



## **RNE as a coordination platform for RFCs' core processes and tools**

Lisbon, 16 March 2016

# RailNetEurope (RNE)

## Introduction



RNE Members Network

## RailNetEurope

- was established in 2004
- currently it has 35 full members
- is an umbrella organisation of Infrastructure Managers (IMs)/Allocation Bodies (ABs)
- enhances international rail traffic
- delivers solutions and tools for international infrastructure management
- provides information on the European railway infrastructure
- offers a coordination platform for the new corridor organisations

# RailNetEurope (RNE) Corridor Management

In late 2005, 11 RNE Corridors were set up to promote the implementation of RNE processes and tools.

- To avoid any duplication of activities, the number of RNE Corridors was reduced in November 2013, when six were replaced by the six corresponding RFCs.
- In November 2015, the remaining three RFCs became operational, thus replacing RNE Corridors 1, 3, 4 and 7.
- RNE Corridor 11 is the only remaining RNE Corridor. It has the potential to become an RFC in future.



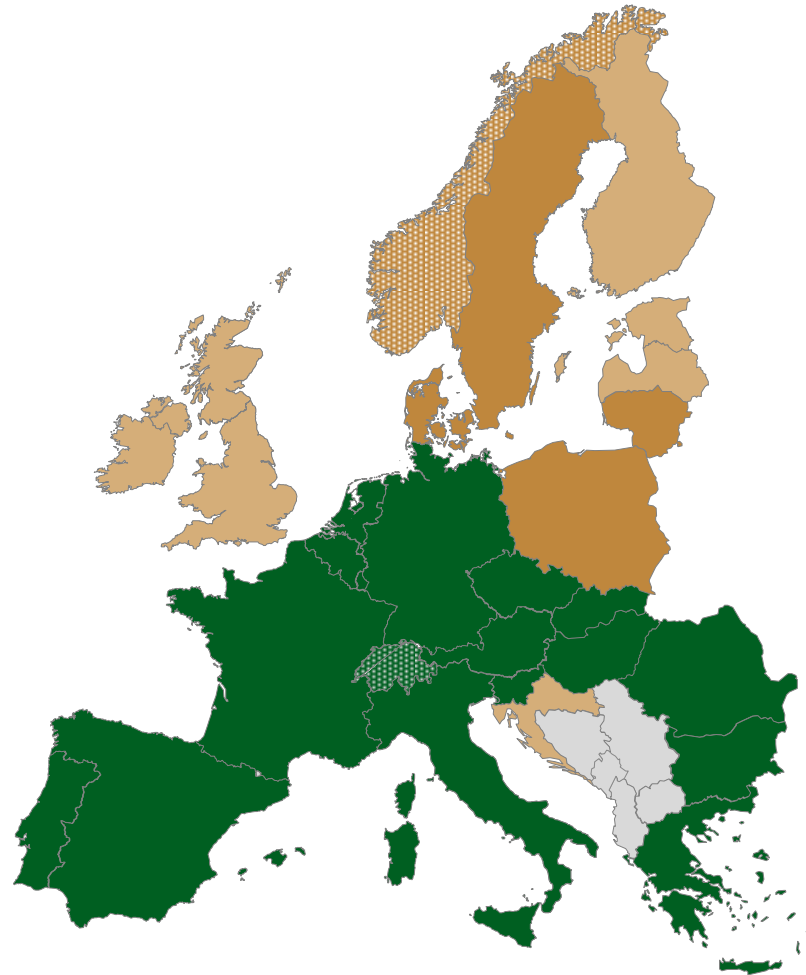
RNE Corridors 1 - 11

# Freight Regulation 913/2010 Implementation Plan (2013 and 2015)

## Implementation by 2013

AT, BE, CH, DE, FR, IT, LU, NL, SI,  
HU, PT, ES, CZ, SK, RO, BG, EL

Corridor	Member States	Years
1	NL, BE, DE, CH, IT	3
2	NL, BE, FR, LU	3
4	PT, ES, FR	3
6	ES, FR, IT, SI, HU, CZ, AT, SK, HU, RO, BG	3
7	EL	3
9	CZ, SK	3



## Implementation by 2015

NO, SE, DK, PL, LT

Corridor	Member States	Years
3	NO, SE, DK, DE, AT, IT	5
5	PL, CZ, SK, AT, IT, SI	5
8	DE, NL, BE, PL, LT	5

