Electricity Distribution Industry Common Competency Framework

Guidelines

Version 1.0
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Contents

1. Background

The Electricity Networks Association (ENA) is the industry membership body that represents the Electricity Distribution Industry (EDI) which takes power from the national grid and deliver it to homes and businesses.

The ENA recognises that keeping people safe, and setting minimum standards for performance, poses a complex challenge for all businesses across New Zealand. Addressing this challenge in the EDI sector requires harnessing the collective expertise of staff within the EDI and across the wider contracting community.

The CCF is the result of a collaboration between a quorum of organisations within the EDI sector, supported by the EDI Health and Safety Forum. Development of the CCF in 2018 also responds to a key part of the ENA Health and Safety Strategy 2017 – 2022; namely to develop a health and safety Common Competency Framework (CCF) for those involved in the EDI in New Zealand.

From its inception the key benefit to the EDI of developing a CCF was to streamline the process of individual competent workers being able to move from one participating organisation to work on the assets of another during disruption events.

2. Purpose

The purpose of the CCF is to empower the EDI sector to reduce risk to workers and the public by setting the minimum levels of knowledge, skills, and experience (collectively referred to as 'competency') required for all workers who are working on or near distribution network assets.

This guideline supports the establishment and maintenance of the CCF as a framework for defining competency across the EDI sector. It includes arrangements for governance and management (section 5), criteria and guidelines to support implementation (sections 6 – 9), and some high-level processes to support onboarding of workers and consistency of operation (section 10).

It is important to note that neither this document nor the CCF is intended to replace or supersede any documents within any EDI organisation, as these may contain operational policies and procedures specific to the authoring organisation. Rather, these guidelines are intended to show how a participating organisation could adopt the CCF, along with the inherent benefits.

3. References

The principles, rules, requirements, policies and guidelines within the following references have been considered in the writing of this document:
- ENA Health and Safety Strategy 2017 – 2022.
- The Health and Safety at Work Act (2015), and the General Risk and Workplace Management Regulations (2016).
- The Electricity Act (1992), and the Electrical (Safety) Regulations (2010).
- EEA Safety Manual for the Electricity Industry (SM-EI).
- EWRB Registration Class Requirements.
- NZQA Tertiary Education Sector Rules.

The content of these guidelines may be subject to updates within these references, the control of which sits outside of the EDI sector. Content has also been informed by documents developed by individual EDI organisations, and other industries where relevant and appropriate.

It is important to note that these guidelines and the CCF were prepared with the expectation that they will be read and understood by those operating in, or having knowledge of, the EDI sector. The terms and phrases used in the CCF were obtained from a range of sources, including the references listed above, and the informed opinions of a range of subject matter experts.

Appendix 2 provides several non-electrical definitions. If any of the terms or phrases in the CCF or in these guidelines are unclear, or clarity on a definition is required, the reader should consult with either a 'Senior User' within their own organisation, a Working Group member or the Steering Group directly. The Terms and Definitions will be amended, and added to over time, as necessary.

4. Principles

The benefits of the CCF lie in a core set of principles, namely that it must be:

1. **Common**, in so far as it should focus on commonalities within the EDI sector, in terms of the type of work carried out, and the tools and technologies utilised in that work.
2. **Usable**, in so far as individual workers must be able to achieve the stated competency by following a process. (This also requires it to be available.)
3. **Transportable**, in so far as commonality should allow a competent worker to move from one participating organisation to work on the assets of another.
4. **Auditable**, in so far as it remains relevant with a clear alignment between the individual competencies, the aligned knowledge framework, and the training workers receive.
5. **Updateable**, in so far as it is a living document, owned by industry and managed on behalf of industry by a group who will ensure it remains current and fit for purpose.

The guidelines outlined in this document are aligned with these principles.

5. Governance and Management

The following arrangements for governance and management ensure that the CCF has a life beyond the first version. These arrangements reflect the principles that the CCF must be **auditable** and **updateable**. They also provide structure to ensure change is managed efficiently and transparently.

