

A Connected Synchronomodal System for the RALP - The FENIX Project

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PTV GROUP

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Data Sharing for Improved Operations

- Digitalisation within mode silos
- Data widely available however not connected or re-usable
- “Product” dispatching not “best” dispatching
- Capacity of transport modes not really addressed



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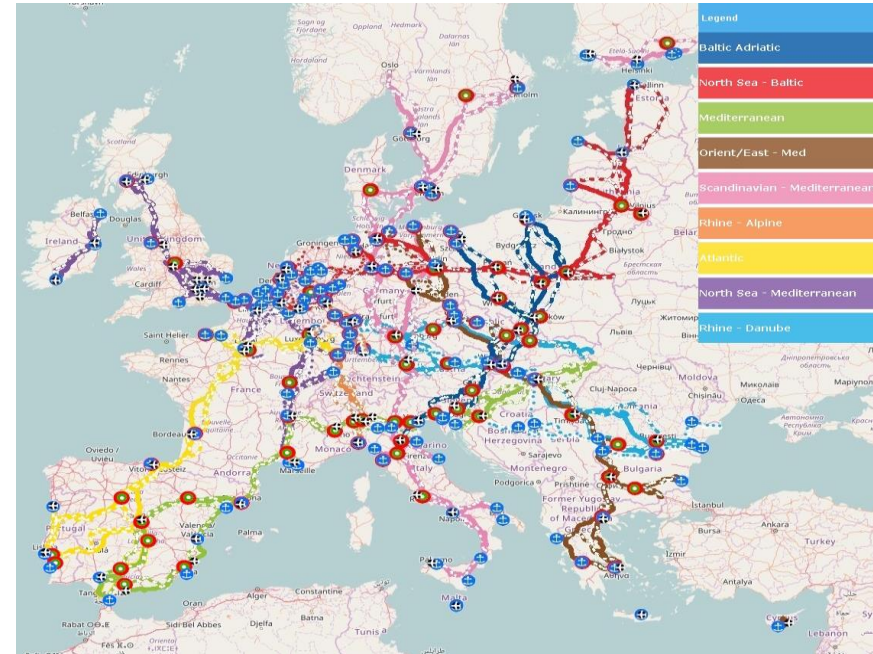
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The FENIX Project



FENIX Federation network is a secure data sharing framework in the form of a federation, where there is not a centralized entity owning the ecosystem, and where all the participants of the federation have the same rights and obligations and follows the federation governance.



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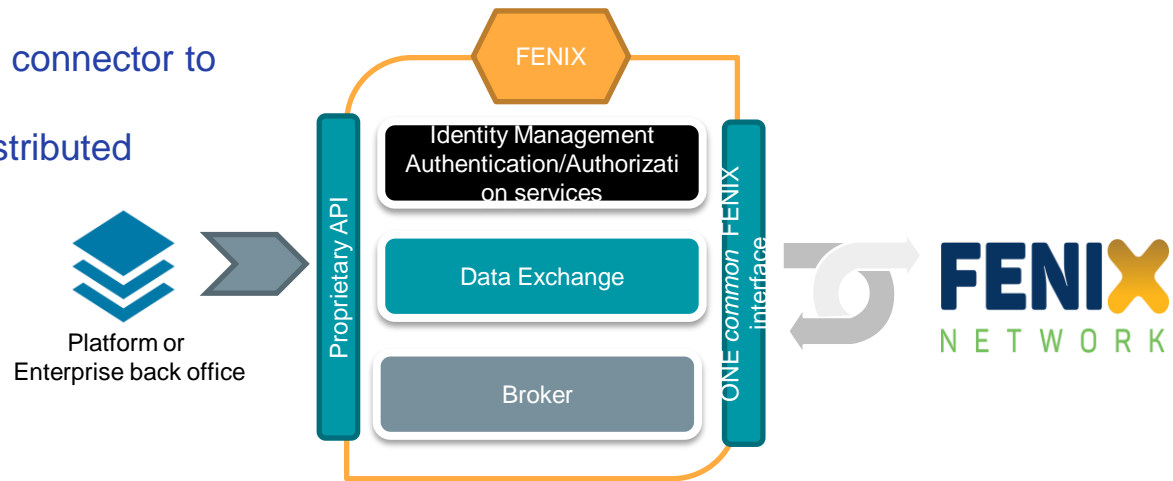
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FENIX-Connectivity

Federated resources will be implemented with 3 main pillars which fits in the business processes based on:

- Identity Management - to ensure the identities of the participants of the federation, authentication of identities
- Data Exchange- data exchange connector to enable the data sharing
- Broker - Search service of a distributed catalogue of services and data available in each node of the federation



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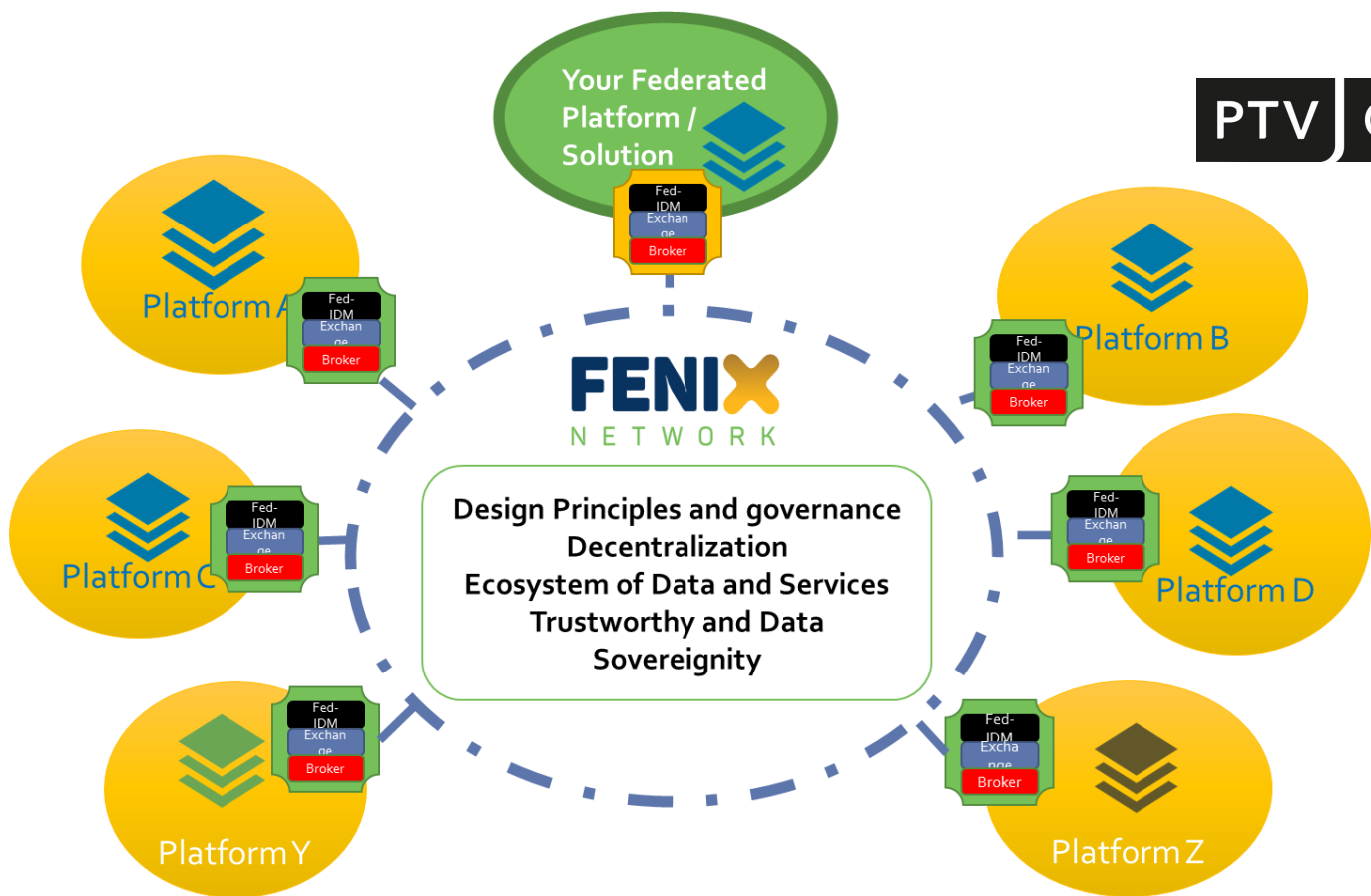


