

# Forum Train Europe FTE

The European coordination platform of  
railway undertakings



FORUM TRAIN EUROPE

PLANNING TRAINS TO CONNECT EUROPE

**Preliminary  
results !**

**Draft: does not  
include all  
sources**

## Service Facilities Research

FTE WG Passengers and Freight

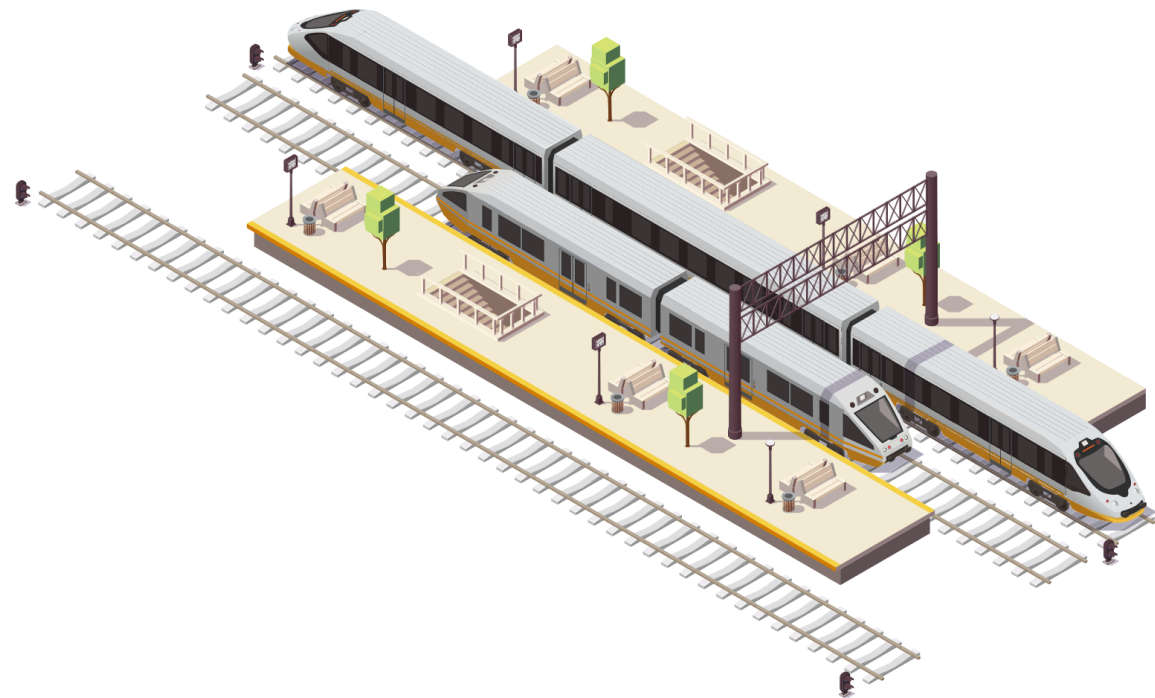
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- **Introduction**
  - Scope
  - Disclaimers
- **Storage sidings**
  - Passenger RUs' perspective
  - Freight RUs' perspective
- **Freight terminals**
  - Actors diagram
  - Key points
- **Preliminary conclusions**



## Description and scope

Integration of service facilities (SF) in the capacity management process.



FTE's objective – Creation of a report for future implementation of needs and criticalities of SFs.

Student's objective – Development of master's thesis in Mobility Engineering for graduation in July 2023.

## Case study

IT & SL, with input from other countries.

Service facilities selected:

- **Storage sidings (F + P)** 
- **Freight terminals (F)** 

**Sources** Contribution from interviews carried out with stakeholders\*. The identities are confidential.



## Research questions

- **Map current practices and processes**
- **Detect criticalities**
- **Find best practices**
- **List market needs**

\* with some stakeholders the contribution was limited

- **Preliminary results, changes in final considerations may occur.**
- **Not all the contributions have been processed yet.**
- **Contributions are anonymous. The author undertakes to maintain this anonymity as far as possible.**
- **Other forms of contributions are included. These will be treated in the same manner, respecting the confidentiality.**



# Storage siding

Passenger RUs' perspective

Freight RUs' perspective

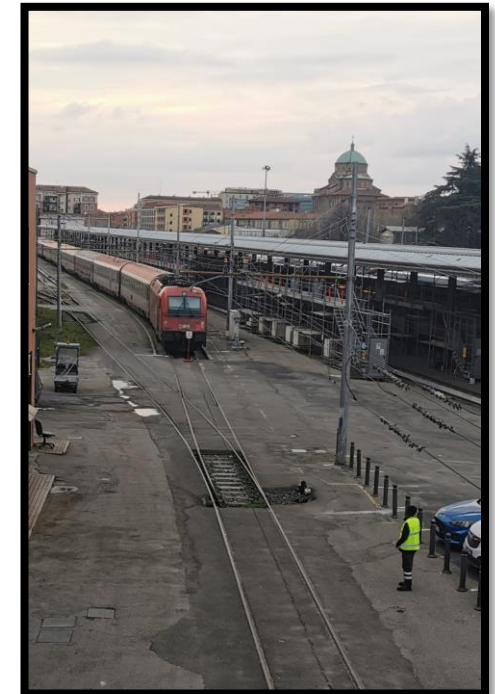


## Basics

- **Definition:** Use of a track to park a train or wagons for a short or long period of time
- **Not part of minimum access package** → IMs not obliged to offer sidings with rail path allocation
- **Ownerships:** Mostly IMs, some countries partially RUs
- **Essential fact:** It can be carried out on station platform or specific sidings, with different rules and costs

