

**RNE PCS**  
Path Coordination System

# What is PCS?

# What is PCS?

The Path Coordination System (PCS) is an international path request coordination system for path applicants:

- Railway Undertakings (RUs)
- Infrastructure Managers (IMs)
- Allocation Bodies (ABs)
- Rail Freight Corridors (RFCs)

PCS optimises international path coordination by ensuring that path requests and offers are harmonized by all involved parties.

# What is PCS?

Input for international path requests needs to be placed only once into one system either into domestic application or directly into PCS.

The tool is also applicable for several other functions:

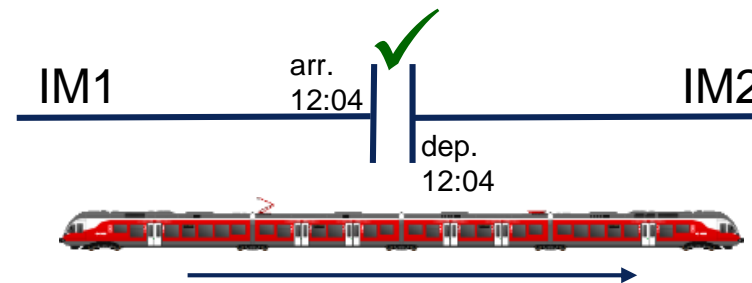
Path Allocation



Pre-Arranged Path Process



Timetable & border point harmonisation

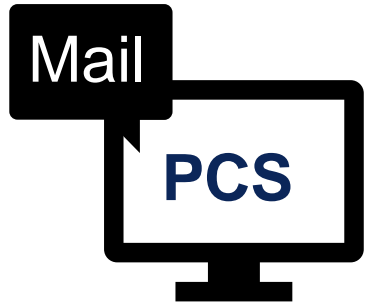


# Train composition



Sequence	21	22	23	24	25	26	27
<b>Carriage type</b>	Bmpz	Bmpz	Bmpz	Bmpz	ARmpz	Ampz	Afmpz
<b>Admin</b>	ÖBB	ÖBB	ÖBB	ÖBB	ÖBB	ÖBB	ÖBB
<b>From train</b>	165	165	165	165	165	165	165
<b>From</b>	Budapest	Budapest	Budapest	Budapest	Budapest	Budapest	Budapest
<b>To</b>	München	München	München	München	München	München	München
<b>To train</b>	69	69	69	69	69	69	69