5.1 Governance – Steering Group

The Steering Group (SG) comprises a subset of EDI Health and Safety Forum members. The purpose of the SG is to ensure that the CCF remains effective throughout its lifetime. The SG is the steward of the CCF, provides oversight over its management (including administration, review and improvement) and ensures that the management of the CCF is consistent with the agreed principles.

The Steering Group is a body established by industry, for the benefit of industry, to maintain the effectiveness of the CCF. In this regard the SG will:

- Comprise no more than five individuals from a cross-section of persons having management responsibility in organisations within the scope of the CCF.
- Be supported by ENA providing secretariat services.

- Set up communication mechanisms with the EDI Health and Safety Forum.
- Set all policies and procedures relating to the CCF, including rules to maintain a minimum viable product (MVP) – described in Section 7 "Essential Components".
- Consult and communicate with EDI and non-EDI stakeholders to maintain the relevancy of the CCF, including providing mechanisms for response and feedback.
- Monitor the use and performance of the CCF and prepare an Annual Improvement Plan, based on identified opportunities and feedback from stakeholders.
- Provide leadership and direction on how the implementation requirements may be met, considering the current desire to move to a centralised platform in the future.
- Agree on the levels of participation required to establish the CCF.
- Agree conflict resolution and mediation procedures as required.

5.2 Management – Working Group

The Working Group is a body established to represent all participating and prospective organisations and ensure the relevancy of the CCF over time. To this end, the WG will:
- Comprise suitably qualified technical specialists who work within individual the EDI sector
- Provide participating organisations with access to the CCF and supporting documents through mechanisms approved by the SG.
- Regularly communicate with participating organisations on the status of the CCF and invite feedback on the CCF content.
- Maintain the content of the CCF, and supporting documents, based on feedback, and in keeping with these guidelines.
- Review the CCF on an annual basis, and allow for ad-hoc reviews on the following triggers:
  - Changes in relevant legislation, regulation, and/or codes of practice.
  - Material change to electrical industry standards and guides (e.g. SM-EI).
  - Material changes to externally managed competencies included in the CCF.
  - Changes in the knowledge framework (to the extent this is externally managed).
  - Adoption of new technologies or processes as deemed necessary.
  - Where review is requested by participating organisations or user groups.

6. Implementation and Support

Organisations that choose to adopt the CCF shall be responsible for implementing the framework within their own organisations. This allows participating organisations the flexibility to integrate the CCF using existing processes and systems (with or without enhancement) however they wish, within the guidelines proposed.

For organisations to be so enabled, the following sections in these guidelines provide:
1. Overview of what the CCF must contain – Section 7 "Essential Components".
2. Direction as to whom and what the CCF applies – Section 8 "Industry Application".
3. Rules on how the CCF is supported by systems – Section 9 "System Requirements".
4. Guidance on a standard process for assessing workers – Section 10 "Operational Process".

Each organisation wishing to participate is advised to appoint someone within their organisation to be the primary contact responsible for implementation. This person will act as a 'Senior User' and will be the primary liaison with members of the Working Group and Steering Group.

Note: This 'participant-empowered' approach to implementation does not preclude moving to a centralised system in future. Rather, it is simply an interim step to ensure the CCF can fulfil its purpose independently of any decision on system centralisation.

Two years is deemed a reasonable timeframe for a single organisation to fully implement the CCF. ENA is prepared to help support adoption however they can.

7. Essential Components

The following components are considered essential for CCF operations, so that it can be both **common** and **usable**. Any updates to the framework will consider the impact of change regarding these components, especially around the availability of training and assessment.

7.1 Competency definition

Each competency is defined within the following structure:
- All Competencies have a minimum of two levels of definition – Class and Sub-Class.
- Class is a simple way of grouping the Sub-Classes beneath it.
- Sub-Class (also referred to as 'competency') also includes the detailed definition of the competency. See **Appendix 1** for the current sub-classes and definitions.
- Class and Sub-Class names and definitions are common to all participating organisations.
- Any competency may also have a third level of definition, titled 'Endorsement', which are designed to allow individual organisation to add network-specific competencies.
- Endorsement details are not included in the CCF but must be related to a specific competency.
- Endorsement definition shall be complementary to the parent competency, and it should never duplicate or contradict any part of the parent competency definition.

