HaCon
Traffic • Software • Service

Rail Freight Locations Portal

railfreightlocations.eu

Niklas Galonske (HaCon)
UIRR-ELETA Digitalisation Workshop, Brussels, 13/04/2018

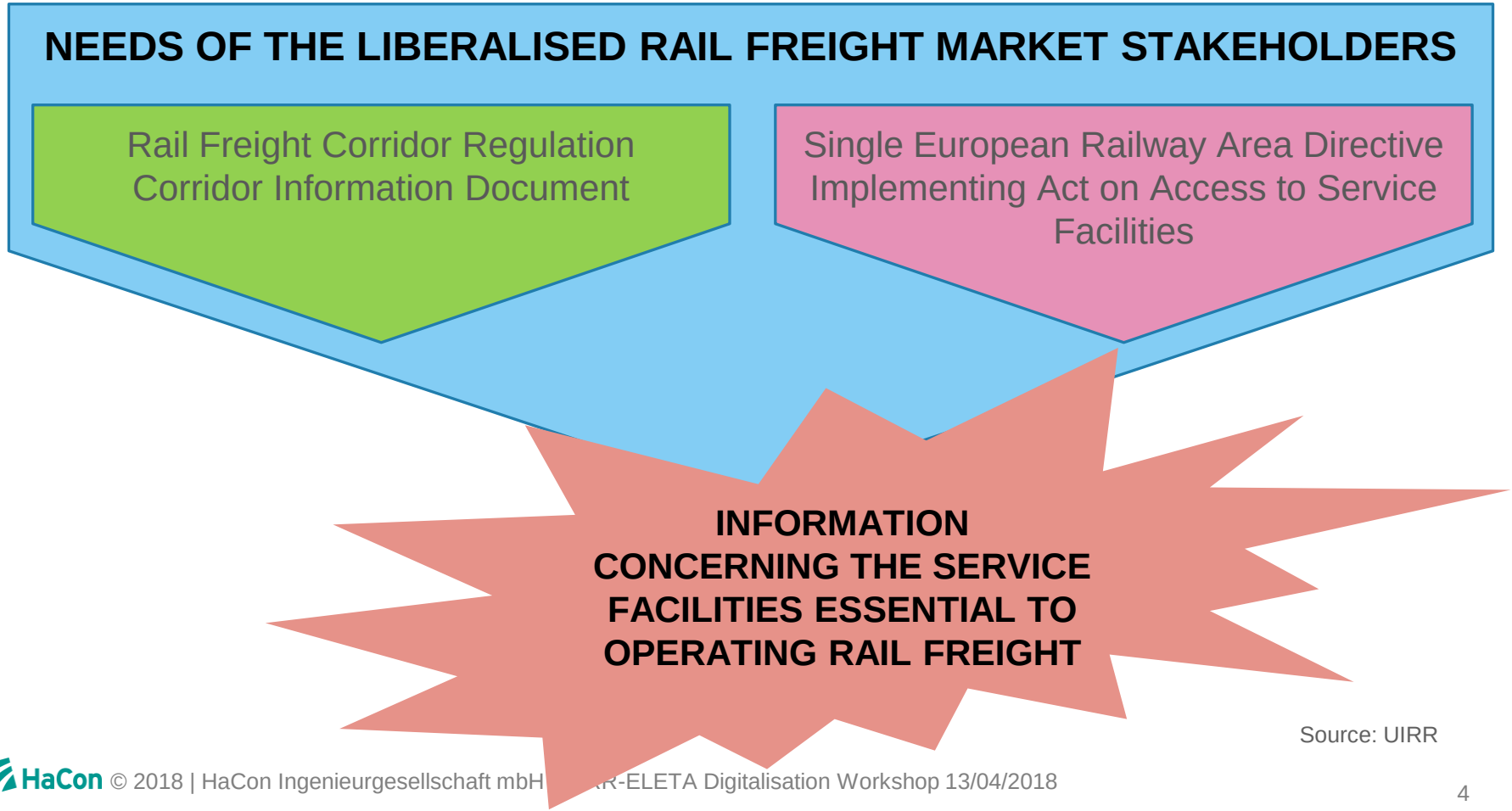
HaCon at a glance

- Software & Consulting for mobility
  - Creating, Editing, Controlling
  - Publishing, Maintaining
- Established in 1984
- Wholly-owned subsidiary of Siemens AG
- 300+ employees, 75% developers

SIEMENS
Ingenuity for life

Background &
EU framework conditions

Motivation from EU market and legislation perspective



Source: UIRR

Applicable EU law

Directive 2012/34: obliges Infrastructure Managers and Service Facility Managers to

- publish information concerning the capabilities of their facilities,
- the conditions of access,
- any temporary capacity restrictions,
- available capacity,
- new services and
- unused capacities/facilities (available for lease).

