# EU EIP – Determining Quality of European ITS Services – SA4.1

Data Quality for Intelligent Truck Parking Services
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Co-financed by the European Union
Connecting Europe Facility

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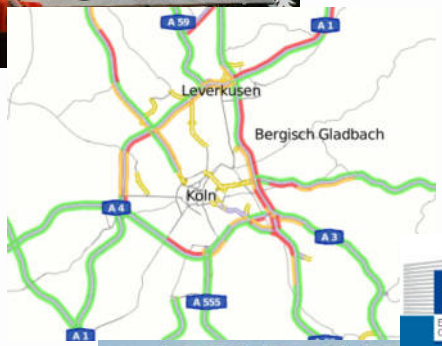
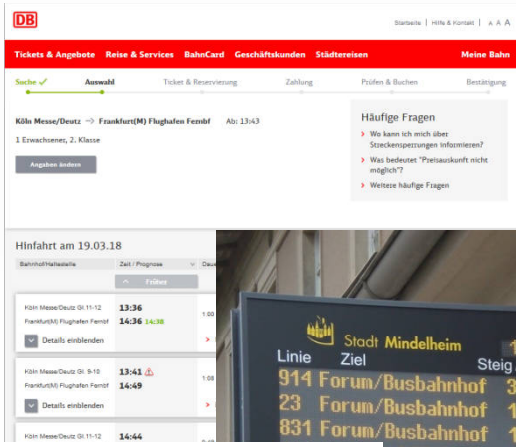
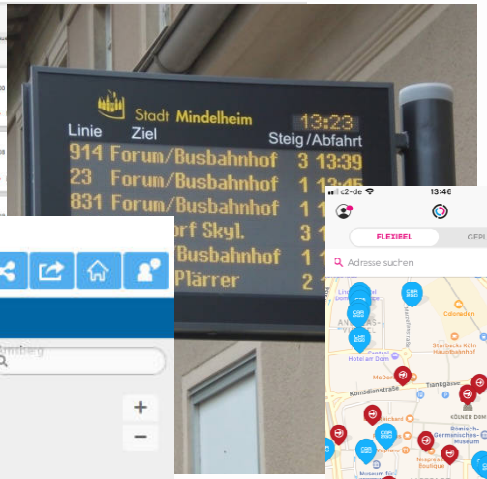
# What is Quality?

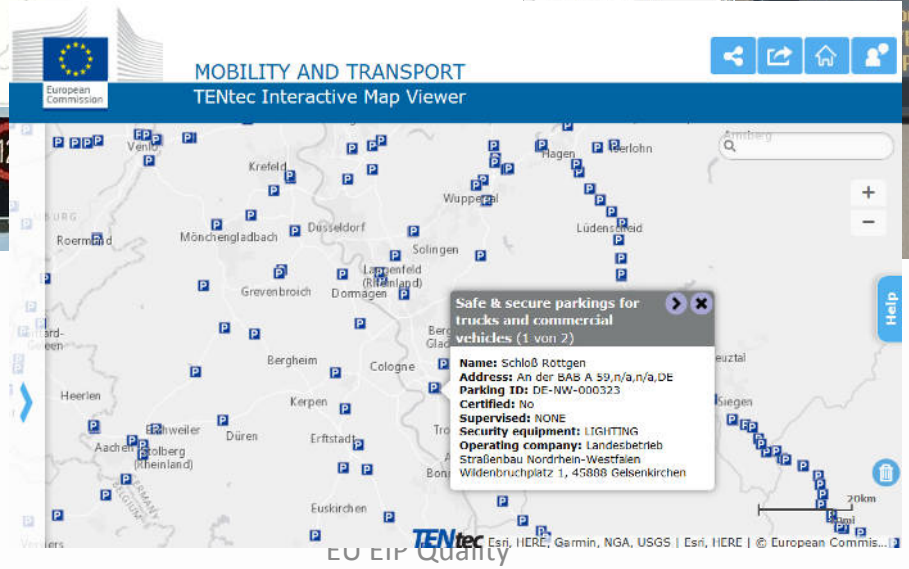
- **Quality** = „degree to which a set of inherent characteristics of an object fulfils requirements“(ISO 9000)