7.2 Knowledge framework

Each competency will retain a unique knowledge set which describes how the competency is to be demonstrated in terms of detailed outcomes. To this end:
- It has been agreed that NZQA qualifications and assessment standards (commonly known as 'Unit Standards') will form the basis of the knowledge framework.
- Other bases for knowledge framework (i.e. industry certifications, learning outcomes) may be considered and added in the future, should the qualifications and unit standards not sufficiently describe the outcomes required to meet each competency.
- Industry knowledge (i.e. industry publications such as the SM-EI) will inform the underlying knowledge base for each competency and the aligned knowledge framework.

7.3 Training provision

Each competency must be achievable on an ongoing basis, with allowance made for flexibility in terms of when an organisation adopts the framework and how workers will be deemed competent. This means:

- Training for each competency should be available (in some form) to all participating organisations and their contractors, so that competency is achievable regardless of location.
- Appropriate refresher training is provided by all participating organisations to ensure competencies remain current.
- Training can be provided through a mix of internal and external expertise including time spent proving competency by performing the key job tasks.
- Training for any endorsement remains the responsibility of the organisation (or group of organisations) that require it including verification of contractor training programmes.

7.4 Assessment and moderation

To ensure consistency of delivery across participating organisations, common assessment practices should be followed, and objectivity maintained. The following recommendations are based on the agreement to use unit standards to inform the underlying structure of the knowledge framework:

- Assessment expertise should be available (in some form) to all participating organisations, so that the competency is achievable regardless of location. This may be carried out separately to the training, but a common approach is recommended.
- Assessment expertise to be quality-assured through the application and maintenance of consent to assess (through the standard setting body for each unit standard).
- Moderation of assessment materials and decisions to be carried out by the organisation appointed to do this by NZQA (currently also the standard setting body).
- Moderation of the attainment of qualifications embedded in competency pathways to be managed through consistency review (currently led by NZQA).

8. Industry Application

This section defines those rules that apply universally (to all competencies) in terms of industry sector, people, and asset relationships. This also enables the CCF to be both **common** and **usable**. More detailed guidelines relating to individual competencies are included in the CCF (for example, through role and asset ranges).

What is important is that the adoption of the CCF **is not** compulsory, and adopting the framework should not impose any additional costs or burden on those who choose to adopt it.

8.1 Sector application

The CCF has been developed as a framework for defining competency within the EDI sector only. For clarification:

- The Electricity Distribution Industry sector is defined as encompassing activities carried out between the transmission grid exit point and installation point of supply.
- Some competencies in the CCF may apply to workers outside the EDI sector, where they are contracted for specific works inside the sector. Examples of such workers include civil workers contracted to lay underground cables.

- The CCF may include competencies prescribed by organisations outside of the EDI sector, but only where such organisations are empowered by legislation, regulation, or gazetted to do so. Examples of such organisations are the Electricity Workers Registration Board (EWRB), the Civil Aviation Authority (CAA), and the New Zealand Transport Agency (NZTA).
- No competency shall conflict with, or attempt to overwrite, the requirements set down by an organisation outside of the EDI sector's sphere of influence.

8.2 Worker relationship

The CCF has been prepared to safeguard all workers in the EDI sector who are working on or near distribution network assets. That said:

- The decision to adopt the CCF, and inherit the benefits that go with it, remains at the discretion of parties directly employing workers in the EDI sector; and
- The CCF, or any part thereof, may be recommended for third party contractors, but adoption can only be enforced where there is formal agreement to that effect.

8.3 Asset relationship

The CCF contains references to assets to give context to the aligned competency and ensure that the competencies reflect industry requirements. Organisations may wish to make use of 'endorsements' where there is a particular competency required to cover network specific assets. For clarification:

- The CCF covers work on (or near) assets which are common within the EDI sector
- Endorsements will be managed outside of the CCF by those that require them.
- Endorsements must be associated with a parent asset type (as determined by the competency to which they relate).