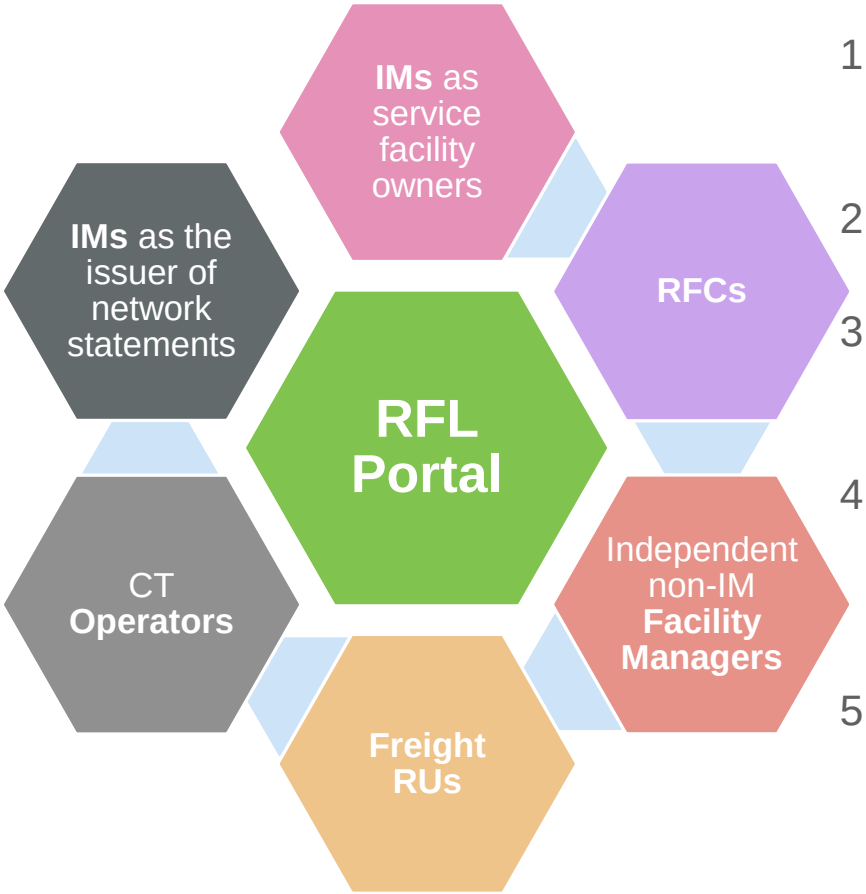
+ **Implementing Regulation** on access to service facilities and use of rail-related services

Regulation 913/2010: obliges (Rail Freight) Corridor Management Entities to

- compile and make available information – including available capacities – on freight terminals and junctions through the Corridor Information Document
- In addition the information is published in the Customer Information Platform (CIP) for 6 RFCs (In more RFC is doing the rollout in 2018)

Source: UIRR

Stakeholders of a common information portal



1. Creates a **market-friendly/user-friendly single source of information** concerning information on Service Facilities essential to operating rail freight
2. The **RFCs** are potential stakeholders for the RFL by publishing (link) to the RFL portal;
3. Assumption of the Network Statement obligations of **IMs** and efficient publication of information concerning their service facilities;
4. Realistic solution to notifying the 'viable alternative' and to satisfy other information provision obligations of **SERVICE FACILITY MANAGERS**;
5. Market-friendly/user-friendly interface-connection solution to **ADVANCED DATA USERS**

Source: UIRR

Pilot Portal

Motivation and goals of EU study

Insufficient information on European rail freight transshipment facilities / last-mile infrastructure!!!