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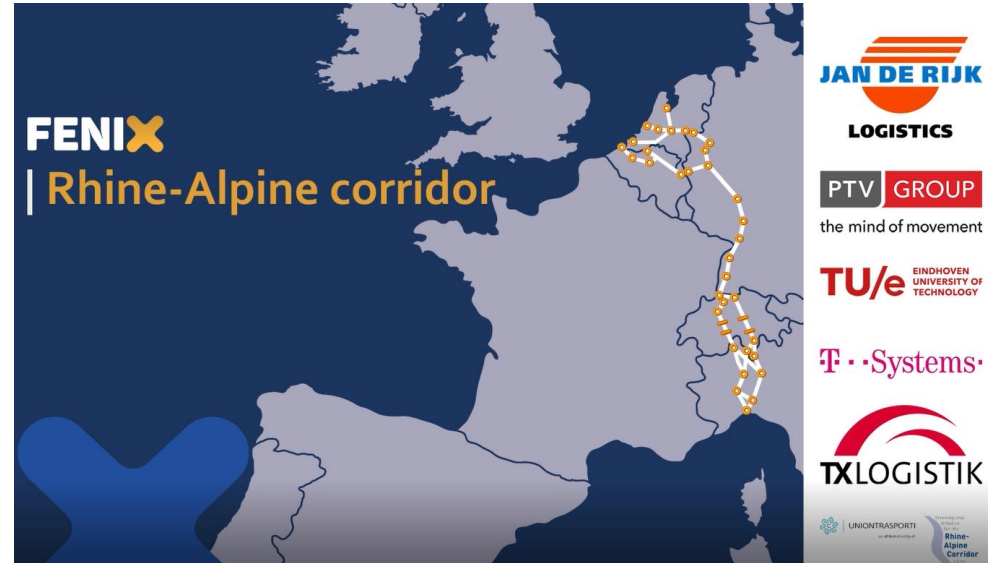
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FENIX RALP



- Optimize freight capacity along the corridor
- Improve corridor management in particular by enhanced visibility
- Demonstrate within a federated architecture
- Derive/apply sophisticated services like mode free capacity planning / synchronomodality



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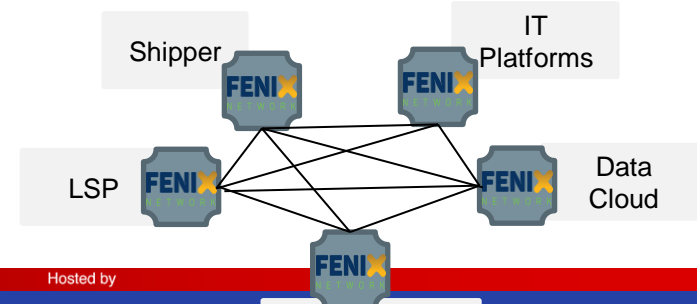
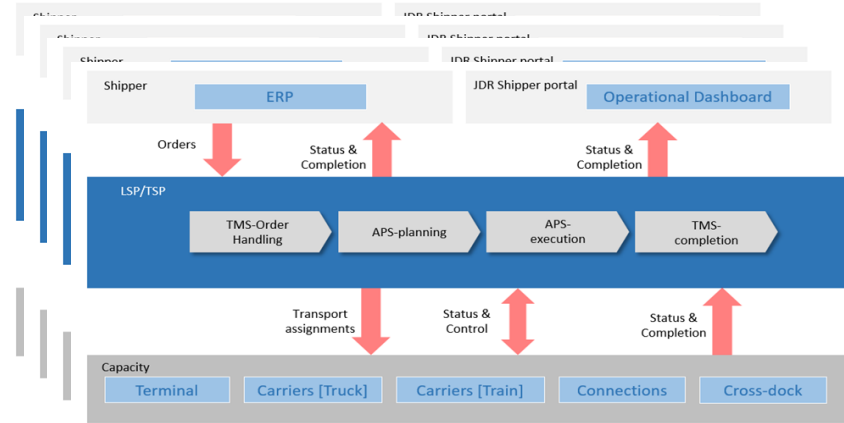
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From many to many to connect once



- Logistics IT flows create many interfaces
- Integration is needed for each single player in the supply chain
- FENIX is to facilitate integration and connectivity by means of standard connectors
- This will enable new services, business models and forms of collaboration