9. System Requirements

This section describes how the CCF may be embedded within existing systems. The section is a guide only and relates to the principle that the CCF must be **transportable** between organisations operating within the EDI sector. If the essential components and/or industry application varies from that outlined in the preceding sections, the requirements will need to change accordingly.

Note: The guidance provided in this section does not preclude the move to a centralised CCF system in future. Rather, it is simply an interim step to ensure the CCF can fulfil its purpose independently of any decision on system centralisation.

9.1 Guiding assumptions

The following basic assumptions underpin requirements for implementing the CCF:

1. Participating organisations must be enabled to integrate the CCF within their business, according to their own operational guidelines and constraints.
2. Standard terminology must be adopted to be consistent with definitions in codes of practice and relating standards (e.g. SM-EI).
3. The CCF must align with, or at least not contradict, requirements set by legislation, regulation or codes of practice (e.g. requirements for organisations to maintain worker information or manage data security).

9.2 Framework data

The following fields are required for the CCF to function as a standard template for the whole EDI sector. These fields will likely be developed over time. Fields marked with an asterisk are mandatory for every network to carry inside their Human Resources / Training Management systems, as they relate to worker data. Other fields must be commonly understood, and available to refer to for training and assessment purposes, but these can exist outside information systems.

Component	Description
Competency Code*	Current competency class and sub-class code. (Noting that the current coding system may need to be changed to allow for growth, as new classes and sub-classes cannot be inserted using the current system).
Class*	A short phrase that describes high-level class of assets under which competencies are developed.
Competency*	A short phrase that defines the competency and distinguishes it from others in the same class.
Description*	Describes what the holder is able and authorised to do (and possibly what they're not authorised to do).
Asset Range*	Describes the asset range to give further context in terms of voltage, tools and technology.
Role Range	Examples of roles that workers would have if they held (up to) this competency only. This is not to include roles which naturally hold higher competencies.
Pre-requisite	The competency that is immediately pre-requisite to this one, to inform the pathway through the framework.
Renewal Period	How often reassessment is required, considering any parent regulations and the risk profile.
Qualification Achieved	The qualification that may be achieved once knowledge is acquired per competency, if applicable.
Knowledge Code	Unique identifier for knowledge framework component. For example, this may be the unit standard number.
Knowledge Description	The components used to assess achievement of the competency. This excludes any components achieved through pre-requisite competencies. Gaps may be filled by referring to source documents (e.g. SM-EI, NZECP, ESR, ASNZS).
Training Provision	The expertise used to transfer and assess the competencies, bearing in mind learning may occur online or in a physical location, and on-job or off-job. Gaps could be filled with a description of how expertise could be developed.
Reference Material	How the delivery of competency will be supported by training materials, bearing in mind a variety of formats may be required to optimise learning. Gaps may be filled by suggesting where and how materials may be sourced and produced.
Competency Status	Traffic light system required to indicate whether the competency is alive or not. The competency becomes achievable when all fields are completed, or unachievable (when unit standards expire, for example).

9.3 Network data

The following fields enable the CCF to function within each participating organisation. Fields marked with an asterisk have been copied from the previous section to indicate the field must be included within Human Resources / Training Management systems, and the data must align with the framework data equivalent.

It is recognised that some variance exists in the specific technologies and tools that surround common assets in the EDI sector. These may be provided for by network-specific endorsements, which are not part of the CCF – the data sits within the organisation that requires it – but they should relate to the CCF as described below. A network can use endorsements at their discretion so the fields relating to endorsements are optional.

Component	Description
Competency Code*	Current competency class and sub-class code. (Noting that the current coding system may need to be changed to allow for growth, as new classes and sub-classes cannot be inserted using the current system).
Class*	A short phrase that describes high-level class of assets under which competencies are developed.
Competency*	A short phrase that defines the competency and distinguishes it from others in the same class.
Description*	Describes what the holder is able and authorised to do (and possibly what they're not authorised to do).
Asset Range*	Describes the asset range to give further context in terms of voltage, tools and technology.
Endorsement Code	Unique code assigned by the network that requires it. This must complement the coding system used by the CCF and not replicate any code used by the CCF.
Endorsement Description	Describes what the endorsement allows the worker to do. (Noting that all endorsements must have a system for training and assessment to meet requirements outside the CCF).
Parent Competency	The Competency Code to which the endorsement relates. The worker must holder this Competency and may optionally have the endorsement.