EU Study MOVE/B2/827-2013
01/2015-03/2016

Resolving difficulties to access information on last mile infrastructure for rail freight

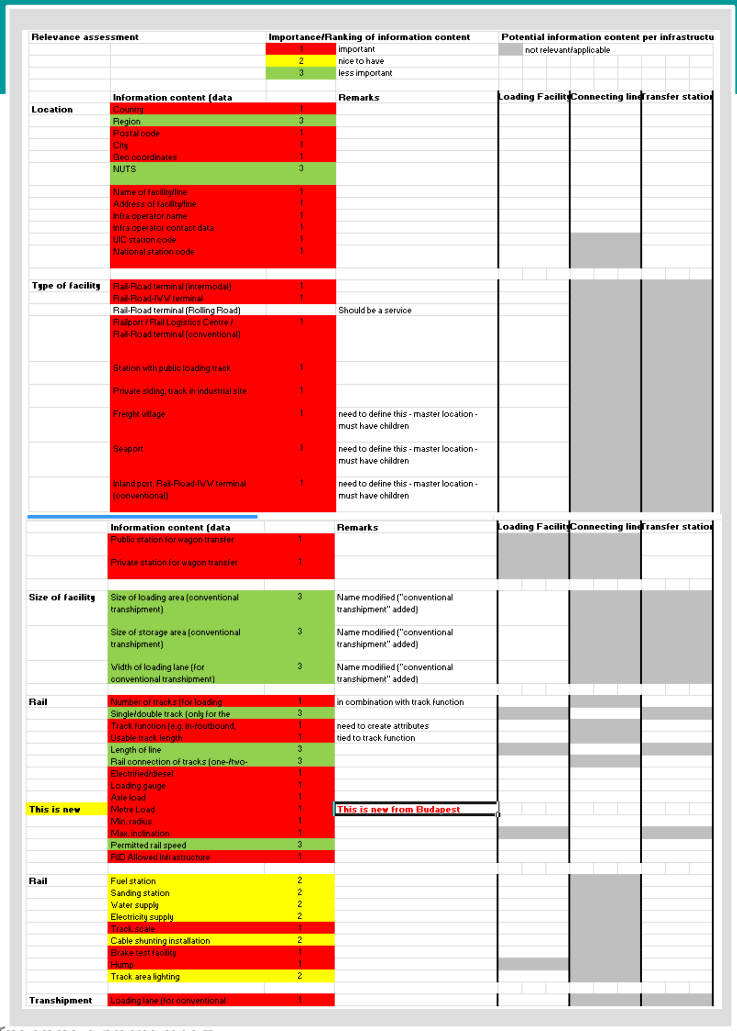
Development and programming of a EU-wide web-based information portal with GIS functionalities **(Demonstrator)**

Recommendations to manage the portal on permanent basis

User needs - information requirements

Information items (“Long list”: 125 single items belonging to 13 clusters)

- Location (12 items)
- Types of facility (11 items)
- Size of facility (3 items)
- Rail infrastructure (14 items)
- Rail infrastructure equipment (9 items)
- Transhipment equipment (5 items)
- Type of LU / cargo transhipment (19 items)
- Type of loading unit/cargo storage (12 items)
- General conditions for rail operation (9 items)
- Rail operation/ service - last mile (10 items)
- Rail operation/ service - long haul (8 items)
- Additional services (10 items)
- Connection to road (3 items)



Relevance assessment		Importance/Ranking of information content		Potential information content per infrastructu		
		1	important	not relevant/applicable		
		2	nice to have			
		3	less important			
	Information content (data		Remarks	Loading Facilit	Connecting line	Transfer station
Location	Country	1				
	Region	3				
	Postal code	1				
	City	1				
	Geo coordinates	1				
	NUTS	3				
	Name of facility/line	1				
	Address of facility/line	1				
	Infra operator name	1				
	Infra operator contact data	1				
	UIC station code	1				
	National station code	1				
Type of facility	Rail-Road terminal (intermodal)	1				
	Rail-Road-IVW terminal	1				
	Rail-Road terminal (Rolling Road)		Should be a service			
	Railport / Rail Logistics Centre / Rail-Road terminal (conventional)	1				
	Station with public loading track	1				
	Private siding, track in industrial site	1				
	Freight village	1	need to define this - master location - must have children			
	Seaport	1	need to define this - master location - must have children			
	Inland port, Rail-Road-IVW terminal (conventional)	1	need to define this - master location - must have children			
	Information content (data		Remarks	Loading Facilit	Connecting line	Transfer station
	Public station for wagon transfer	1				
	Private station for wagon transfer	1				
Size of facility	Size of loading area (conventional transhipment)	3	Name modified ("conventional transhipment" added)			
	Size of storage area (conventional transhipment)	3	Name modified ("conventional transhipment" added)			
	Width of loading lane (for conventional transhipment)	3	Name modified ("conventional transhipment" added)			
Rail	Number of tracks (for loading	1	in combination with track function			
	Single/double track (only for the	3				
	Track function (e.g. in-/outbound,	1	need to create attributes			
	Usable track length	1	tied to track function			
	Length of line	3				
	Rail connection of tracks (one-/two-	3				
	Electrified/diesel	1				
	Loading gauge	1				
	Axle load	1				
This is new	Metre Load	1	This is new from Budapest			
	Min. radius	1				
	Max. inclination	1				
	Permitted rail speed	3				
	RID Allowed Infrastructure	1				
Rail	Fuel station	2				
	Sanding station	2				
	Water supply	2				
	Electricity supply	2				
	Track scale	1				
	Cable shunting installation	2				
	Brake test facility	1				
	Hump	1				
	Track area lighting	2				
Transhipment	Loading lane (for conventional	1				

