

1. Title	Revamp the maintenance method for railway signal and control system equipment to enhance maintenance quality and efficiency
2. Code	EMRAMA607A
3. Range	Revamp the maintenance method for railway signal and control system equipment by making use of the development of new technology and maintenance methods and capable to examine the effectiveness of the new method in order to enhance the quality and efficiency of signal and control system maintenance
4. Level	6
5. Credits	20
6. Competency	<p style="text-align: center;"><u>Performance Requirements</u></p> <p>6.1 Studies and techniques of revamping the maintenance method for railway signal and control system equipment</p> <ul style="list-style-type: none"> ◆ Be familiar with the operation mode, performance requirements and standards for railway signal and control system equipment ◆ Master the techniques of screening, reviewing and integrating information about new technological development so as to assess and study the strategy and plans of applying the techniques and equipment of new technological development to the maintenance work of railway signal and control system equipment ◆ Master data and information about analysis, review, integration and development of the new maintenance method so as to judge the feasibility and effectiveness of adopting the new maintenance method and perform risk assessment ◆ Calculate, analyze and assess the cost effectiveness of adopting techniques and equipment of the new technological development and the new maintenance method <p>6.2 Method and procedures of revamping maintenance methods for railway signal and control system equipment and enhancing maintenance quality and efficiency</p> <ul style="list-style-type: none"> ◆ Capable to study new technological development and the development of maintenance methods for railway signal and control system equipment so as to select a suitable new maintenance method such as <ul style="list-style-type: none"> • Monitoring of new technological development and application of recording instrument • Condition monitoring maintenance method • Reliability – centred maintenance method ◆ Capable to identify the actual benefits of introducing the new maintenance method particularly in respect of maintenance quality and efficiency ◆ Capable to analyze the performance history of the new maintenance method when it is applied outside ◆ Capable to perform risk assessment for adopting the newly introduced maintenance method

	<ul style="list-style-type: none"> ◆ Capable to compile assessment and review reports for adopting the new maintenance method ◆ Capable to analyze the assessment and review reports and consider the overall condition of signal and control system maintenance and draft an implementation plan for adopting the new maintenance method including <ul style="list-style-type: none"> • Pilot scheme • Review of the effectiveness of the pilot scheme • Expansion of the pilot scheme • Plan of full implementation of the new maintenance method • Contingency plans ◆ Capable to coordinate with the maintenance team and decide on the plan of implementing the new maintenance method ◆ Capable to formulate strategies <p>6.3 Professionalism in revamping maintenance methods for railway signal and control system</p> <ul style="list-style-type: none"> ◆ Revamp maintenance methods for railway signal and control system equipment according to the standards and requirements for work safety, health, environmental protection and quality management of railway works so as to enhance maintenance quality and efficiency ◆ Understand the safety guidelines as required by the law and codes of practice in revamping maintenance methods for railway signal and control system equipment
<p>7. Assessment Criteria</p>	<p>The integrated outcome requirement of this unit of competency is:</p> <p>(i) Capable to assess and identify the actual benefits of revamping maintenance methods for railway signal and control system effectively with regard to maintenance quality and efficiency; and</p> <p>(ii) Capable to formulate effective strategies and planning procedures for “revamped railway signal and control system maintenance methods”, and formulate effective follow-up and contingency plans.</p>
<p>8. Remarks</p>	<p>The credit value of this unit of competency is set on the presumption that the person already possesses professional knowledge of railway signal and control system engineering.</p>