9.4 Worker data

The following fields are required for the CCF to be applied to workers across the EDI sector. This field set may be developed over time, as necessary. All fields in the following table will be mandatory for each network to carry in their Human Resources and / or Training Management systems, except for Endorsements (see previous section on Network data).

Data Type	Description
Worker Number*	This number will be unique to the organisation that first migrated the worker onto the CCF.
Worker Name*	This will be the name of the Employee, or contractor, who has achieved some Competency. This should be their legal name and align to the name used in the National Student Index (if applicable).
Competencies*	This will be a list of Competencies which the worker has achieved to date. This will include Competency Code, and Sub-Class (and may be arranged by Class).
Endorsements	This will be a list of any Endorsements which the worker has achieved, in addition to achieving the parent competency. This will include the Code and Description and will appear in relation to a parent competency.
Award Date*	To apply to each Competency and Endorsement. This will be the date upon which the worker first achieved the Competency or Endorsement, via the agreed process. This is required for entry.
Last Refresher*	To apply to each Competency and Endorsement. This will be the date upon which the worker was last assessed, attested for Competency or Endorsement, via the agreed process. This may be blank.
Assessor Name*	To apply to each Competency and Endorsement. This will be the name of the expert who last assessed the worker, according to the quality assurance rules of the knowledge framework used.
Assessor Employer*	To apply to each Competency an Endorsement. This will be the employer of the expert who last assessed the worker.
Awarding Employer*	To apply to each Competency and Endorsement. This will be the name of the Employer (or contractor) that provided Attestation as part of the last award.

10. Operational Processes (for consideration and feedback)

This section introduces methods and processes for training, assessment and the award by a variety of methods. This responds to the principle that it must be **usable**. It also reflects the ENA's ambition (and industry's expectations) that adopting the framework should not add additional cost or burden on any organisation.

Note: For the purposes of transition, and ongoing use, the CCF is intended for use both as an assessment framework, and a tool to inform the design of training programmes.

10.1 Guiding assumptions

The following basic assumptions underpin the arrangements for transitioning workers onto the CCF:
1. A worker must be enabled to achieve competency through a combination of knowledge and skills acquisition or qualification and experience.
2. A worker must hold the competency to be permitted to either work alone or be responsible for other workers.
3. A worker must be supervised by a competency holder if they are not themselves deemed competent, even if they are training towards the competency.

10.2 Gaining competency

It is generally expected that a worker will gain competency via a **training pathway** whereby competency is achieved over time through training programmes delivered by a combination of internal and external expertise and resources. That said there will be those who are already deemed 'competent' by their employer who may not wish to be assessed against the competency criteria. For those that do wish to gain competency, there are several mechanisms to do so:

- **Grandfathering –** i.e. migrating workers from existing internal frameworks developed by individual EDBs, which may or may not be based on earlier versions of the CCF.

  Note – In these circumstances it is likely that a variety of mechanisms will be used by organisations choosing to adopt the CCF. As adopting the framework is not mandatory, it is expected that organisations will find their own ways to 'grandfather' workers over time.

- **Recognition of Prior Learning** – from existing external frameworks such as EWRB license requirements, or the NZQA Qualification framework and Directory of Assessment Standards.
- **Recognition of Current Competence** – where assessment is largely based on demonstrable knowledge and proven experience only, but this may include an element of RPL.
- **Competency refreshment** – aimed at recall and reinforcement of previously acquired knowledge and skills (responding to the need for ongoing competency to be maintained through refresher training).
- **Recognition of overseas qualifications –** as far as they align to New Zealand qualifications, may be necessary for new workers following guidelines set down by NZQA.