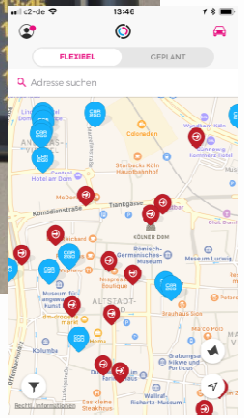
# Quality of what?





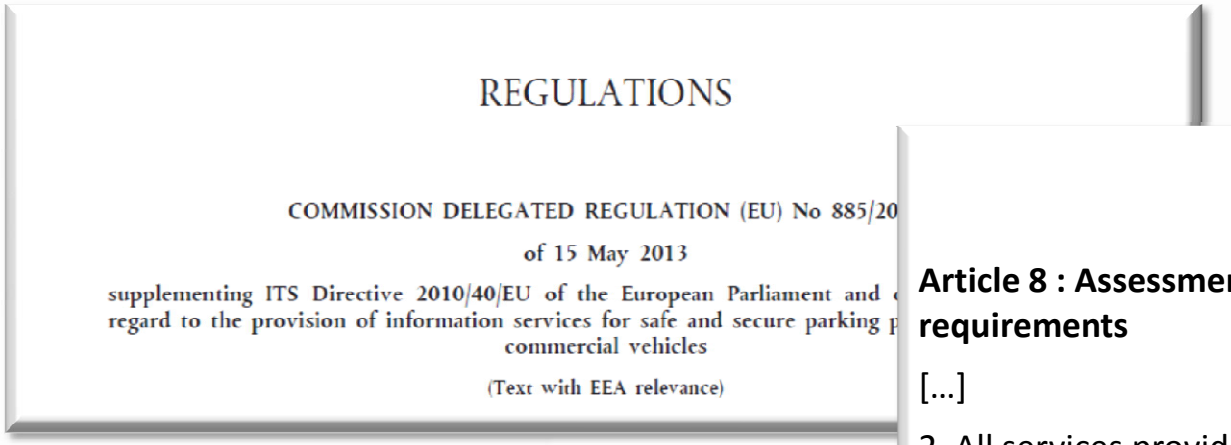
# What to do with Quality?

- **Assess**
- **Document**
- **Report…**
  - … internally
  - … to external data consumers
  - … to European Commission
- **Implement QMS**

# Context: EU ITS Directive

| Priority Action | EC Delegated Regulation | Data / information type |
|---|---|---|
| **C)** | 886/2013 | "Road Safety-Related Minimum Universal Traffic Information" (SRTI) |
| **B)** | 2015/962 | "EU-wide Real-Time Traffic Information Services" (RTTI) |
| **A)** | 2017/1926 | "EU-wide Multimodal Travel Information Services" (MMTIS) |
| **E)** | 885/2013 | „Information Services for Safe and Secure Parking Places for Trucks and Commercial Vehicles" (ITP Information Services) |

# Context: EU ITS Directive



REGULATIONS

COMMISSION DELEGATED REGULATION (EU) No 885/20

of 15 May 2013

supplementing ITS Directive 2010/40/EU of the European Parliament and
regard to the provision of information services for safe and secure parking
commercial vehicles

(Text with EEA relevance)

**Article 8 : Assessment of compliance with the requirements**

[…]

2. All services providers shall submit a declaration […].

The declaration shall contain the following elements:

d) **the quality and availability of the information provided,** point of access to the information and the format in which that information is provided.[…]

# What is EU EIP?

# What is EU EIP?

- Cooperation of partners from private and public sectors from EU Member States and neighboring countries
- To foster, accelerate and optimise current and future ITS deployments in a harmonized way
- **Technical knowledge management center for ITS Deployment**

