



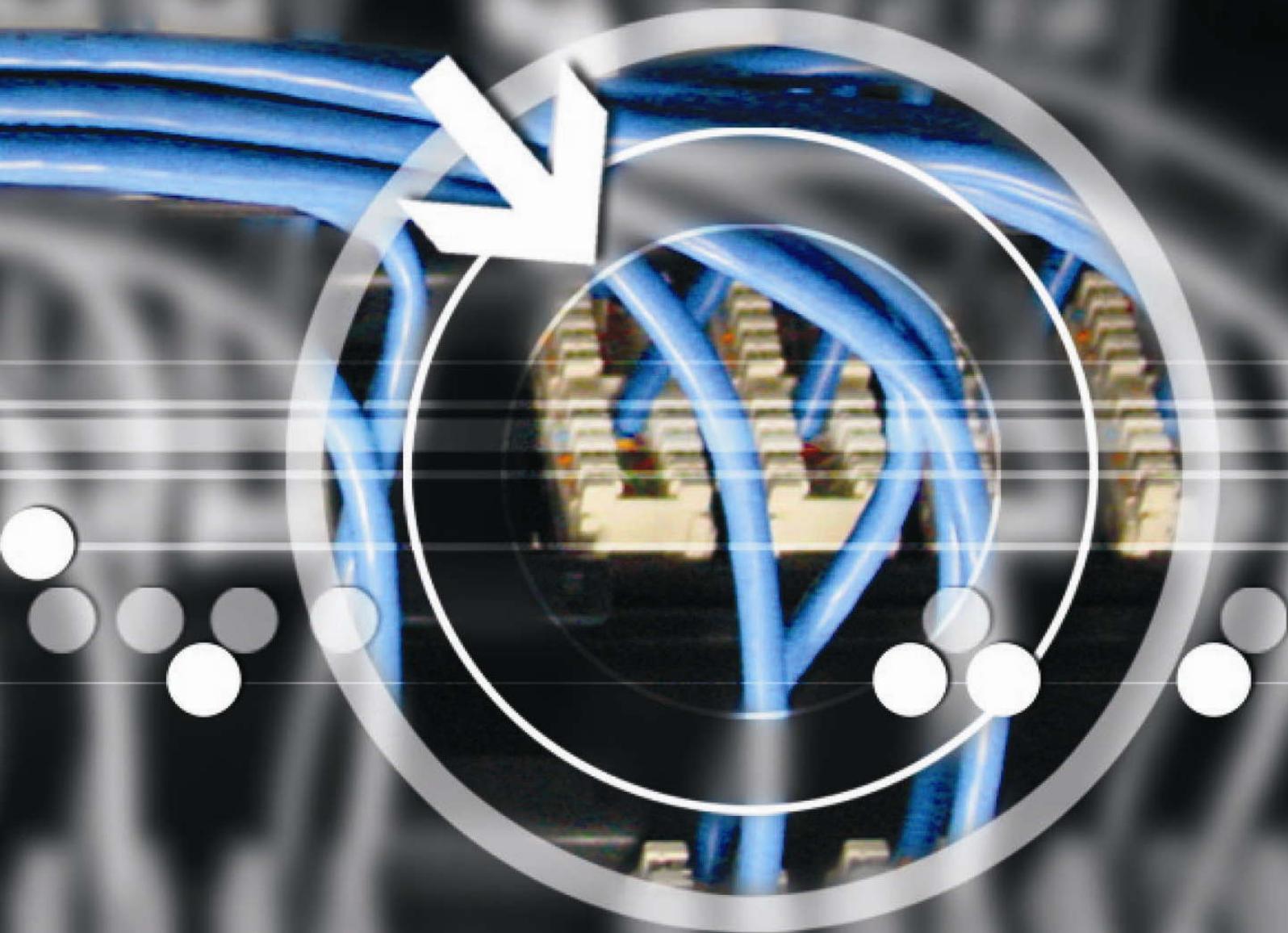
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Australia's regulator for broadcasting, the internet, radiocommunications and telecommunications

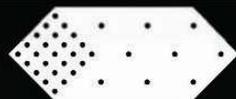
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Pathways to ACMA Cabling Provider Rules Cabler Registration

MAY 2007



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TRAINING STANDARDS
AUSTRALIA



INNOVATION & BUSINESS SKILLS AUSTRALIA

Pathways to ACMA Cabling Provider Rules Cabler Registration

Commonwealth of Australia 2007

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INTRODUCTION

The Australian Communications and Media Authority (ACMA) and key industry stakeholders originally developed this document in 2004 to consolidate the training pathways to ACMA Cabling Provider Rules (CPR) registration.

In the cabler training and registration sector, there needs to be clarity about the programs available for training cablers and which programs apply to which types of candidates. The pathways in this document bring together existing programs in a cohesive framework of training that optimises access to training and registration for all types of candidates.

Use of this document

This document is intended to be the primary information source for registered training organisations (RTOs), registrar organisations and cabler assessors.

The recommended strategy for using this document with individual candidates is:

- **Identify the characteristics of the candidate**—their experience, prior learning and desired outcomes
- **Assess the candidate's experience** using the criteria supplied in the section Criteria for cabling experience
- **Select a pathway** which suits the candidate characteristics using the charts in Figure 1 or Figure 5
- **Refer to the detailed charts** to obtain information about the specific modules or competency units to be undertaken.

The charts can also be used by RTOs in determining which programs they will offer and the specific details of those programs.

Contact details – TITAB Australia, EE-OZ, ACMA & IBSA

For more information or advice about the use of this document or other issues concerning cabler training and registration contact one of the organisations listed.

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METHODOLOGY FOR DEVELOPING PATHWAYS

Background

In September 2003, the Australian National Training Authority (ANTA), now a function of the Department of Education, Science and Training (DEST), funded a project with the following initial brief:

The purpose of this grant is to provide the IT Skills Hub Pty Ltd with funds to develop support materials to meet the regulatory requirements of the Australian Communications and Media Authority (ACMA).

The project will include the development of recognition and training pathway models and assessment tools, which will be used by Registered Training Organisations, regulators and employers to enable individuals to have their skills formally recognised and benchmarked against ACMA requirements.

The development of the pathways outlined in this document is one of the products of that project and an update was completed in 2007, supported by IBSA, EE-Oz, and TITAB Australia.