10.3 Assessment processes

An integrated approach is recommended to enable all training and assessment needs (including refresher training), to be covered through one process. The benefit of such an approach is that certain processes may be by-passed, allowing for easier transition where possible (i.e. without compromising worker safety). The process is summarised as follows:

- **Gathering of worker data** – this will include collating data relating to individual worker's current employment arrangements, and the work they typically carry out.
- **Identifying competencies required** – this will involve matching current role to the competencies required.
- **Profile risk assessment** – A risk-based approach is recommended to allow for optionality in the remaining processes, according to the risk profile of both worker and work type. Worker type risk evaluation will assess the degree of visibility that the employer has of the worker, and the exposure the worker has had to the task. Work type risk profile is the degree of risk involved in performing the task. Previous performance issues might also be noted at this point.
- **Recognition of Prior Learning** – this will involve collating evidence of current formal qualifications and matching these against the relating knowledge framework to each Competency required. Competencies achieved against an existing framework will be considered RPL at this point.
- **Competency gap analysis** – This is a mid-point, where it may be determined that the process can skip through to the Evaluation stage (based on outcomes of preceding processes). For example, if there is an exact match between an existing competency and an equivalent in the new CCF, the next three steps may be by-passed.
- **Knowledge testing** – This will involve a knowledge test as a way of by-passing some training, where the worker can demonstrate foundation knowledge in an off-job assessment scenario.
- **Formal Training** – Where the knowledge testing reveals gaps in knowledge, and where gaps in skill have been identified in the gap analysis, formal training must be provided.
- **Practical Experience** – This may involve the worker being under 'training' and therefore supervised for a period, until such time as both the employer and the worker are ready for evaluation.
- **Competency Evaluation** – This process is designed to gather results from the processes outlined above so the employer can have confidence in signing an attestation.
- **Management Attestation** – This will involve at least two signatures – one by the manager to whom the worker reports on a day to day basis, and a manager having responsibility for safety.

Note: Collateral development will be required to support the above (should materials not already exist), notably for knowledge testing.

10.4 Supporting documents

Templates and other documents are required to support implementation. These include:

- **CCF Guidelines** – Outlining governance and management arrangements for the CCF, plus how to operationalise and transition workers to the CCF (these guidelines).

- **Pathways to Achievement** – Mapping pathways through the CCF aligned to role, to assist workers and participating organisations with Continuing Professional Development.
- **Worker Record of Achievement** – Recording competency achievement on an ongoing basis, to be owned by the worker, and shared with other participating organisations in the event of cross-contracting
- **Competency Evaluation** – Template to enable an evaluator (assigned by each participating organisation) to record evidence of competency and provide summary evaluation.
- **Employer Attestation** – Template to recording attestation by management that the worker has following a robust competency evaluation and work exposure process.

Appendix 1: The Competencies (to be updated ongoing)

The table below presents a summary of each of the competencies in the CCF:

Competency		Description
1A	Restricted Area Entry	Allows the worker to access a Restricted Area (as defined in SM-EI Rules) and to approach unrestricted areas within four metres of live electrical equipment. Working positions must remain outside appropriate minimum approach distances to live equipment. Additional competencies are required to work on network assets.
2A	Minor Works Management	Allows a worker to work in or manage a work site close to live electrical equipment, under formal authority granted by the asset owner. Working positions must remain outside appropriate minimum approach distances to live equipment. Additional competencies are required to work on network assets or to supervise others. Refer to the EEA supervision guide for restrictions.
2B	Primary Works Permit Recipient	Allows a worker to take a permit for the purposes of working on or near electrical equipment. The worker becomes the recipient of an Access, Test or Live Line Permit after the agreed controls are in place. Additional competencies are required to work on network assets.
2C	Primary Works Permit Issuer	Allows the worker to issue, modify, receive back, transfer or cancel access and test permits. This competency does not allow the worker to control any network assets without subsequent achievement of the Network Control Competency.
4A	Vegetation Works Competent Worker	Allows the worker to remove vegetation within the Competent Worker Zone / Restricted Area Zone around overhead lines.
4B	Vegetation Works Close Working	Allows the worker to remove vegetation using insulated tools in the Close Working Zone / closer than minimum approach distance to overhead lines or underground cables.
4C	Non-Production Felling Close Working	Allows the worker to fell vegetation in the Close Working Zone / closer than minimum approach distance to overhead lines or underground cables.
6A	Low Voltage Isolated Works	Allows the worker to work on assets which are in an isolated state up to and including 1kV.