## Implementation after 2015

UK, HR, LV, EE, FI

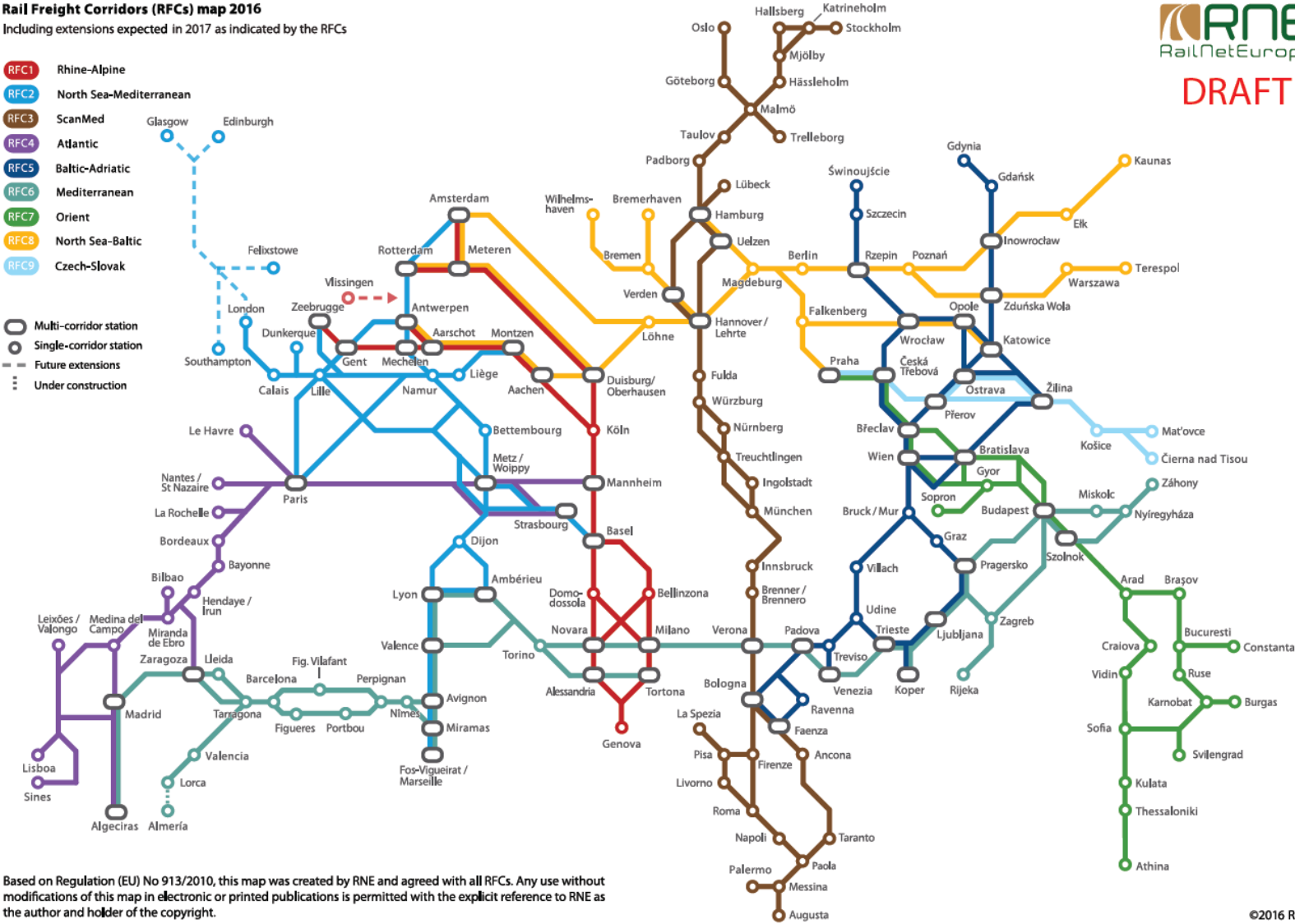
# RailNetEurope (RNE) RFC Overview Map Draft 2016

**Rail Freight Corridors (RFCs) map 2016**  
Including extensions expected in 2017 as indicated by the RFCs



- RFC1 Rhine-Alpine
- RFC2 North Sea-Mediterranean
- RFC3 ScanMed
- RFC4 Atlantic
- RFC5 Baltic-Adriatic
- RFC6 Mediterranean
- RFC7 Orient
- RFC8 North Sea-Baltic
- RFC9 Czech-Slovak

- Multi-corridor station
- Single-corridor station
- - - Future extensions
- ⋮ Under construction



# Freight Regulation 913/2010 Requirements

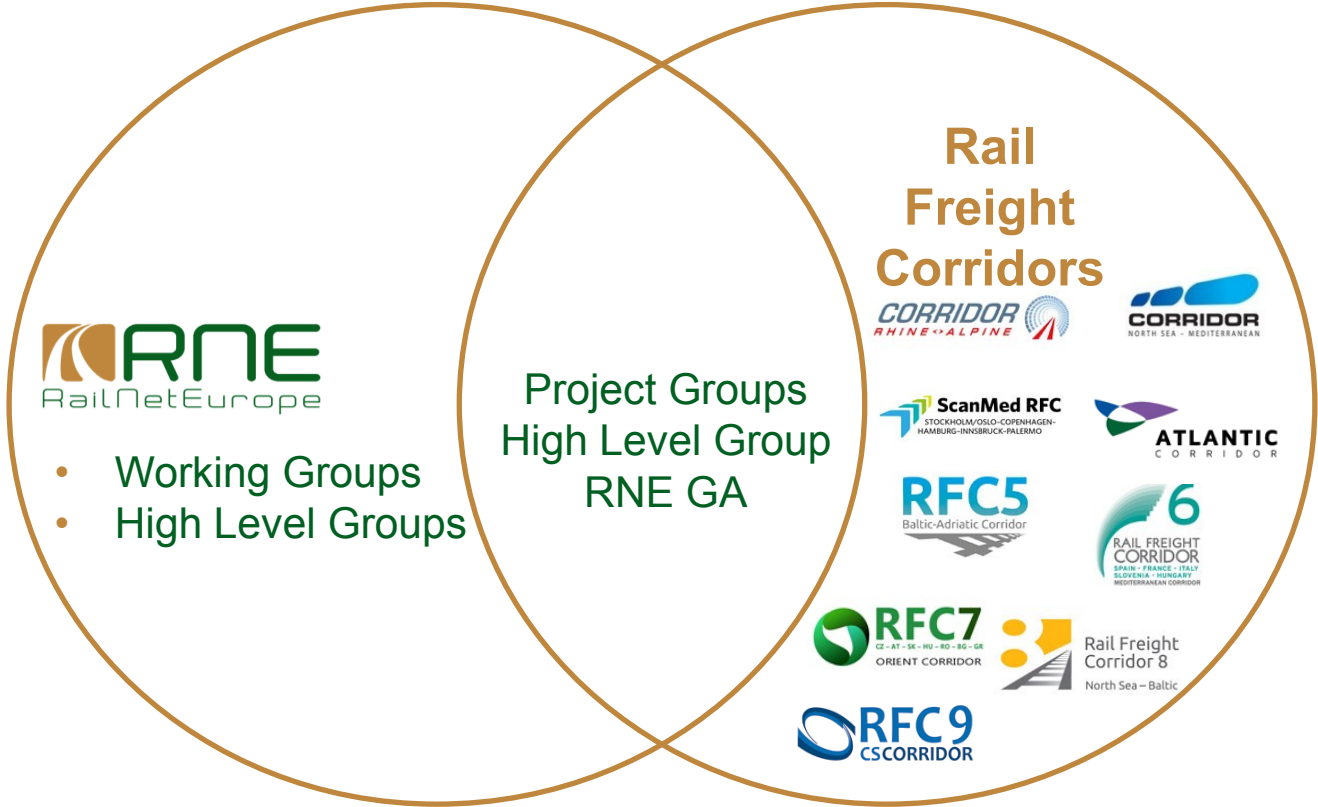
- Implementation of Freight Regulation 913/2010 requires standardised procedures and tools across all corridors
- Business is not tied to single corridors
  - Some RUs and IMs/ABs are active on several corridors
  - The majority of traffic does not start/end on one corridor
  - ⇒ interface between corridors / national systems needed
- Existing methods, processes and tools that RNE has developed and operated could be chosen (Statement in EU Implementation Handbook)