User needs – stakeholder statements

"The initiative encourages rail development. Freight forwarders are very interested in SWL"

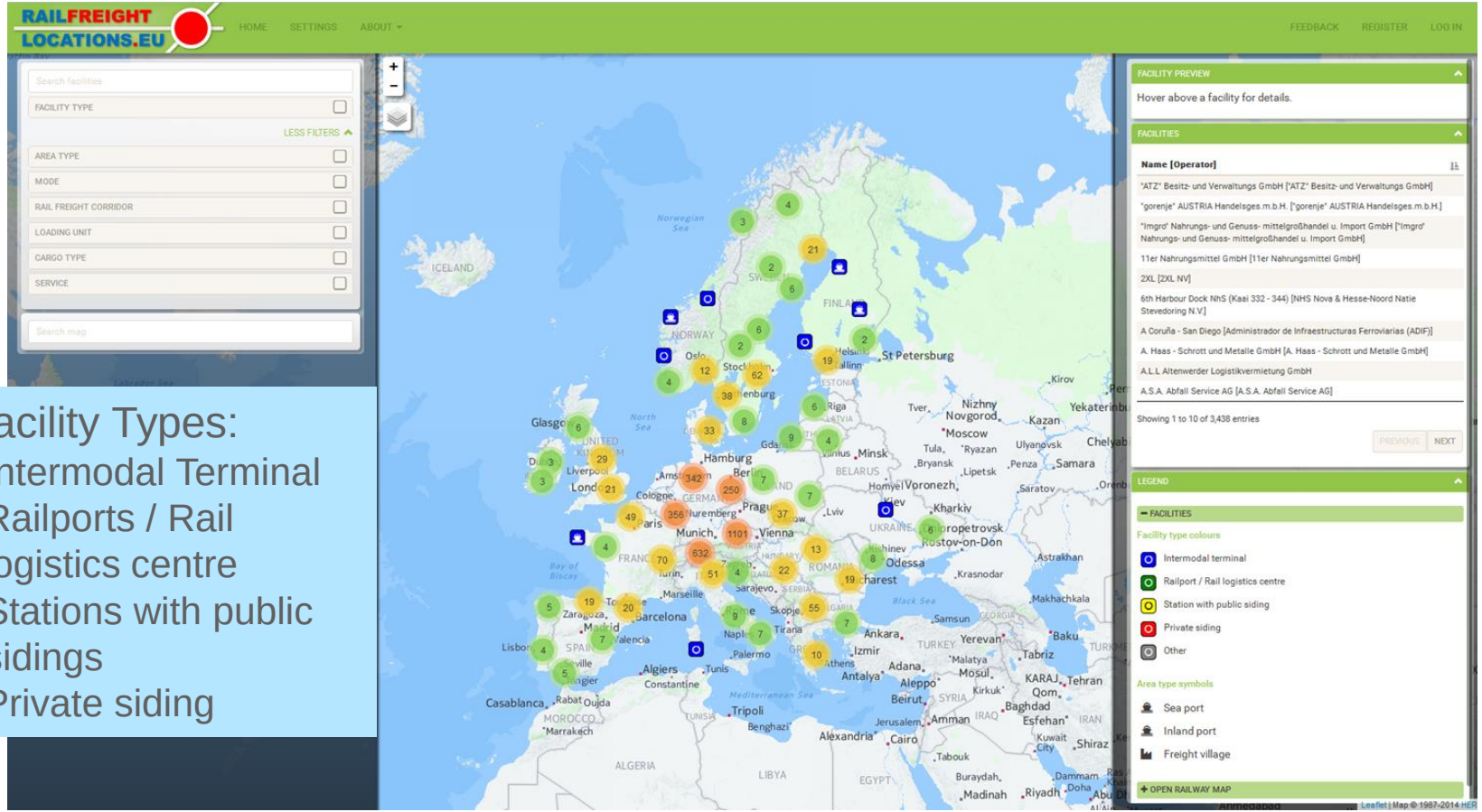
"As railway operator organising transport, the need for information about services is real: what kind, by whom, which time windows"

