

# STANDARDISATION 1: The UIC role

March 2017



INTERNATIONAL UNION  
OF RAILWAYS

## Harmonisation and compatibility

**Technical harmonisation of the railway system has been a core objective of UIC**, the International Union of Railways, acting as an SSO (Standards setting organisation), since its creation in 1922. Its members – the operators of the world’s railways – have over the years developed the “**UIC code**” comprising “UIC Leaflets”, which define the common rules to ensure safety and efficiency in the design, construction, operation and maintenance of the railway system. A significant number of these deliverables are used outside the railway operating community.



**UIC  
CODE**

Rail transport is about offering an attractive product to the customer which they choose to use as their land transport mode of choice. It is also about technical **harmonisation and compatibility**:

- **Compatibility between infrastructure and tracks**, and the rolling stock that operates on these tracks



- **Compatibility between traction units and various sources of energy supply**



- **Compatibility train to train**, thanks to signalling and **traffic management systems** designed to protect the trains from accidental contact and collisions with other trains or obstacles

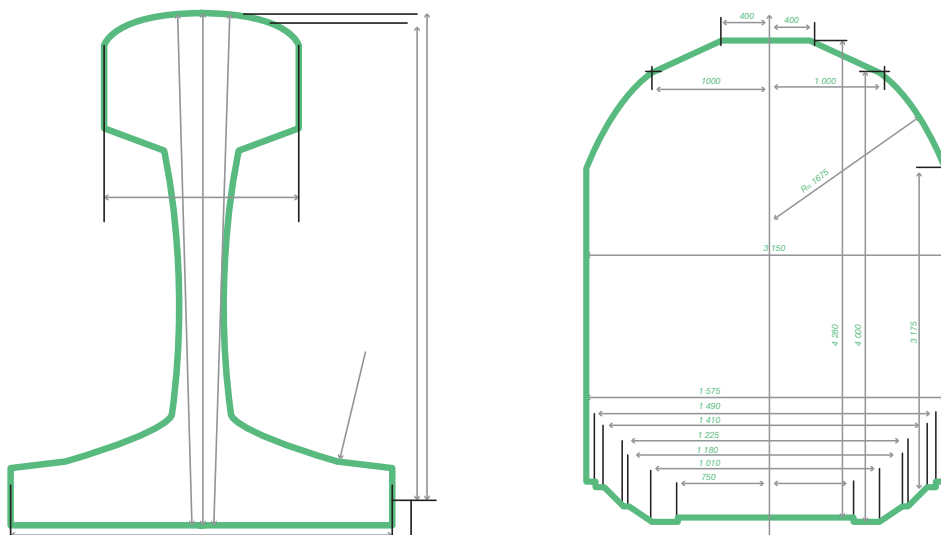


For rail traffic operations to be safe and compatible, it makes common sense that they adhere to standardised **rules** based on technical harmonisation.



**COMMON  
RULES**

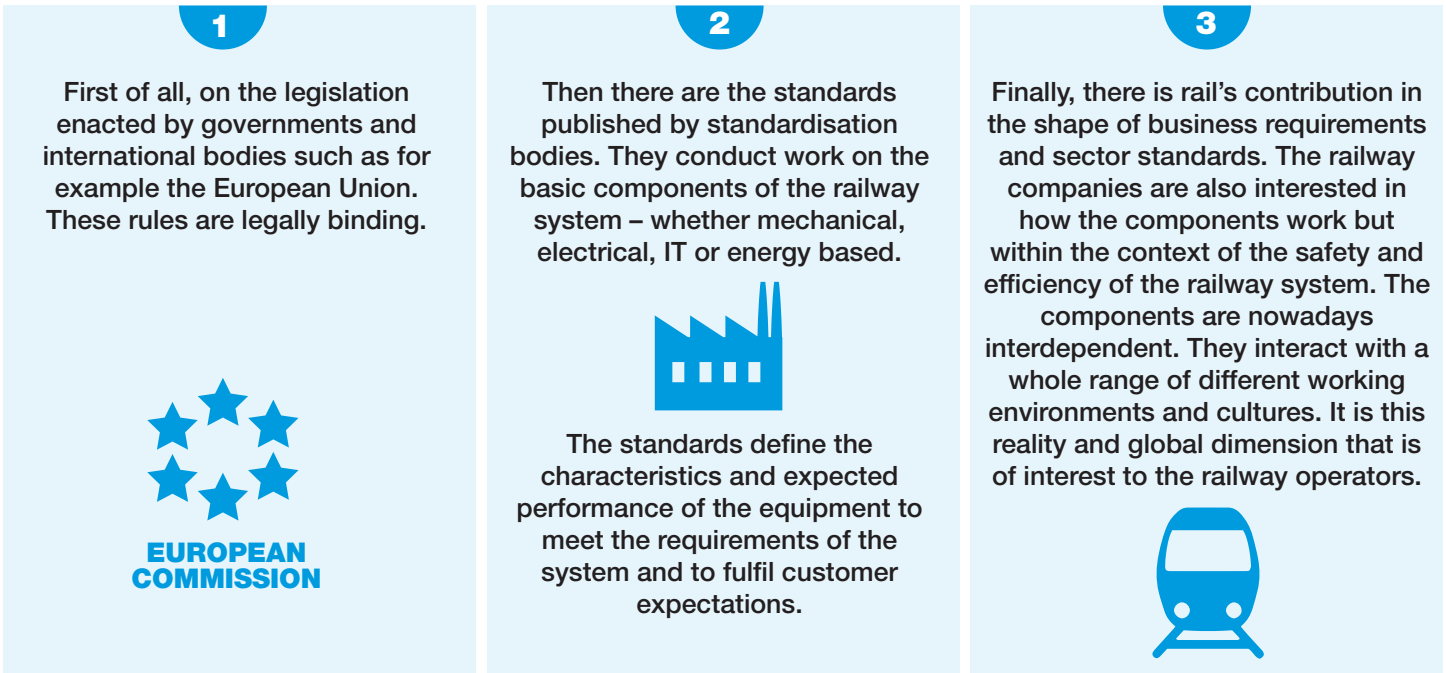
Technical harmonisation enables connections to be made between railway lines and, on a larger scale, between railway networks – thus enabling intercontinental corridors to link several continents by rail.