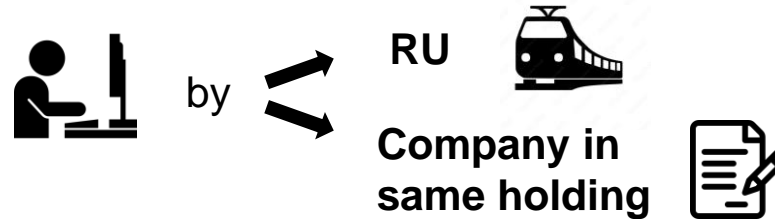
## What is storage siding for you?

### *Users*



## 1. When is it requested?

- Alongside the path request in ATT



## Interviewees



2 RUs in 2 countries

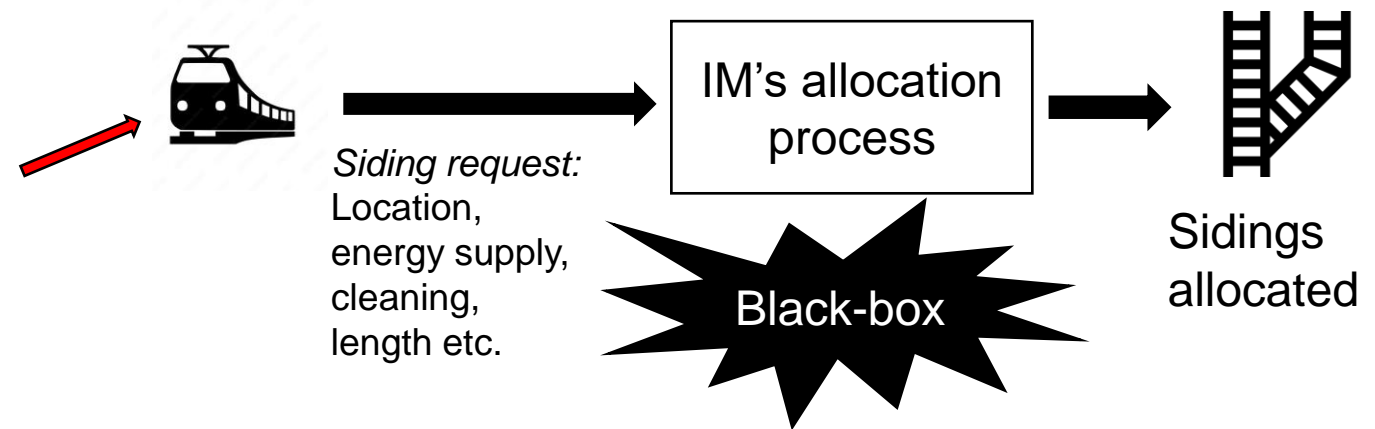
## 2. Importance

- Critical bottleneck, especially when auxiliary services needed

## 3. How is it requested?

- Differences between countries
- Requested in national IT system
- IM does not enable RUs to check feasibility
- Possible exchange before the request

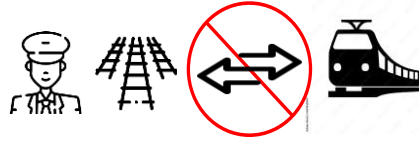
Country #1: Rail path and storage siding allocated simultaneously  
Country #2: Rail path allocated regardless storage siding



## 4. Criticalities

- Lack of transparency of auxiliary services in sidings EXAMPLE

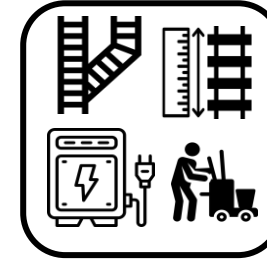
## 5. Long-term collaboration

- No** moment of exchange 
- Desired moment would be before January → RUs ready for FTE A timetable conference
- Sensitive to commercial power → small RUs would have low influence on siding planning

## 6. Market needs – Best practices

- Accessibility of sidings should not be fragmented → RUs only pay rent
- Modern IM-IT tools with up-to-date data
  - Precise information about sidings must be published
  - Digital map of SFs with **real-time occupation**
- Not urgent need to integrate sidings in PCS

