

# Rail Operational Modelling A Systems Engineering Approach to Rail Projects

Joint Electrical Institutions Sydney - IET, EA, IEEE



ENGINEERS  
AUSTRALIA

## DATE & TIME

Thursday, 13<sup>th</sup> Oct, 2016  
5:30 pm for 6:00 pm start

## VENUE

Engineers Australia  
Harricks Auditorium  
Ground Floor, 8 Thomas Street,  
Chatswood NSW 2067

## COST

EA, IET, IEEE Members – Free  
Students – Free

## CPD

Eligible for 1.5 Continuing  
Professional Development hours.

## RSVP

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## HOSTED BY

The IET as part of the Joint Electrical  
Institutions Sydney



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Engineering and Technology



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ENGINEERS  
AUSTRALIA  
Sydney Division

## Presentation by

Thomas McPeake – Signalling Design Manager  
Concept and Innovation



## Rail Operational Modelling – A Systems Engineering Approach to Rail Projects

Over the last ten years Australian railways have seen a significant increase in rail patronage and freight volumes. This has stretched the capacity limits of rail systems, such that major infrastructure and operational changes are required.

Key to the success of any rail project is defining the system requirements in the early stages of the project. But this requires an understanding the rail system and the interactions between the various rail subsystems.

This presentation will provide an overview on rail operational modelling tools and discuss how these can be applied to optimise rail infrastructure arrangements.

The presentation will also discuss how a systems engineering approach to rail projects can provide value-for-money solutions that are compliant with the system and business requirements.

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# Rail Operational Modelling – A Systems Engineering Approach to Rail Projects



## SPEAKER BIOGRAPHY

**Thomas McPeake – MIET, AIRSE**

**Signalling Design Manager - Concept and Innovation**

Thomas is a Signalling Design Manager with over 15 years rail industry experience in all delivery phases of railway signalling.

His experience ranges from feasibility, concept design, detailed design, testing & commissioning.

Thomas has a particular niche focus in technical studies and concept development and currently manages the Arcadis Rail Concept Design and Innovation Team.

One of Thomas' core skills is developing and planning signalling solutions to meet both capacity requirements and to address asset performance issues.

He has scoped complex rail signalling projects in brownfield environments and produced both deployment and enabling works strategies.

**For further information, contact – Paul Furniss CEng FIET FIEAust CPEng NER**

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