# What is EU EIP?

## **Activity 4** - Harmonization Cluster

- Sub-activity 4.1: Determining Quality of European ITS Services
- Sub-activity 4.2: Facilitating automated driving
- Sub-activity 4.3: ITS Deployment Road Map Update
- Sub-activity 4.4:Cooperative ITS Services Deployment Support
- Sub-activity 4.5:Liaison and harmonisation on interfaces for data exchange
- Sub-activity 4.6:Monitoring and Harmonisation of Single Point of Access
- Sub-activity 4.7:Provision of updates of ITS spatial road data

# EU EIP: Activities

## **Activity 4** - Harmonization Cluster

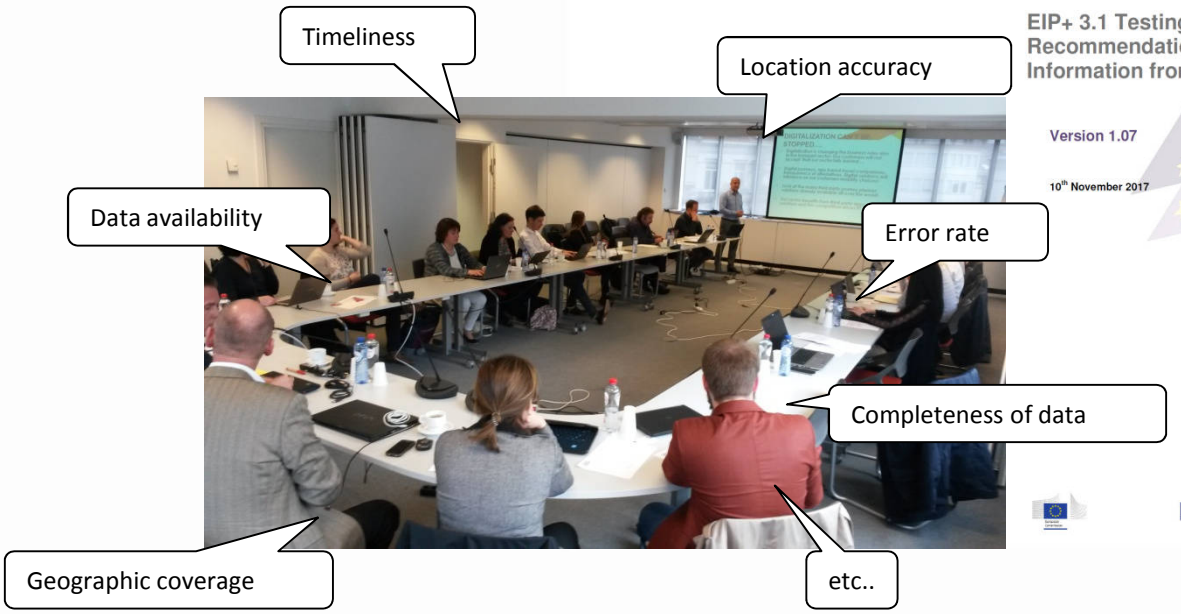
– Sub-activity 4.1: Determining Quality of European ITS Services

→ Works on:

- … quality frameworks, recommendation papers and practical trials,
- … regarding data and service quality,
- …for all priority actions of the EU ITS Directive.