Competency		Description
6B	Low Voltage Live Works	Allows the worker to work on assets which are in a live state up to and including 1kV.
6C	Overhead Service Connect and Disconnect	Allows the worker to connect and disconnect a low voltage overhead service. Low voltage live working procedures must be used. This competency applies to the installation side of the network, not supply.
6D	High Voltage Earthed Works (up to 33kV)	Allows the worker to work on assets which are in an earthed state in the voltage range from above 1kV up to and including 33kV.
6E	High Voltage Earthed Works (above 33kV to 110kV)	Allows the worker to work on assets which are in an earthed state in the voltage range from above 33kV up to and including 110kV.
6F	High Voltage Live Line Hot Stick (11kV and above)	Allows the worker to work on assets above 11kV which are in a live state using hot stick techniques.
6G	High Voltage Live Line Glove and Barrier (11kV to 33kV)	Allows the worker to work on assets within the voltage range of 11kV up to and including 33kV which are in a live state using glove and barrier techniques.
6H	Towers and Monopoles	Allows the worker to work on lattice towers and/or monopoles (which may be constructed of hardwood, steel or concrete). This competency is only required for structures that are 15 metres or taller (above ground level) and applies only to structures owned by network companies.
7A	Cable Laying	A worker directing or overseeing the laying of low voltage and high voltage cables in trenches or ducts. Also includes laying ducts in trenches or thrusted. Note this does not permit the person to terminate or joint.
7B	Cable Location	Allows the worker to locate and mark out cable location in preparation for excavation. Any voltage. There is no requirement to identify specific locators with this competency.
7C	Underground Service Connect and Disconnect	Allows the worker to connect or disconnect a low voltage underground service to installations. This applies to the installation side of fuses (service side of the network), not the supply side.
7D	Low Voltage Terminations	Allows the worker to complete low voltage cable terminations including installation of service cables, and installation and connection to the load side of fuses supplying service lines and cables located in low voltage ground mounted pillars.
7E	Low Voltage Jointing Polymeric only	Allows the worker to joint low voltage polymeric cables ONLY.
7F	Low Voltage Jointing Any Cable	Allows the worker to joint any type of cable.
7G	Low Voltage Jointing Live	Allows the worker to joint cables in a live state.

	Competency	Description
7H	Low Voltage Working Live Not jointing	Allows the worker to work on live low voltage underground cables and equipment. Note that live work should only be undertaken once it has been justified through the Networks Justification process.
7I	Low Voltage Pilot Cabling	Allows the worker to lay, locate, joint and terminate pilot cables in the underground network.
7J	High Voltage Jointing and Termination (11kV)	Allows the worker to complete the jointing and/or termination of 11kV cables.
7K	High Voltage Jointing and Termination (above 11kV to 33kV)	Allows the worker to complete the jointing and/or termination of any type of cable above 11kV up to and including 33kV.
7L	High Voltage Jointing and Termination (above 33kV)	Allows the worker to complete the jointing and/or termination of any type of cable above 33kV.
7M	High Voltage Jointing and Termination Oil and Gas	Allows the worker to complete the jointing and/or termination of oil and gas filled cables at any voltage.
8A	Low Voltage Switching	Allows the worker to operate low voltage switching equipment including switches, fuses and links (series and parallel), both overhead and underground.
8B	Switching at Height (up to 33kV)	Allows the worker to operate HV switching equipment up to 33kV off the ground and requires the application of height safety measures. This includes overhead enclosed switches, manually operated air break switches, dropouts and links. It also allows the worker to apply earthing procedures if required.
8C	Switching on Ground (11kV to 33kV)	Allows the worker to operate HV switching equipment 11kV up to 33kV on the ground. This includes automated air break switches, sectionalisers, reclosers, pole-mounted regulators, but only where such equipment can be operated without the application of height safety measures.
8D	Switching Ground Mounted (under 33kV)	Allows the worker to operate ground-mounted HV switching equipment 11kV up to 33kV. This includes ringmain units and ground-mounted voltage regulators.
8E	Switching Substation (under 33kV)	Allows the worker to operate zone substation indoor and outdoor switchgear and equipment up to 33kV.
8F	Switching Substation (33kV to 110kV)	Allows the worker to operate zone substation indoor and outdoor switchgear and equipment 33kV up to and including 110kV.
8G	Switching Instruction	Allows the worker to create switching instructions for use in planned and/or fault situations.
8H	Network Control	Allows the worker to manage the electricity supply system equipment and work control.
8I	Fault Response (up to 33kV)	Allows the worker to carry out fault response activities on all network assets up to and including 33kV.

