RNE PCS
Path Coordination System

Digitalisation Conference and Fair
Budapest, 24th October 2016

What is PCS?

- Introduction to the system -

What is PCS?

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

- Railway Undertakings (RUs)

- Infrastructure Managers (IMs)

- Allocation Bodies (ABs)

- Rail Freight Corridors (RFCs)

PCS optimizes international path coordination by ensuring that path requests and offers are harmonized by all involved parties.
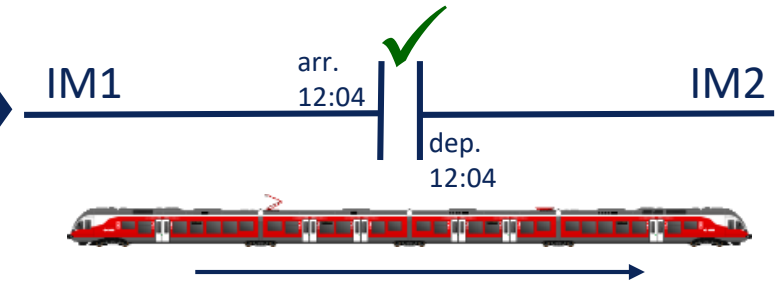
What is PCS?

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

Construct → Publish → Request → Reserve → Allocate

IM1   arr. 12:04 ✓   IM2
dep. 12:04

Planned Train composition

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Who is in PCS?

Who is in PCS?

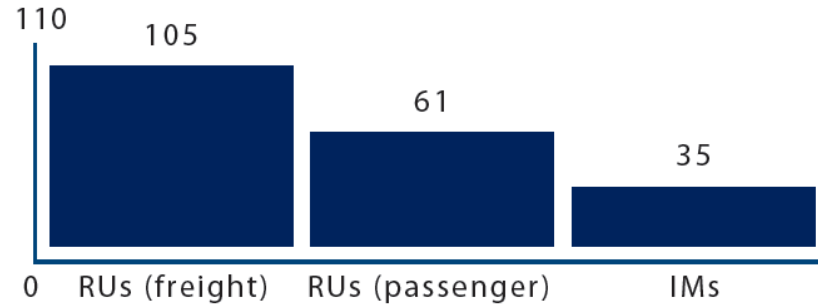| 1500	30	105	61	35
Users	**Countries**	**RUs** (freight)	**RUs** (passenger)	**IMs**
There are approximately 1500 active PCS users	30 countries throughout Europe use PCS on a daily basis	105 RUs require PCS to coordinate their desired timetables for their international freight lines	61 passenger RUs use PCS to coordinate their timetables for international trains across Europe	35 IMs in Europe use PCS to harmonise their paths for cross-border traffic

Who is in PCS?