Development process

The pathways development process has involved:

- research into existing pathways and types of cabler registration candidates
- Australia-wide industry focus groups to assess industry stakeholder issues
- review and refinement of existing pathways to address industry stakeholder issues and candidate needs
- Australia-wide validation of refined pathways with industry stakeholders
- documentation and consolidation of pathways in consultation with ACMA and key stakeholders
- revising content in 2006/2007 to ensure a better understanding of the requirements of Pathways and to simplify the pathways document for end users
- addressing the concerns of state/territory training authorities in relation to audits and findings on alignment of pathways with the Australian Quality Training Framework (AQTF)
- clarification in the 2007 document to ensure that users of the document can see that **the principles in this document apply to the ACMA Cabler Provider Rules (CPR) registration system and are not to be substituted for requirements of the Australian Quality Training Framework (AQTF)**. As the national communications regulator, ACMA sets out requirements for cablers in an industry context and state/territory training authorities administer the national AQTF requirements.

The outcome of this process is a set of agreed pathways that address the needs of all cabler registration candidates and the issues raised by industry stakeholders.

TYPES OF CABLING WORK

The following information on cabling work has been extracted from the [Telecommunications Cabling Provider Rules 2000](#) (CPRs), as amended, made under subsection 421 (1) of the *Telecommunications Act 1997*. The full consolidated version is on the ACMA website at www.acma.gov.au (go to **For licensees and industry: Licensing and regulation > Telecommunications regulation > Cabling licensing > Cabling Provider Rules**).

Types

These rules apply to three types of cabling work—open, restricted and lift.

Open cabling work

Open cabling work is any type of cabling work (including aerial or underground cabling work on private or public property) in which the customer cabling that is used terminates at the network boundary on a socket, a network termination device or a distributor.

Examples of distributors

- 1 Building distributor (formerly known as a main distribution frame)
- 2 Campus distributor

Restricted cabling work

Restricted cabling work is defined in the Cabling Provider Rules as:

- (1) Subject to subsection (2), the following cabling work is **restricted cabling work**:
 - (a) cabling work (including aerial or underground cabling work on private property):
 - (i) that is performed only in relation to a customer's premises; and
 - (ii) in which the electrical supply voltage does not exceed typical domestic single-phase and three-phase electrical supply voltages; and
 - (iii) in which the customer cabling that is used terminates at the network boundary on a socket or network termination device;
 - (b) cabling work in which customer cabling is connected to customer equipment that complies with:
 - (i) the Act; and
 - (ii) the requirements of the Labelling Notice;
 - (c) cabling work that meets each of the following criteria:
 - (i) the work is performed only in relation to a customer's premises;
 - (ii) the electrical supply voltage exceeds the typical domestic single-phase and three-phase electrical supply voltages;
 - (iii) the supply voltages are identifiable by every person performing the cabling work;
 - (iv) the electrical power cables are inaccessible to any person performing the cabling work

Note 1 Domestic single-phase and three-phase electrical supply voltages are nominally 240 and 415 V ac (volts alternating current) respectively.

Note 2 Section 4.6 sets out requirements that must be met if a cabling provider is performing restricted cabling work that relates to aerial cabling.

(2) Subsection (1) does not apply to cabling work:

- (a) performed between customer equipment and any of the following jumperable distributors or jumperable frames, and terminating at the distributor or frame:
 - (i) a Building Distributor;
 - (ii) a Campus Distributor;
 - (iii) a Local Distributor;

- (iv) a Floor Distributor;
- (v) a System Distribution Frame;
- (vi) a Test Point Frame; or

- (b) involving cable pairs that are included in cable sheaths shared with other services; or
- (c) performed between customer equipment and a patch panel, and terminating at the patch panel.

Examples of restricted cabling work

1. Cabling work connected behind an alarm panel or modem (but not via a jumperable distributor, a jumperable frame or a patch panel).
2. Cabling work connected directly behind a Customer Switching System (but not via a jumperable distributor, a jumperable frame or a patch panel).
3. Cabling work for additional phone points (other than the first point) in a commercial, high rise or multi-storey building, if the service involved is a standard telephone service (but not via a jumperable distributor, a jumperable frame or a patch panel).
4. Cabling work for a home automation system (but not via a jumperable distributor, a jumperable frame or a patch panel).

Lift cabling work

Lift cabling work is defined in the Cabling Provider Rules as work:

- (a) that is performed in relation to a lift that has been installed, or is to be installed; and
- (b) in relation to which the customer cabling that is used connects:
 - (i) a cross connection point adjacent to the lift motor room; and
 - (ii) the lift control cubicle within the lift motor room; and
 - (iii) the lift cars.

Examples of cross connection points

1. The Floor Distributor (formerly known as the Intermediate Distribution Frame).
2. The Local Distributor (formerly known as the Final Distribution Point).
3. Another suitable cable termination point adjacent to the lift motor room.

More information

More detailed information about the CPRs and arrangements for cabler registration is available on request from ACMA.

CRITERIA FOR CABLING EXPERIENCE

Candidates for registration through the module based pathways **require experience in cabling** as well as the successful completion of the required modules. The lists of criteria outlined below are to be used by RTOs in assessing a candidate's experience.

Open Registration

Where cabling requires experience to progress to open cabling registration the following criteria can be used to define cabling experience.

The experience of the candidate should meet **the first three criteria in all cases and four of the other criteria** listed.

- Experience comprises at least 600 hours of work on cabling tasks within the last two years
- Cabling experience was supervised by a registered cabling
- Cabling work undertaken is covered by one or more Australian Technical Standards, e.g. AS/ACIF S008:2006 and AS/ACIF S009:2006

-
- Installation of distributor systems involving a capacity of at least 20 lines
 - Installation of telecommunications earthing protection
 - Creation and interpretation of cable plans
 - Assistance in cable testing and fault rectification
 - Preparation of telecommunications cabling advice (TCA) reports for customers
 - Interaction with customers

Evidence of experience: This should be provided to an RTO, or a registrar on request, by a registered cabling who has supervised the candidate. To do this, photocopy this page, add the name of the candidate and tick the criteria they have met. Then sign off giving current CPR registration number.

Note: Where state/territory school-based programs operate, these are usually undertaken on the basis of qualifications within a competency based system. State/territory training authorities may apply their own experience criteria to such programs whether module or competency based, before issuing any formal credentials.

The experience criteria for AQTF purposes may differ from ACMA criteria.

Restricted Registration

Where cabling require experience to progress to restricted cabler registration the following criteria can be used to clarify the definition of cabling experience.

The experience of the candidate should meet the **first three criteria in all cases and two of the other criteria** listed.