## RNE Path Coordination System (PCS) & RNE Train Information System (TIS)

- fulfil Regulation's requirements
- play key role in successful implementation



# RFC Core Processes harmonisation & IT tools development



RNE Corridor Management

Core Processes

IT Systems

# Customer Information Platform (CIP)



# The Customer Information Platform (CIP) formerly developed by RFC Rhine-Alpine

**SEGMENTS** | **TERMINALS\_EXT**

Name	Value
NAME	Köln Niehl Hafen CTS
OWNER	.
Homepage	<a href="http://www.intermodal-terminals.eu/database/terminal/view/id/120">http://www.intermodal-terminals.eu/database/terminal/view/id/120</a>
ADDRESS	Stapelkai 2, Niehl Hafen - 50735 Köln
TERMINALTYPE	Container/Intermodal Terminal

**SEGMENTS** | **SEGMENTS** | **NODES**

Name	Value
NAME	Venlo
MANAGER	ProRail
COUNTRY	The_Netherlands
CODE	VL
CATEGORY	Node

**SEGMENTS**

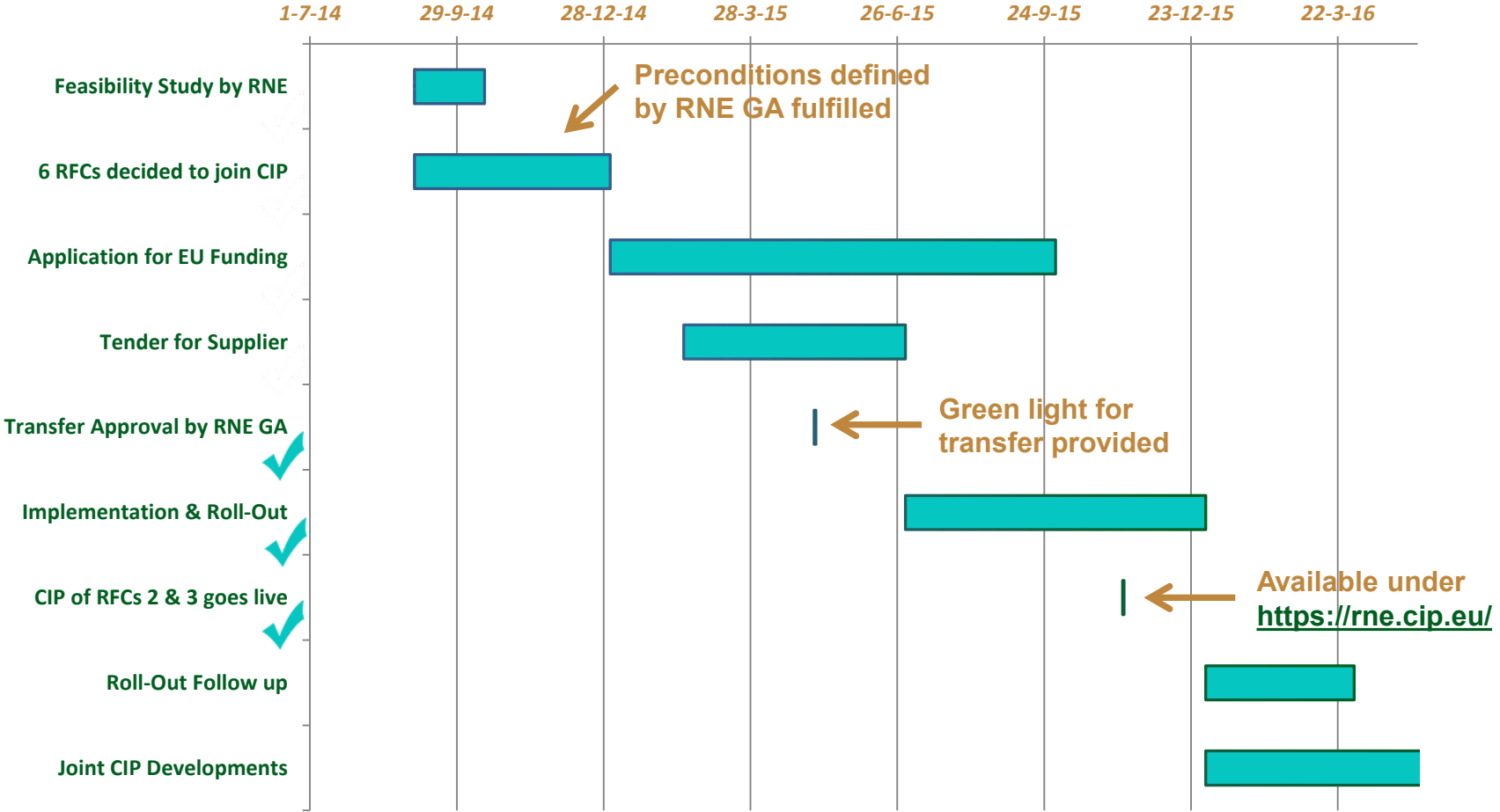
Name	Value
NAME	Aachen Hbf - Köln Ehrenfeld
MANAGER	DB Netz
COUNTRY	Germany
CATEGORY	Principal Line
INTERMODAL_FREIGHT_CO...	P/C 70/400
INTEROPERATIONAL_GAUGE	upon request
LINE_CATEGORY	D4
MULTINATIONAL_GAUGE	upon request
TRACTION_POWER	upon request
GRADIENT_1	10 - 15
GRADIENT_2	10 - 15
SIGNALLING_GROUP	upon request
SIGNALLING	upon request

