# TIME IN**TIME**TABLING

**László Pósalaki**
**Head of Capacity Allocation Department**
**VPE Kft.**
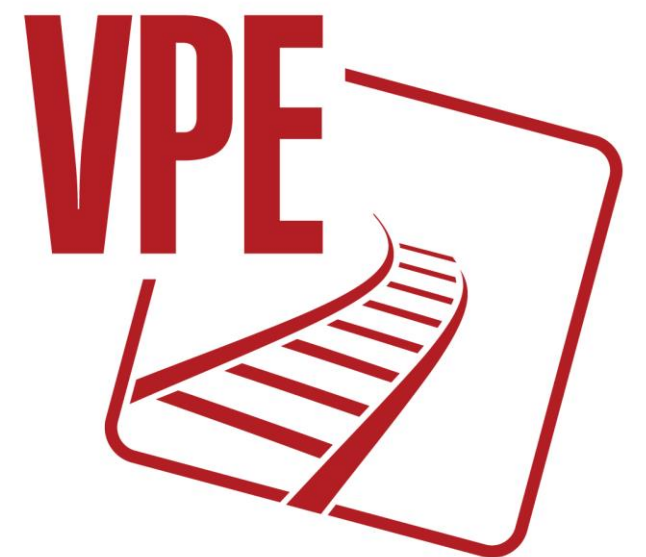
# Where is the time in timetable?

**Hours**
**Minutes**

- Traffic management
- Information for Passengers and RUs
- Handling of disturbances

