

### The digital revolution

**The digital revolution** is not so much technical as it is first human and then industrial; it is about considering how digital with very few investments in terms of man-day and budget can not only improve but support the design of new industrial tools, and thereby procedures and professions, but also, in particular, man's position in this perpetually evolving world.



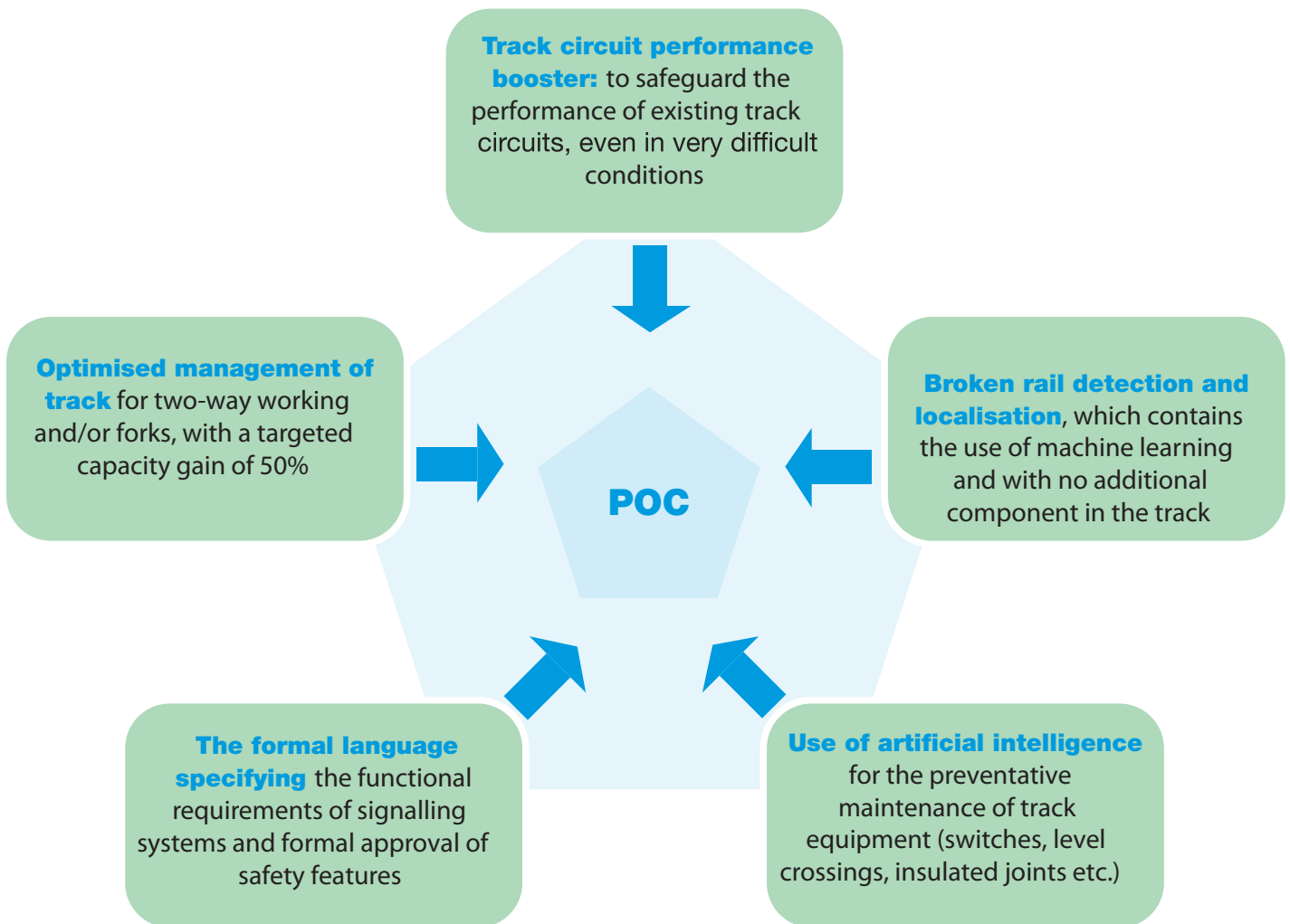
**Digital technology** serves no purpose in and of itself. Digital technology for its own sake is not a way forward and a purely holistic approach has little chance of success. It gives the possibility to improve productivity and efficiency of existing assets.

This is particularly true for **railway production**; we are in transition from an organisation with a top-down management structure, where actors interact vertically with defined and assumed responsibilities, and which depends on deterministic processes to ensure production and safety in a closed world, to a system with a flat management structure, where actors interact holistically both internally and externally, with intentionally watered-down and transparent responsibilities in an increasingly open world.



**UIC's role is to pre-empt**, among other things, the organisational impacts, business models, safety and security aspects of these new possibilities by suggesting methods and approaches to "manage" this revolution, such as the Cybersecurity guidelines for railway undertakings. The world of processes is swiftly developing concrete solutions in open source.

Several Proofs of Concept (POC) have already been carried out within UIC to adapt digital technology to the needs of railways (new functions or improvement of existing assets) :



Some of these POCs may give rise to International Railway Solutions (IRS) and therefore assist in the opening of railways up to new value-creation drivers, whilst maintaining UIC's impartiality. This has to be considered as an on-going activity of the Digital Platform and the Rail System Forum in line with its core mission, delivering added value services to UIC members.

## Everything depends on the actors and their cooperation

The UIC Digital Platform compiles practices from among its members, cooperatively supports them in developing new cooperative ventures and promotes this digital approach for railways worldwide.

*“Digital technology opens the path to*

- New Designs for railway business models.*
- A Demonstration of digital's value for mobility.*
- The Delivery of new specific solutions which benefit society as a whole.”*