

ERTMS_ _ _

Implementing ERTMS in a brown field situation

Wim Fabries

28 March 2017



ERTMS Programme

- A collaboration between the Ministry of Infrastructure and Environment, ProRail and NS.
- Why this collaboration?
 - More than just technique
 - Impact on the sector as a whole
 - Unique: rolling-stock & track
- Why ERTMS?
 - To improve safety
 - To increase speed, capacity, reliability
 - To improve interoperability
 - Replacing current system(s)



Mission and ambition

Mission

- Implementing ERTMS will make it more safe and more attractive for passengers and railfreight operators while ‘business continues as usual’

Ambition

- To do this in such a way that train drivers, traffic controllers and mechanics are eager to use it



Update: current status

- We are moving forward, here as well as in Europe
- The Dutch deployment strategy was approved (2016)
- Plan development phase complete: 2th half 2017
(ready for review and decision making)
- After review and decision making: realisation phase
- First line estimated: 2024

A small step in technique, big change for the sector

- Implementing the “innovative” ERTMS system in the Dutch infrastructure is a big change
- Impact on systems, operations, organisations (both public as well as private) and employees
- The Programme lays the base (NL)
(with immediate benefits and preparing for new applications)
- ERTMS is part of a bigger picture.
Smarter and more flexibel public transportation (LTSA)

Setting the Scene

- Task: a solid base for the next 20 years
- Plan development phase: making the right choices now
- Using the System engineering method in brown field is essential
- In terms of both the operation and the procurement procedure



Setting the scene: lessons learned

- Actively use of the knowledge and expertise available
- Learn from other countries
- Lessons Learned from largescale (rail) projects
- Essential: extensive testing both technical and practical ('Reallife')

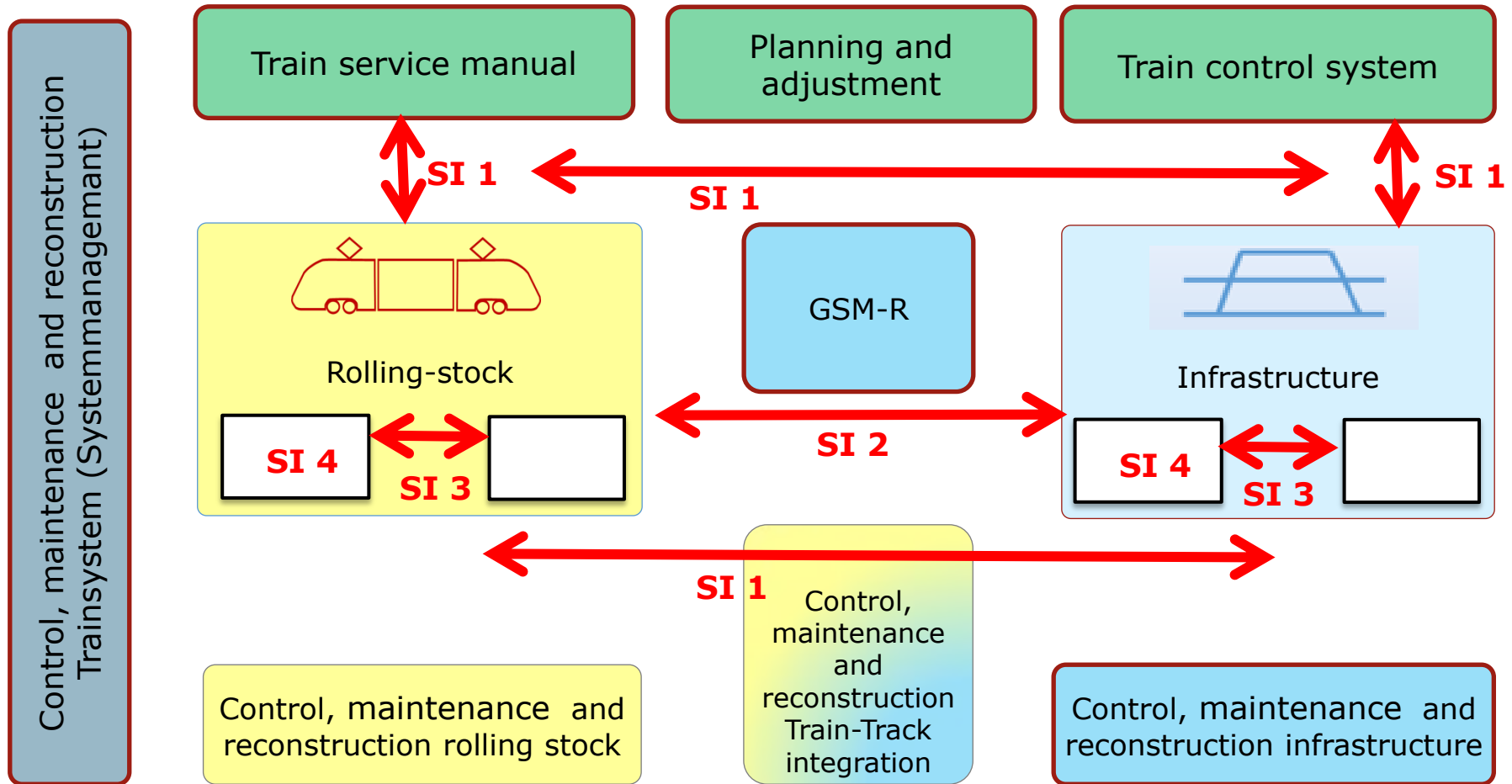


System Integration and Governance

- Major system leap needs system integration from day one and not only for the engineering aspects
- System integration is essential on different levels
- Will not work without good governance: who, what, when and how?



System integration



Dealing with technological developments

- Technological developments occur rapidly:
the world is changing
- Programme and sector have to stay adaptive
- How? By making choices in our plans that help future development (no obstructive choices)
- Deploying Level 2: why not wait for level 3



Moving forward together

- Real steps forward are taken: both here as in Europe
- Main challenges: 'no clean slate' (brown field) and foreseeing the future
- Taking the time now will enable us to reap the benefits later
- Key to succes: by really working together