The contents of this Customer Information Platform is solely for information and not legally binding, except for Tab C-OSS. See Book 1 chapter 7

Logos: bbls, SBB CFF FFS, RFC Rhine-Alpine, European Union

- Offers one single source of harmonised corridor information,
- Provides a user friendly access 24 hours 7 days a week

# Transfer of CIP to RNE

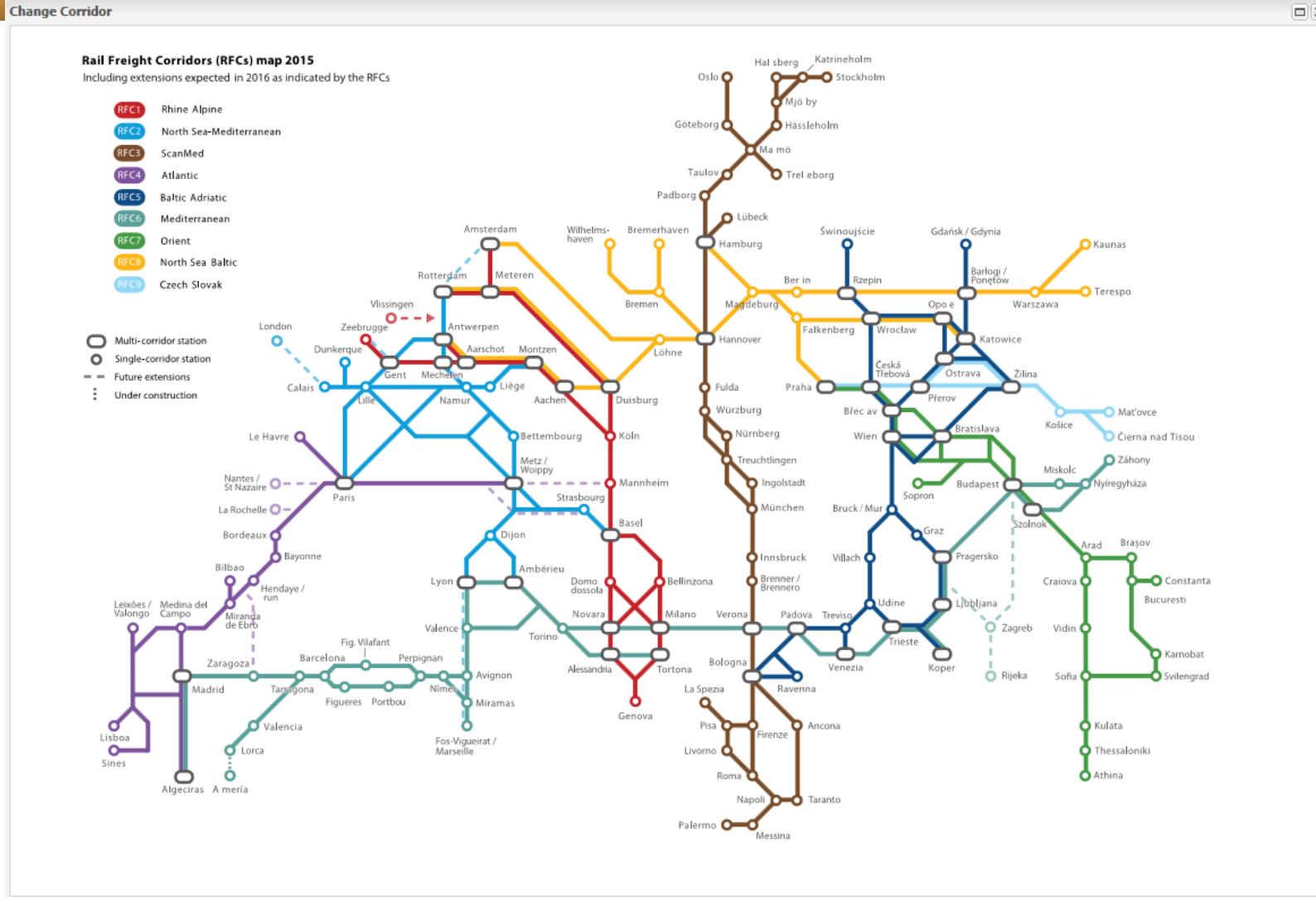


# Flexibility for participating RFCs



	Customer functions	Internal functions	Admin functions	Special features
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# Improved navigation for customers