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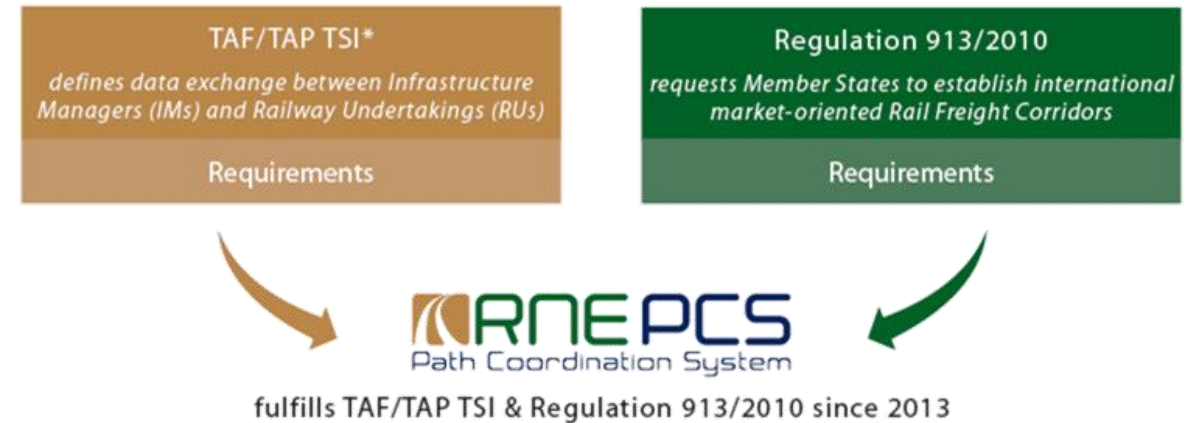Including extensions expected in 2017 as indicated by the RFCs*
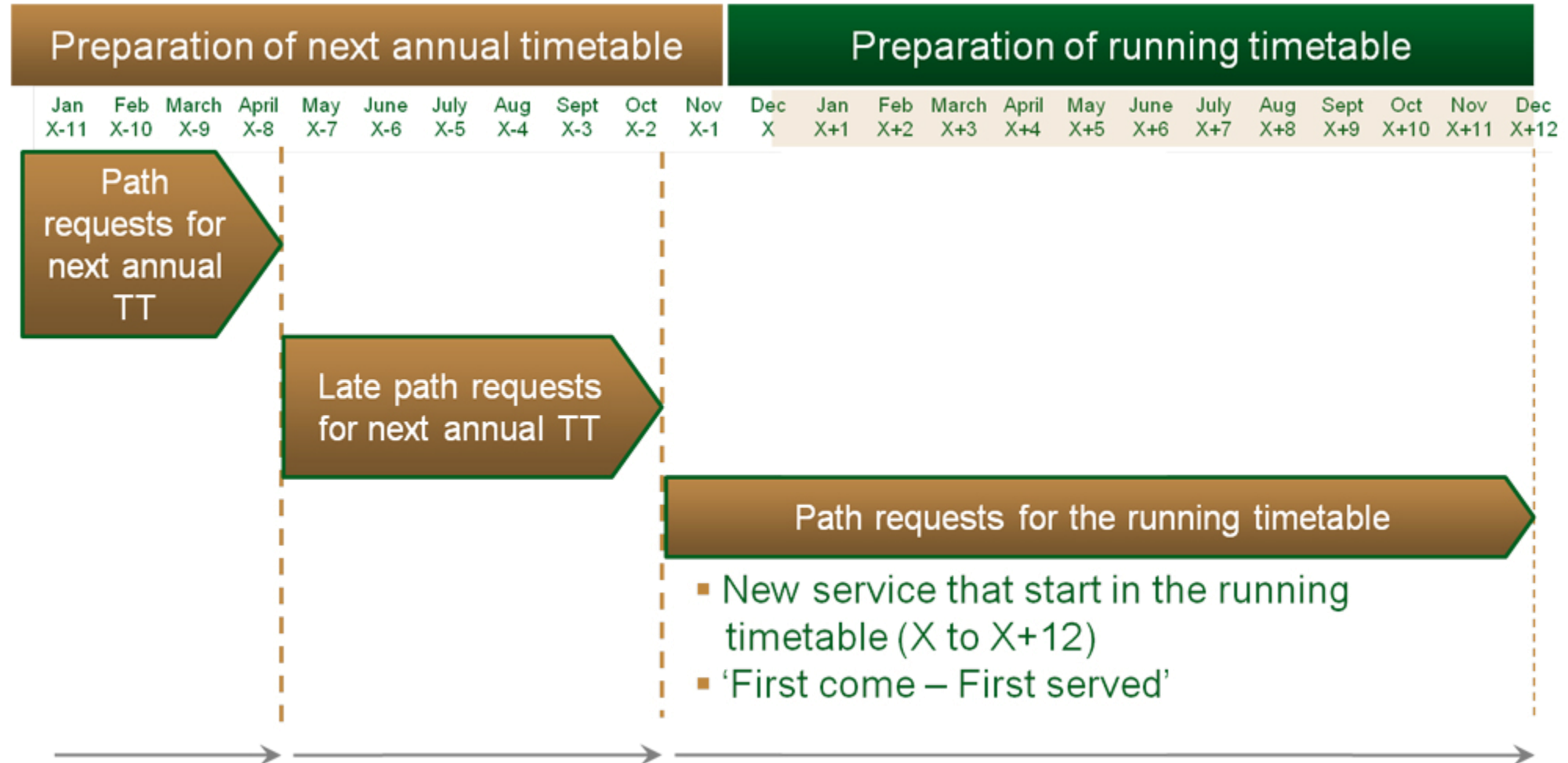
What is in PCS?