# Notifications



## New notifications (Ad-Hoc & LPR)

- Harmonisation started → RU
- Offer arrived → RU
- Request arrived → RFC/IM/AB

## Subscribe/Unsubscribe

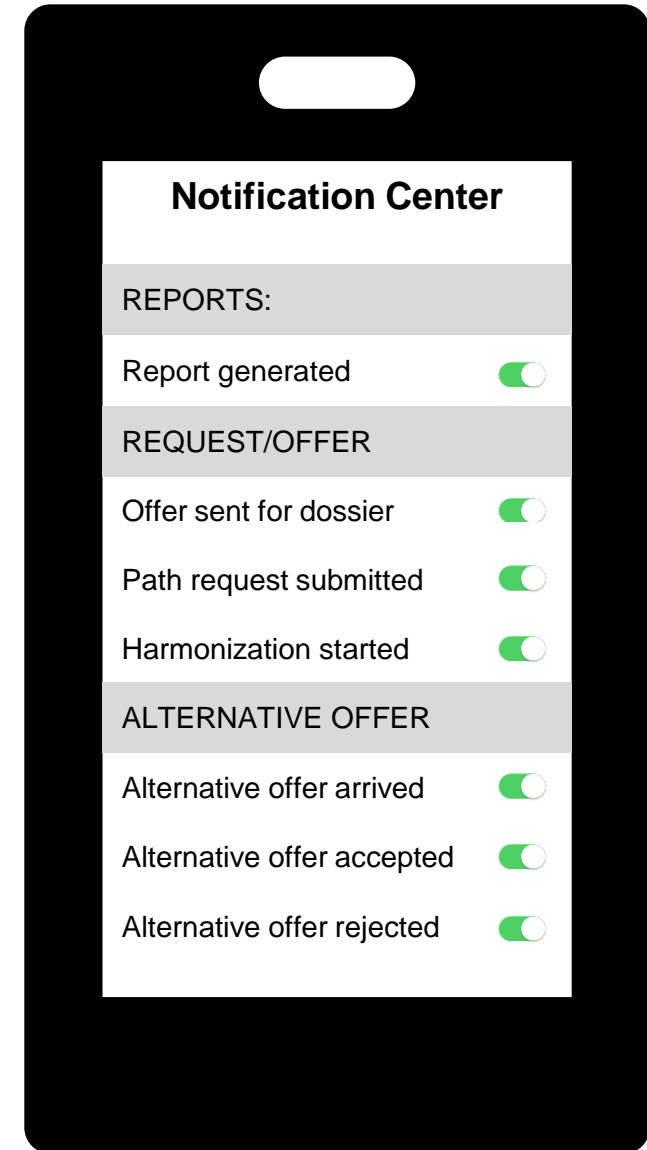
- To/From new notifications
- To/From already existing notifications

## Default

Everybody is subscribed to every [notification](#)

## Change

1. Go to  Personal settings
2. Edit e-mail  subscription



# Loco types

IMs/ABs/RFCs



## Publication

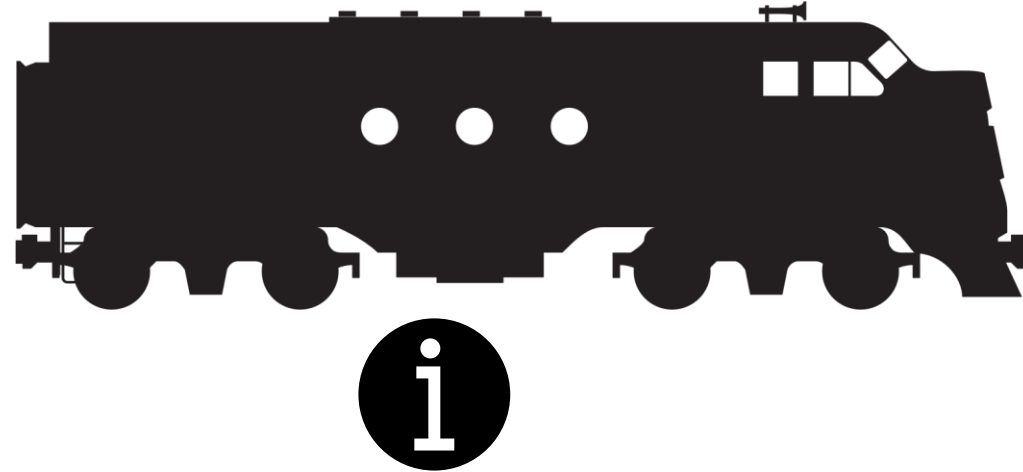
CSV import or via the GUI  
by IMs/ABs

## Maintenance

Possibility to add new Loco  
at anytime of the TTP

## PaPs

PaPs are published with  
reference locos from the  
database



## Identification

PCS ID, Loco type number, National ID

## Information

TT Period, IM, Explanation

## Technical parameters

Type\*, Top speed (km/h)\*, Weight (t)\*  
Length (m)\*, Train control system  
Related performance (kW)