Competency		Description
8J	Fault Response (above 33kV)	Allows workers to carry out fault response activities on all network assets above 33kV.
10A	High Voltage Supply Electrician	Allows a worker to undertake high voltage installation, repair, maintenance and commissioning of electrical equipment in distribution and zone substations, indoor/outdoor switchgear, batteries, UPS, DC control circuits, cables and cable fault location. The worker can also carry out work on power system protection and SCADA systems which is limited to installation, flag and target resetting, open/close and basic metering interrogation of HMI.
11A	Communications Technician	Allows a worker to access and work only in panels that contain no exposed live electrical conductors over 50V AC or 125 VDC or areas that have exposed high voltage conductors. Elective endorsements are: (1) Installation of equipment within and rack or stack within the designated equipment panel for communications (2) Splicing (3) Patching
11B	SCADA Technician	Allows a worker to install, commission, maintain and repair SCADA interfacing equipment like RTU's and associated communications equipment. Includes remote interrogation, upload or download of configuration files. Excludes commissioning of protection relays or primary electrical equipment.
11C	Power Systems Technician	Allows a worker to accept, install, commission, maintain, test and repair primary and secondary equipment installed on an electricity supply system. Includes work on and the understanding the operating principles for protection relays, power and instrument transformers, transformer management systems, circuit breakers and associated control systems including SCADA 11A.
11D	Local and Remote Engineering Access	Allows a worker, via data connections, access to protection, automation, communication and control equipment for commissioning support, maintenance activities and fault investigations. The access can either be remotely via the IP network or locally through a serial cable or HMI.

Appendix 2: Terms and Definitions (to be updated ongoing)

Key terms used in these guidelines are provided in the table below. For the purposes of clarity, if any terms conflict with either relevant legislation or key guides such as the SM-EI, the relevant legislation and guide definitions take precedence.

Term	Description
Assessor	A competent person who undertakes the verification assessment of worker's ability, skills, knowledge, and experience to deem the worker competent in a competency sub-class having meet the requirements of this standard.
Competency	A sub-class as described in the CCF, sometimes referred to as a ('Work Type Competency'). There is no universally accepted definition of 'competency', but it includes elements of education and continuous learning, experience, exposure, attitude and confidence. In this context most agree it relates to an individual's ability to fulfil the role for which they were employed in a dynamic (ever-changing) environment.
Competent	A person is 'competent' when they can demonstrate at any time that they have the necessary knowledge, skills, and experience, attitude and confidence to carry out the work safely to the relevant competency standard.
Knowledge framework	A means for defining how competency is to be measured, expressed in terms of the knowledge to be demonstrated.
Recognition of Current Competency	Recognition of Current Competency (RCC) is an assessment process that enables people to gain recognition for the skills and knowledge they already have. It requires the candidate to prove to the assessor that they already have the skills and knowledge needed to meet the requirements of a competency sub-class.
Recognition of Prior Learning	Recognition of Prior Learning (RPL) is a process that involves formal assessment of a learner's relevant and current knowledge and skills (gained through prior learning) to determine achievement of learning outcomes of a competency sub-class.
Employer	An organisation that employs an individual worker under formal contract or employment agreement.
Worker	An individual who carries out work in the Electricity Distribution Industry, under a formal contract with an employer.