**Days**

**Daily timetable planning**

**Years**
**Months**

- Planning of Rolling stock
- Planning of Capacity and Procedures
- Annual timetable planning, order of capacity
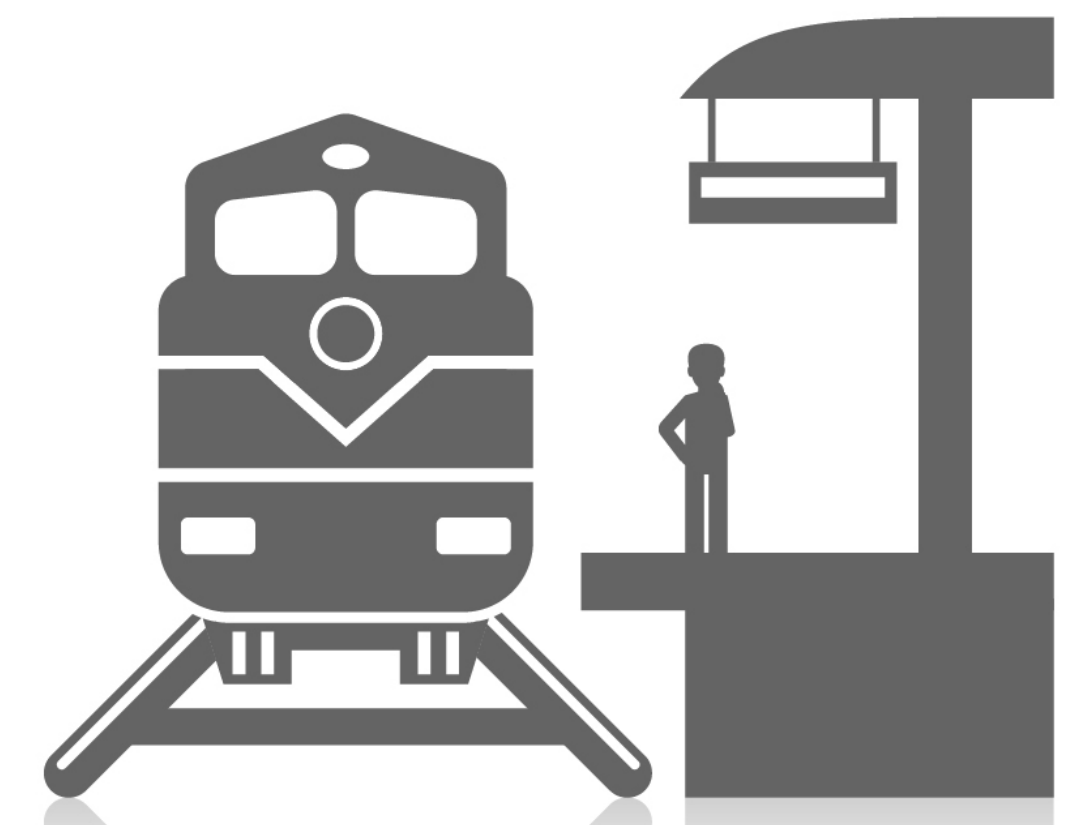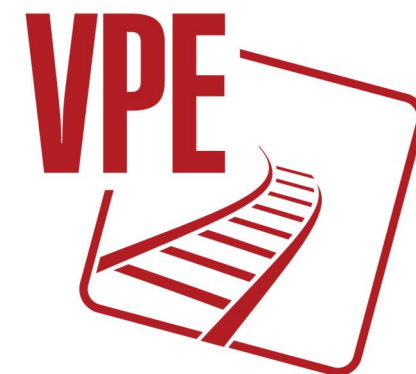- Turnaround planning (staff, vehicles)
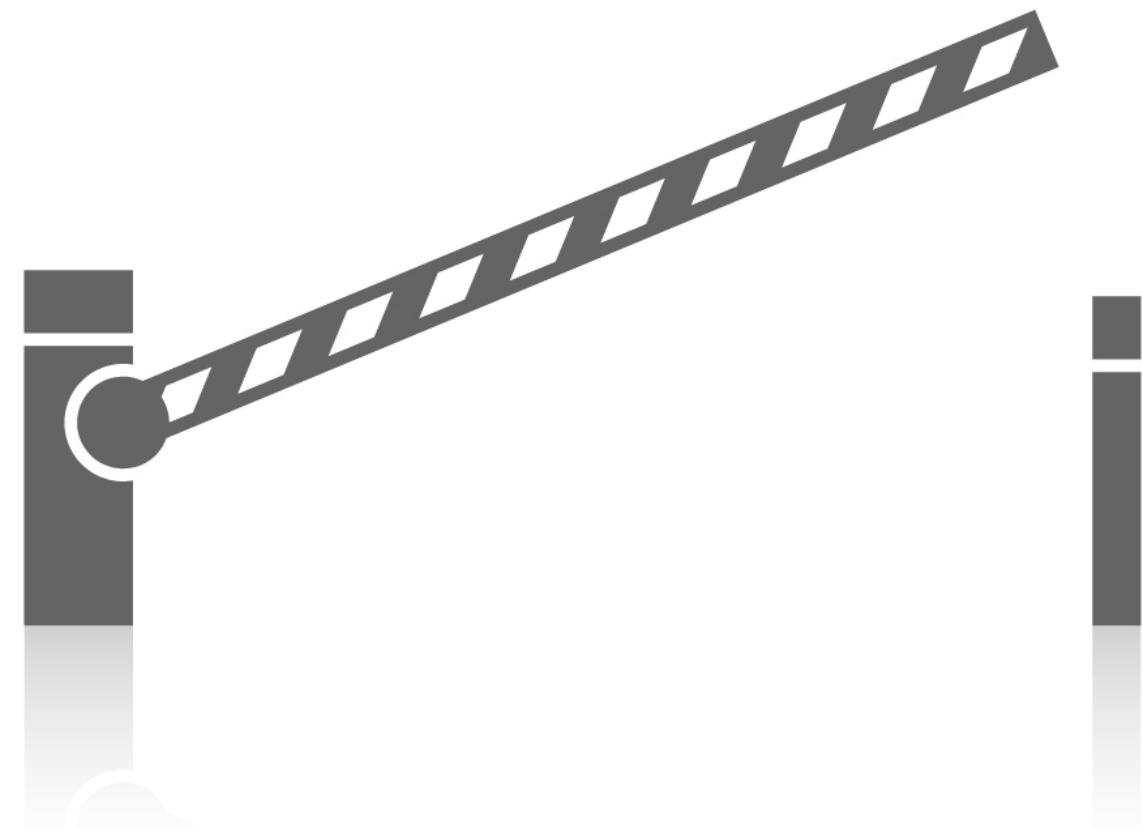
**Decades**