RUs



## Overview

Access to every IMs/ABs  
loco type list

## Selection & Copy

In train parameters RU can  
type Loco type number or  
Explanation

Copy possible among  
IMs/ABs, if the Loco type  
number is harmonized

# Loco types

Logged in as RU

Filter by Timetable period

Timetable period  
2019

Filter by IM/AB, Loco type number, National ID

Enabled only for IM/AB

Import loco types + Add loco type

id	Agency	Loco type nu...	National id	Explanation	Type of Engine	Train cc system	Weight(t)	Length(m)	Traction max s...	Related perfor...	Multiple Unit
▼ Agency: VPE											
8308	VPE			Nohab M61	Diesel	EVM	101	19	100		No
8231	VPE			A26	Diesel	EVM	46	12	5		No
8223	VPE				Diesel	EVM	21	11	80		No
8224	VPE	003		AKT-TMs-003 ATM	Diesel	EVM	30	15	80		No
8225	VPE	18		A29	Diesel	EVM	48	12	5		No
8227	VPE	47		DerbySulzer	Diesel	EVM	114	20	120		No
8228	VPE	60		Sulzer	Diesel	EVM	114	17	100		No
8229	VPE	81		ER20 1223	Diesel	EVM	80	20	140		No
8230	VPE	102		A25	Diesel	EVM	64	12	40		No
8232	VPE	120		TVG	Diesel	EVM	8	5	60		No

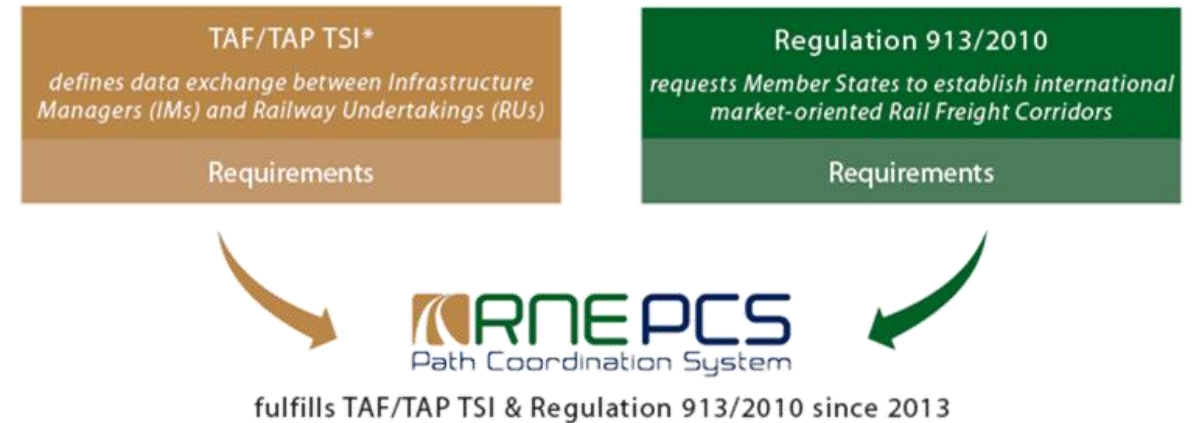


# What is behind PCS?

# What is behind PCS?

PCS is built up from several elements that are co-operating and complementing each other:

- Dossier (= train) as the core element of the system
- Timetable process (2012/34/EU, 913/2010)
- TAF/TAP TSI standards (2006/62/EC)
- Available and reserved capacity
- National IM parameters



# Legal Basis for Timetabling Process: 2012/34/EU

Art. 38: Capacity rights

Art. 39: Capacity allocation

Art. 40: Cooperation in the allocation of infrastructure capacity on more than one network

