Rail as the backbone for logistics: challenges and solutions

F. Davenne
UIC – June 2018
A physical network without common software
A physical network without common software
A physical network without common software
A physical network without a common software
Rail as a backbone for seamless mobility?

Internal regulation
1. Minimise the internal complexity of the rail system
2. Create interoperable train paths
3. Connect different regional railway systems

External interfaces
1. Multimodality
2. Interfacing with other regulations: customs, public transport, security, etc.
3. Creating and securing common data models and exchange protocols
How to achieve confidence and efficiency in sharing an international network?

Common procedure for safe operation

National rules

Common COTIF rules

National rules

Safety certification process

Each RU establishes its safety management system for international services

Safety certification process
How can confidence and efficiency in sharing an international network be achieved?

- Process for assessing infrastructure compatibility?
- Role of ERA?
- How to create a regulatory package with UIC?
- How to define relevant interfaces with OSJD transport law?
How to build multimodal freight services in the digital age?

1. Physical layer: Physical requirements
2. Interoperability: Compatibility with the network
3. Inter-exchangeability and wagon fleet management
4. Digital transport management:
   - Multimodality
   - Customer oriented monitoring

STANDARDS

TSI / UTP

SECTOR

GCU
Open questions

• What should the future customs transit regime for rail transport be on the Eurasian level?

• How can the security and authentication of digitalised documents be ensured (Blockchain)?

• Train path allocation: a sector solution or a legislative approach?

• Multimodality: how can digitalisation make it easier to interface different modes?