



TECHNICAL MEETING

<https://d10-dev-2.techsoc.org.uk/talks/imeche-railway-challenge>

The IMechE Railway Challenge

Presented by
Martin Halligan, SNC Lavalin & TfL Teams

Wednesday 10 October 2018

Venue: 55 Broadway, 10th Floor

Commencing at 5:30pm BST

Talk synopsis

The Railway Challenge is an annual competition organised by the Railway Division of the Institution of Mechanical Engineers, which brings together teams of university students, apprentices and graduates from across the world to test their business knowledge, design ability and technical skills in a live railway environment. Participants are required to design and manufacture a miniature (10¼" gauge) railway locomotive in accordance with a set of strict rules and a detailed technical specification; this is a test of electrical and control system design as well mechanical design. These locomotives are then tested live at a competition weekend at Stapleford Miniature Railway in Leicestershire, where several categories of winners and an overall Railway Challenge champion are crowned.

In this presentation, Martin Halligan, a member of the Railway Challenge Managing Committee, will introduce the competition and how it is adjudicated, and then teams from London Underground and SNC-Lavalin will discuss their designs, practical experience and lessons learned from competing earlier this year.

The Speaker

Martin Halligan is a consultant at SNC-Lavalin within the Rail Control Systems team. Before joining SNC-Lavalin he worked for London Underground, starting on the graduate scheme where he was a member of the winning team for Transport for London in 2013. He then went on to work within Predict and Prevent maintenance modernisation and mentored members the following years entry. He is now an active member of the managing committee for the event. Currently on assignment in Canada for the opening of a new light rail metro system, he has returned to the UK to compete at this event.

Both LU and SNC-Lavalin have regularly entered teams of their developing engineers into the Railway Challenge since its inception and both organizations have won various categories of the competition in numerous years.