What is in 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 and processes (2006/62/EC)
- Available and reserved capacity Pre-arranged Path
- National IM parameters (Network specific parameters)

TAF/TAP TSI*

defines data exchange between Infrastructure Managers (IMs) and Railway Undertakings (RUs)

Requirements

Regulation 913/2010

requests Member States to establish international market-oriented Rail Freight Corridors

Requirements

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fulfills TAF/TAP TSI & Regulation 913/2010 since 2013

Timetabling phases

	Preparation of next annual timetable	Preparation of running timetable

| Jan X-11 | Feb X-10 | March X-9 | April X-8 | May X-7 | June X-6 | July X-5 | Aug X-4 | Sept X-3 | Oct X-2 | Nov X-1 | Dec X | Jan X+1 | Feb X+2 | March X+3 | April X+4 | May X+5 | June X+6 | July X+7 | Aug X+8 | Sept X+9 | Oct X+10 | Nov X+11 | Dec X+12 |

Path requests for next annual TT

Late path requests for next annual TT

Path requests for the running timetable

- New service that start in the running timetable (X to X+12)
- 'First come – First served'

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Timetabling process and PCS workflow

Path Coordination System (PCS) and Timetabling Process

Running Timetable Period

| Ad-hoc path request | Path elaboration, Path offer, etc. | Path allocation |

| Applicant opens new dossier | Harmonisation by applicants | Path requests |

Next Timetable Period

| On-time/late path request | Path elaboration, Path offer, etc. | Path allocation |

Optional

| Path study request | Path study results |
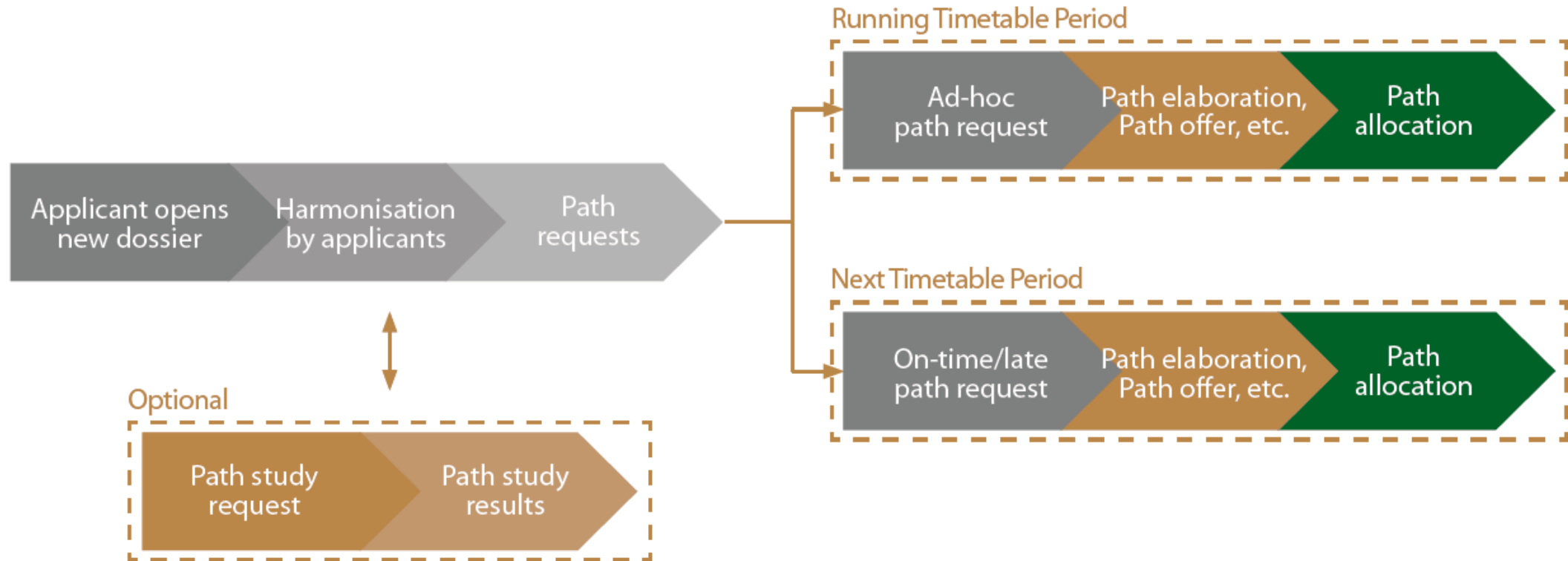
→ *Automatic recognition of process type according to the time of the year*

