

## About Competency Australia

Competency Australia Pty Limited is committed to the provision of quality training and assessment outcomes to our clients.

Competency Australia Pty Limited is a Registered Training Organisation (RTO Code 40647).

For more information, please visit our Website : <http://CompetencyAustralia.edu.au> or  
Email : [training@CompetencyAustralia.com.au](mailto:training@CompetencyAustralia.com.au)



# Railway Electromagnetic Compatibility (EMC)

An Introductory Course  
for Project Managers



Competency Australia Pty Ltd  
ABN 42 152 799 687  
Mail: 63 Broadmeadow Road  
Broadmeadow NSW Australia 2292  
Email: [info@competencyaustralia.com.au](mailto:info@competencyaustralia.com.au)  
Phone: within Australia 02 4040 9110  
International +612 4040 9110



CA1071 Training Course

An aircraft explodes mid-air, a cigarette lighter causes a car park barrier to open, a digital TV set top box initiates an air-sea rescue...the result of electromagnetic interference can seem strange and unpredictable - but is it really a mystery?

In this course we explain the fundamentals of Electromagnetic Compatibility - what it is, why it's important, and how to know when you have it.

## Course Objectives:

To introduce the main principles of Electromagnetic Compatibility (EMC) within the railway context.

To provide project managers and others working on railway projects with an understanding of the importance of EMC.

## Pre-Requisites

There are no formal pre-requisites for the course. Familiarity with the railway environment is assumed.



## Who Should Attend?

Individuals responsible for the management of projects within the railway environment. Although the topic is technical, the approach is not - there are no equations, just principles.

## About the Course

Railway Electromagnetic Compatibility is a one day course. The training is focused on principles and practical application, and aims to provide an understanding of how EMC impacts every rail project.

Please contact us for more information, including course dates and costs.

The following topics are covered:

- Electromagnetic compatibility :
  - What is it?
  - Why should I care?
- Standards and Legislation
- Safety Issues : radiation, touch potential, fault currents
- Sources of EMC, including traction power and locomotive systems.
- What can go wrong and how to prevent it - the effect of EMC on systems.



## Course Outcomes

Successful completion of this course will provide you with the skills and knowledge to :

- Identify the warning signs of an EMC problem
- Identify the relevant standards and understand their limitations
- Interpret EMC lab reports and certificates
- Apply a systems thinking approach to the management of railway projects.

You will be provided with the tools to ask the right questions of the right people at the right times and avoid the delays and costs which a lack of electromagnetic compatibility can cause.