1

**6 out of 9 RFCs participating**  
(1, 2, 3, 4, 5 & 8)



- RFCs 2, 3 & 4 in production
- RFCs 5 & 8 in test system
- Migration of RFC 1 in preparation  
(not coordinated by RNE)

2

**RFCs 6, 7 & 9 invited to join the common initiative**



- Benefit from the EU funding
- Attend CIP CCB as observers
- Next CCB on 5 September

3

**Possible developments of CIP**  
prioritised by the CCB



- Enabling of Multi corridor view
- Automated publication of TCRs
- Link to the Rail Freight Locations

# Improved navigation for customers



## **Access to CIP is free of charge:**

If you need support with accessing the system or wish to become an internal user of CIP, please contact our Service Desk.

## **For e-mail inquiries please write to:**

[support.cip@rne.eu](mailto:support.cip@rne.eu)

Tickets sent by e-mail in English are registered and handled on all weekdays, regardless of holidays or vacation periods, with a guaranteed response time.

## **For telephone enquiries please call:**

+43 1 907 6272 25

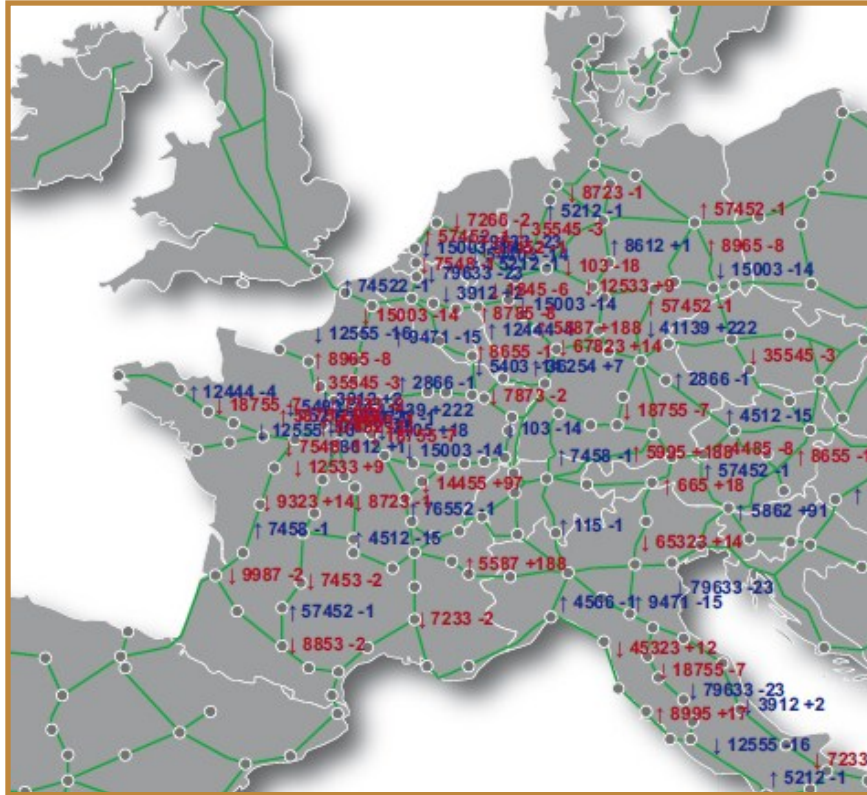
## **Service Desk opening hours on working days:**