- Experience comprises at least 400 hours of work on cabling tasks within the last two years
- Cabling experience was supervised by a registered cabler
- Cabling work undertaken is covered by one or more Australian Technical Standards, e.g. AS/ACIF S008:2006 and AS/ACIF S009:2006

-
- Creation and interpretation of cable plans
 - Assistance in cable testing and fault rectification
 - Preparation of TCA reports for customers
 - Interaction with customers

Evidence of experience: This should be provided to an RTO, or a registrar on request, by a registered cabler who has supervised the candidate. To do this, the registered cabler should photocopy this page, add the name of the candidate and tick the criteria he or she has met. The cabler should sign off the page and provide the current CPR registration number.

Note: Where state/territory school-based programs operate, these are usually undertaken on the basis of qualifications within a competency based system. State/territory training authorities may apply their own experience criteria to such programs, whether module or competency based, before issuing any formal credentials.

The experience criteria for AQTF purposes may differ from ACMA criteria.

PATHWAYS CHARTS

Explanation and list of charts

There are multiple pathways to cabler registration. These pathways arise from the telecommunications and the electrotechnology training packages and agreements between stakeholders.

Figures 1 and 5 provide an overview of the collective pathways to Open and Restricted Registration. The other figures provide more detailed information about specific pathways. Guidance for RTOs when assessing a candidate's prior cabling experience is provided under **Criteria for cabling experience** above.

Figure 1: Summary of Open Registration pathways

Figure 2: Competency-based pathways

Figure 3: Module-based pathway for qualified electricians and experienced cablers

Figure 4: Module-based pathway to Open Registration for ordinary people

Figure 5: Summary of Restricted Registration pathways

Figure 5A: Summary of Lift Registration pathways

Figure 6: Competency-based pathways

Figure 7: Module-based pathway for qualified electricians and experienced cablers

Figure 8: Module-based training pathway to Restricted Registration for ordinary people

Figure 1: Summary of Open Registration pathways

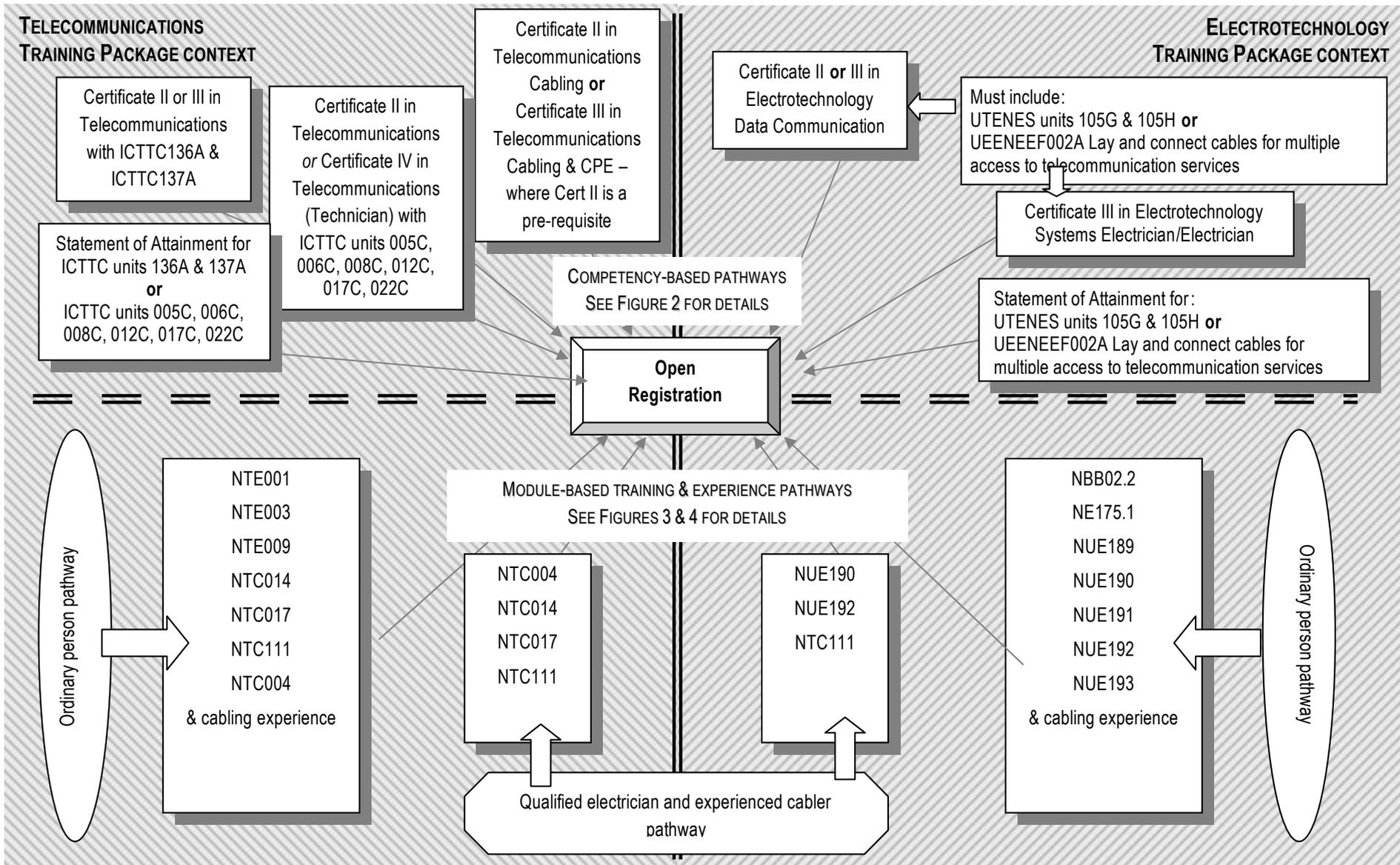
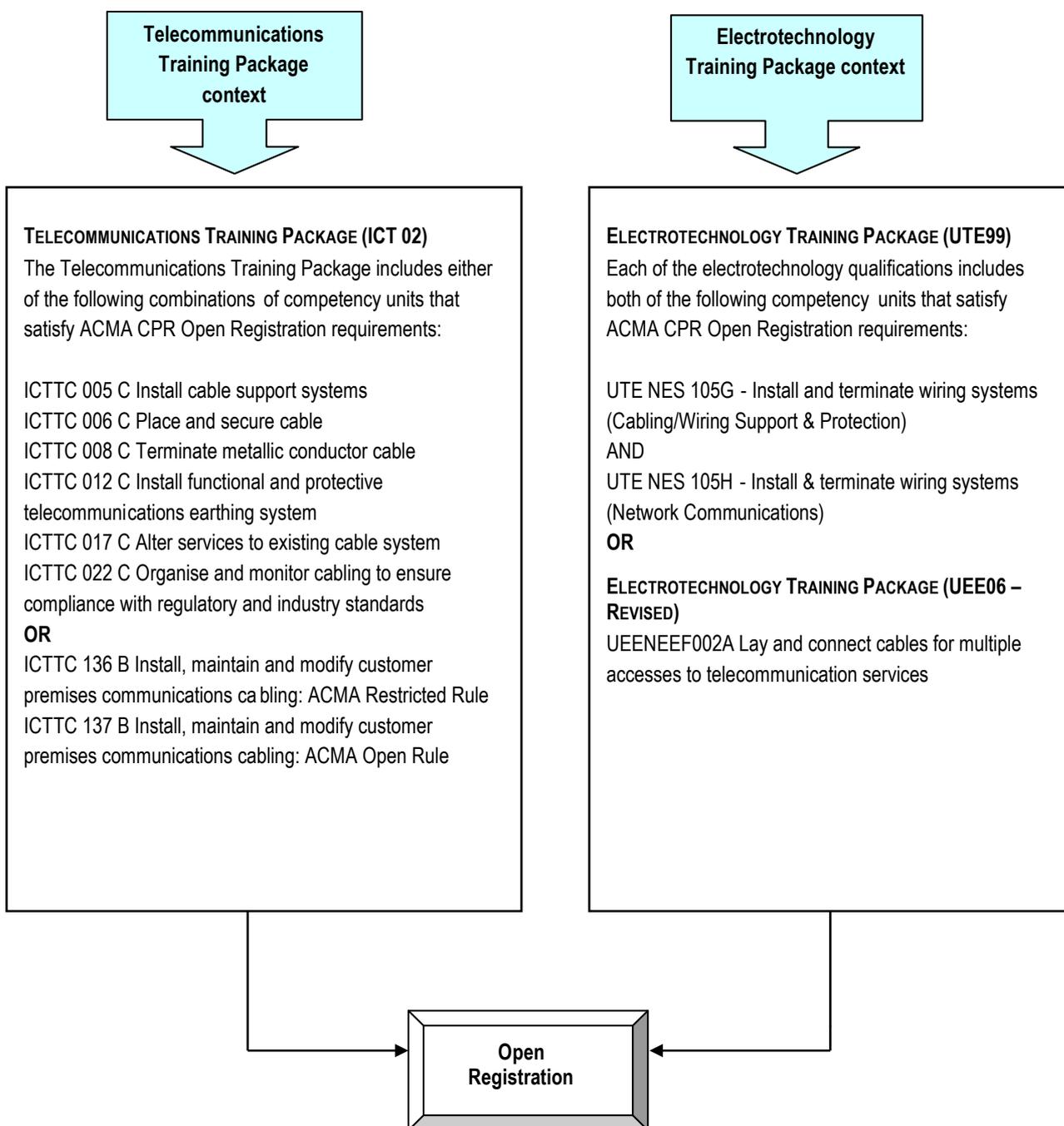