*Examples of solutions produced by UIC forming the foundation on which today’s railway system operates, including track type, vehicle gauging as well as ticketing, transfer of rolling stock and data exchange between systems.*

## What does technical harmonisation involve today?

It is based on three core components:

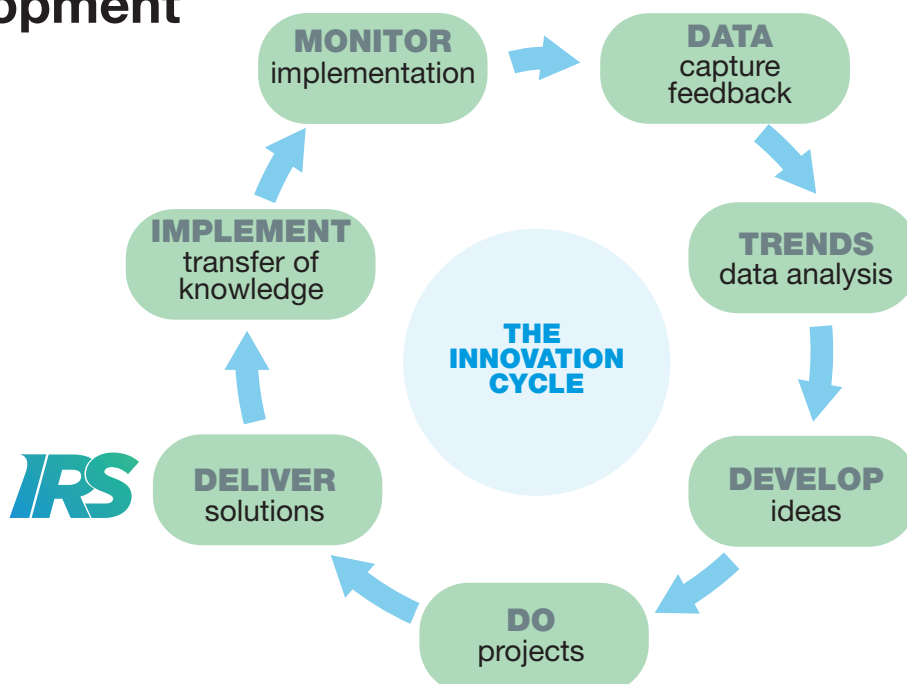


*International Railway Solution (IRS)©: a structured framework of documents prepared and published by UIC for use within the railway sector. They blend together a range of voluntary solutions to support the design, construction, operation and maintenance of the railway system and the services that the sector provides.*

So that, in short, explains the IRSs. They are the **outcome of independent work conducted by the railway operators in order to harmonise the railways in an efficient and realistic way.** Though the IRSs are progressively replacing the UIC Leaflets, they have kept their universal and global objective but also incorporate regional variations. **They help the railway companies in their aim to serve society and the economy.**

For a range of relevant subjects, volunteer experts also develop guidelines for good practice. They produce recommendations which then serve as professional standards, and which are used to ensure harmonisation and economic efficiency in the railways.

## IRS: one of the links in the innovation cycle for rail development



VIDEO ON IRS



More editions to follow