Monday - Thursday: 09:00 - 16:00

Fridays: 09:00 - 15:00

# Train Information System (TIS)

# RNE Train Information System (TIS)

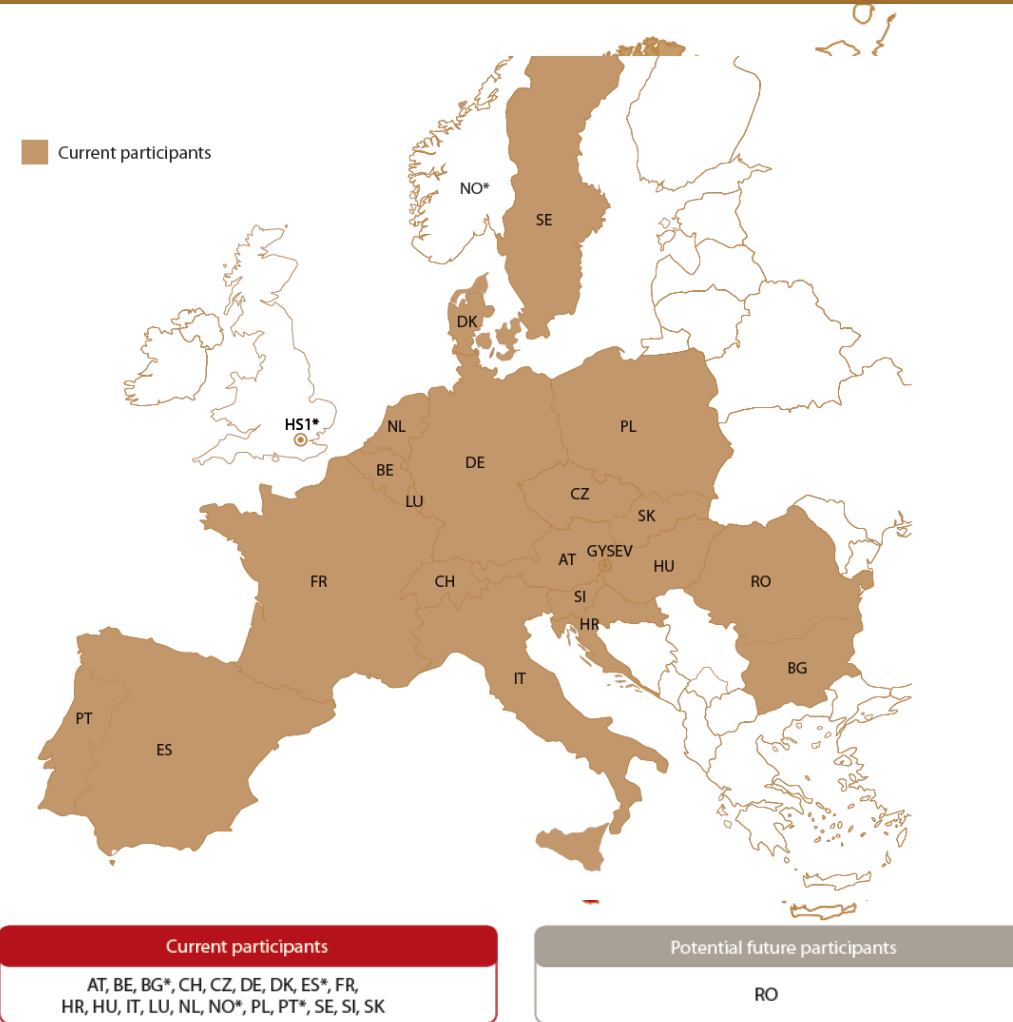


*Train Information System (TIS)*

- RNE system for real-time international train run monitoring
- Originally developed by consortium of 6 IMs
- Handed over to RNE in 2007
- RNE developments
  - Improvement of data quality
  - Roll-out to other IMs (currently 22 IMs are TIS members)
  - Train Info from about 20.000 reporting points currently
  - Introduction of additional functions



# TIS Rollout



\*Contract signed. Implementation in progress.

### Main TIS functions:

#### ■ Real time information

- Real-time traffic data for each train
- Graphical interface
- Network overview and Train Info optimized for Tablets and Smartphones

#### ■ Reporting

- Pre-defined reports
- Customisable reports
- Information source of other projects

#### ■ Data exchange

- Raw data exchange between IM and RU based on TAF TSI messages
- Filtering function

### Added value for:

- IMs/Terminals are supported in the traffic management
  - Improved capacity planning (on operational/dispatching level)
  - Avoidance of accumulation of delays in the terminal
- RUs are supported in their own productions system
- Information source for IMs and RUs in the identification of problems and of corrective actions
- Support for other projects such as Train Performance Management and European Performance Regime
- Information source for other stakeholders (i.e. CIT for refunding of passenger tickets)



# TIS for Terminal Operators

- Basics and applications
  - **A terminal is defined by a list of TIS (TrainInformationSystem) points (max 10 points)**
  - **A list of RU is authorized by signed agreements**
    - Terminal user can view a restricted range of trains defined by:
      - All trains running through a point associated to the Terminal
        - » The train must have at least one Contracted Time Table (CTT) on the defined point(s)
      - Information content based on the signed agreements
  - **Application overview** (optimized for Tablets and smartphones)
    - The Terminal operator user can access the TIS pages
      - **Train information** (detailed info about a single train run)
      - **Connection diagram** (schematic representation of the trains on a selected point)
      - **Network overview** (graphical representation of trains running towards/apart a selected Terminal)
      - **Train request page** (a list of trains with actual information for a given time period)

- Conditions regarding TIS Core system
  - Selection of „National Trains” (NT)
    - only in consent between IM and RNE (avoiding overload of the TIS application)
    - RU provides the sample of NT
  
- IMs providing National Trains
  - Provision already by RFF, DB Netz, BDK, Trafikverket
  - RFI announced to provide data about national trains on demand in the 1<sup>st</sup> Q 2016. At the moment 3 Railway Undertakings placed a request
  - Information available on TIS application based on user rights
  - Information about NT available via RU interface (TAF TSI format) as well

# Terminal Operator

## Application: Network overview multiple filter (V 6.2 Jan 2016)

- Multiple filters can be defined and stored for continues usage
  - Trains, Points (max 10), RU and IM

Filter

Current filter

<unnamed>

User network: all

Train type:  
International, National  
Passenger, Freight, Unknown

Save Clear Edit

Saved filters

Name
40000-40100
ITL Captrain
Z1351
ECR
T Freudenu

Edit filter <unnamed>

Train List

Train type

Passenger  National  
 Freight  International  
 Unknown

User network: all

Threshold

Later than (minutes)

Earlier than (minutes)

Invert selection

Trains

Add

Reference Number
40000-43000
53001-53003

RU

Add

IM	Name	Code
0083	SBB Cargo Italia S.r.l.	SBBC
0085	SBB Cargo International (SBBCIN)	5503

Points

Add

IM	ENEE	Abbrev	Name
0083	765	NVB	NOVARA BOSCHETTO
0085	40	BSGB	Basel SBB GB

IM

Add

Code	Name
0083	RFI
0085	SBB INFRA

Cancel Apply

# Terminal Operator

## Application: Train Info with Filter functions enlarged

- Train Info: enlarged new filter (wildcards “\*,?”) can be used

- Detailed inform

International Train Number: 43645  
 Departure Time: From 08/02/2016 00:00:00 +0 To 10/02/2016 23:59:59 +0  
 Apply