PCS simplified workflow

RUs (roles)

Start

Harmonisation by RUs → Path request → Acceptance

IMs (roles)

Elaboration by IMs → Offer (path details) → Path booked

End (path ready to use)

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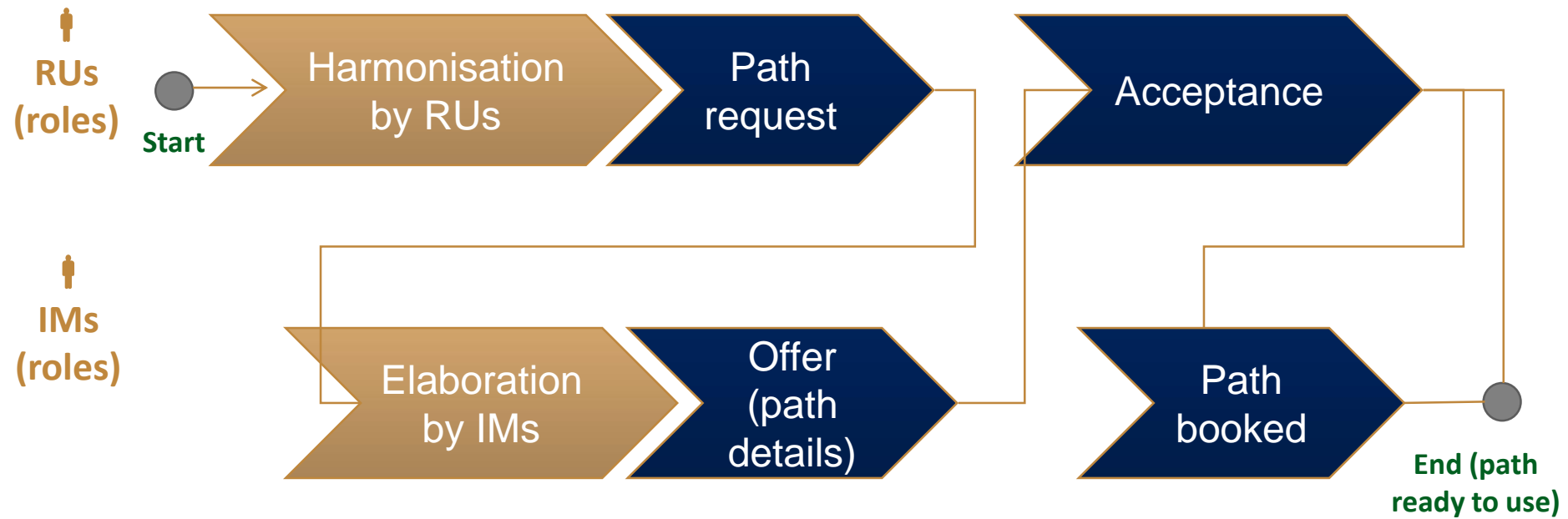
Overview of PCS functional architecture