- Developing of network and services
- Planning of Infrastructure

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# Specialities of ad-hoc trains in Hungary

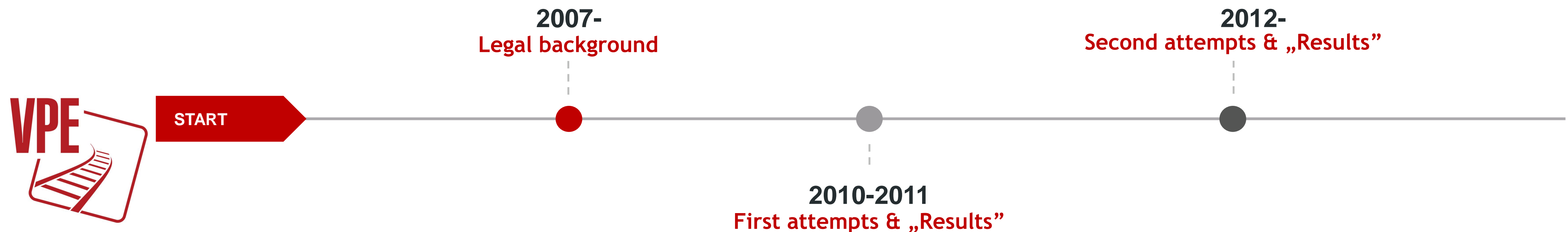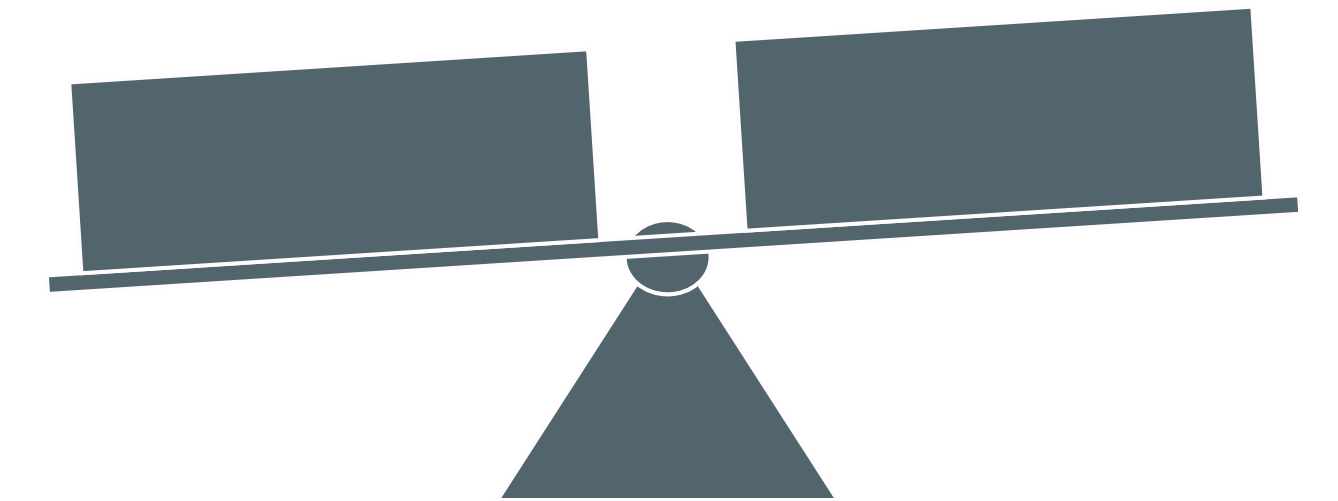1. The main part of freight traffic is ad-hoc