Art. 41: Applicants

Art. 43: Schedule for the allocation process

Art. 45: Scheduling

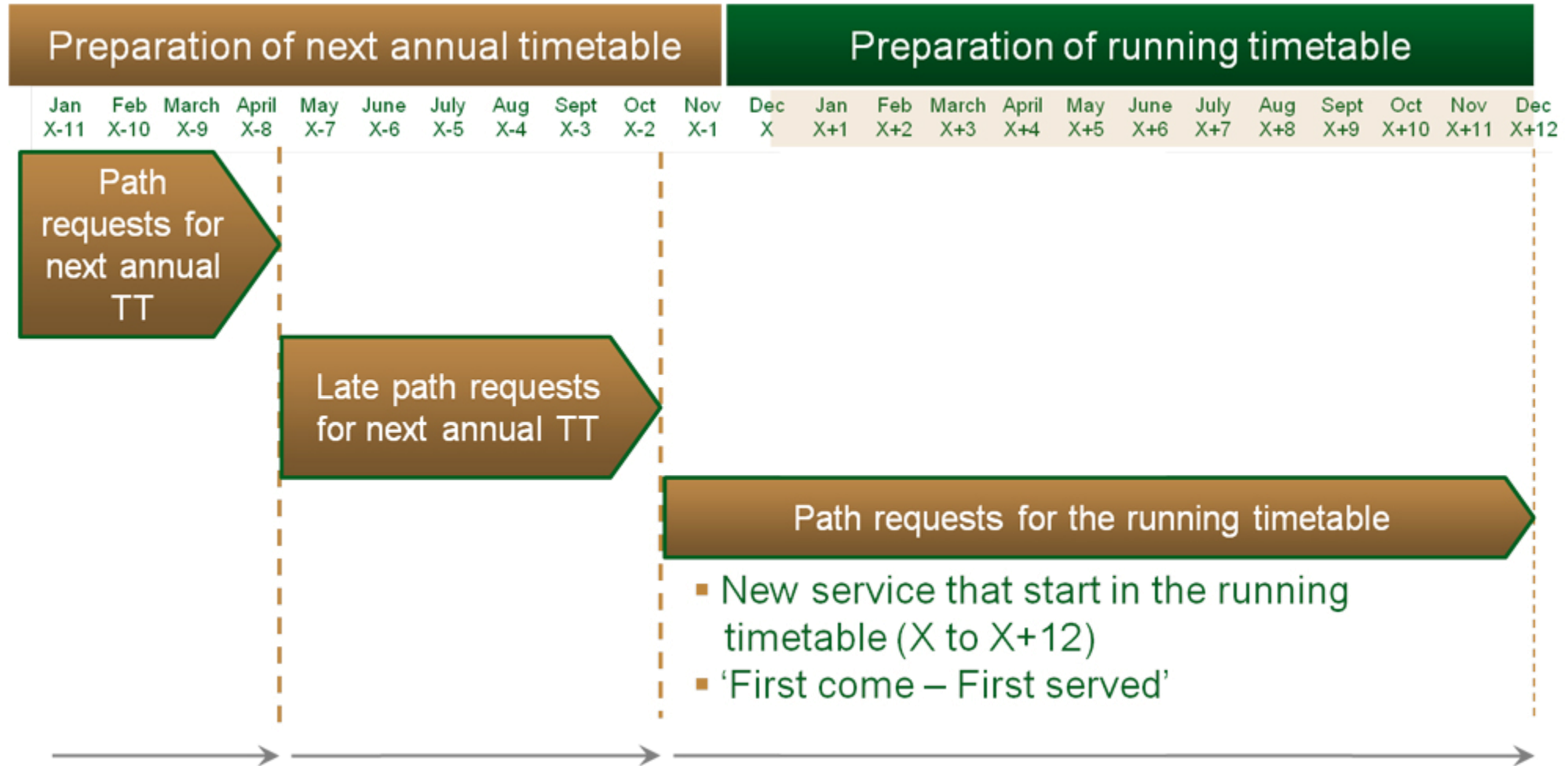
Art. 46: Coordination process

Art. 48: Ad-hoc requests

Art. 50: Capacity analysis

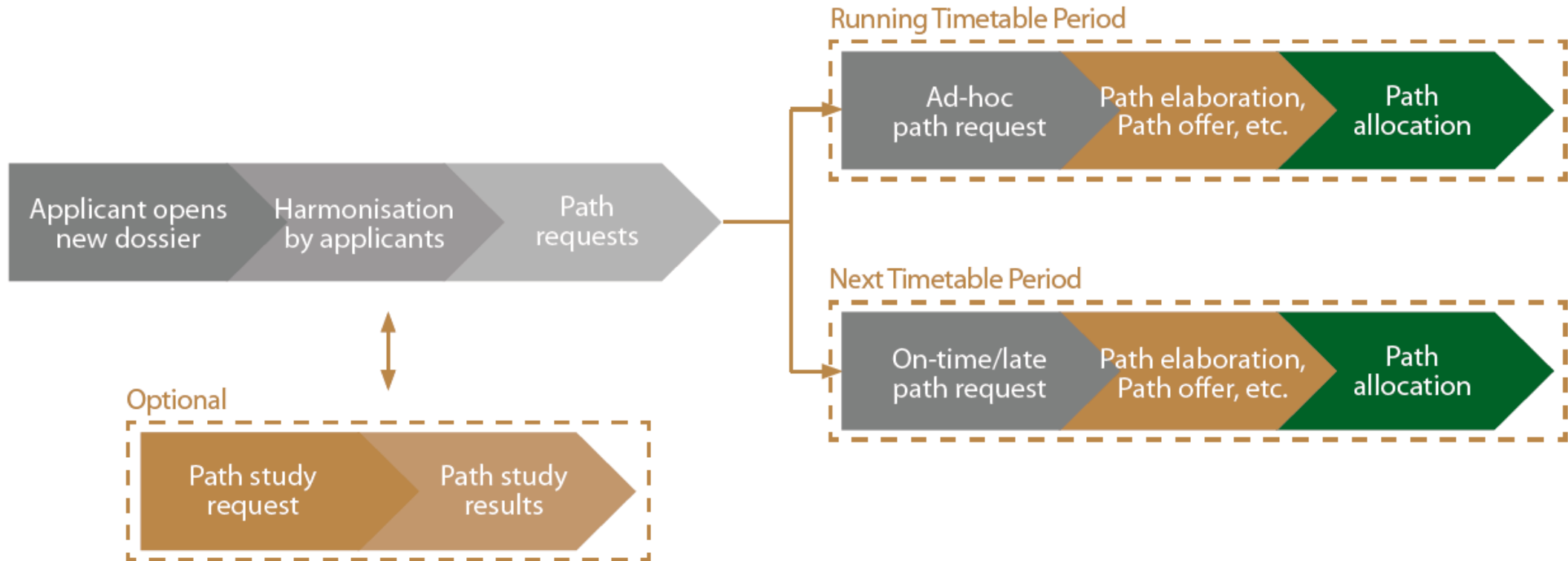
Art. 53: Infrastructure capacity for maintenance work

# Timetabling phases



# Timetabling process and PCS workflow

## Path Coordination System (PCS) and Timetabling Process



→ *Automatic recognition of process type according to the time of the year*

# Overview of functional architecture



## PCS Core System – Web Application

- No installation needed, only a standard web browser
- Users work with web browser and place requests directly into PCS
- Several Excel import/export possibilities are supported

## PCS Interface (Integration Platform – PCS IP)

- No double data input – you type it once into your system, the data is forwarded to PCS and vice versa
- Any change in a dossier data or status that is relevant for your company is transmitted to your system



# PCS environments

- Production system

<https://pcs-online.rne.eu/pcs/login>



- School system

<https://pcsschool.rne.eu/pcs/login>



The system is kept for training sessions  
It's always in the same state as PCS Production

