certificate III in Broadband and Wireless Networks Technology and ICT30610 Certificate III in Broadband and Wireless Networks qualifications.
- Installing NBN Wireless and infrastructure Skill Set
 - This skill set is for experienced personnel in the installation of optical FTTx network and wireless equipment for national broadband implementation in the carrier access network. This skill set provides credit towards ICT30110 Certificate III in Broadband and Wireless Networks Technology and ICT30610 Certificate III in Broadband and Wireless Networks qualifications.
- Basic Telecommunications Rigging Installation Skill Set
 - This skill set is designed for personnel to work in the installation of telecommunications network infrastructure on structures. This skill set provides credit towards ICT20510 Certificate II in Telecommunications Rigging Installation qualification.
- Advanced Telecommunications Rigging Installation Skill Set
 - This skill set is for experienced personnel in basic rigging practices and the installation of telecommunications network infrastructure on structures. This skill set provides credit towards ICT30510 Certificate III in Telecommunications Rigging Installation qualification.
- IP Convergence installations for home and SME Skill Set
 - This skill set is for to develop personnel to work in the installation of modern telecommunications networks using IP converging technologies in small to medium enterprises. This skill set provides credit towards ICT20210 Certificate II in Telecommunications qualification.
- Convergent Technology installations for home and SME Skill Set
 - This skill set is for experienced personnel in the installation of modern ICT networks using IP converging technologies in home and small to medium enterprises. This skill set provides credit towards ICT40210 Certificate IV in Telecommunications Network Engineering qualification.
- Basic ICT Sustainability Skill Set
 - This skill set is for experienced personnel in the installation of modern ICT networks using technologies to reduce energy consumption for sustainability. This skill set provides credit towards ICT40210 Certificate IV in Telecommunications Network Engineering qualification.

- Advanced ICT Sustainability Skill Set
 - This skill set is for experienced personnel in the installation of modern ICT networks using IP convergence and virtualisation technologies. This skill set provides credit towards ICT50210 Diploma of Telecommunications Network Engineering qualification.
- ICT Sustainability Planning and Designing Skill Set
 - This skill set is for experienced personnel who want to integrate sustainability in the planning and design of ICT networks. This skill set provides credit towards ICT60110 Advanced Diploma of Optical Networks, ICT60210 Advanced Diploma of Telecommunications Network Engineering and ICT70110 Vocational Graduate Certificate of Telecommunications Network Engineering qualifications.
- Technical Help Desk Support Skill Set
 - This skill set is for experienced personnel in the installation and maintenance of customer access networks and customer infrastructure including equipment and cabling. This skill set provides credit towards ICT30210 Certificate III in Telecommunications and ICT30310 Certificate III in Telecommunications Cabling qualifications.

What are Employability Skills?

In May 2005, the decision was reached to incorporate employability skills within Training Package qualifications and units of competency. Consequently, from 2006 employability skills have replaced key competency information in Training Packages.

Employability skills are also sometimes referred to as generic skills, capabilities or key competencies. The employability skills discussed here build on the Mayer Committee's key competencies, which were developed in 1992 and attempted to describe generic competencies for effective participation in work.

The Business Council of Australia (BCA) and the Australian Chamber of Commerce and Industry (ACCI), produced the Employability Skills for the Future report in 2002 in consultation with other peak employer bodies and with funding provided by the Department of Education, Science and Training (DEST) and the Australian National Training Authority (ANTA). Information on Employability Skills is available from the following website: <http://employabilityskills.training.com.au>

The report indicated that business and industry now require a broader range of skills than the Mayer Key Competencies Framework and featured an Employability Skills Framework identifying the following eight employability skills:

- Communication
- Teamwork
- Problem solving
- Initiative and enterprise
- Planning and organising
- Self-management

- Learning
- Technology

The report demonstrated how employability skills can be further described for particular occupational and industry contexts by sets of facets. The facets listed in the report are the aspects of the employability skills that the sample of employers surveyed identified as being important work skills. These facets were seen by employers as being dependent both in their nature and priority on an enterprise's business activity.