2. Approximately 400-600 trains/day without TT

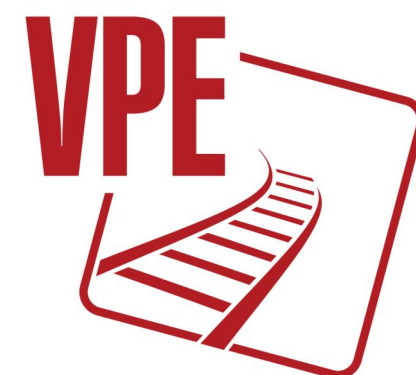3. Regarding Performance Regime the ordering time is very close to train departure

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# Legal background
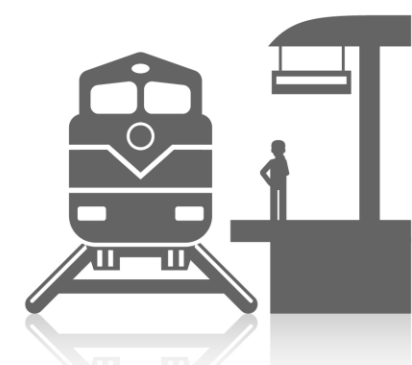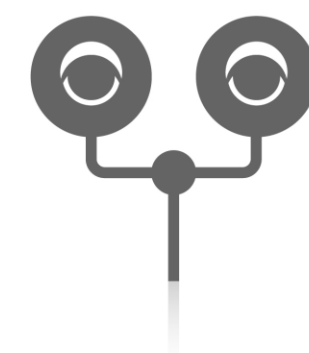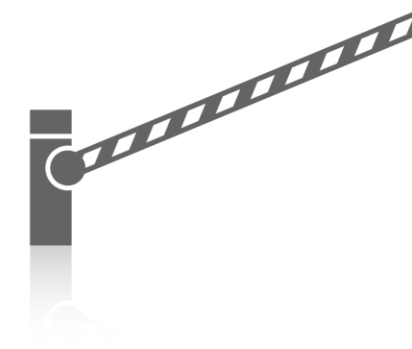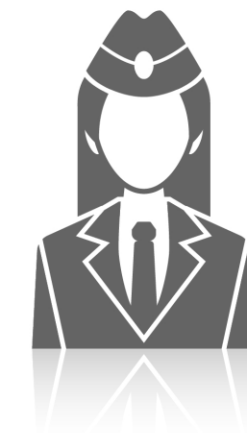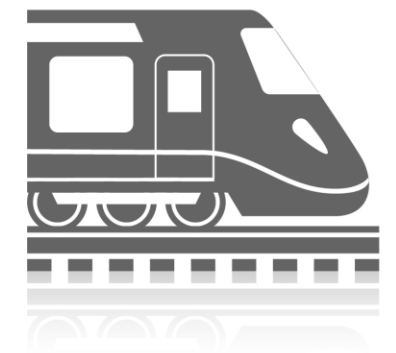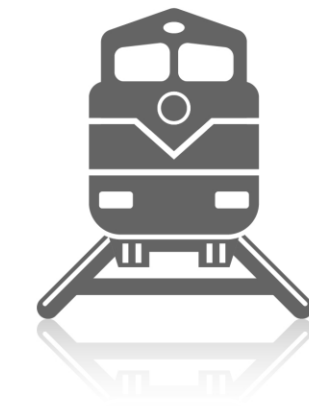
- From 2007 VPE had to offer catalogue path for the ad-hoc train    (Based on RNE method)

- Cancelled trains move to catalogue

**2007-**
Legal background

**2012-**
Second attempts & „Results"

START

**2010-2011**
First attempts & „Results"

# First attempts & „Results (2010-2011)

- Created train catalogue with 4000 trains

- Static booking process

- Daily maintenance of catalogue paths (modification -> other trains, cancellation -> track maintenance)

- Very low offering (<50%) and acceptance rate (<20%)