"Our customers need terminal information, on what services are available, on technical parameters of the various sites"

"We serve many private sidings, through SWL. Some technical information should not be neglected: e.g. axle load, length of tracks etc. Access conditions are also important from the corridor perspective."

"The information is important for concrete business purposes and also for lobbying. It answers customers' needs."

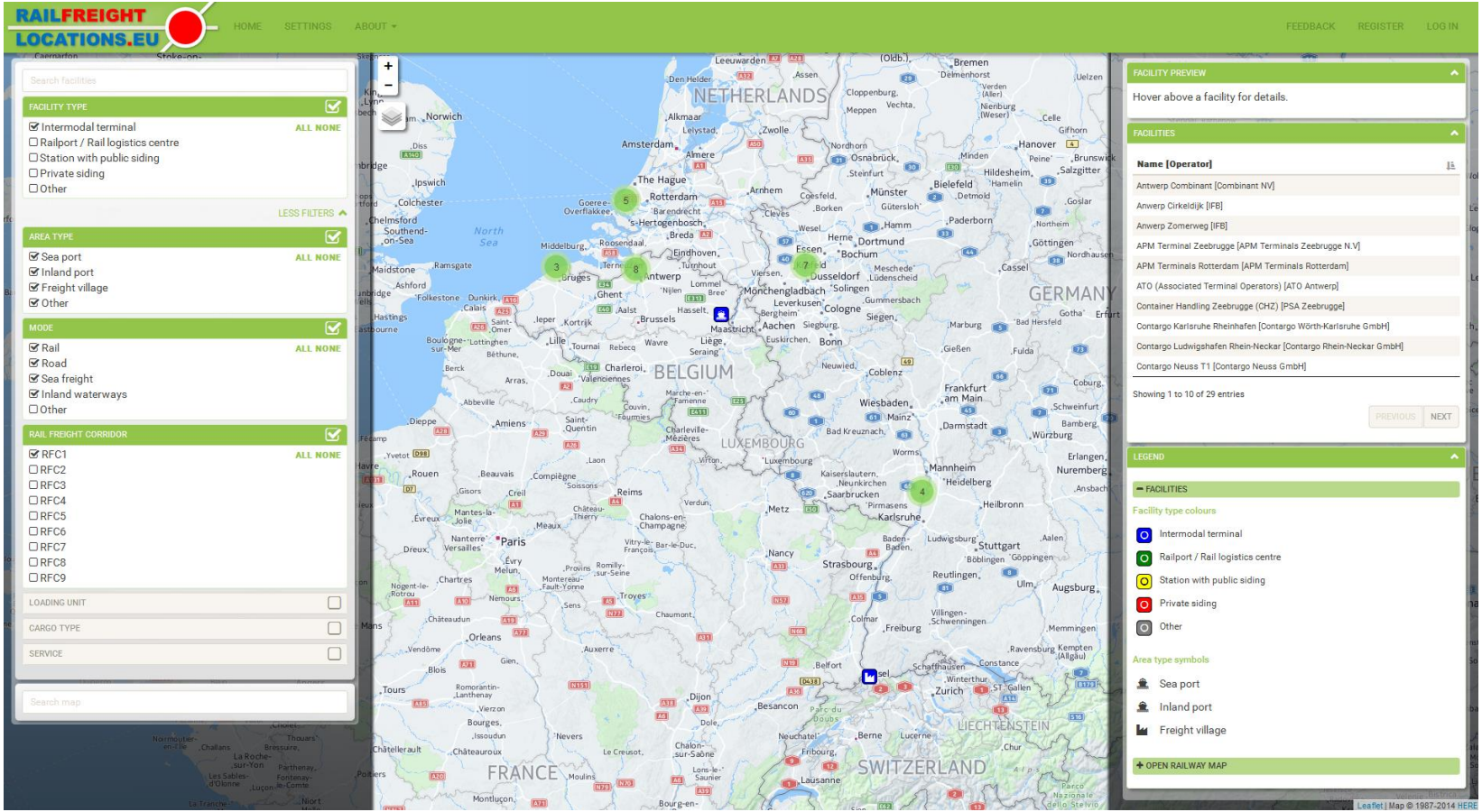
Railfreightlocations.eu (Screenshots)