Auxiliary services needed





## 1. When is it requested?

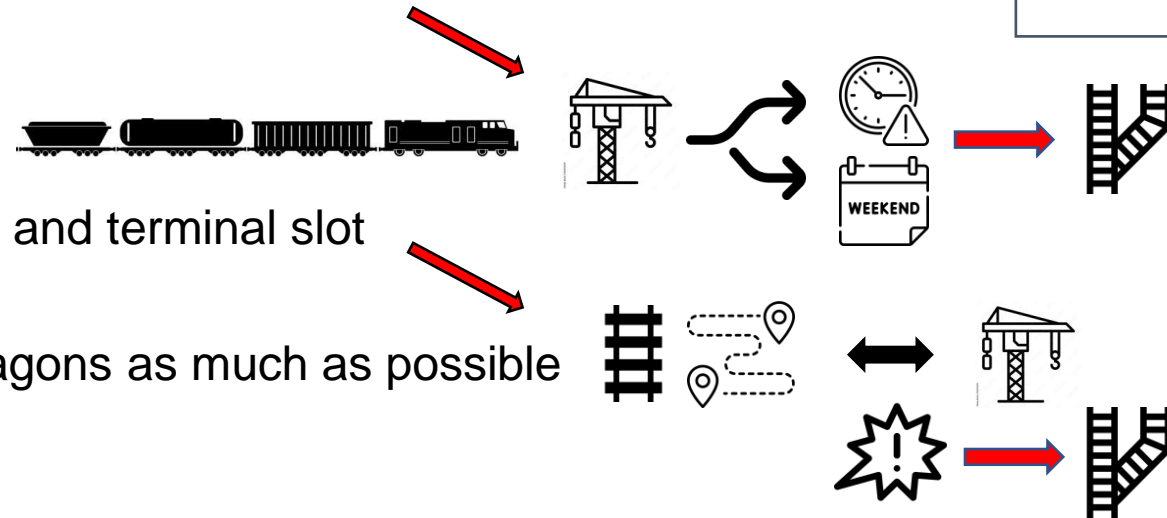
- Mostly in short term → difference to passenger RUs
- Typical usage → Delays, spare wagons, transfer of wagons in stations

## 2. Importance

- Essential for conflicts between rail path and terminal slot
- Parking a train is a financial loss  
→ RUs strive to avoid it and use the wagons as much as possible

## 3. How is it requested?

- It is possible to request sidings alongside the rail path in ATT, yet it rarely occurs
- RUs check **informally** with IM for feasibility



## Interviewees



8 RUs in 6 countries

## 4. Criticalities

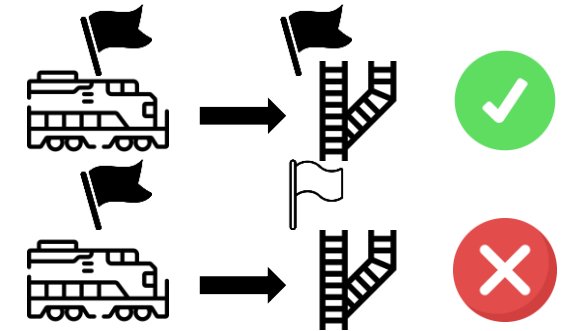
- Tendency by IM to discourage parking in national infrastructure → difficult access
- Problem of parking rolling stock by partner RUs in **operation phase** EXAMPLE
- Some countries → no formal allocation (good will of IM to keep the promise)

## 5. Long-term collaboration

- Mostly **no** long-term collaboration between IMs and RUs.
- In some countries, sidings access are perceived as efficient (not top of priority)

## 6. Market needs – Best practices

- Modern and updated IM-IT tools → Digital map of SFs with real-time occupation
  - Romania – Excel overview of sidings and occupation status
  - Germany – IT system with available tracks (RU can choose)
- Formalised (but not bureaucratic) sidings allocation



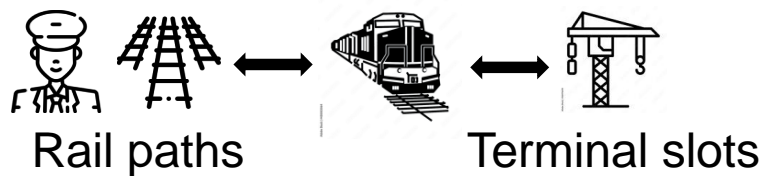
# Freight terminal

Actors diagram

Key points

## Basics

- **Definition:** It enables freight trains to connect with other modes of transport
- **Ownerships:** Private, public or RU owned.
- **Not part of minimum access package** → freight terminal slots not automatically allocated with rail paths
- **Scope:** Understand how terminal slot are harmonised with rail path, criticalities and market needs.