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
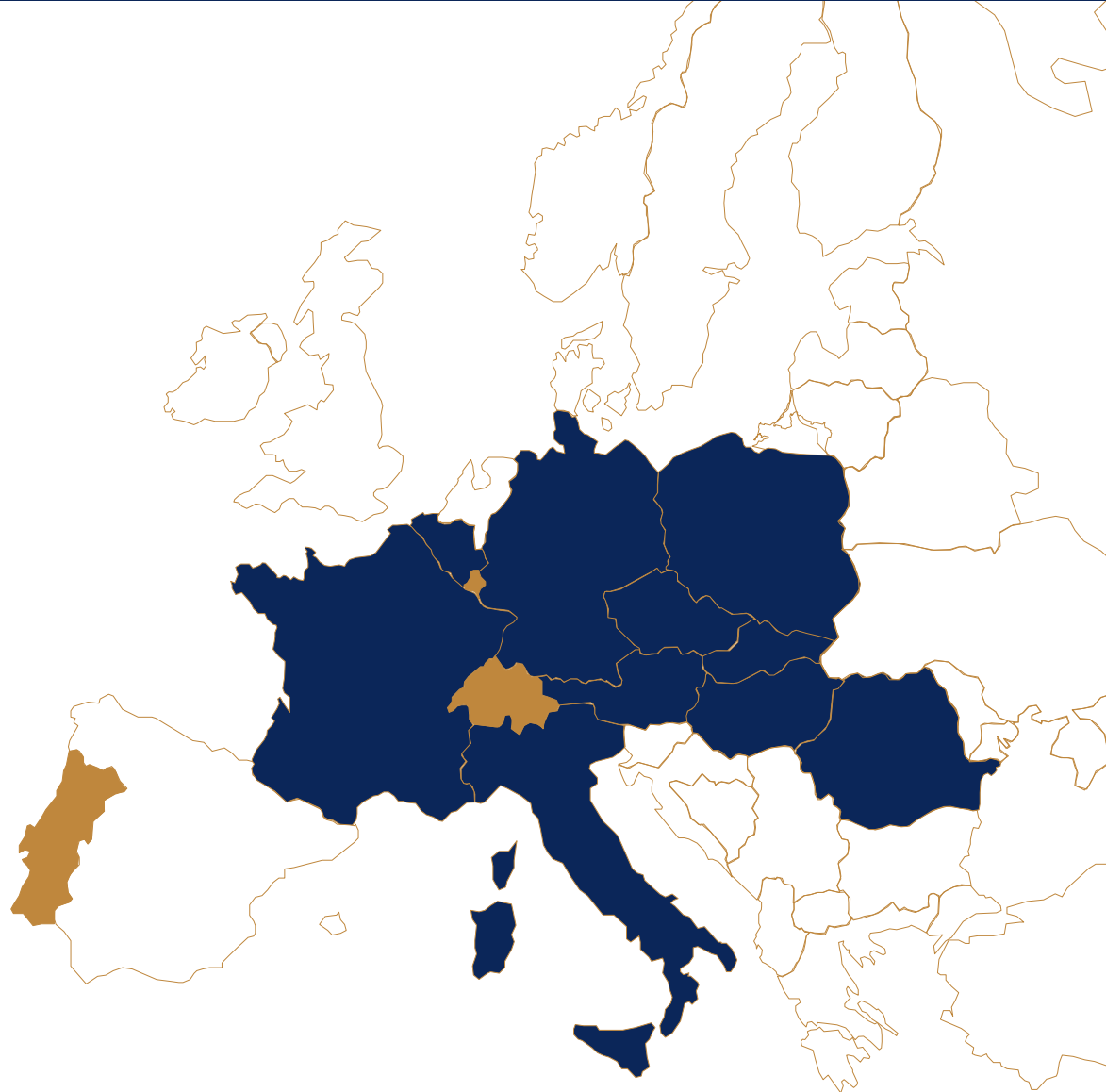
PCS interface map

