

1. Title	Verify the design of trackside equipment of railway signal and control systems and perform design reviews
2. Code	EMRADE523A
3. Range	Verify the design of trackside equipment of railway signal and control systems and perform design reviews according to the requirements for the overall design of railway signal and control systems.
4. Level	5
5. Credits	9
6. Competency	<p style="text-align: center;"><u>Performance Requirements</u></p> <p>6.1 Verify the design requirements for trackside equipment of railway signal and control systems to match with the overall design of railway signal and control systems</p> <ul style="list-style-type: none"> ◆ Understand the design requirements for trackside equipment of railway signal and control systems and master the key points. The equipment includes: <ul style="list-style-type: none"> • PLC and control components • Train location detecting devices • Platform screen door control devices • Railway signal display devices • Electronic interface devices • Points ◆ Master the techniques of matching the design of trackside equipment of railway signal and control systems with the overall design of railway signal and control systems <p>6.2 Methods and procedures of verifying the design of trackside equipment of railway signal and control systems and performing design reviews</p> <ul style="list-style-type: none"> ◆ Verify the design of the devices of trackside equipment according to the requirements on railway signal control and monitoring ◆ Verify the design of trackside components according to the requirements on railway operation ◆ Verify the design of points and circuits according to the requirements on railway signal and track control ◆ Review comprehensively the design of trackside equipment of railway signal and control systems according to the requirements for the overall design of railway signal and control systems <p>6.3 Professionalism in verifying and reviewing the design of trackside equipment of railway signal and control systems</p> <ul style="list-style-type: none"> ◆ Verify the design of trackside equipment of railway signal and control systems and perform design reviews 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 verifying and reviewing the design of trackside equipment of railway signal and control systems

7. Assessment Criteria	<p>The integrated outcome requirement of this unit of competency is:</p> <ul style="list-style-type: none"> (i) Capable to verify the design of trackside PLC and control components efficiently according to the overall requirements for railway signal and control systems and design standards for trackside equipment ; (ii) Capable to verify the design of points and circuits efficiently according to the requirements on railway signal and track control and design standards for points; and (iii) Capable to review the design of trackside equipment efficiently to match with the overall requirements for railway signal and control systems.
8. Remarks	<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 systems.</p>