Figure 2: Competency-based pathways – Open Registration

These pathways apply to any person **who does not meet the criteria for a licensed electrician or experienced cabler**. As these persons are assessed against national competencies and deemed competent, there may be no requirement for formal on the job experience.



Note: Where school based programs operate under state/territory jurisdiction, there may be ‘work experience’ requirements applied to students before formal awards are given. Notwithstanding, work practice in cable installation must be demonstrated.

Figure 3: Module-based pathway for qualified electricians and experienced cablers* – Open Registration

*Experienced cablers are technically trained staff from telecommunications, fire, security, data and computer cabling companies and statutory authorities who can be credited with completion of modules NTE001, NTE003, NTE009 (or their equivalents) using their formal RTO or employer training records.

Note: There is no fast track option for NTC004 /NTE005/NUE190. An 80 per cent pass mark using the prescribed ACMA subject guides in the module is required per test. Any retest must be again set against the full subject guides.

For experienced cablers and qualified electricians, the RTO has the responsibility to ensure the pre-requisite requirements are met for these pathways by sighting and recording evidence of credits, completed qualification or assessing and providing a Statement of Attainment.

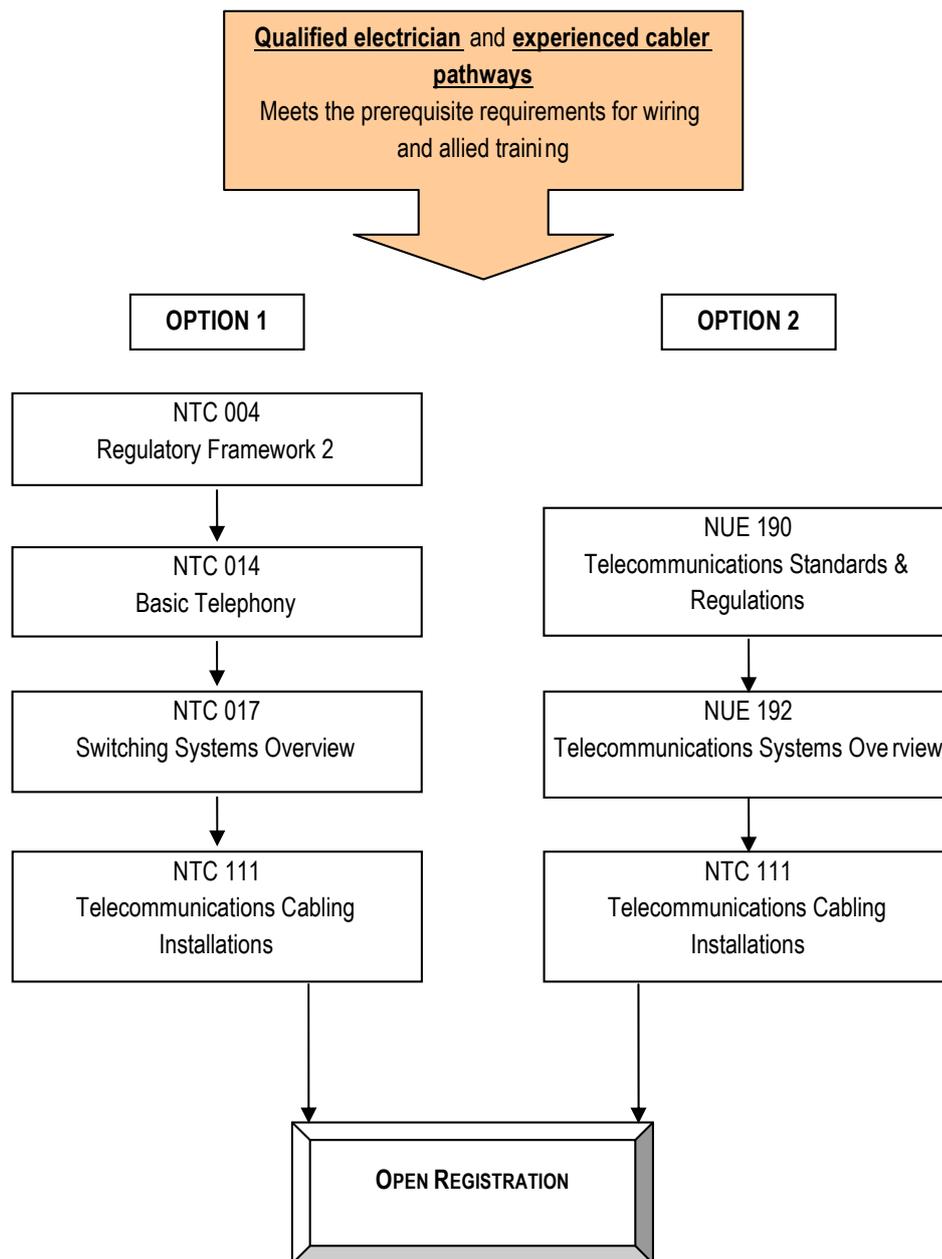


Figure 4: Module-based pathway for ordinary people – Open Registration

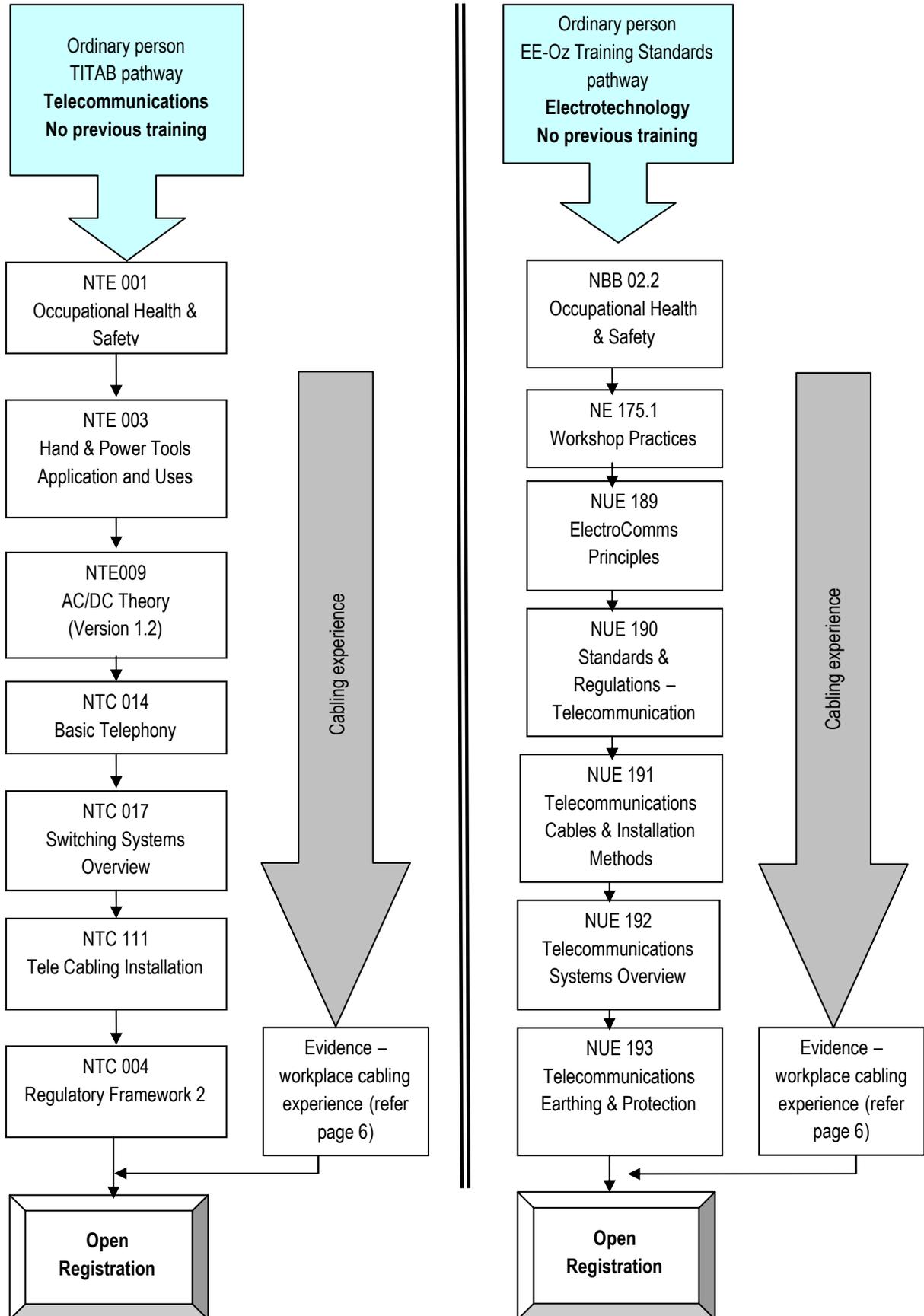


Figure 5: Summary of Restricted Registration pathways

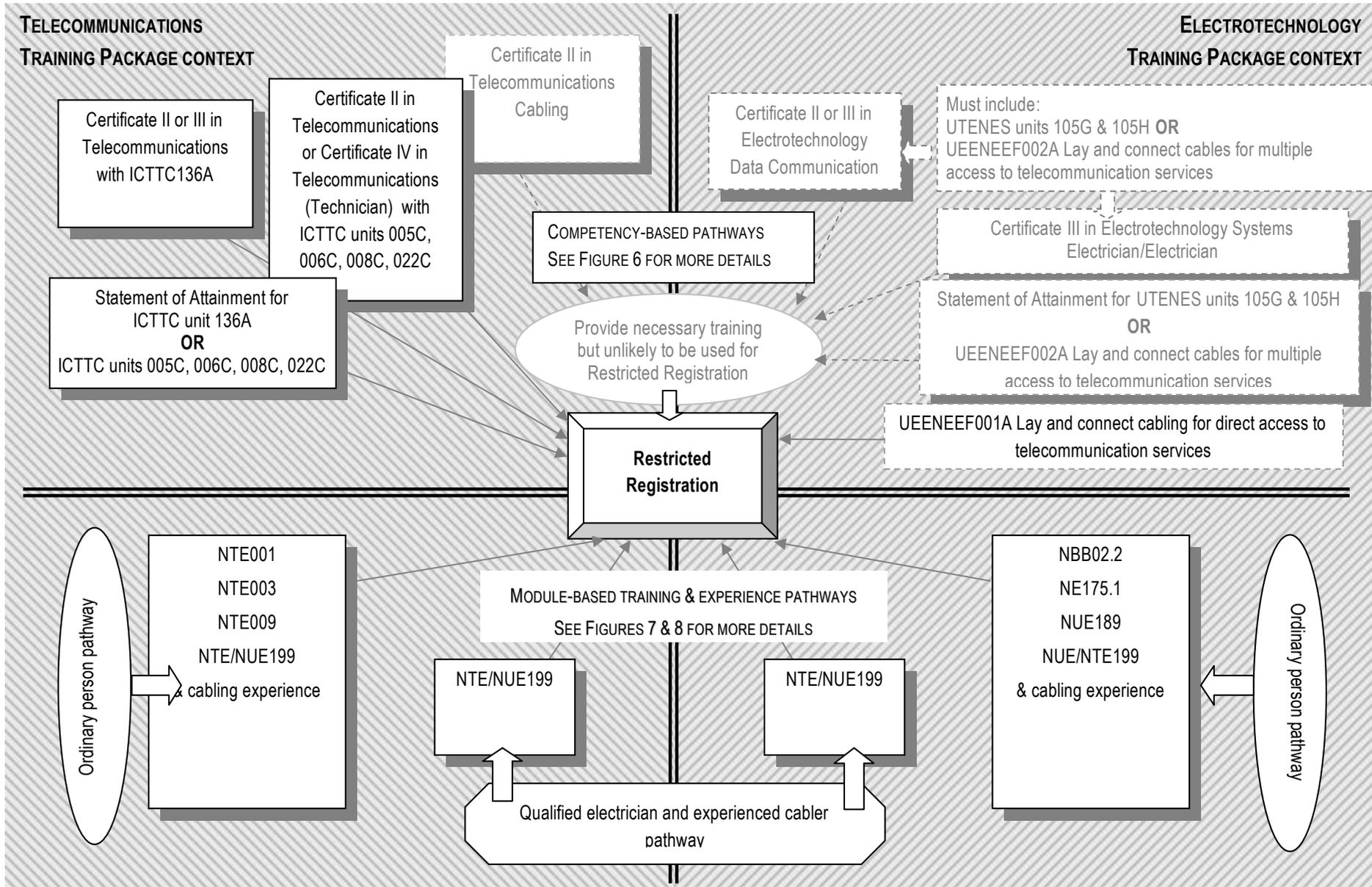


Figure 5A: Summary of Lift Registration pathways

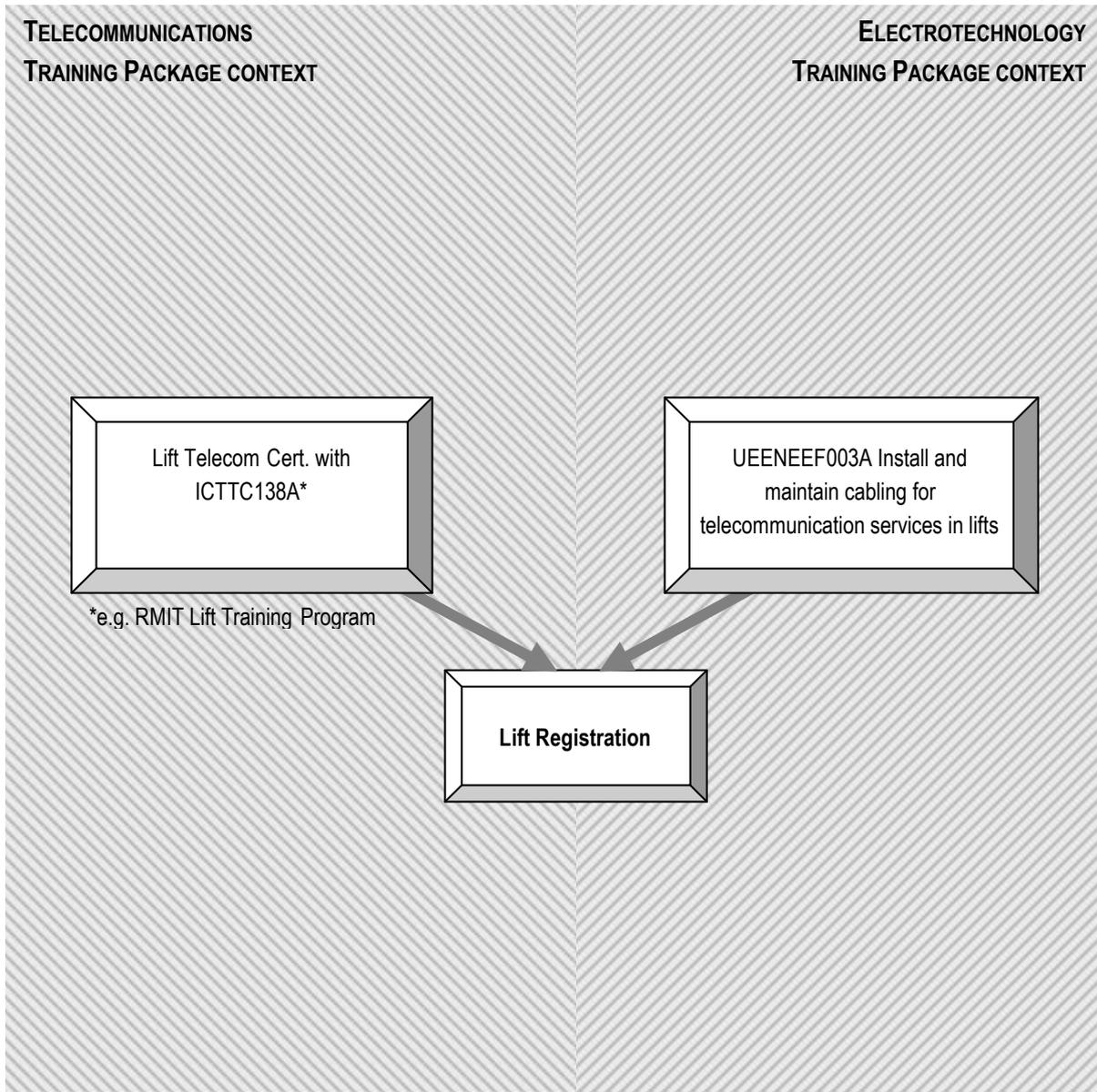


Figure 6: Competency-based pathways – Restricted Registration

The telecommunications pathway is open to people from all disciplines who want to meet the ACMA CPR Restricted Registration requirements.