Result count: 5

Train number	From	Time (from)	Delta (from)	To	Time (to)	Delta (to)
43645	Freiburg (Breisgau) Gbf	08/02/2016 21:55:00 +01:00	+10	Basel Bad Bf	08/02/2016 23:43:00 +01:00	+21
43645	Gellert	08/02/2016 23:45:35 +01:00	+22	*Domodossola (bif)	09/02/2016 03:41:57 +01:00	0
43645	Domodossola	09/02/2016 03:48:00 +01:00	+93	NOVARA BOSCHETTO	09/02/2016 06:22:00 +01:00	+86
(3) 43645	Freiburg (Breisgau) Gbf	09/02/2016 21:55:00 +01:00	0	NOVARA BOSCHETTO	10/02/2016 06:22:00 +01:00	-2
(3) 43645	Freiburg (Breisgau) Gbf	10/02/2016 21:55:00 +01:00	+2	NOVARA BOSCHETTO	11/02/2016 06:22:00 +01:00	+29

- Train Info: enlarged export function (excel)

Point Name	Contracted TT	CTT Point Status	Running Time	Delta	Running Point Status	Service Number	IM	RU Code	RU	EOPT ID
Domodossola	2016-02-09T03:48:00.000+01:00	3	2016-02-09T04:02:30.000+01:00	14	3	43645	83	SBBC	SBB Cargo Italia S.r.l.	1606622
Domodossola	2016-02-09T04:23:00.000+01:00	4	2016-02-09T05:56:30.000+01:00	93	4	43645	83	SBBC	SBB Cargo Italia S.r.l.	1606622
VILLADOSSOLA	2016-02-09T04:32:00.000+01:00	5	2016-02-09T06:08:30.000+01:00	96	5	43645	83	SBBC	SBB Cargo Italia S.r.l.	1606622
PIEVE VERGONTE	2016-02-09T04:38:00.000+01:00	5	2016-02-09T06:14:00.000+01:00	96	5	43645	83	SBBC	SBB Cargo Italia S.r.l.	1606622
PREMOSELLO CHIOVENDA	2016-02-09T04:45:00.000+01:00	5	2016-02-09T06:18:00.000+01:00	93	5	43645	83	SBBC	SBB Cargo Italia S.r.l.	1606622
OMEGNA	2016-02-09T05:17:00.000+01:00	5	2016-02-09T06:36:00.000+01:00	79	5	43645	83	SBBC	SBB Cargo Italia S.r.l.	1606622

# Terminal Operator

## Application: Train Info

- Train Info: Tablet optimized version for Network Overview and Train Info
  - Device (tablet or smartphone) will be automatically recognized by the TIS application – no additional user credentials necessary



Point Name	Contracted TT	CTT P3	RTPC	Delta	Service Number
Curtici	12/01/2016 15:14:00 +02:00	➤	12/01/2016 15:19:00 +02:00	+5	74
L.Secusnica	12/01/2016 14:24:00 +01:00	➤	12/01/2016 14:29:00 +01:00	+5	74
L.Secusnica	12/01/2016 14:49:00 +01:00	➤	12/01/2016 14:54:00 +01:00	+5	74
Kőbregyháza	12/01/2016 15:00:00 +01:00	➤	12/01/2016 15:05:00 +01:00	+5	74
Kőbregyháza	12/01/2016 15:01:00 +01:00	➤	12/01/2016 15:06:00 +01:00	+5	74
Kőbregyháza	12/01/2016 15:00:00 +01:00	➤	12/01/2016 15:05:00 +01:00	+5	74

TIS Newsletter  
just click on it



Adobe Acrobat  
Document

- Network Overview
- Train Info/Request

# Terminal Operator

## Application: Train Info

### ■ Train Request

- Current trains on the run to Terminal Novara Boschetto (Final destination)
  - Information is updated every 90 sec

Result count: 7

Reference	Current point	Delta	Running time	Contracted time	Estim	Estimated time	Departure origin point	Departure orig	Final destination point	Final destination time
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	Novar*	<input type="text"/>
<a href="#">43639</a>	NOVARA BOSCHETTO	-14	18/05/2015...	18/05/2015 05:40			Freiburg (Breisgau) Gbf	17/05/2015...	NOVARA BOSCHE...	18/05/2015 05:40
<a href="#">38185</a>	NOVARA BOSCHETTO	+54	18/05/2015...	18/05/2015 07:29			BIVIO/PC ROSALES	18/05/2015...	NOVARA BOSCHE...	18/05/2015 07:29
<a href="#">42311</a>	NOVARA BOSCHETTO	+64	18/05/2015...	18/05/2015 07:22			Noisy-le-Sec	16/05/2015...	NOVARA BOSCHE...	18/05/2015 07:22
<a href="#">43605</a>	MOMO	+11	18/05/2015...	18/05/2015 09:52	+11	18/05/2015...	Freiburg (Breisgau) Gbf	18/05/2015...	NOVARA BOSCHE...	18/05/2015 10:12
<a href="#">43617</a>	NOVARA BOSCHETTO	-3	18/05/2015...	18/05/2015 06:50			Freiburg (Breisgau) Gbf	17/05/2015...	NOVARA BOSCHE...	18/05/2015 06:50
<a href="#">43677</a>	NOVARA	+11	18/05/2015...	18/05/2015 09:53	+11	18/05/2015...	Lubeck Skandinavienkai	17/05/2015...	NOVARA BOSCHE...	18/05/2015 09:55
<a href="#">61213</a>	NOVARA BOSCHETTO	+30	18/05/2015...	18/05/2015 05:08			Domo II	17/05/2015...	NOVARA BOSCHE...	18/05/2015 05:08



