

1. Title	Formulate strategies and plans for reducing the faults in train fleet equipment
2. Code	EMRAOR601A
3. Range	Assess the development of new technologies in train fleet equipment and their maintenance and the change of railway environment, and formulate strategies and plans for reducing the faults in train fleet equipment according to the analysis of fault records.
4. Level	6
5. Credits	20
6. Competency	<p style="text-align: center;"><u>Performance Requirements</u></p> <p>6.1 Studies and techniques for reducing the faults in train fleet equipment</p> <ul style="list-style-type: none"> <li>◆ Analyze and assess from different aspects the information and records of the faults and performance of train fleet equipment and apply the electrical, mechanical and train-related engineering knowledge to formulate plans for reducing the faults in such equipment</li> <li>◆ Master the techniques of reviewing, integrating and extending the knowledge of new technologies and development and apply it to formulate plans for reducing the faults in train fleet equipment</li> <li>◆ Master the application of management knowledge and skills so as to formulate plans for improving persistently the performance of train fleet equipment</li> <li>◆ Analyze and assess the cost-effectiveness of improvement plans</li> </ul> <p>6.2 Methods and procedures of formulating strategies and plans for reducing the faults in train fleet equipment</p> <ul style="list-style-type: none"> <li>◆ Formulate the strategies for improving the reliability of trains based on the analysis of system fault records, including: <ul style="list-style-type: none"> <li>• Improving the design of train fleet equipment</li> <li>• Diversifying the load to enhance safety factor</li> <li>• Improving the methods of maintaining consumable parts</li> </ul> </li> <li>◆ Apply the instruments and equipment developed by new technologies to monitor the operation of the train fleet so as to reduce the faults in train fleet equipment</li> <li>◆ Apply the instruments and equipment developed by new technologies to improve the fault-alerting functions of train fleet equipment</li> <li>◆ Formulate strategies for persistently reducing the faults in train fleet equipment, including: <ul style="list-style-type: none"> <li>• Establishing good communication and cooperation with the design department and the servicing department</li> <li>• Negotiating with staff on formulation of training programmes and providing adequate and upgrading training for them</li> <li>• Formulating review mechanism for the operation and make improvements</li> </ul> </li> </ul>

	<p>6.3 Professionalism in formulating strategies and plans for reducing the faults in train fleet equipment</p> <ul style="list-style-type: none"> <li>◆ Formulate strategies and plans for reducing the faults in train fleet equipment according to the standards and requirements for work safety, health, environmental protection and quality management of railway works</li> <li>◆ Understand the safety guidelines as required by the law and codes of practice in formulating strategies and plans for reducing the faults in train fleet equipment</li> </ul>
<p>7. Assessment Criteria</p>	<p>The integrated outcome requirement of this unit of competency is:</p> <ul style="list-style-type: none"> <li>(i) Capable to formulate strategies and plans efficiently for reducing the faults in train fleet equipment; and</li> <li>(ii) Capable to formulate strategies and plans efficiently for persistently reducing the faults in train fleet equipment.</li> </ul>
<p>8. Remarks</p>	<p>The credit value of this unit of competency is set on the presumption that the person already possesses the professional knowledge of electrical and mechanical engineering and management.</p>