



## Institution of Railway Signal Engineers CALL FOR PAPERS

**IRSE Technical Meeting – Sydney, New South Wales**  
Friday 17 July and Saturday 18 July 2020

### ***Signalling Technology Supporting Growing Cities and Transport Needs***

The New South Wales Committee invites technical papers for presentation at the July 2020 Technical Meeting under the theme of *Signalling Technology Supporting Growing Cities and Transport Needs*.

The Australian rail industry is responding to the challenge of delivering numerous significant projects, whilst simultaneously responding to the task of day-to-day operations through increasing availability and capacity with our current signalling systems. Authors may consider how existing, or emerging signalling technologies, are influencing the growth of railway traffic in passenger and freight networks in Australia and overseas.

The theme aims to guide the preparation of papers and presentations, with a focus on the application of technologies within signalling, train control and communications systems, as they are deployed on infrastructure or rolling stock assets.

Papers of the following types relating to the theme, or part thereof, are sought:

- Principles Paper that addresses the current approach and practice
- Automation Paper that addresses various aspects of system operation
- Communications Paper that addresses current systems and their application
- Systems Engineering Paper that addresses the requirements and integration of a unified system
- Current Project Papers that demonstrate the intent of the theme
- Strategy Paper that promotes the adoption and application of the theme
- Maintenance Paper that addresses the lifecycle complexities of operating a unified system

#### **Abstract Submission**

Authors are invited to submit an abstract in English of around 300 words. All submissions will be peer-reviewed and assessed on originality and technical quality. The file format for your abstract should be \*.doc(x). Papers must have a strong engineering content: please do not offer extensive system or project descriptions. Where relevant, it is the engineering that underlies the system that is of primary interest.

**All authors must submit their abstracts before the [closing date of 13 April 2020](#) to Andy Webb, IRSE Sydney Conference Committee, at [sydney@irse.org.au](mailto:sydney@irse.org.au).**



## Institution of Railway Signal Engineers CALL FOR PAPERS

### Content Guidelines

<b>Project paper</b>	<i>Aim</i>	To describe a project
	<i>Audience</i>	Everyone
	<i>Typical Structure</i>	<ul style="list-style-type: none"> <li>▪ Operational context (why is the project needed? operational parameters)</li> <li>▪ Solution chosen (highlight new design techniques)</li> <li>▪ Equipment used (highlight new equipment, new configurations &amp; benefits)</li> <li>▪ Installation / project management / programme / logistical support</li> <li>▪ Project outcomes / lessons learnt</li> </ul>
<b>Principles Paper</b>	<i>Aim</i>	To educate audience in specific technical principles
	<i>Audience</i>	Beginner to Intermediate Practitioner, with intent it could be used as a reference paper for students and new entrants to the industry.
	<i>Typical Structure</i>	<ul style="list-style-type: none"> <li>▪ Define the principle &amp; importance in rail context</li> <li>▪ Generic rules and basic operation – give clear practical examples</li> <li>▪ Implementation using different technologies</li> <li>▪ Implementation differences between Australian states</li> <li>▪ RAMS issues and operating during failures</li> <li>▪ Future developments</li> </ul>
<b>Standard Technical Paper</b>	<i>Aim</i>	To educate audience in relevant technical developments
	<i>Audience</i>	Intermediate to Advanced Practitioner
	<i>Typical Structure</i>	<ul style="list-style-type: none"> <li>▪ Introduction</li> <li>▪ Compare existing systems or processes in use</li> <li>▪ Define the proposed changes and predicted benefits</li> <li>▪ Define the implementation process and method of measuring success</li> <li>▪ Describe the outcomes and results</li> </ul>
<b>Strategic Paper</b>	<i>Aim</i>	To describe strategic direction for government / a rail operator, or To describe a non-technical project
	<i>Audience</i>	Everyone
	<i>Typical Structure</i>	<ul style="list-style-type: none"> <li>▪ Define context</li> <li>▪ Current Situation</li> <li>▪ Drivers for Change</li> <li>▪ Options</li> <li>▪ Proposed direction</li> </ul>

### Examples of Papers

There are numerous excellent past papers downloadable from the IRSE website: [www.irsepapers.co.uk/publications](http://www.irsepapers.co.uk/publications).

### General Do's and Don'ts

- Only use the IRSE paper format that will be provided to authors whose abstracts are accepted
- Concise “fluff free” content with content matched to target audience
- No sales presentations