# New Template Procedure to join TIS for Terminals



RailNetEurope (RNE)  
RNE TIS Manager  
Mr Josef Stahl  
Oelzeltgasse 3/8  
1030 Vienna  
Austria



+43 1 907 62 72 27  
+43 1 907 62 72 90  
E-mail Josef.Stahl@rne.eu

**DECLARATION<sup>1</sup>  
to RailNetEurope (RNE), Vienna, Austria  
concerning data sharing within RNE Train Information System (RNE TIS)**

Dear RNE TIS Manager,

We, the Railway Undertakings (RU) listed below, have concluded a TIS User Agreement with RNE and hereby agree on sharing of train information with terminal operators in the RNE TIS system. The information includes, but is not limited to, train run data and delay codes for trains operated by us.  
Our consent is limited to trains running from and to the terminals<sup>2</sup> and terminal operators<sup>3</sup> chosen in Annex 1.  
This declaration is valid until further notice and may be withdrawn by us at any time.

	Railway Undertaking (RU) <small>(full company name, legal form, statutory seat and name of CEO or other authorised representative)</small>	RICS Code <sup>4</sup> / National RU code/s <sup>5,6</sup>	Place, Date, Signature of RU's CEO or signature of other authorised RU's representative
1.			
2.			

**Annex 1<sup>7</sup>**

*(Please choose among the listed Terminals and Terminal Operators. The chosen ones with YES would be part of data sharing in TIS.)*

Name and country of Terminal/Terminal Operator	RU choice	
	Yes	No
KTL Ludwigshafen, Germany	<input type="checkbox"/>	<input type="checkbox"/>
HUPAC Gallarate, Italy	<input type="checkbox"/>	<input type="checkbox"/>
.....	<input type="checkbox"/>	<input type="checkbox"/>
.....	<input type="checkbox"/>	<input type="checkbox"/>
.....	<input type="checkbox"/>	<input type="checkbox"/>
.....	<input type="checkbox"/>	<input type="checkbox"/>

Date, Place, Signature

For RU .....XYZ .....

### Train Information System (TIS) will be the right tool ...

- ... to meet TAF-TSI requirements
  - over 220 Million messages were received in 2015
  - Around 100 Million messages were sent to RUs/IMs in 2014.
  - all messages can already be sent in TAF TSI format & structure
- ... to comply with new Freight Regulation
  - Train Monitoring on corridors
  - Train Performance Management (performance schemes)
  - Including further terminals on the corridors
- ... to ensure availability of new products (e.g. Train Control Center Communication)
  - Multilingual messaging Tool (bunch(13) of predefined messages)
    - Languages supported
      - FR, DE, EN, BG, HU, CZ, SK, SI, IT, NL, PK, HR, RO, ES, PT
      - Message will be translated to the receivers default languages
      - Notification with messages content will be sent to receivers mailbox

# Contact Information

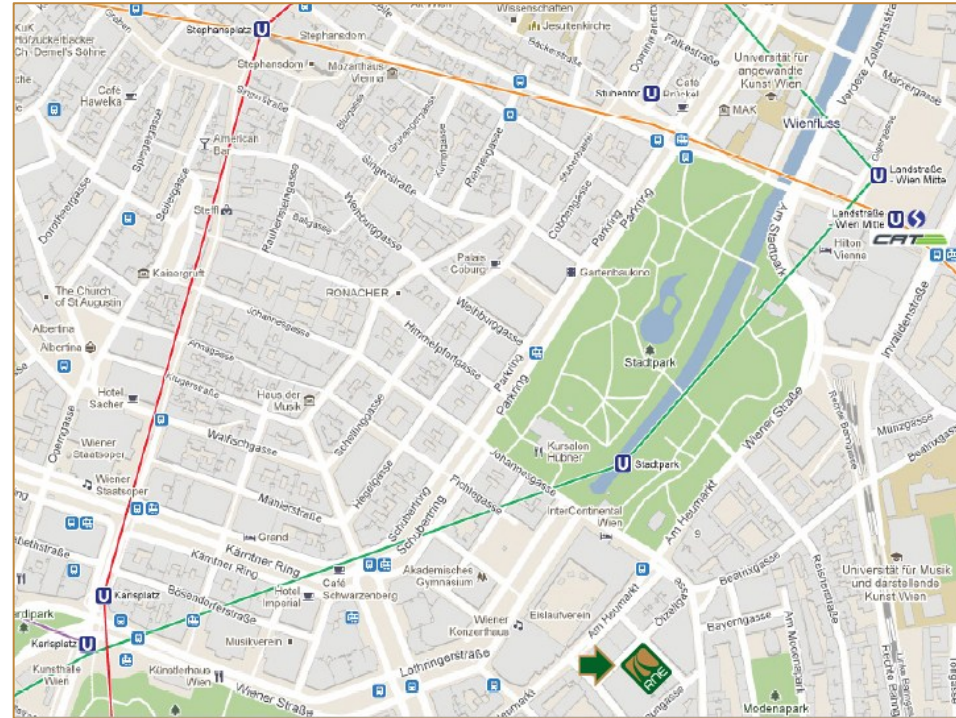
**RailNetEurope**  
Oelzeltgasse 3/8  
1030 Vienna  
AUSTRIA

Phone +43 1 907 62 72 00

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E-mail [mailbox@rne.eu](mailto:mailbox@rne.eu)

Web [www.rne.eu](http://www.rne.eu)



*Map – RailNetEurope Joint Office*