What are Employability Skills Summaries?

Summaries broadly identify the application of each Employability Skill in the context of the job role(s) covered by the qualification. They are designed to assist in the identification and inclusion of relevant industry applications of the Employability Skills into learning and assessment strategies.

An Employability Skills Summary describes the broad industry requirements that are further explained as measurable outcomes of performance in the unit of competency for each qualification. An Employability Skills Summary has been included for each qualification in ICT10 v1 and the summaries capture the key aspects, or facets, of each Employability Skill that are important in the job roles covered by the qualification. They are not intended to be exhaustive lists or checklists for performance. An example of an employability skills summary from ICT10 v1 is provided below.

Employability Skills Summary

ICT20310 Certificate II in Telecommunications Cabling

The following table contains a summary of the Employability Skills required for a Telecommunications cabler. The Employability Skills facets described here are broad industry requirements found in this qualification.

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY	
Employability Skill	Industry/enterprise requirements for this qualification include:
Communication	<ul style="list-style-type: none"> • confirming approval for time and method of site access with customers • documenting and communicating work-related information, including reporting of faults and problems
Teamwork	<ul style="list-style-type: none"> • participating in a team structure by identifying team members, tasks and goals and recognising and responding positively to conflict
Problem solving	<ul style="list-style-type: none"> • determining cable routes, taking into account building services, safety, industry codes and practices, and customer requirements • evaluating earthing needs for cable systems on customer premises • following up promptly on difficulties and known problem areas
Initiative and enterprise	<ul style="list-style-type: none"> • reading and understanding plans and designs to

	<p>acknowledge local physical conditions</p> <ul style="list-style-type: none"> • identifying issues and possible solutions within established guidelines
Planning and organising	<ul style="list-style-type: none"> • planning and organising installation and operation of telecommunications equipment and products
Self-management	<ul style="list-style-type: none"> • relating own role to the industry and establishing own work schedule • using strategies to present a professional image to customers
Learning	<ul style="list-style-type: none"> • seeking assistance from team members • giving and receiving feedback • providing suitable training and assessment opportunities for work team members
Technology	<ul style="list-style-type: none"> • installing and operating telecommunications customer equipment, customer products and test equipment

How should Employability Skills be addressed in learning and assessment activities?

Employability Skills are most appropriately worked with in relation to the criteria, knowledge and skills described in units of competency. However, at some point in the learning process, time must be devoted to openly discussing the concept of Employability Skills with learners. This should include reviewing how these skills are specifically applied to the unit(s) being studied (as contained in the Employability Skills Summaries). Learners' understanding of Employability Skills can be further enhanced by their participation in learning that adheres to adult learning principles. The process through which individuals learn can, in itself, emphasise particular Employability Skills

When working with Employability Skills, whether in training or assessment, they should always be considered within the context of that unit – and not as individual skills. This holistic approach of combining technical and Employability Skills is more relevant and closely aligned to real job expectations and practices.

Employability Skills Resources are available at:

<http://www.training.com.au/portal/site/public/menuitem.0216ca6f4edda8ef49be0a1c17a62dbc/>

How will Employability Skills be reported on?

The National Quality Council (NQC) has completed a project to develop a model for assessing and reporting on Employability skills, and has included a professional development strategy to support implementation. Basic principles of the model include:

- an integrated approach where the assessment of employability skills is integrated with the assessment of technical skills within units and qualifications; and
- descriptive reporting, where short text is used to describe the employability skills developed as part of a qualification.

When will ICT10 be reviewed?

As of 2006, all training packages adopted a model of continuous improvement. What this means in effect is that IBSA will be collecting information about the currency, relevance and practicality of all units and qualifications in ICT10 and updating it to reflect industry needs. Everyone has the opportunity to make suggestions about improvements through IBSA's website at www.ibsa.org.au. Future emphasis will be on improving ICT10 through a continuum of maintenance, endorsement and implementation, referred to as continuous improvement. However a full review will still be undertaken where evidence of continuous improvement is not considered to be sufficient, or where consultation indicates the need. This may be requested by the NQC or by the ISC.