



A Digital Single European Railway Area

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Digital Single Market

- **Digital Single Market is one of the ten priorities of the Juncker Commission.**
- **Communication “A Digital Single Market Strategy for Europe”, COM(2015) 192 final published in May 2015**
- **Accompanying staff working document refers to a Digital Single European Railway Area Strategy**
Draft document sent to stakeholders for consultation in July 2015.

Why talk about digitalisation?

- **Existing EU legislation for intelligent transport systems within specific modes**
SafeSeaNet, River Information Services (RIS), SESAR (aviation), ITS specifications (road)
For rail: TAP-TSI, TAF-TSI and ERTMS, registers
- **Long implementation time of existing rail applications – fast developing technology: Adaptation or further development of existing tools needed?**
- **Specific measures on access to transport data and recognition of electronic documents can stimulate better mobility services and new business models.**

What are we looking at?

- Internal processes
 - Intramodal processes (RU-RU, RU-IM, IM-IM)
 - Interface RU-customers and RU-suppliers
- All need to act as an ecosystem



Digital could be...



- **Electronic documents**
- **Data exchange/availability**
- **Automation**

Precursors to digitalisation

- **Interoperability of IT systems**
- **Standardisation of documentation and procedures**
- **Trust and rules/terms and conditions for data sharing and use**
- **Cooperation**
- **Awareness, knowledge, education**

Where can digital solutions bring added value?

- **Increasing safety**

- Exchange of safety relevant information
 - Occurrence reporting
 - Transport of dangerous goods
 - ERTMS



- **Increasing reliability, performance and efficiency**

- Digitalisation improves interoperability
 - ERTMS for capacity increase and reliability
 - TAF and TAP TSIs for real-time information and track and trace
 - Reliability supported by IT-tools (internet of things, big data) for diagnostics, condition-based maintenance, remote online condition monitoring

Where can digitalisation bring added value?

- **Contributing to sustainability**

- Assistance for eco-driving

- Real-time energy consumption monitoring

- Management of network energy requirements



- **Facilitating authorisation and certification procedures**

- Simplified framework for authorisation for placing on the market of rolling stock and safety certification and authorisation (4th Railway Package). ERA One Stop Shop will promote transparency and information exchange between applicants, NSAs and ERA.

Where can digitalisation bring added value?



- **Better rail freight services**

Enhance information provision at all stages of services through generalised use of TAP TSI.

Rail freight corridor IT tools could offer new/better services, including an enriched one stop shop (net-PAP requests), optimised operations along corridors.

Online and coordinated publication of works along the track would be beneficial for planning rail freight services.

- **Better multimodal freight services**

Digital Transport and Logistics Forum

One stop shops for multimodal corridor information



Where can digitalisation bring added value?

- **Better rail passenger services and passenger rights better served: Passenger Rights Regulation (1371/2007) and TAP TSI**

All actors need to make information about travel, tariffs and tickets available to passengers, including in alternative formats for persons with disabilities.

Delays, cancellations and missed connections: Passengers holding separate tickets under a single contract have equal rights as passengers with a single ticket.

EP own initiative report on multimodal integrated ticketing adopted in May 2015. Rail stakeholders should contribute to this goal.

Assistance to disabled persons and persons with reduced mobility through IT tools/apps deserves more attention.

Data security/privacy issues merit more attention.

Who does what? – European Commission

- **Steering and programme management**
 - Steering committees for TAF/TAP/ERTMS
 - ERTMS breakthrough programme
- **Policy development**
 - Digital transport and logistics platform
 - Access to transport data/multimodal information services
- **Strategic coordination, facilitation of discussions with and between stakeholders**
 - PRIME and RU Dialogue
- **Shift2Rail**
- **Funding/financing under CEF, innovative financial instruments**

Who does what? – European Railway Agency (ERA)

- **System authority**
 - Ensure a stable set of European specifications
 - Check compliance with the specifications
- **Lead architecture (including interfaces) for a true interoperable railway intelligent transport system**
- **Build a common information and communication system (one stop shop) to support a harmonised EU approach to safety and interoperability**
- **Establish interfaces between operational databases used by rail operators and ERA hosted registers**

Who does what? - Sector



- **Ensure that implementation of TAF/TAP/ERTMS and population of registers remains on track or is even accelerated**
- **Contribute to multimodal projects**
- **Digitalise processes**

Who does what? - Member States

- **Ensure that TSIs and other implementing acts are implemented and enforced (TAF/TAP/ERTMS and population of registers).**

Next steps



Digital Single European Railway Area Strategy

- Draft document sent to stakeholders for consultation in July 2015
- Stakeholder comments by 15 October
- Discussions in PRIME and RU Dialogue during autumn
- Finalisation of document in 2016



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