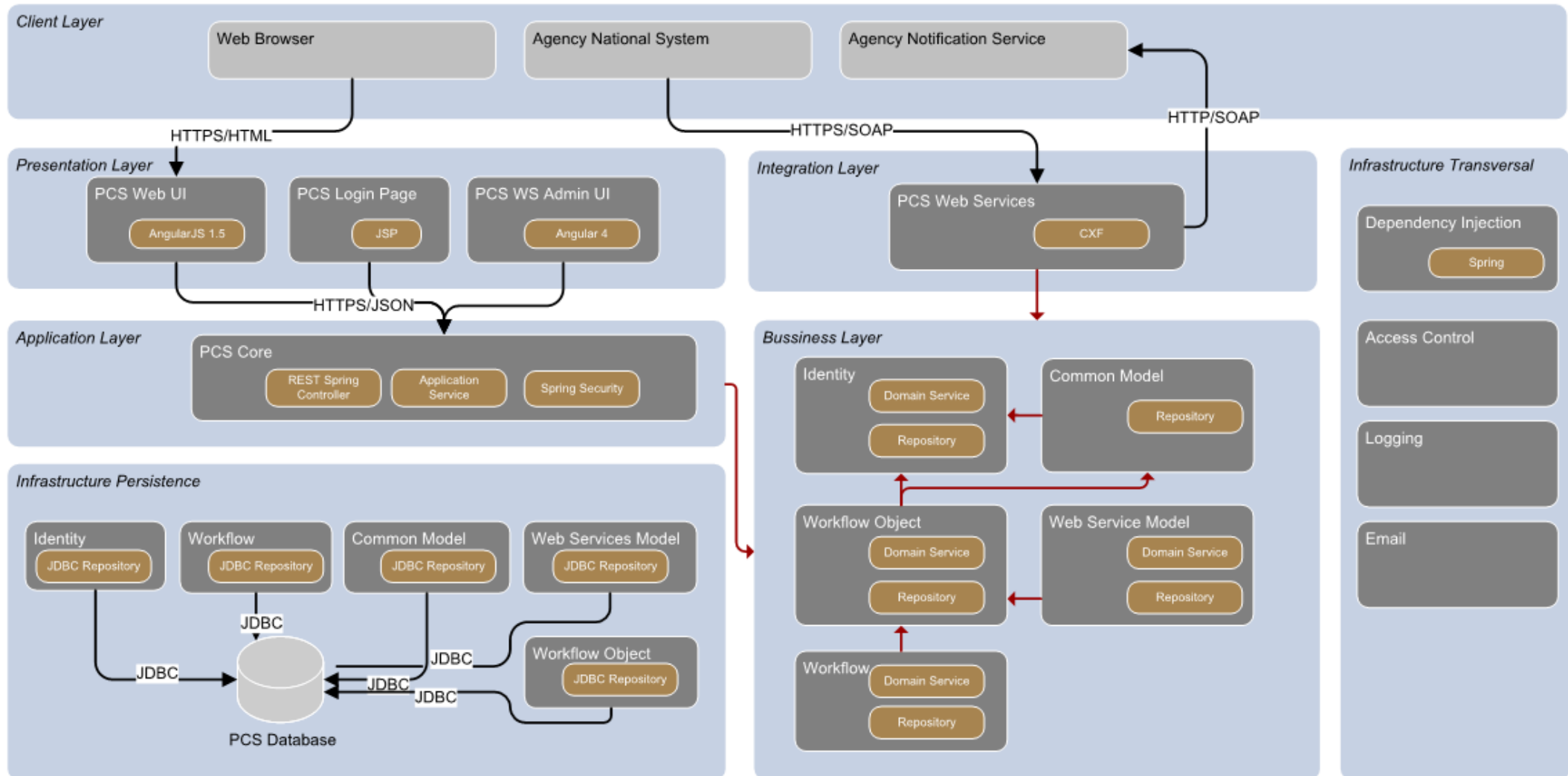
- Test system

<https://pcstest1.rne.eu/pcs/login>



Then company abbreviations (e.g. db-nz, password always 09)  
It always comes with the most recent developments