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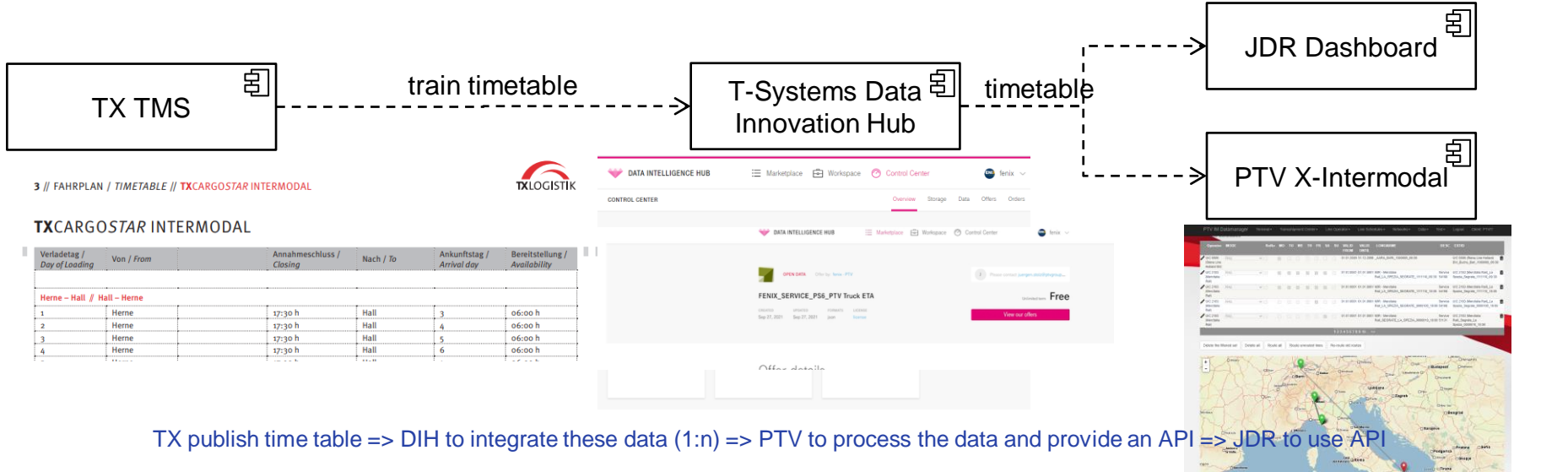


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Example on Use Cases



TX publish time table => DIH to integrate these data (1:n) => PTV to process the data and provide an API => JDR to use API

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Time table data processing

Line Schedule

EXTID: UIC 3308 ITX Logistik AG_Koeln_Verona_0010000_14.30

SHORT NAME: [Empty]

LONG NAME: TXL - TX Logistik AG_KOELN_VERONA_0010000_14.30

MODE: RAIL

RoRo:

DAYS: Mo Tu We Th Fr Sa Su

VALID FROM: 01.01.0001

VALID UNTIL: 31.12.2020

Operator: TXL - TX Logistik AG (UIC 3308 ITX Logistik AG)

DESCRIPTION: [Empty]

UPDATE TIME: 07.08.2020 11:20:33

UPDATE USER: PIVIT

Save Cancel Back

Operator

EXTID: UIC 3308 ITX Logistik AG

NAME: TXL - TX Logistik AG

COUNTRY: DE

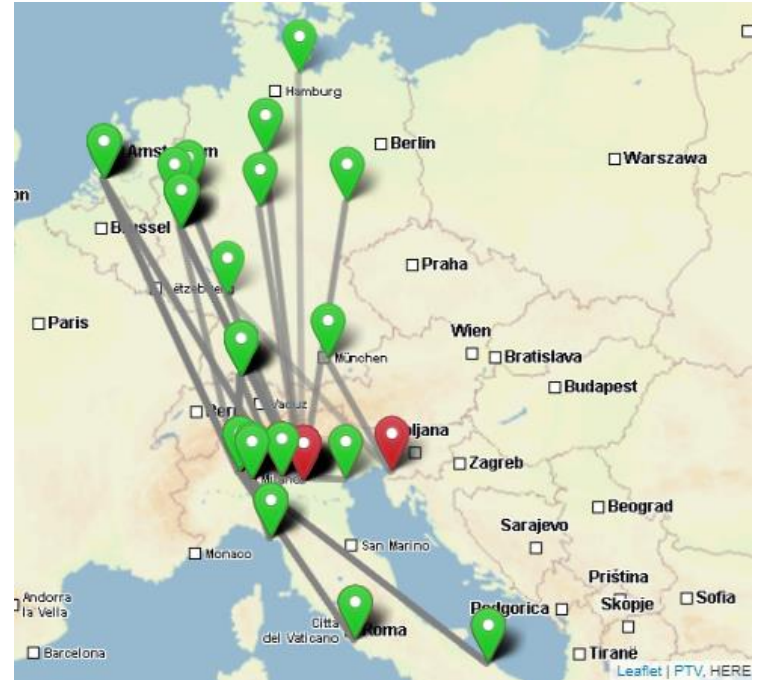
POSTCODE: [Empty]