4 Facility Types:

- Intermodal Terminal
- Railports / Rail logistics centre
- Stations with public sidings
- Private siding

Railfreightlocations.eu (Screenshots)



Railfreightlocations.eu (Screenshots)

DUSS-Terminal München-Riem

BASIC DATA | INFRASTRUCTURE/EQUIPMENT | LOADING UNITS/CARGO TYPES | SERVICES | LINKS

Facility type

Intermodal terminal

Facility address

Hofbräuallee 11
81829 München
Germany

Facility contact data

DUSS mbH
Hans Prey
T +49 89 97887 100
F +49 89 97887 105
duss-muenchen-terminalleitung@deutschebahn.com
Website

Opening times

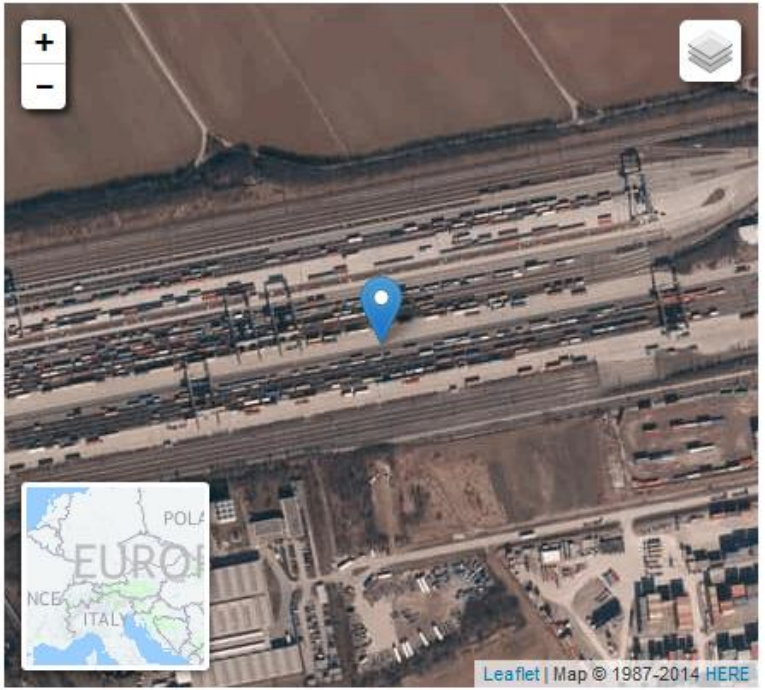
24h operation

Modes

Rail, Road

Operation status

Unknown



Main data source: SGKV/UIRR

Send Feedback

EU study to further develop the RFL Pilot Portal

Project objectives

Further portal (software) development
- User-friendly tool
- Changes in data model (compliance with regulations)
- User roles / management
- Editing/validation functions