# PCS Architecture





# Who is in PCS?

# Who is in PCS?



1500

**Users**

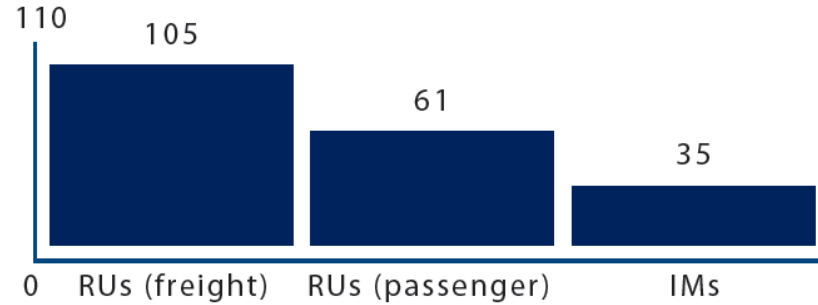
There are approximately 1500 active PCS users



30

**Countries**

30 countries throughout Europe use PCS on a daily basis



105

**RUs  
(freight)**

105 RUs require PCS to coordinate their desired timetables for their international freight lines

61

**RUs  
(passenger)**

61 passenger RUs use PCS to coordinate their timetables for international trains across Europe

35

**IMs**

35 IMs in Europe use PCS to harmonise their paths for cross-border traffic

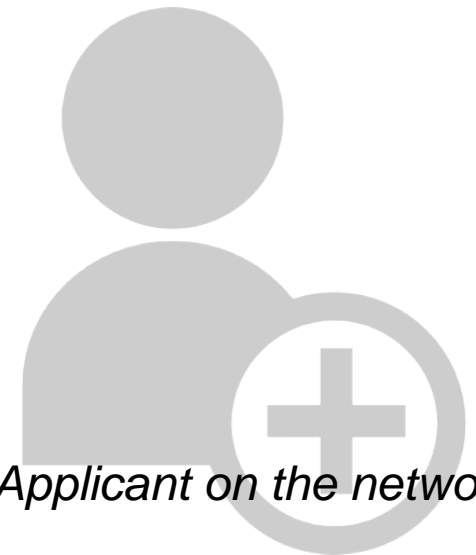
# Who is in PCS?



# How do you become a PCS user?

1. Contact PCS Support ([support.pcs@rne.eu](mailto:support.pcs@rne.eu))
2. Sign PCS User Agreement (if you haven't done so yet)
  - PCS User Agreement
  - PCS Interface Agreement for Users
  - PCS User Agreement with charges
3. Ask for new user account
  - Account with read-only rights
  - Account with editing rights
4. Start working with PCS

*Access to PCS is FREE OF CHARGE if your company is an **Applicant** or a non-RU Applicant on the network of one or more Members of RNE.*