Current interface partners

CFR, CD, DB Netz, Infrabel, PKP PLK ÖBB, RFI, SBB, SNCF Réseau, SZDC, ZSR, VPE

Future interface partners

DB Cargo, IP, RCA, SBB, B Logistics, SNCF Fret

PCS environments

- Production system
  https://pcs-online.rne.eu

- School system
  https://pcsschool.rne.eu

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

- Test system
  https://pcstest1.rne.eu

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

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Who works behind PCS?

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PCS team

Philipp Koiser
Sales &TT Manager RNE

Jorge Campo
PCS Functional Manager

Máté Bak
PCS Technical Manager

Netcetera

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Decision making and advisory boards

Sales & TT WG
Business experts from **all** IMs/ABs/RFCs (2x per year)

→ Proposals →
← Decisions ←

RNE MB / GA

TT Support Group
Business experts from **various** IMs/ABs/RFCs (4-6x per year)

RNE IT PCS

PCS Change Control Board

Functional Specifications →

Development

RU Advisory Group   RUs

'Veto' privilege

RFC Community   RFCs

PCS Technical Board

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Where can you read about PCS?

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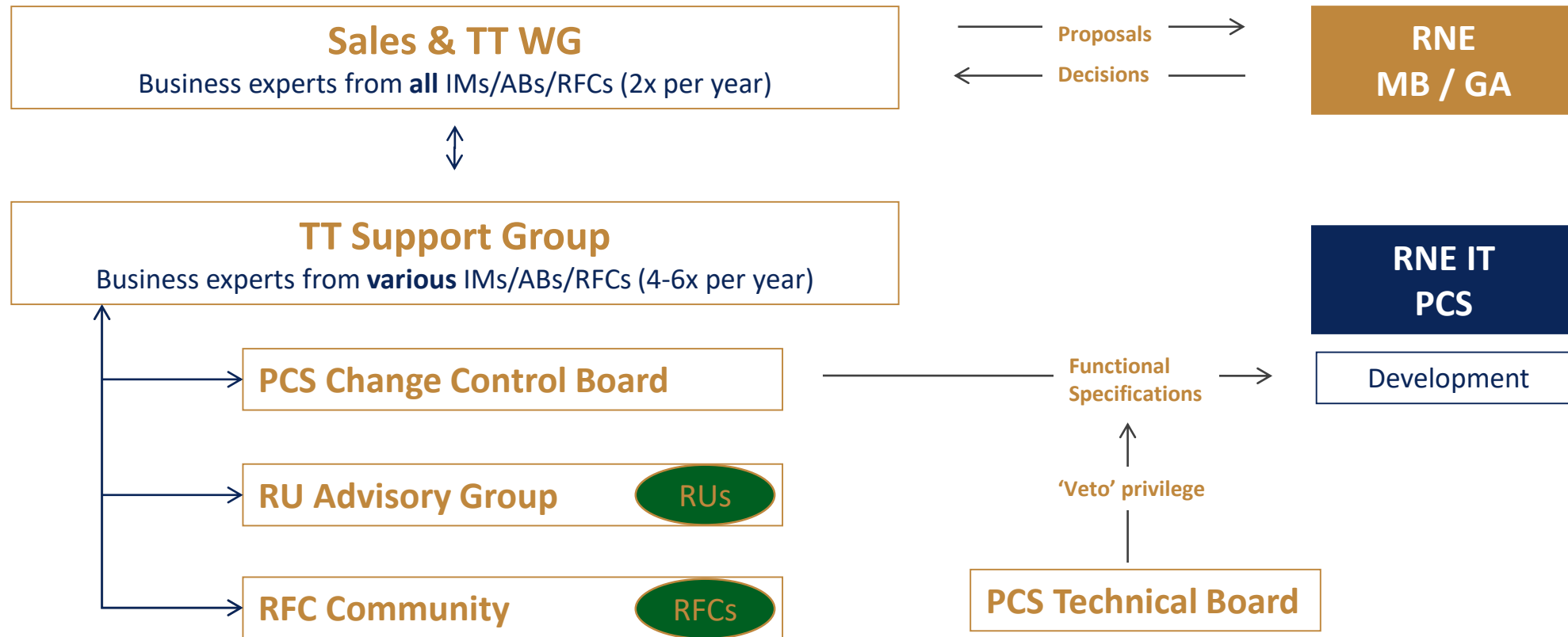
Where can you read about PCS?