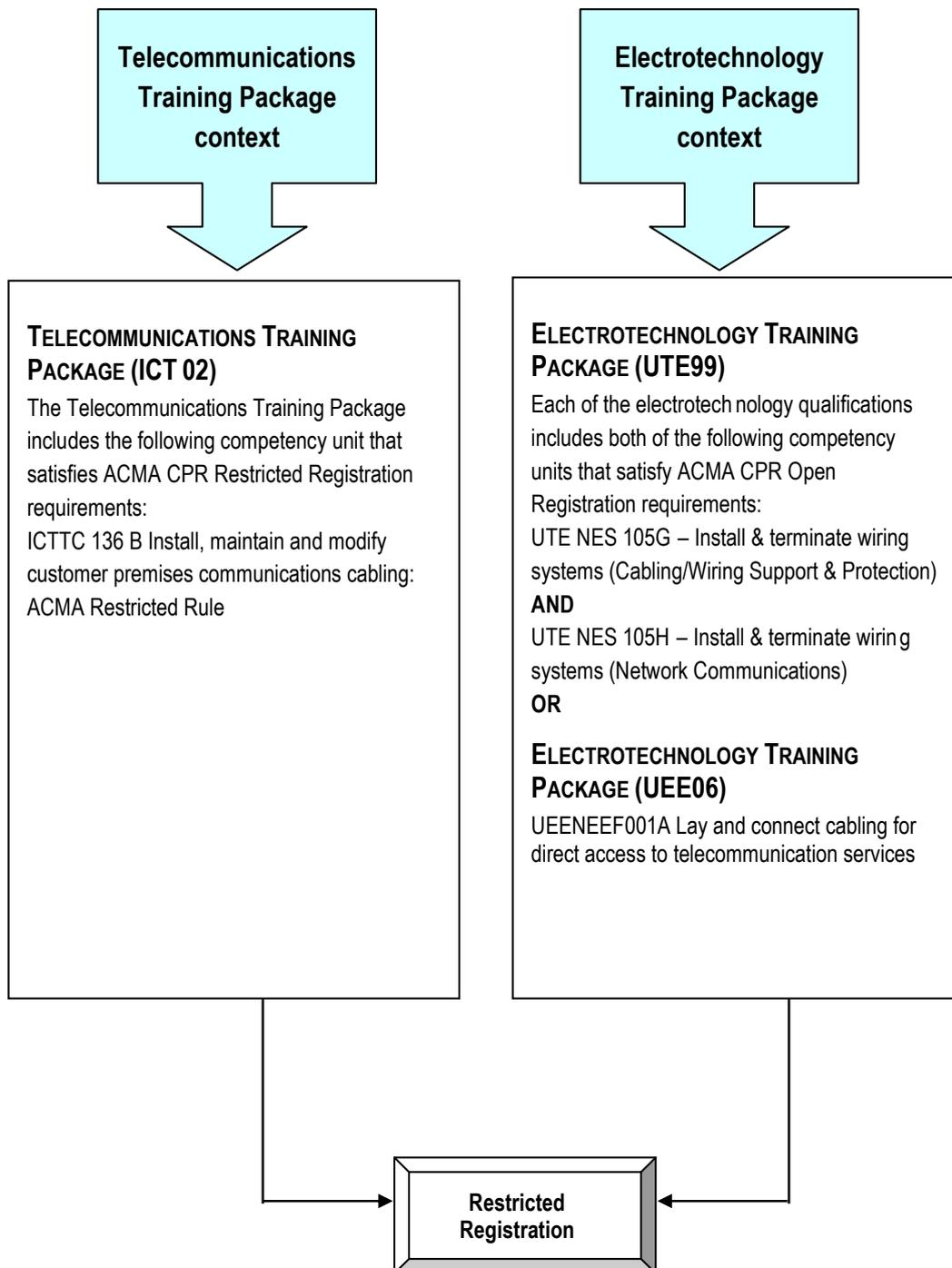


Figure 7: Module-based pathway for qualified electricians and experienced cablers* – Restricted Registration

*Experienced cablers are technically trained staff from telecommunications, fire, security, data and computer cabling companies and statutory authorities who can be credited with completion of modules NTE001, NTE003, NTE009 (or their equivalents) using their formal RTO or employer training records.

For experienced cablers and qualified electricians, the RTO has the responsibility to ensure the pre-requisite requirements are met for these pathways by sighting and recording evidence of credits, completed qualification or assessing and providing a Statement of Attainment.

