

Maximising track availability by creating Safe and efficient track access

Speaker
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Infrabel

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1. About Infrabel

1 mission

Infrabel is the public enterprise that develops, maintains and operates the Belgian railway network. Thanks to the professionalism of our employees and our high-performance technology, we offer our customers a service that focuses on both present and future mobility needs.

1 vision

Infrabel aims to become the crossroads of Europe thanks to its safe and high-quality railway network. Its ambition is to be a strong link in a sustainable transport system supporting the socio-economic development of Belgium and Europe.

5 priorities



Safety first!

Since Infrabel's establishment in 2005, we have been constantly working to improve all aspects of safety in the railway environment. The safety of our train passengers, our employees and everyone near the tracks is our main priority.



Trains on time

With a comprehensive maintenance and renewal policy, Infrabel invests in a reliable and punctual railway network for passengers.



A railway network for all the trains of tomorrow

Infrabel desires to offer a solution to the mobility issue and aims to offer a competitive railway network to its customers and passengers in order to support the economic and social development of our country.



A financially sound company

We have to carry out our plans in the face of strong pressure on government funding. In order to maintain a constantly sound financial situation, we use the resources available to us efficiently, and we have to find innovative ways to finance investments.



In tune with society

Infrabel's fifth strategic priority revolves around its persistent desire to keep its finger on the pulse of society and to ensure that its decisions meet social expectations to the greatest extent possible.

1. About Infrabel

10 Key figures*

11,723 EMPLOYEES (OF WHICH 1,088 ARE WOMEN)	€ -6,75 MILLION EBITDA	11,925 ENGINEERING STRUCTURES	10,249 MAIN SIGNALS	1,773 LEVEL CROSSINGS
14 CUSTOMERS (AS OF 27/04/2016)	3,607 KILOMETRES OF RAILWAY TRACK	4,256 SWITCHES AND CROSSINGS ON MAIN LINES	126 SIGNAL BOXES	5,976 KILOMETRES OF CATENARY ON MAIN LINES