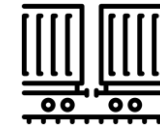


Integrated only until a certain extent

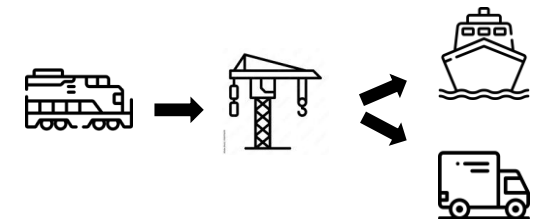
***This must improve***



## Users

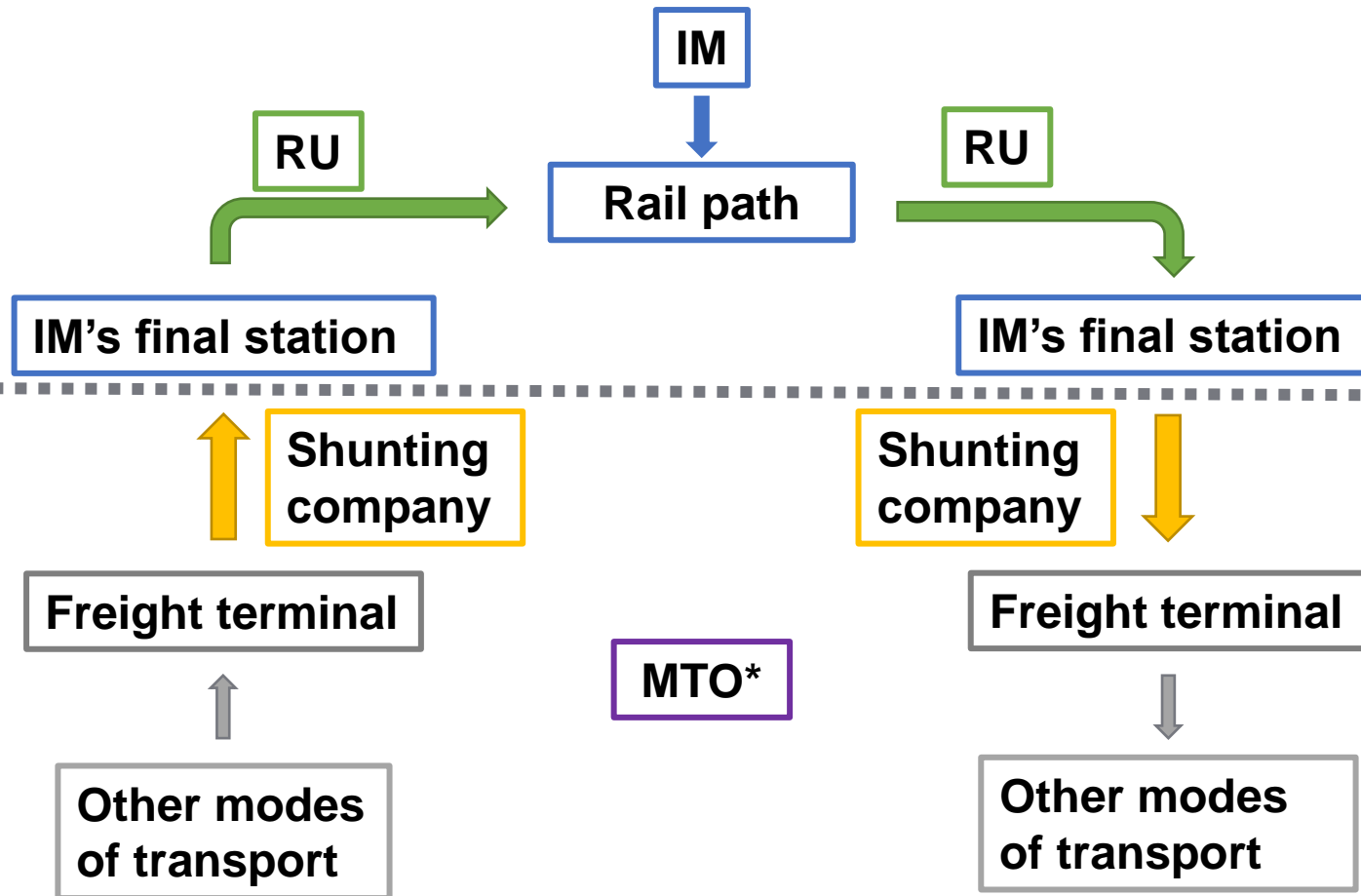


## Transport chain



# Freight terminal - Actors diagram

## Typical scheme of freight transport