- Huge manual work

**2007-**
Legal background

**2012-**
Second attempts & „Results'

START

**2010-2011**
First attempts & „Results"

VPE

# Second attempts & Results (2012-)

Catalogue paths only in the border sections and special lines

No manual work in TT department, only supervision of booking process
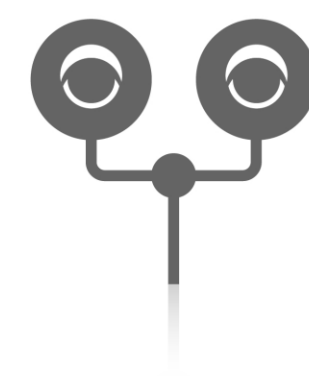
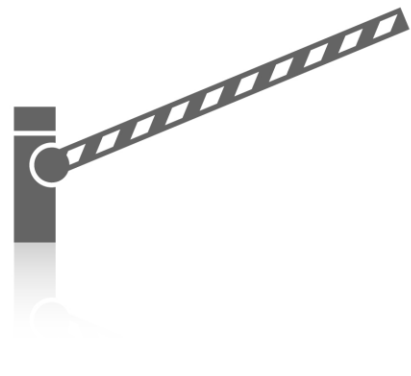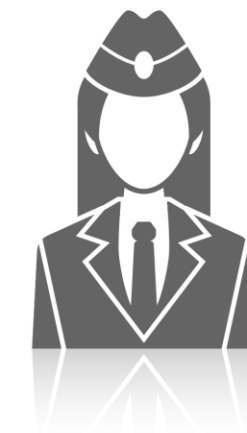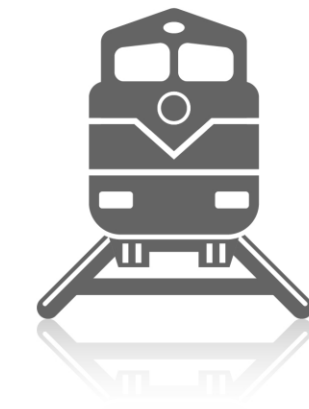Dynamic booking process & Automatic TT tool