*As on 31/12/2015



Freight operators authorised for the Belgian railway network



Active passenger operators on the Belgian railway network



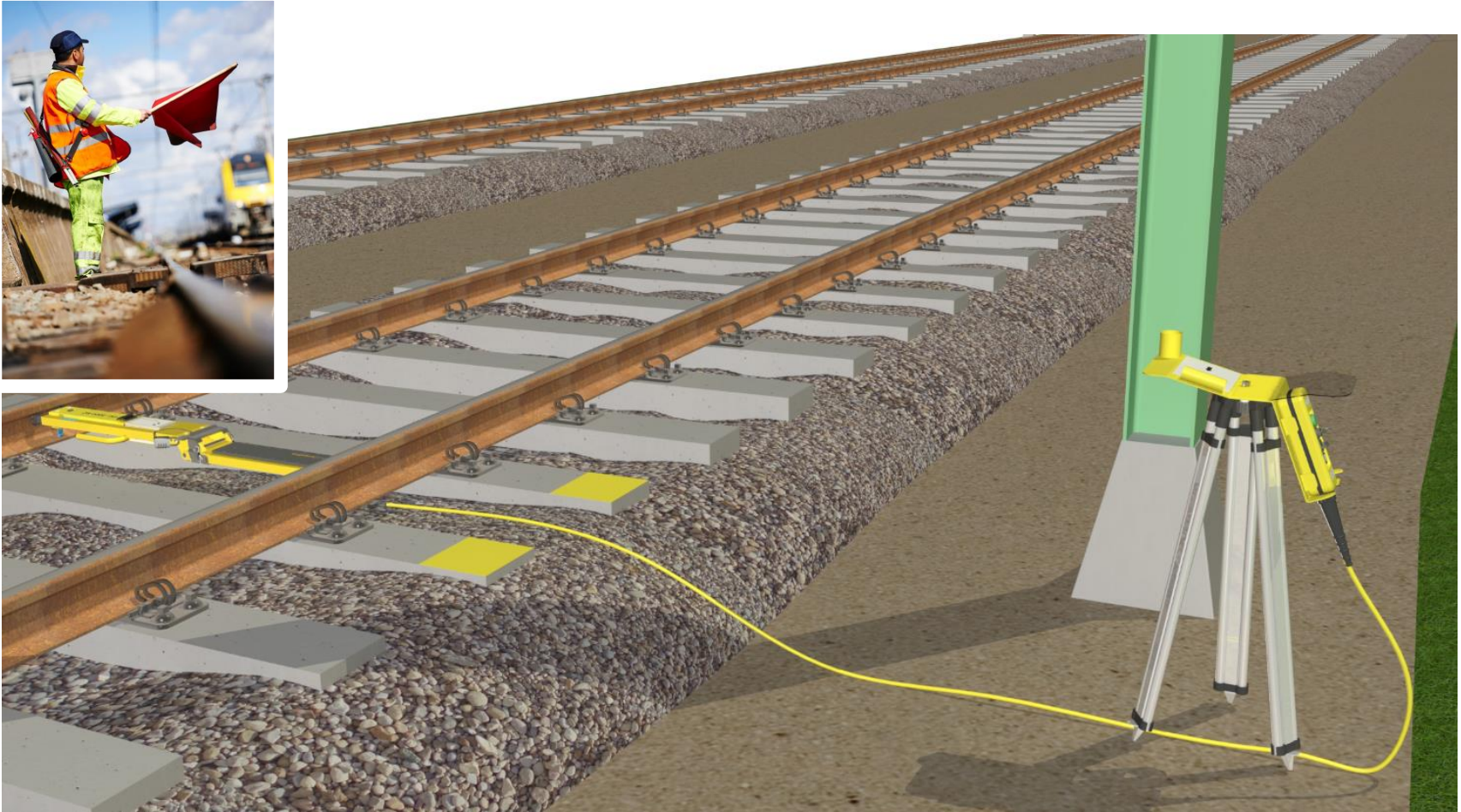
* Thalys : independent operator as of 31/03/2015

2. Key challenges



- Safety First
- Increasing number of passengers and trains, because this ,more track maintenance will be needed in less time.
- Speed up investments Infrastructure
- Limited budget
- Retirement of staff
- Adoption new technology