## Interviewees:



6 RUs in 4 countries

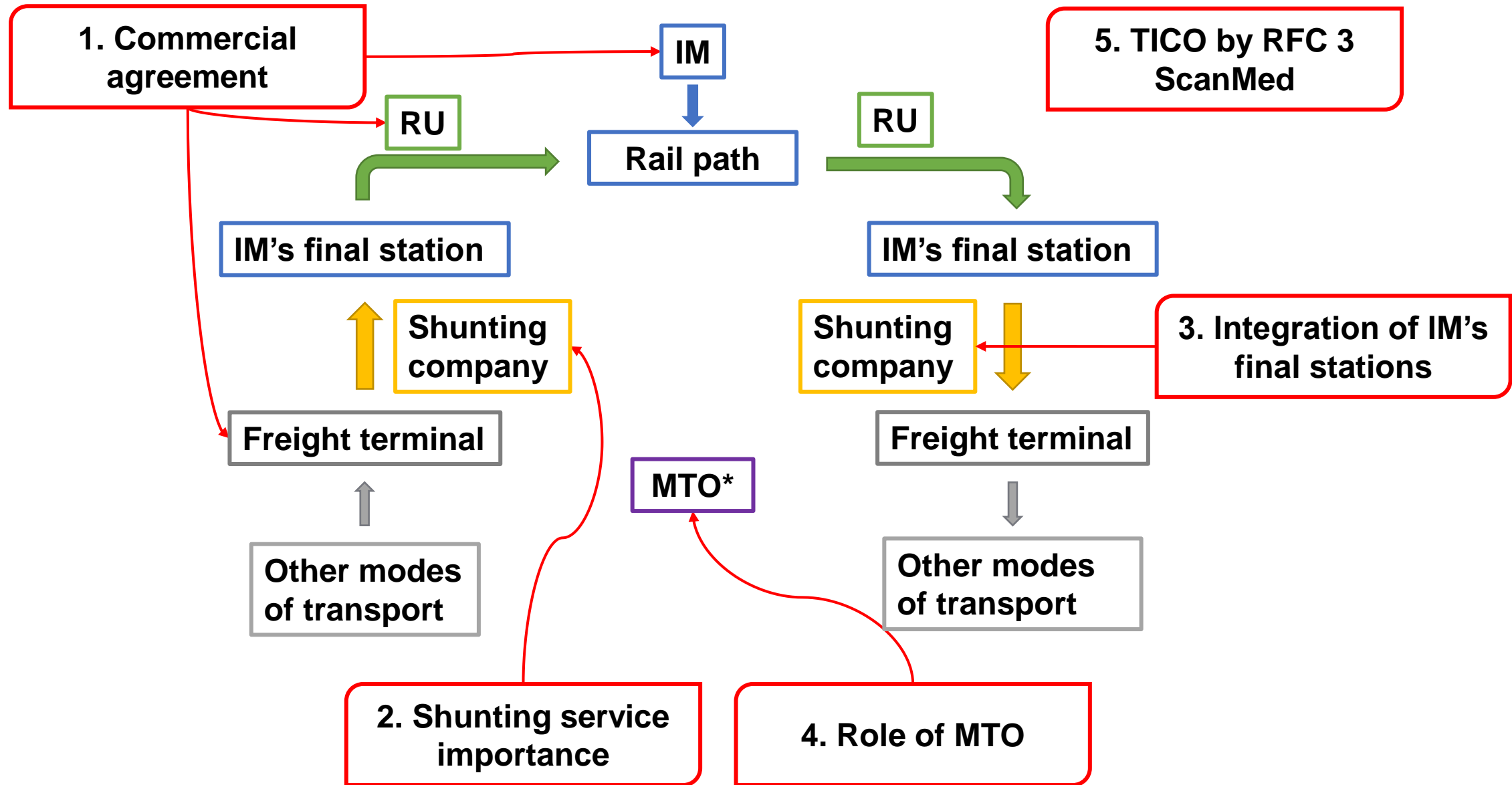
Rail path allocation processes

Freight terminal operations

Necessity of research

\*Multimodal Transport Operator (MTO), it coordinates different transport modes and have contracts with the final customer

