

1. Title	Formulate maintenance instructions for railway overhead feeder system equipment
2. Code	EMRAMA505A
3. Range	Formulate maintenance instructions for railway overhead feeder system equipment by referring to their design and the repairing standards for train overhead lines and power switching and protection devices, and considering their overall operational performance and repair history.
4. Level	5
5. Credits	9
6. Competency	<p style="text-align: center;"><u>Performance Requirements</u></p> <p>6.1 Design, structure and working principles of railway overhead feeder system equipment</p> <ul style="list-style-type: none"> ◆ Be familiar with the design, structure and working principles of railway overhead feeder system equipment ◆ Apply the repairing guidelines provided by the manufacturer ◆ Master the techniques in calculating the standard for maintaining railway overhead feeder system equipment ◆ Master the applications of instruments and tools commonly used for repairing and checking railway overhead feeder system equipment <p>6.2 Method and procedures of formulating maintenance instructions for railway overhead feeder system equipment</p> <ul style="list-style-type: none"> ◆ By referring to the design of train power supply system and the repairing standards for train overhead lines and power switching and protection devices, capable to draft maintenance instructions for the contact wire, catenary wire, insulator, isolator and associated devices of overhead line system, including: <ul style="list-style-type: none"> • Maintenance procedures • Maintenance standards • Adjustments, setting and preliminary function tests • Points to note during maintenance ◆ Capable to test the draft maintenance instructions ◆ Capable to analyze data, amend and formulate maintenance instructions for overhead line system ◆ Capable to draft, test and formulate maintenance instructions for the power switching devices, circuit breakers, interlock devices and protection devices of the power supply system ◆ Capable to draft, test and formulate maintenance instructions for the electricity quality improvement devices such as wave filtering devices, power factor improvement devices, etc. ◆ Capable to draft, test and formulate maintenance instructions for the control circuits and devices of the power supply system including PLC control units, control and display circuits and equipment, etc.

	<ul style="list-style-type: none"> ◆ Capable to draft, test and formulate maintenance instructions for the protection circuits and devices of the power supply system including distance and region overcurrent and earthing fault protection devices <p>6.3 Professionalism in formulating maintenance instructions for railway overhead feeder system equipment</p> <ul style="list-style-type: none"> ◆ Capable to formulate maintenance instructions and standards for railway overhead feeder system equipment according to the standards and requirements for work safety, health, environmental protection and quality management of railway works ◆ Understand the safety guidelines as required by the law and codes of practice in formulating maintenance instructions for railway overhead feeder system equipment
7. Assessment Criteria	<p>The integrated outcome requirement of this unit of competency is:</p> <p>(i) Capable to draft maintenance instructions for railway overhead feeder system equipment in a particular region in compliance with the maintenance requirements for railway overhead feeder system equipment; and</p> <p>(ii) Capable to test the effectiveness of the draft maintenance instructions, analyze data and make amendments.</p>
8. Remarks	<p>The credit value of this unit of competency is set on the presumption that the person already possesses professional knowledge of overhead feeder system.</p>