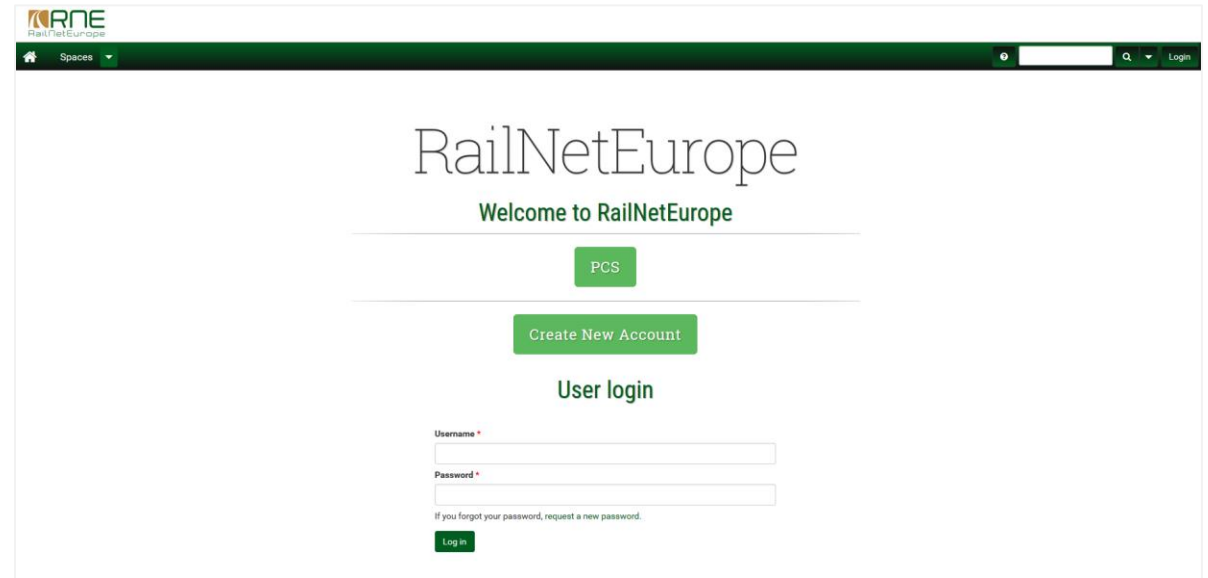


# Where can you read about PCS?

## RNE Content Management System

<http://cms.rne.eu/>

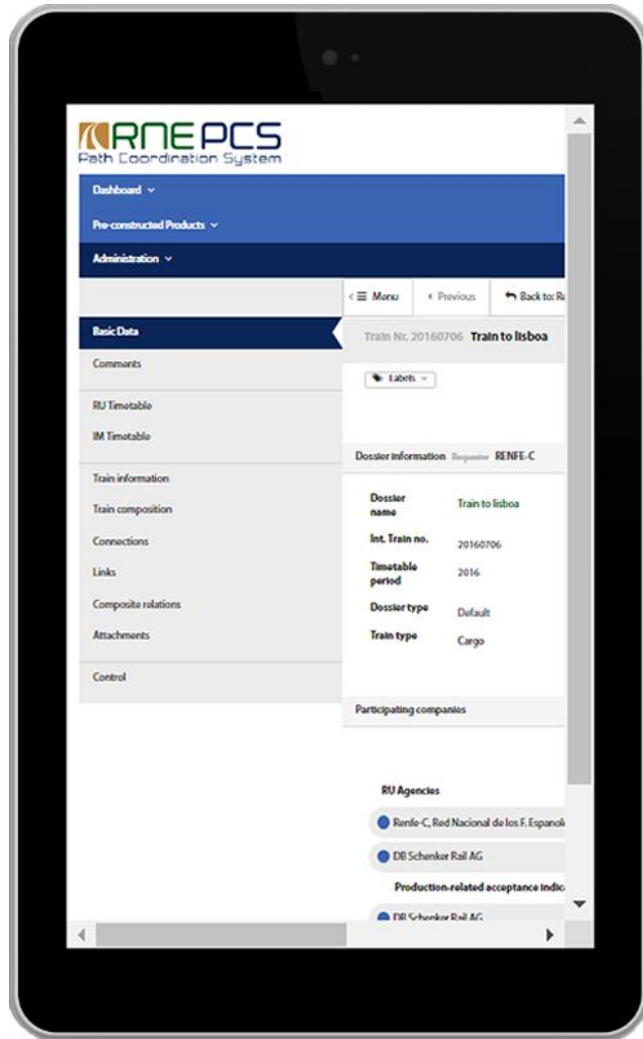
- Public content
- What will you find there?
  - Change Requests
  - Patch Management (fresh bug fixing summary)
  - Documentation:
    - » References (e.g. release summary, process description, basic information, general functions)
    - » Training materials (e.g. special ‘how to do’ documents, videos)
    - » Technical documentation (e.g. PCS Integration Platform Handbook, Migration Guide)



# CMS new Theme, multiple devices



# PCS on tablet or mobile phone



Yes, PCS too!

# CMS: Integration