# Freight terminal - Key points





**What is it?** Document required by IM to RUs in ATT in **Italy**.

**Aim** It states the RU acceptance in the freight terminal. Mandatory to keep right to rail paths.

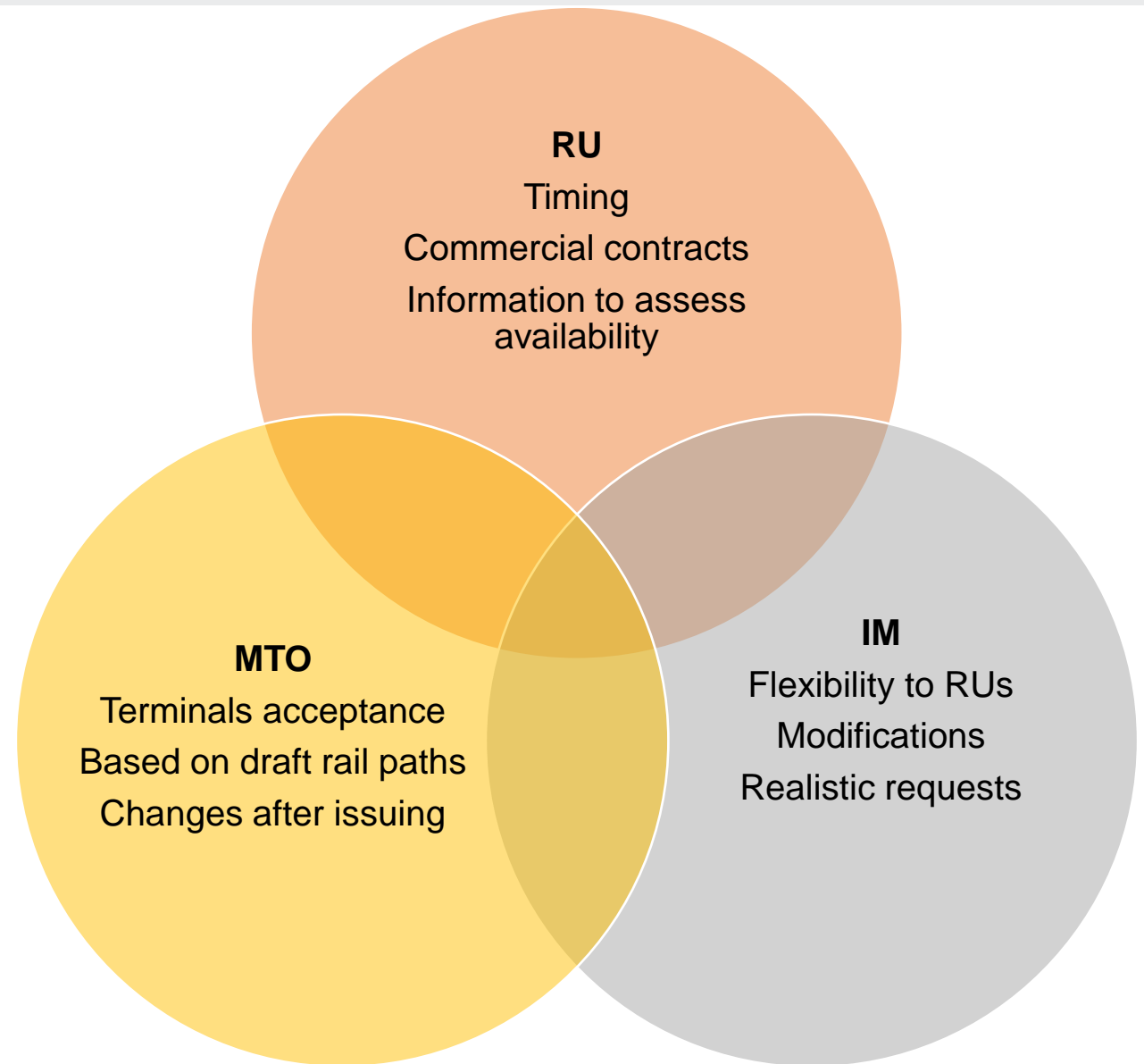
**Perspectives on this document by three stakeholders**