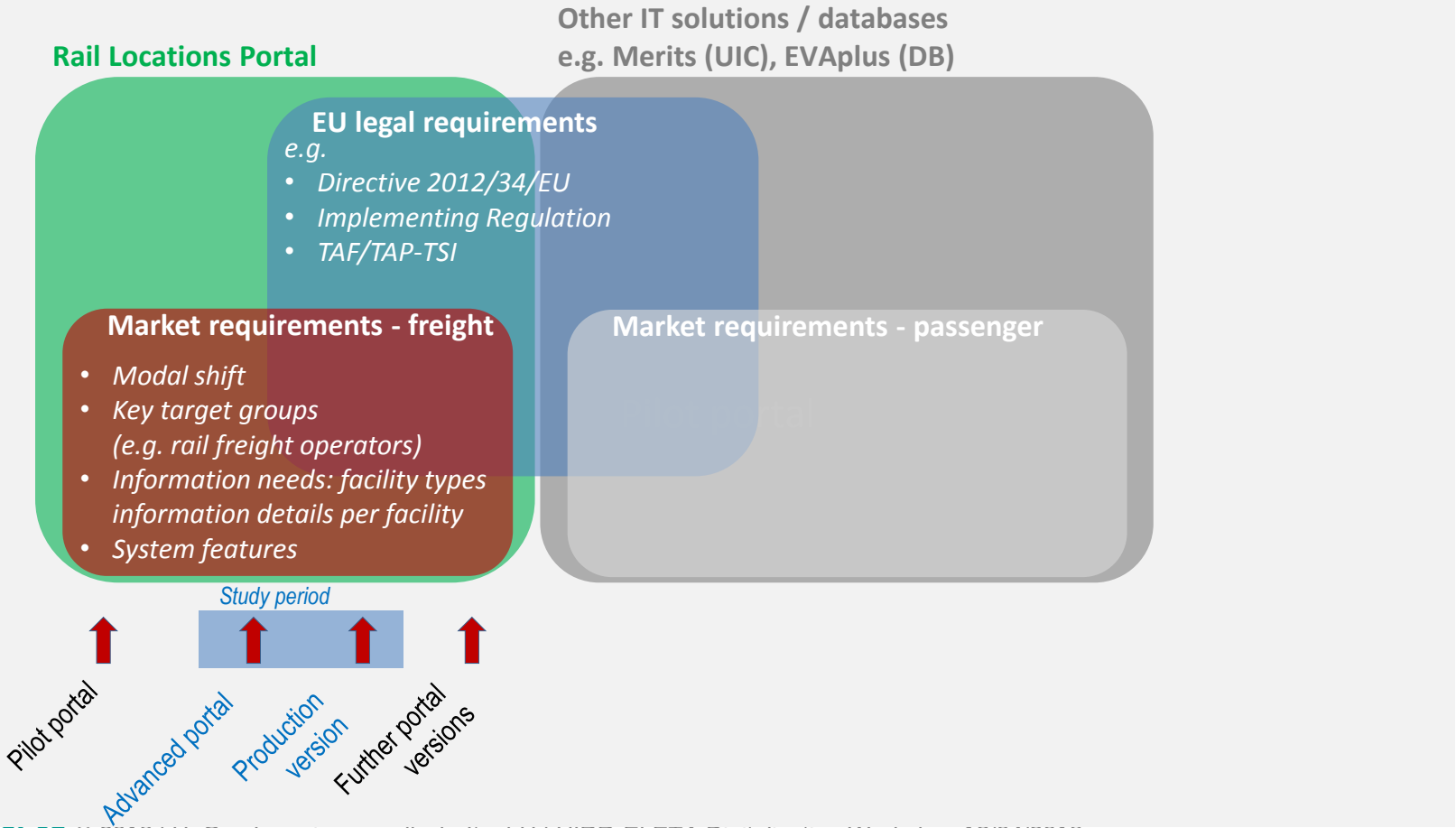
Strategies and plans for
- Governance
- Business model
- Data collection / management
- Portal functionality development

Data Feeding
- Ensure usage + update of existing data
- Supplement /complete data (“critical mass”)
- Optimise data input / update procedures

Further development of RFL portal for permanent operation

EU Study MOVE/C3/2017-198
04/2018-05/2019

Project approach – Concept for portal design



Consideration of facility types according Directive 2012/34/EU

- Passenger stations
- Freight terminals (+ potential subtypes)
- Marshalling yards / Train formation facilities, including shunting facilities
- Storage sidings
- Maintenance facilities
- Other technical facilities, incl. cleaning and washing
- Maritime and inland port facilities linked to rail activities
- Relief facilities
- Fuelling facilities

Consideration of Implementation Regulation, Article 4/2 (1)

Required information (Implementing Regulation)		Included in the Pilot Portal data model	Proposal for updated data model	Proposal for link to Operator Website or for attached file (by operator)
(1)	Facilities according Directive 2012/34/EU, Annex II/2	See extra chart		
(1)	Additional services according Directive 2012/34/EU, Annex II/3		(Pre-heating of passenger trains)	- Traction current (charges) - Tailor-made contracts
(1)	Ancillary services according Directive 2012/34/EU, Annex II/4	- Supplementary information - Technical inspection of rolling stock (maintenance/repair)	- (Maintenance services for high-speed trains) - (Ticketing services in passenger stations)	- Access to telecommunication networks
(1)	Location	✓		
(1)	Opening hours	✓		
(2)	Key contact details	✓		
(3)	Technical characteristics	- Sidings - Equipment for (un)loading - Available storage capacity	Shunting/marshalling tracks	- Equipment for washing - Equipment for maintenance
(4)	Description of services listed in Directive 2012/34/EU, Annex II/2, 3, 4			✓

