

1. Title	Repair the faults in railway overhead feeder systems
2. Code	EMRAOR308A
3. Range	Identify and repair the faults in railway overhead feeder systems and protection devices in areas with railway overhead lines or power control rooms.
4. Level	3
5. Credits	6
6. Competency	<p style="text-align: center;"><u>Performance Requirements</u></p> <p>6.1 Working principles of railway overhead feeder systems and equipment and basic fault finding techniques</p> <ul style="list-style-type: none"> ◆ Understand the structure and working principles of the railway overhead feeder systems, including <ul style="list-style-type: none"> • Contact wire • Catenary wire • Insulator • Isolator ◆ Understand the structure and working principles of the switching devices and electricity quality improvement devices of overhead feeder systems, including: <ul style="list-style-type: none"> • Power switching devices • Circuit breakers • Interlock devices • Electricity quality improvement devices ◆ Understand the structure and working principles of the control and protection devices of overhead feeder systems, including <ul style="list-style-type: none"> • PLC control unit • Distance and district overcurrent protection devices • Earth fault protection devices ◆ Master the basic fault finding techniques <p>6.2 Methods and procedures of identifying and repairing the faults in railway overhead feeder systems and equipment</p> <ul style="list-style-type: none"> ◆ Able to read the electrical engineering drawings and check the circuits systematically and efficiently ◆ Check the main line system, the switching and isolation devices and electricity quality improvement device of the overhead feeder system according to the information and fault symptoms so as to identify the fault equipment or components ◆ Check the control and protection devices of the overhead feeder system according to the information and fault symptoms so as to identify the fault equipment or components ◆ Remove the faults after identifying the fault equipment or components ◆ Use general electrical and overhead line repairing and testing instruments and tools efficiently

	<p>6.3 Professionalism in repairing faults in railway overhead feeder systems and equipment</p> <p>◆ Understand the safety guidelines as required by the law and codes of practice in removing faults in railway overhead feeder systems and equipment</p>
7. Assessment Criteria	<p>The integrated outcome requirement of this unit of competency is:</p> <p>(i) Capable to identify the faults in the railway overhead feeder system safely and efficiently according to the information and fault symptoms;</p> <p>(ii) Capable to identify the faults in the control and protection devices of the railway overhead feeder system safely and efficiently according to the information and fault symptoms.</p>
8. Remarks	<p>The credit value of this unit of competency is set on the presumption that the person already possesses basic knowledge of electricity.</p>