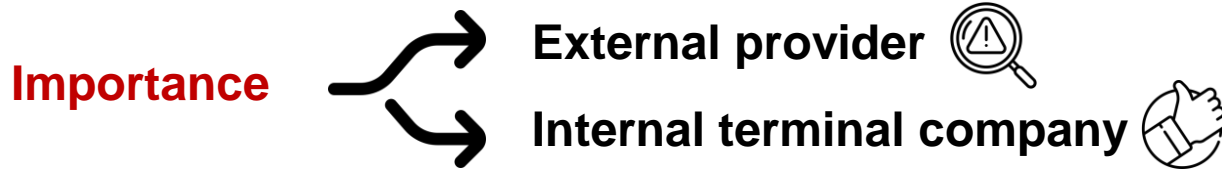
July/August



**How does it work in your country?**

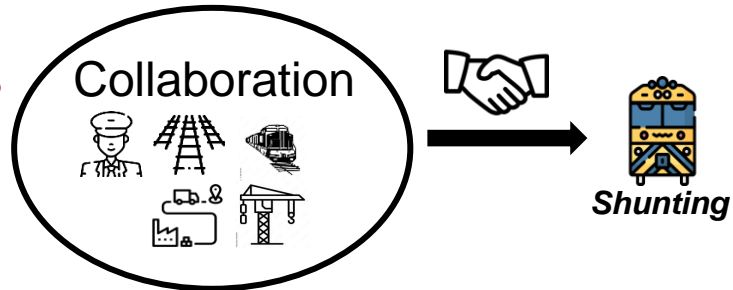


# Freight terminal - Shunting company

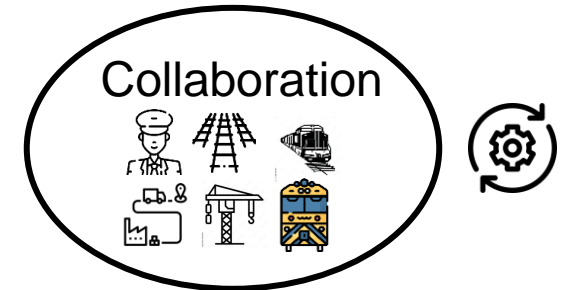


## Stakeholder meetings

• Ext. company →



Int. company →



• Lack of medium long-term planning of shunting

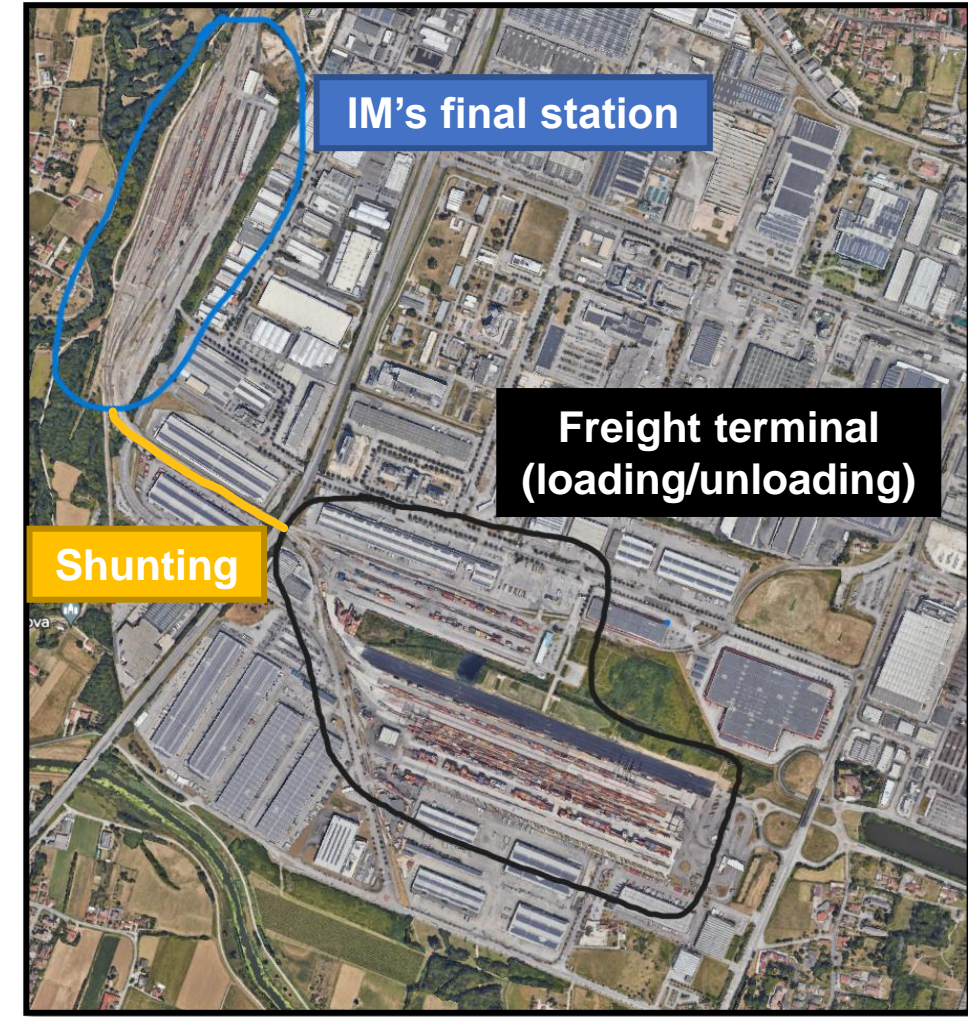
## Risks of integrations?