Good offering (>90%) and acceptance rate (>75%)
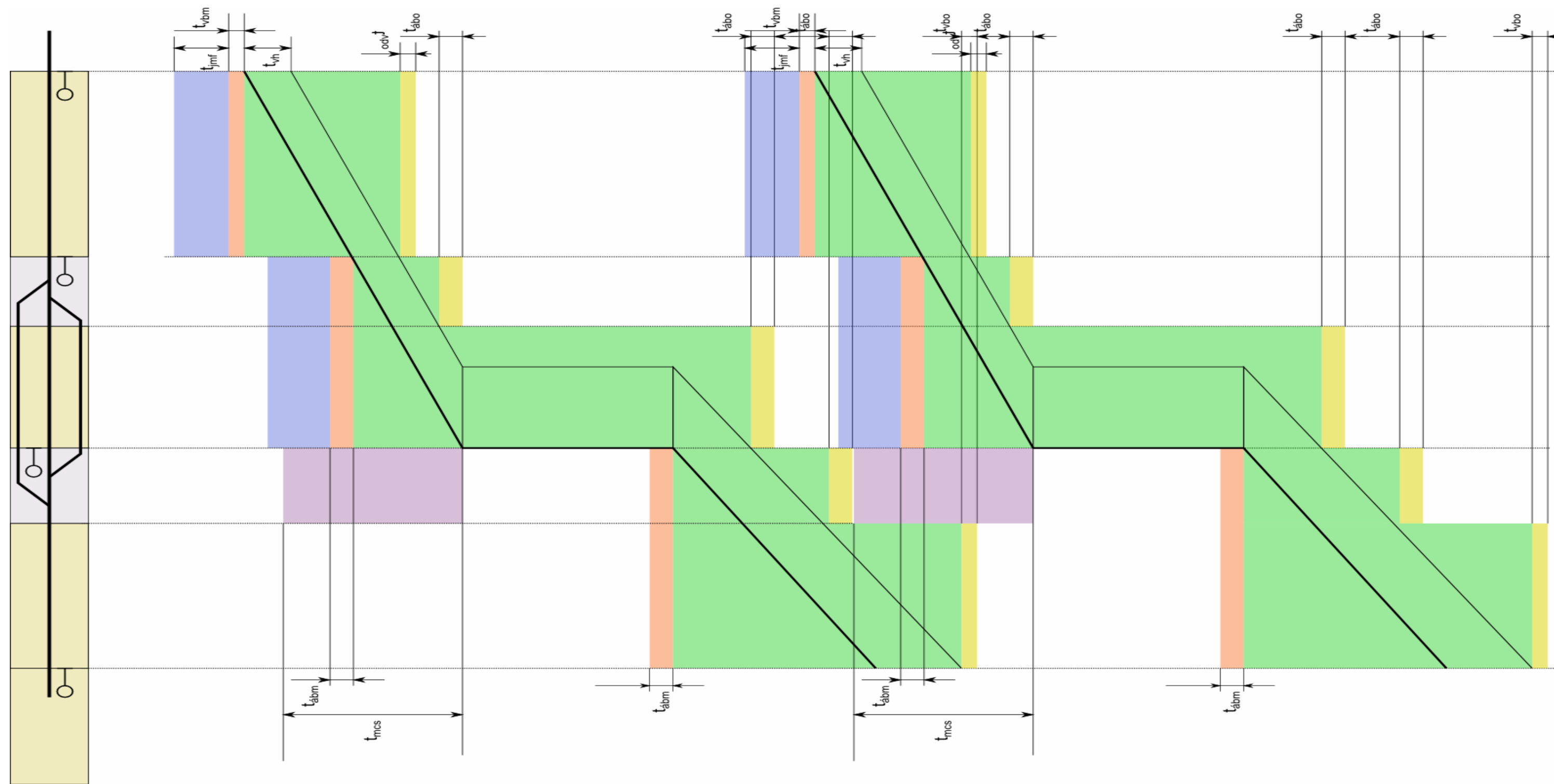
**START**

**2007-**
Legal background

**2010-2011**
First attempts & „Results"

**2012-**
Second attempts & „Results'
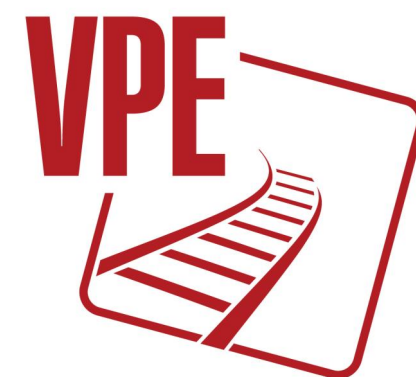
# How does KUMO work?



- Planning parameters from the request
  - Speed, Weight, Loco, Stopping times, etc.
- Planning parameters from the Database
  - Characteristics of lines, technical time at stations, etc.

