

1. Title	Verify the design of train interlock protection loops and perform design reviews
2. Code	EMRADE513A
3. Range	Apply the professional knowledge and techniques of train door system and brake system engineering to verify the design of train interlock protection loops and perform design reviews according to the design requirements and matching with the overall train design.
4. Level	5
5. Credits	5
6. Competency	<p style="text-align: center;"><u>Performance Requirements</u></p> <p>6.1 Verify the design requirements for train interlock protection loops to match with the overall train design</p> <ul style="list-style-type: none"> ◆ Understand the design requirements for train interlock protection loops and master the key points. The system equipment includes: <ul style="list-style-type: none"> • Train door protection loops • Brake protection loops • Protection pipe line running through the whole train ◆ Master the key points of the overall train design and the techniques of matching the design of interlock protection loops with the overall train design <p>6.2 Methods and procedures of verifying the design of train interlock protection loops and performing design reviews</p> <ul style="list-style-type: none"> ◆ Verify the design of the train door protection loops according to relevant design requirements ◆ Verify the design of the brake protection loops according to relevant design requirements ◆ Verify the design of the protection pipe line running through the whole train according to relevant design requirements ◆ Review comprehensively the design of the train door protection loops and brake protection loops of the whole train according to the overall design requirements for train protection loops ◆ Review comprehensively the design of the brake protection pipe line running through the whole train according to the design requirements for the protection pipe line running through the whole train <p>6.3 Professionalism in verifying and reviewing the design of train interlock protection loops</p> <ul style="list-style-type: none"> ◆ Verify the design of train interlock protection loops 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 train interlock protection loops

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 train door protection loops efficiently according to relevant design standards; (ii) Capable to verify the design of train brake protection loops or pipe line efficiently according to relevant design standards; and (iii) Capable to review the design of train door protection loops and brake protection loops or pipe line efficiently according to the standards complying with the overall train design.
8. Remarks	<p>The credit value of this unit of competency is set on the presumption that the person already possesses professional knowledge of control circuit and control pipe line.</p>