Consideration of Implementation Regulation, Article 4/2 (2)

Required information (Implementing Regulation)	Included in the Pilot Portal data model	Proposal for updated data model	Proposal for link to Operator Website or for attached file (by operator)
(5) Possibility and conditions of self-supply			✓
(6,7,8,9,10,11,13,14,15,16,17,18) Procedures for requesting access, terms and conditions, charges			✓
(12) Information on changes in technical characteristics and temp. capacity restrictions		✓	
(19) Information on private branch lines/sidings (only relevant if needed to access other service facilities)	✓ Contact: Private siding operator	✓ Technical characteristics of private branch lines	

Consideration of Implementation Regulation (3)

Required information (Implementing Regulation)	Included in the Pilot Portal data model	Proposal for updated data model	Proposal for link to Operator Website or for attached file (by operator)
Article 6 (1) Information on allocation of costs for charges' calculation			✓
(12), Article 6 (3,4) (Real-time) Information on facility capacity		✓ Provided by facility operator	
Article 7-15, 17			✓
Article 16: Unused facilities	✓ Operation status		
Other information items, mentioned neither in Directive 2012/34/EU nor in Implementing Regulation	Facility types, area types, RFC assignment		
	Loading unit types, cargo types		
	Dangerous goods handling, reefers, stuffing/stripping, trucking, other services		
	Loading tracks, Head/side ramp, loading lane, other equipment		

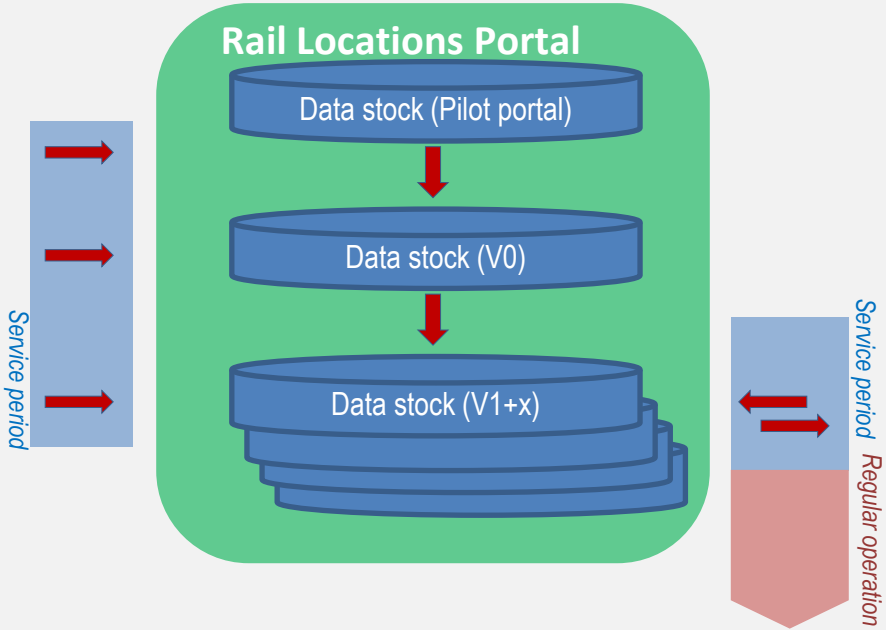
Project approach – Concept for portal data

Data collection exercise (by project team)

Negotiate with data providers use of data for permanent portal

Data collection/verification: Check/correct data transferred from pilot portal

Data supplement/completion
- *Agreed facility types and information parameters (exploit portal functionalities for editing or data transmission)*
- *Focus on geographical areas*
- *Achieve "critical mass"*



Data editing involving facility operators → Permanent data update

(Feedback to portal contents via existing feedback module)

<u>Registered users (data providers):</u>
Data editing or transfer via "Extended user model" with upgraded editing masks, interfaces
<u>Portal data manager(s)</u>
Support for data editing/transfer
Feedback in case of inconsistencies

Potential data sources

- **European registers on railway infrastructure**
  e.g.
  RINF (Register of Infrastructure);
  CRD database (Central Repository Domain).

- **Network statements**
  of the national and regional rail infrastructure managers or primary information sources from other infrastructure operators (terminals, railports,...)

- **Rail Freight Corridors**

- **Terminal operators**

- **Other existing information portals**

Discussion

Thank you for your attention!

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