# EU EIP: Activities & Products

- Quality Frameworks for Priority Actions of the EU ITS Directive

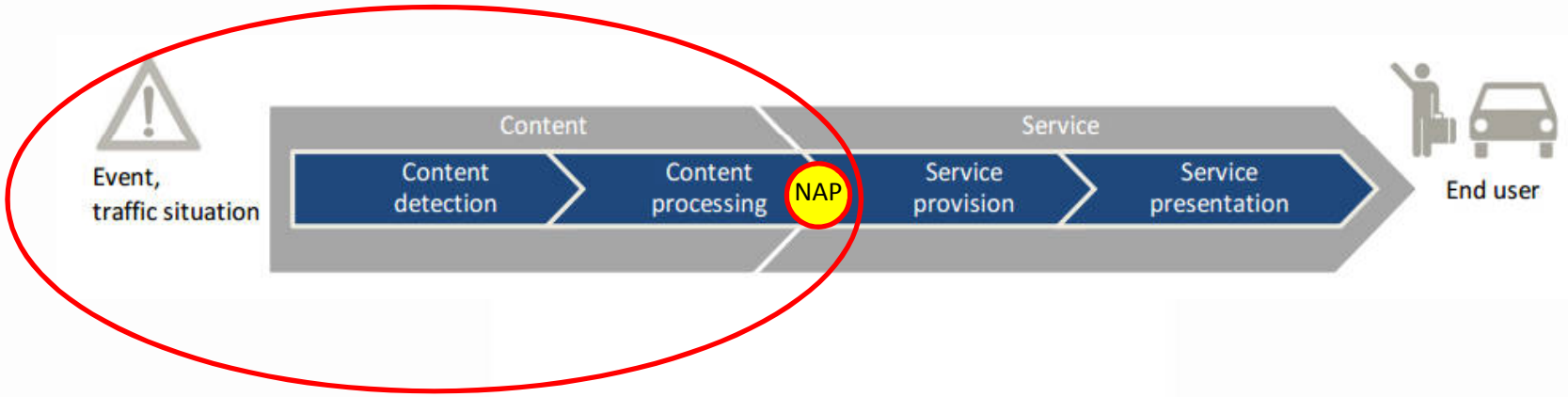


# EU EIP Quality: Stage Plan

| Priority Action | EC Del. Reg. | Phase | | | | | |
|---|---|---|---|---|---|---|---|
| | | Take stock → | Propose → | Test → | Validate → | Enhance → | Optimise |
| **C)** | 886/2013 (SRTI) | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| **B)** | 2015/962 (RTTI) | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| **A)** | 2017/1926 (MMTIS) | ✓ | ✓ | ✓ | ✓ | (✓) | |
| **E)** | 885/2013 (ITP) | ✓ | ✓ | | | | |
| | C-ITS | (✓) | | | | | |