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)
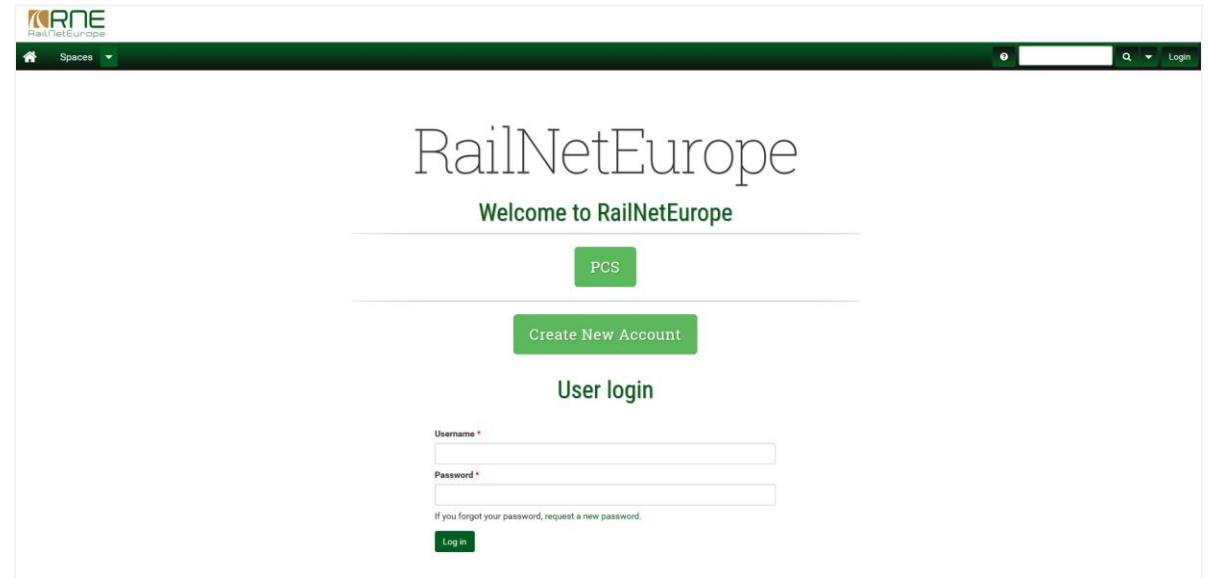
How can you become a PCS user?

1. Contact PCS Support (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

Price Model

Price Model from 1st January 2016

- **PCS is completely financed by the RNE (Infrastructure Manager´s)**
  - IMs are financing the System as RNE Members
  - Non RNE Members have a special contract and have to cover their maintenance
- **PCS usage for RUs is free of Charge**
- **PCS usage of the interface is free of Charge**

Additional services like own test system, special maintenance is charged on time and material

Thank you!