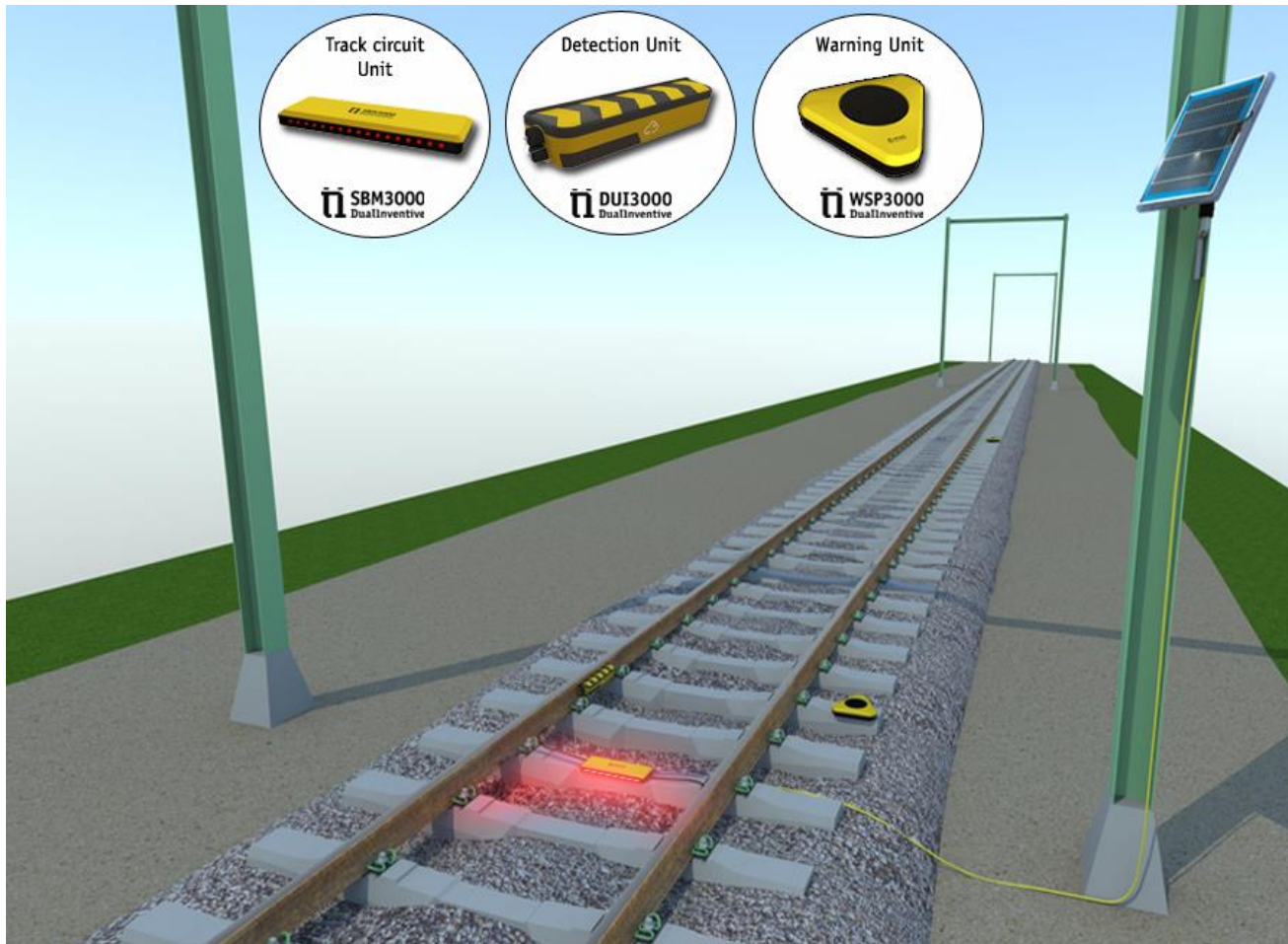
3. How do we meet the challenges



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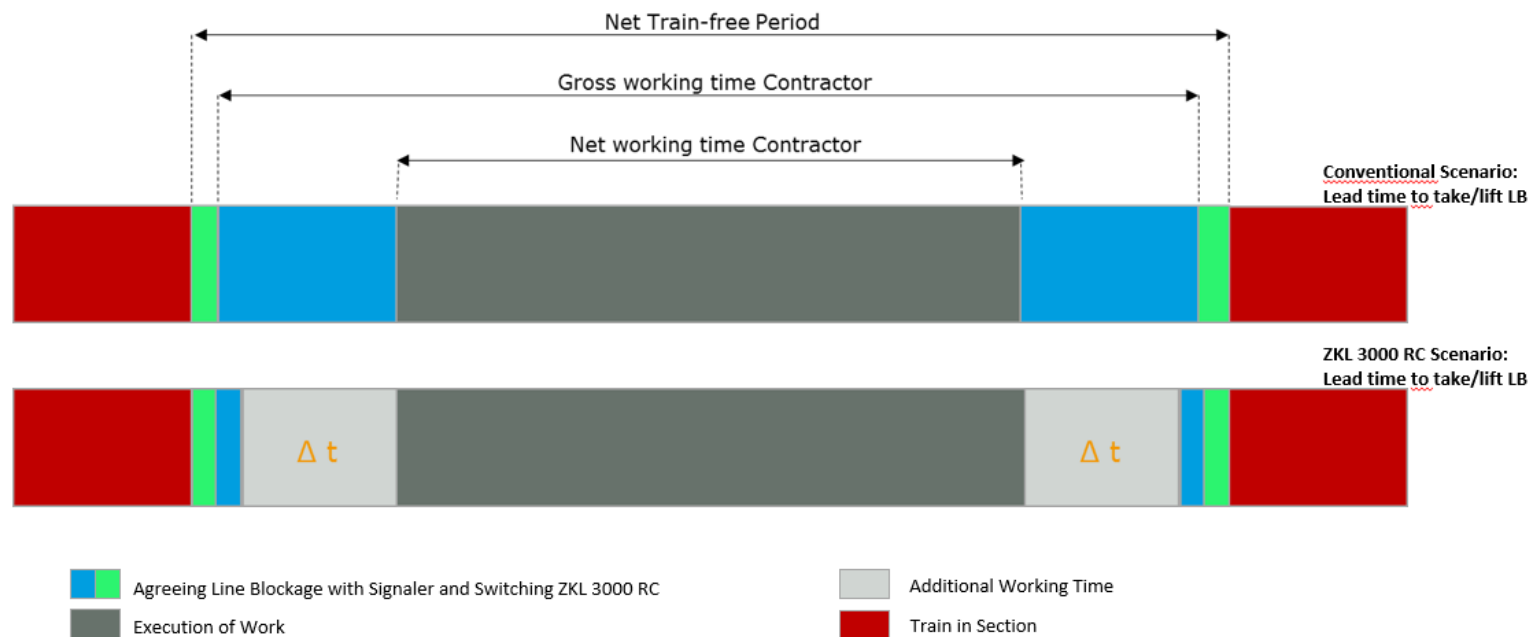