• RU's comment →



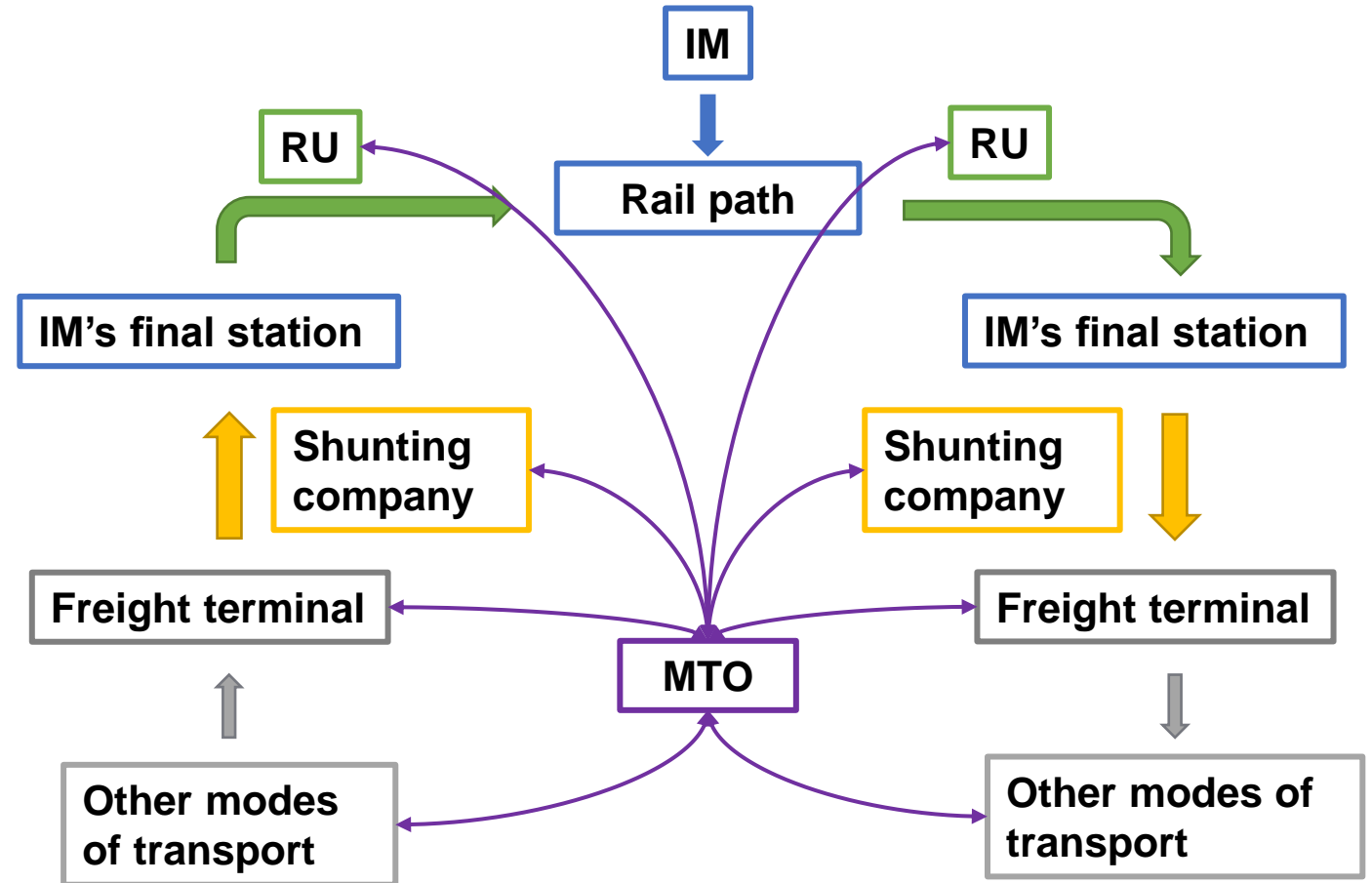
## Stations owned by IM

- **Final stations of rail paths**
  - Shift between **IM and service facility** infrastructure
- **Access necessary but not sufficient for RUs**
  - Critical point of transport chain, capacity shortage
  - In case of delays, problems with shunting
- **IM should check the capacity before allocation of rail path**
  - RUs state that it actually happens later
- **Integration of SFs limited to final stations**
  - RU or MTO harmonise with freight terminals



## Basics

- The MTO is often the **real planner** of the transport
- It coordinates different transport modes
- Often it is the actor deciding the timing with freight terminals → input information for RU
- It may **request train paths** and only later entrust them to an RU



## *What is TICO?*

Terminal Integrated Capacity Offer

***PaP + slot in terminal***

## Interviewees



6 RUs, 2 IMs, 5 SFs, 2 MTOs  
in 6 countries

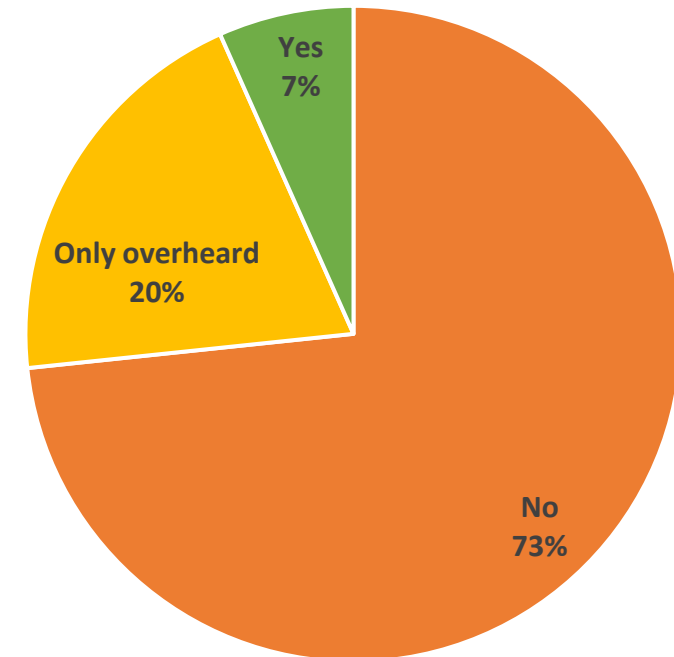
## Basics

- **Aim?** To integrate rail paths with slots in freight terminals
- **Who?** Offered by RFC 3 ScanMed

## Main comments from interviews

- It is rare that the RU oversees the request for the terminal slot, thus potential two options (not excluding themselves) can be investigated.
- Option 1: The MTO may be the applicant, as it is the planner of transport
- Option 2: RUs sell the complete product of services to MTO
  - Including traction, shunting, and handling of goods
  - Importance of **including the shunting company** operations
- **The success of TICO relies on effectiveness of PaPs and RFCs**

## *Do you know TICO?*



# Preliminary conclusions



## Storage sidings

- Sidings are mostly used in case of problems between terminal slots and rail paths (F), and to park train over-night or in turnaround (P)
- Need for a formalised transparent process but not bureaucratic, (F) parking trains is a financial loss
- Need for IM-IT tools, with specific information e.g. sidings parameters (P), real-time occupation (F)

## Freight terminals

- Rail path allocation process does not include terminal slots (goes only until IM's final stations)
- RU or MTO harmonise the two processes (not always same actor). When MTO is the planner, the terminal slots are simple inputs for the RUs
- Shunting service is a key. However, if it is an external company, its integration could be risky

**What is your opinion?** Any contribution or experience is valuable for the research



**FINAL  
REPORT  
AVAILABLE  
IN SUMMER  
2023**

# Thank you for your attention



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