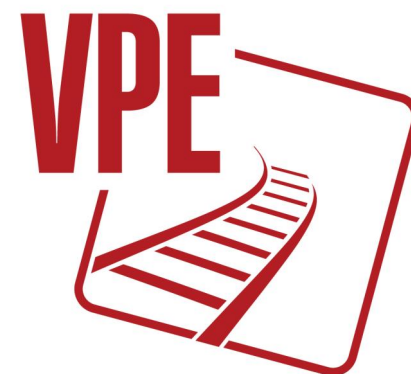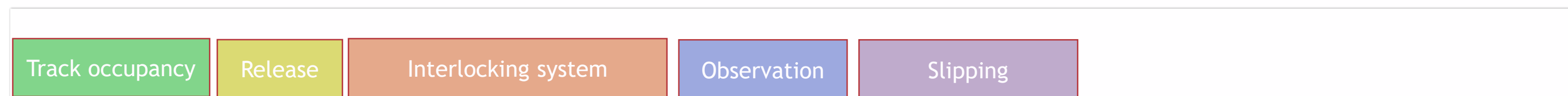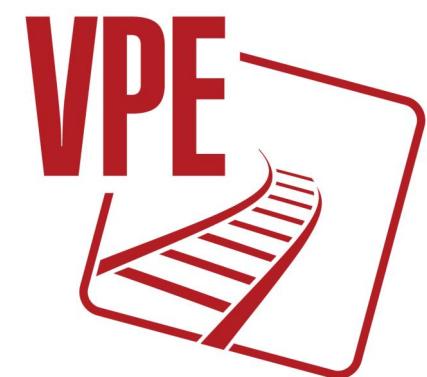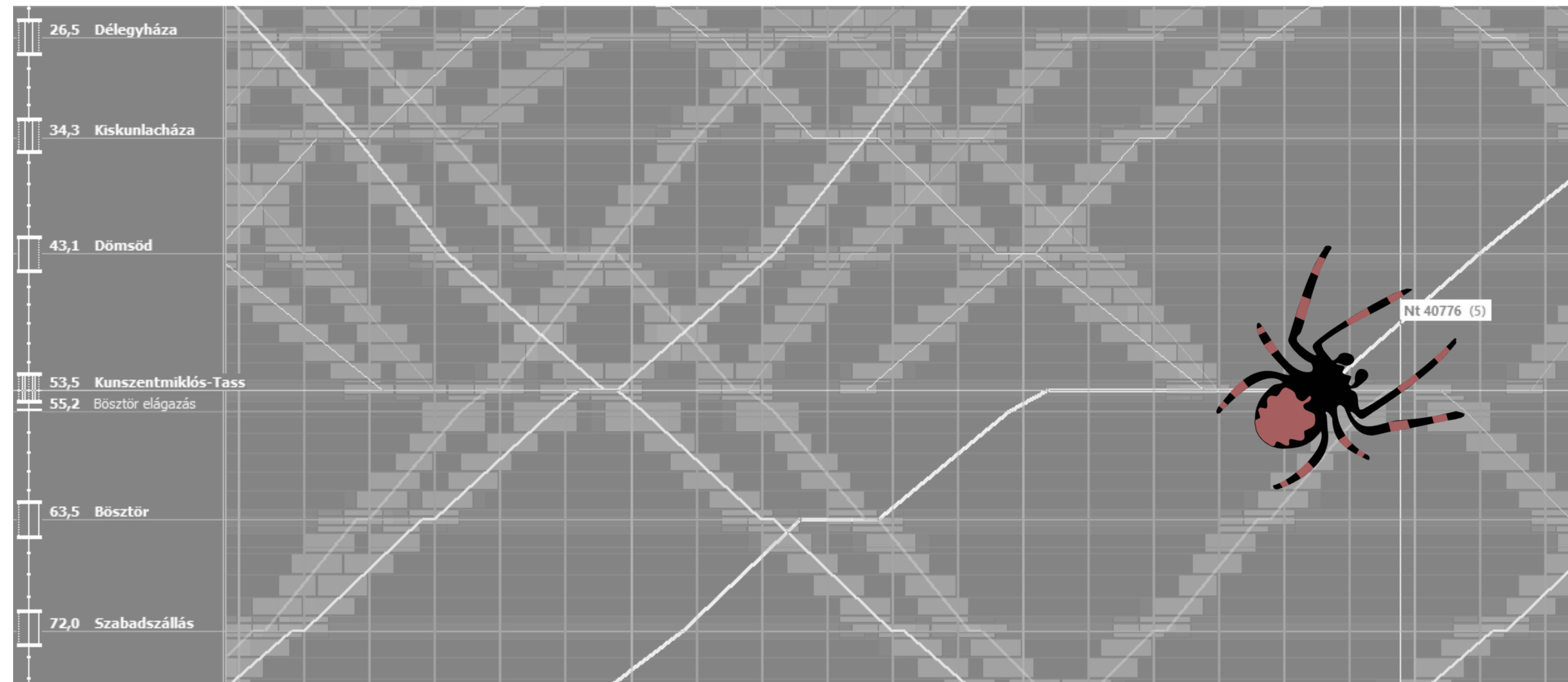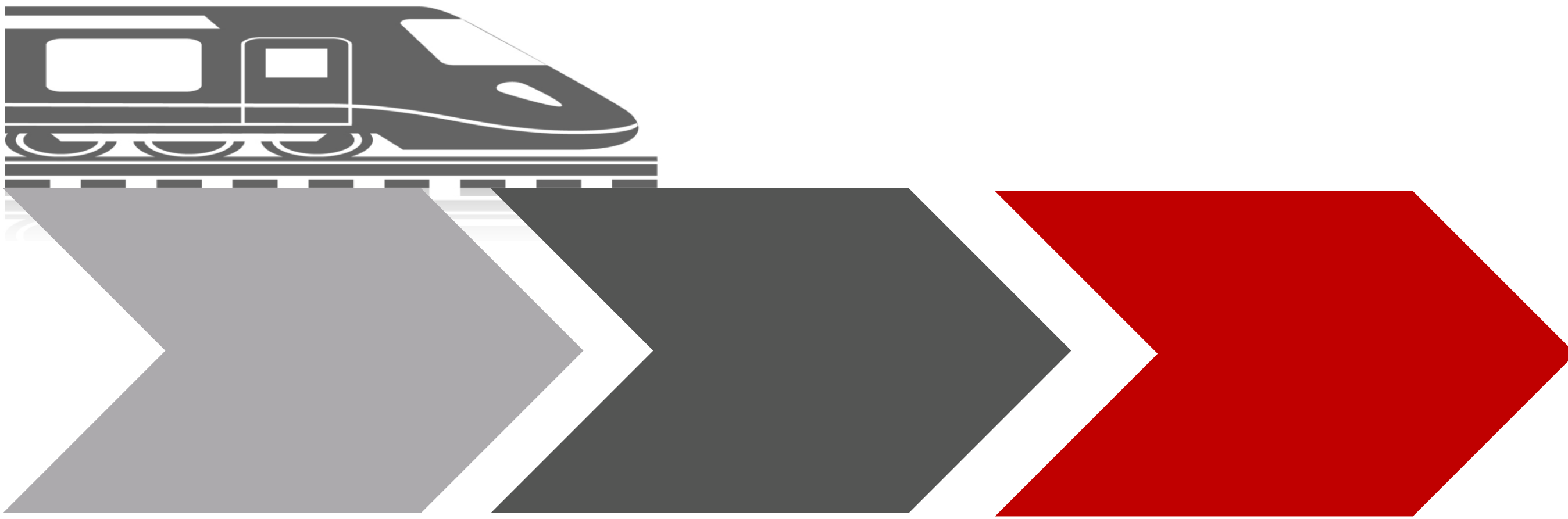| Track occupancy | Release | Interlocking system | Observation | Slipping |

# How does KUMO work?

- Planning parameters from the request
    - Speed, Weight, Loco, Stopping time, etc.
- Planning parameters from the Database
    - Characteristics of lines, technical time at stations, etc.

# Future plans…

- Launch the new capacity allocation system – K2 (2017. december)
  - TT for extraordinary consigments
  - Different TT day by day (next 5 days)
  - Connection with PCS
- Upgrade of supervising methods (BI – Tableau)
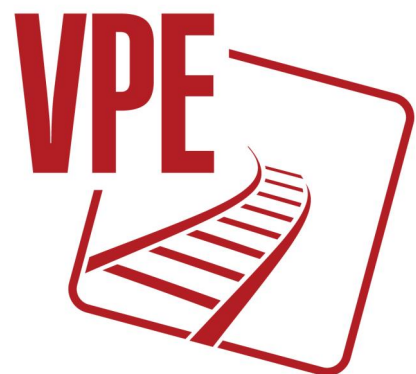
# Thank you for your attention!

LÁSZLÓ PÓSALAKI
VPE
HEAD OF CAPACITY ALLOCATION DEPARTMENT