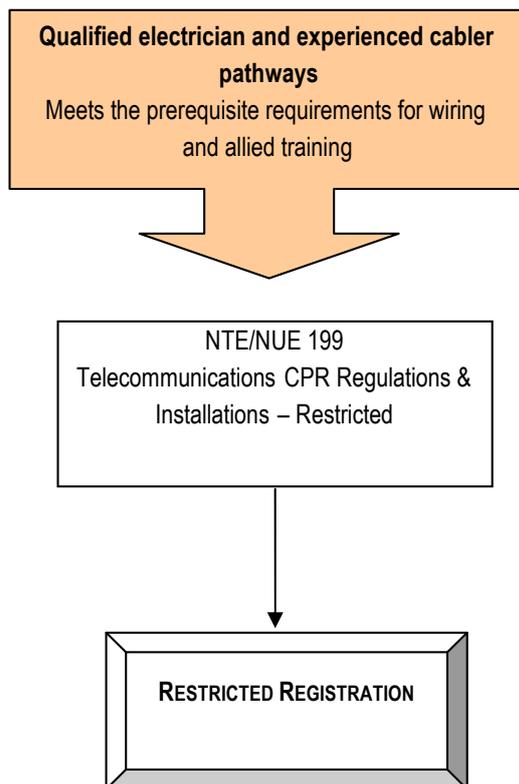
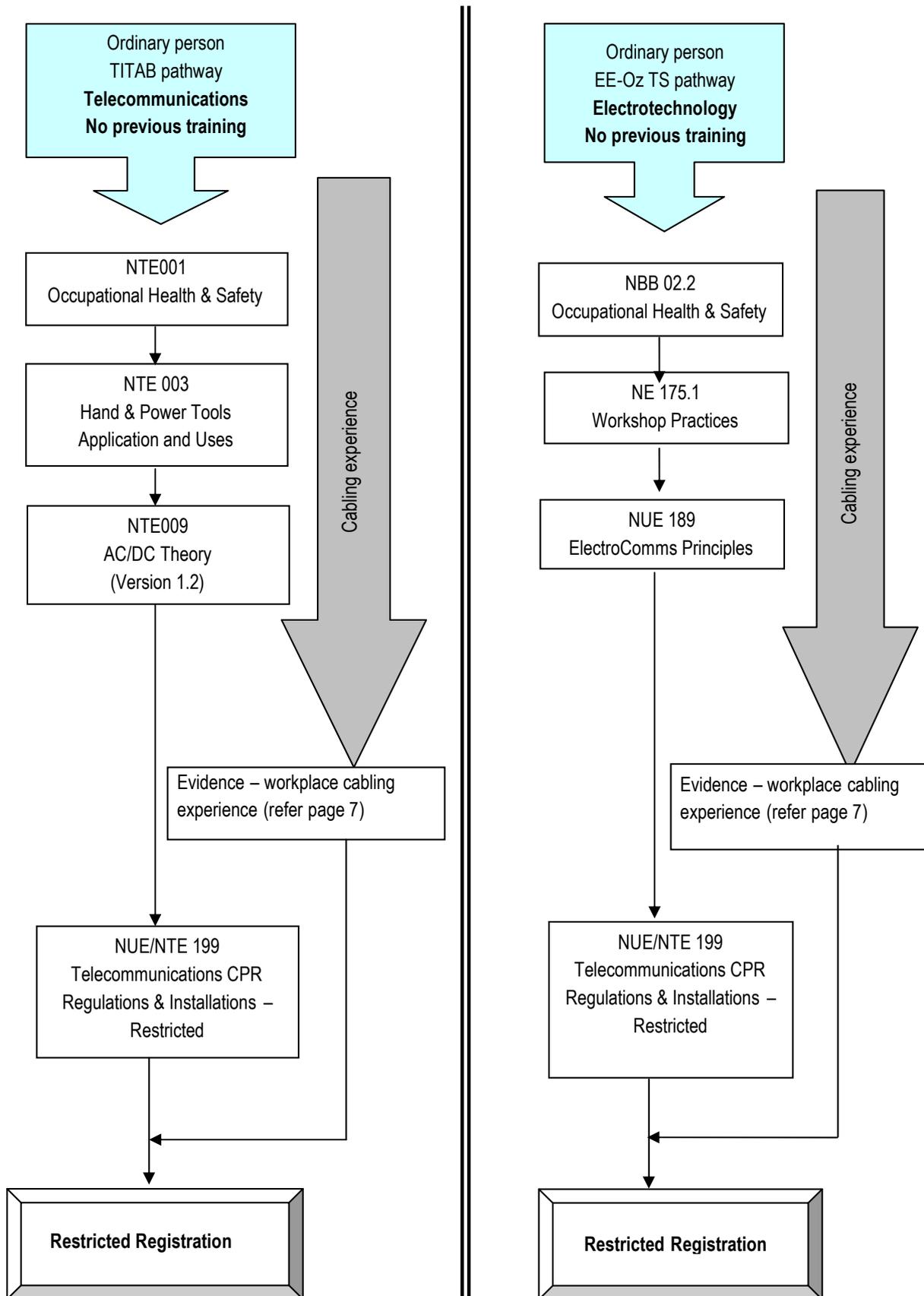


Figure 8: Module-based training pathway for ordinary people – Restricted Registration



CABLING PROVIDER RULES

The **Telecommunications Cabling Provider Rules 2000** (CPRs) regulate the cabling industry and replaced the previous cabler licensing system with an industry-managed registration scheme.

CPRs ensure that minimum cabling requirements are in place to promote safety and maintain network integrity.

The major requirements of CPRs are that:

1. All customer cabling work in the telecommunications, fire security and data industries must be performed by a registered cabler.
2. Depending on the cabling work performed, cablers must obtain either an Open, Restricted or Lift registration that meets ACMA's training competency requirements.
3. Cabling work must comply with the Wiring Rules. The Wiring Rules detail the minimum requirements for cabling installations to ensure that network integrity and the health and safety of end-users, other cablers and carrier personnel is protected.
4. A key requirement of the Wiring Rules is that telecommunications cabling is adequately separated or segregated from electrical cabling to avoid creating a dangerous situation.
5. Cablers are required to install only cabling product (including cable) and customer equipment that complies with the requirements of the Labelling Notice.
6. Cablers must, at the completion of each cabling task, provide the client (i.e. the customer or employer, whichever is appropriate) with a job sign-off form, such as a telecommunications cabling advice form (TCA).
7. Registered cablers must directly supervise an unqualified cabler's cabling work. This is known as the Supervision Rule.
8. Under the Supervision Rule, a qualified cabler must accept full responsibility for the work done by an unqualified cabler and ensure that it fully complies with the Wiring Rules including signing the TCA form.
9. Cablers must provide all reasonable cooperation and assistance to ACMA inspectors and cabling auditors. Cablers can be subject to fines if they do not abide by their registration conditions.
10. Cablers are required to notify their registrar of any change of contact details within 21 days.

More information

This is a brief overview of the CPRs and does not list all the obligations and responsibilities of cablers performing telecommunications cabling work. Cablers should make themselves familiar with the requirements of the [Telecommunications Cabling Provider Rules 2000](#), which is on the ACMA website at www.acma.gov.au or contact ACMA on telephone 1300 850 115, fax (03) 9963 6970 or email to cabling@acma.gov.au.

Please note: This document is intended as a guide only. For this reason, the information should not be relied on as legal advice or regarded as a substitute for legal advice in individual cases. **This document is on the ACMA website at www.acma.gov.au/webwr/aca_home/registers/cabling_licences/pathways.pdf.**

Offences

A person who intentionally or recklessly contravenes the requirements for CPRs is guilty of an offence punishable on conviction by a fine of more than \$13,000.



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