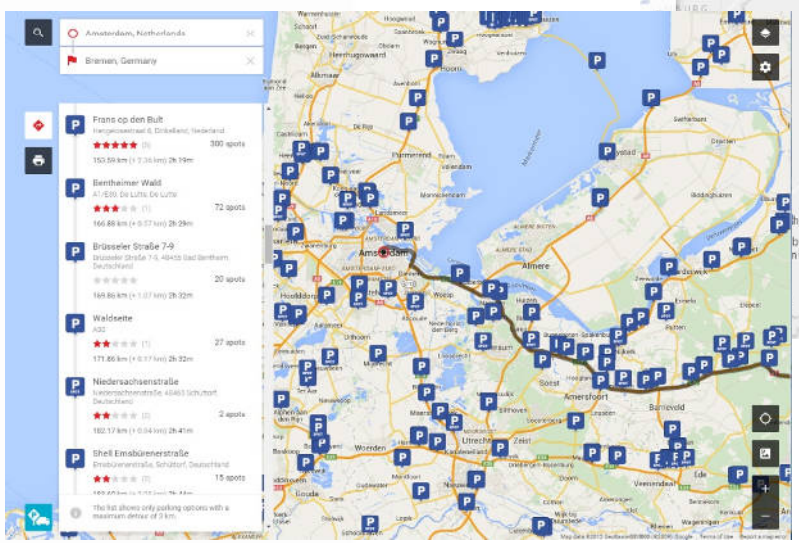
# EU EIP: Activities & Products

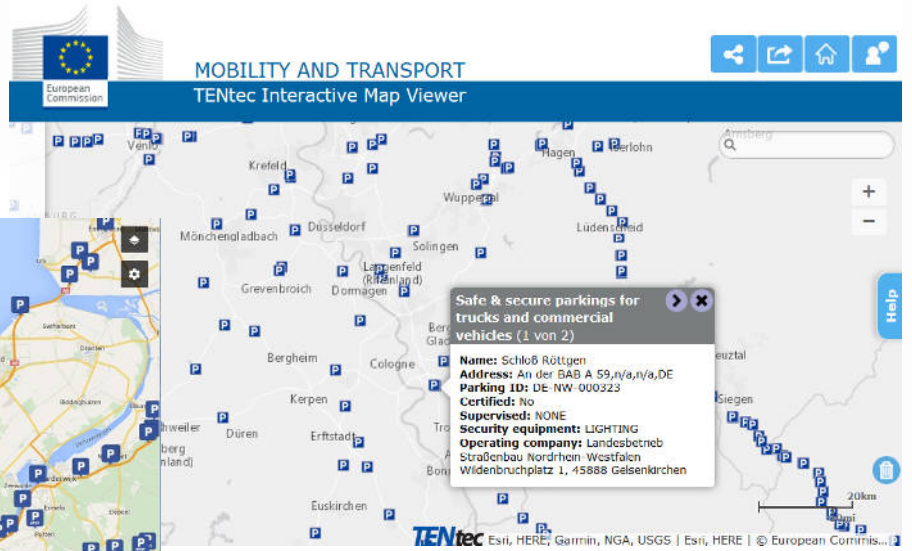
# EU EIP Quality: Scope



# ITPS Quality: Baseline

- Existing ITP services and on-going projects






European Access Point for Truck Parking Data

© PTV Truckparking BV

# ITPS Quality: Baseline

- Questionnaire

EU EIP A4.1

Truck Parking Information Services

Questionanire

| General information | |
|---|---|
| Name of service/system/project | Truck Parking Europe |
| Name of operator/organisation | PTV Truckparking BV |
| Service delivery | ☐ Public<br>x Private |
| Service in accordance to … | ☐ Delegated Regulation 885/2013 and its Guidance Documents<br>☐ Other relevant Deployment Guideline(s): _____ |
| Unique national identification number (if applicable) | |
| Is the data delivered to a central data access point? | ☐ National Access Point (according to the Delegated Regulation)<br>☐ European Access Point<br>☐ other public access point: _____<br>☐ other private access point: _____ |
| Contact for more information | Niels de Zwaan - niels.dezwaan@truckparkingeurope.com |

# ITPS Quality: Deliverable

- Quality concepts and definitions on:
  - quality criteria
  - quality requirements
  - assessment methods

  for ITPS data and information.

- Report is online, see link:

https://eip.its-platform.eu/highlights/intelligent-truck-parking-services-itps-quality-framework-published

# ITPS Quality: Deliverable

- Example: Quality requirements for „Error rate“

| | ITP Service | Interpretation | ★ (Basic) | ★★ (Enhanced) | ★★★ (Advanced) |
|---|---|---|---|---|---|
| | The provision of dynamic data on availability of parking places including whether a parking is: full, closed or number of free places which are available | *Absolute relative error (Err) of the provided number of free spaces ($N_p$) compared to the ground truth ($N_r$) calculated as:* $$Err = \frac{\lvert N_r - N_p \rvert}{N_r} \times 100$$ *Measured as the arithmetic mean of the errors for all parking places covered by the service.* | 15% | 10% | 5% |

# ITPS Quality: Next steps

- Validation of Quality Package
- Checking quality definitions with real-life ITPS data and services
- Any stakeholders interested in validation?
- Please respond to Activity 4.1!

# More on data provision aspects!

- Practical implementation of ITS Rules for parking areas
- Presentation by Louis Hendriks, EU EIP
- Tomorrow, 10:30!

- Thank you!
- Questions?

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