

Network Rail's Systems Integration for Delivery (SI4D) Framework

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Abstract. In the United Kingdom Network Rail delivers hundreds of infrastructure projects every year to enhance and renew the national rail network. This forms a capital delivery portfolio measured in Billions of pounds per year, from platform extensions to large scale regionwide upgrades.

This paper presents a case study of the development and implementation of Network Rail's System Integration (SI) for Delivery framework. The focus here is on

- drivers for a new framework,
- implementation embedded with existing management systems,
- language and terminology used to communicate the new framework.

The framework is designed to be flexible in terms of effort relative to complexity and benefit and aims to optimise the performance of new infrastructure delivered by Network Rail.

The framework consists of a suite of competence management, training, processes, products and tools that have been embedded within existing management systems to support a consistent and cohesive approach to delivery of capital projects.

Biography

Derek Price (Network Rail)

Derek's career has largely been focused on the application of systems thinking to major infrastructure projects across transport, power and defence industries. He has worked on both sides of the fence as well as sitting on it – suppliers, consultancy, approvers/regulators, owners, operators, and has seen the state of practice develop over 2 decades now.

His current role for Network Rail is "Technical Head of Discipline (Systems Integration)" to Direct, Plan and Assure System Integration activities related to delivery of projects and programmes across Network Rail's Infrastructure Projects.

Derek is proud to be a founder member of the INCOSE UK Rail Interest Group and is Network Rail's representative on the INCOSE UK Advisory Board.

His hometown is Darlington, where the world's first public passenger steam railway "SYSTEM" started service in 1825. Derek certainly didn't set out to become a Railway Man but the complexities, scale of challenge, and opportunity to forge a path as a systems engineer in this critical sector became irresistible.