CITY: UNKNOWN

SEQ	TERMINAL	ARRIVAL	A. DAY	READY FOR PICKUP	RFP. DAY	CLOSING	C. DAY	DEPARTURE	D. DAY	DIST. POS	LOAD. POS	UNLOAD. POS	G. PRC2	G. PRC3	G. PRP2	G. PRP3
1	Koeln Effeltor	15:00	0	18:00	0	06:00	0	06:00	0	0	<input checked="" type="checkbox"/>	<input type="checkbox"/>				
2	Verona Quadrante Europa	20:00	1							962	<input type="checkbox"/>	<input type="checkbox"/>				

Onits #2: [Empty]

#1: [Empty]



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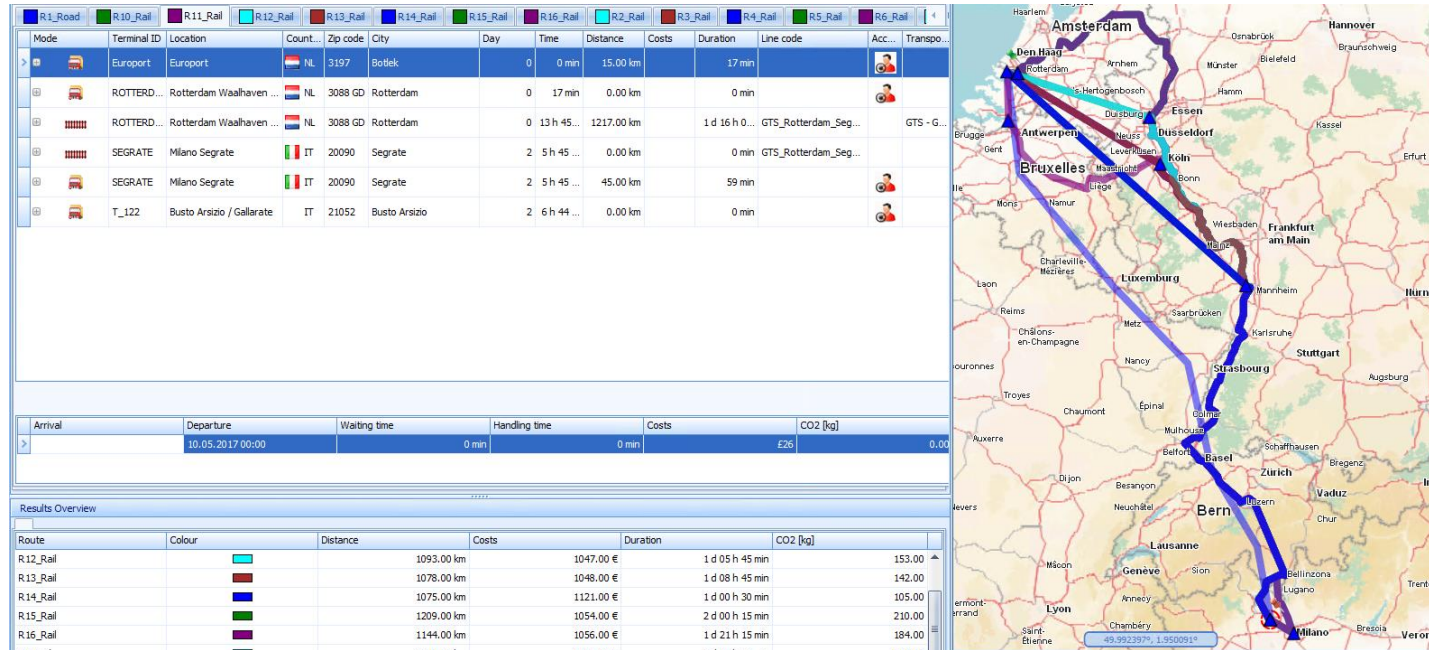
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D2D Capacity Planning



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Mode Free Optimisation



The screenshot displays the PTV Visum software interface, which is used for network optimization. It features a map on the right showing a dense network of routes across Europe, with major cities like Amsterdam, Berlin, Frankfurt, and London highlighted. On the left, there are several data tables and panels:

- Aufträge (Orders):** A table listing various orders with columns for #Tao, B.Plan, Gewicht, Beladestz, Beladestel, Beladestz, and Früheste Bel.
- Linienfahrten (Interland):** A table showing line services with columns for Mod, Kennung, Startzeit, S-Le, S-Stadt, Z-Le, Z-Stadt, Auslastung, Auftr, Kapaz, and Betreiber.
- Stoppes (Stops):** A table listing stops with columns for Nr, Kennung, Bezeichnung, Land, PLZ, Stadt, and Strasse.
- Linienfahrten (Inland):** A table showing domestic line services with columns for Nr, Kennung, Bezeichnung, Land, PLZ, Stadt, and Strasse.

The interface also includes a search bar, a map navigation toolbar, and a status bar at the bottom indicating the current view and data selection.

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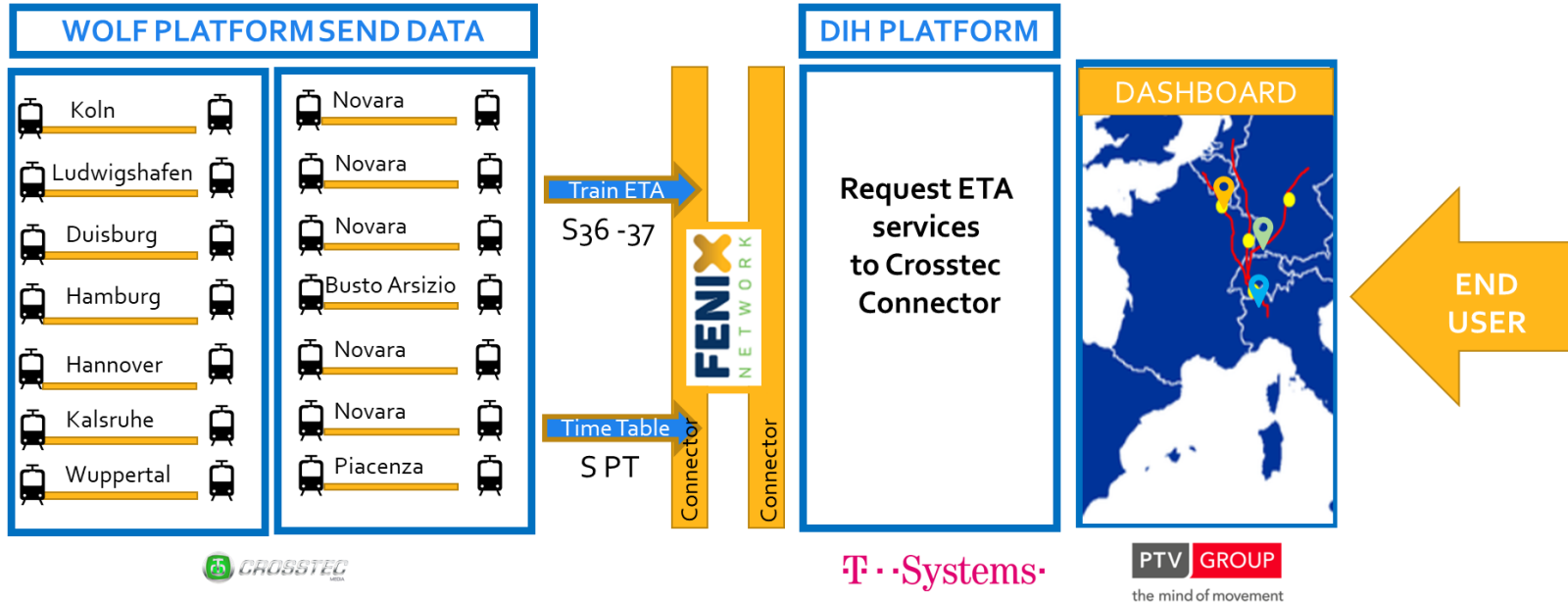
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Synchromodal Planning



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Final

- Cross stakeholder use cases can be developed and deployed quickly following the principle: Data - Function/Service – API/Dashboard
- Core is to establish seamless and barrier free (Plug&Play) data and information flow, enhanced by services to better plan and optimise logistics along the corridor.
- Further use cases can be modularly added, please contact us at the ERTICO stand!

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GET IN TOUCH

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Chief Logistics Research

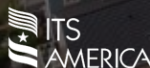
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