3. How do we meet the challenges



3. How do we meet the challenges

- The systems are developed in accordance with EN50126, EN50128 and EN50129 at SIL 4 level, so safety will increase.
- By using of new technology , work can be done more efficiently. Because of this more capacity will be available for trains.



4. Partnership: to build Ubiquitous Rail



5. New Technology: Internet of Things (IoT)

Wireless has the future



"Cables are a pain in the ass"

"too expensive"

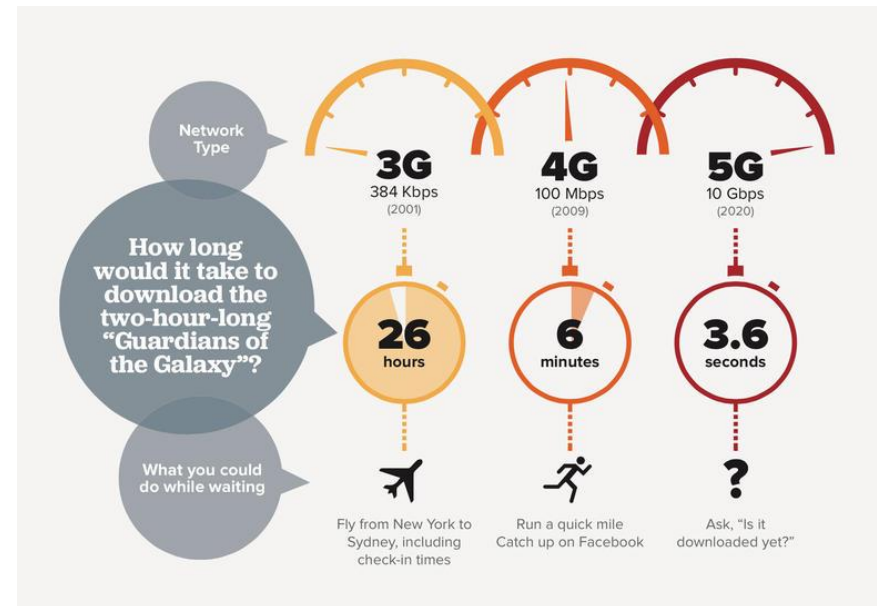
"Many failures"

"Robust"

"Fast"

"Wireless"

"Focus"



5. New Technology: Architecture

Easy to link other (3rd party) hardware



5. New Technology: Engagement

Instant safety information
via connected helmet



MTinfo 3000
ASSET MANAGEMENT

The Secure (NB)IoT-platform for Rail

The Secure (NB)IoT Platform for Rail facilitates trackworker's control

6. Experiences & Results



- Infrabel started deploying the ZKL 3000 RC in 2014.
- Implementation new technology needs to be done step by step.
- Awareness for the complete Infrabel organisation that new technology will be needed for achieving goals
- People need to be trained properly

