



## TAC Presentation – Study Case Serbia

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Sarajevo

04.09.2025.

# Legal framework



## Railway law 2013

- Methodology for Valuing Elements for Determining the Charges for the Use of Railway Infrastructure
- Rulebook on the Timetable for the Allocation of Railway Infrastructure Capacity
- Rulebook on the Content and Form of the Network Statement

## Railway law 2015

## Railway law 2018

- Decree on the Method and Modalities for Calculating Costs Incurred as a direct result of train operation

## Railway law 2023

- Methodology for Determining the Charge for Access to Public Railway Infrastructure and Service Provision

# TAC methodology



"Old" methodology

$$\begin{pmatrix} \text{main} \\ \text{regional} \\ \text{local} \end{pmatrix} \cdot \begin{pmatrix} \text{electrified} \\ \text{non - electrified} \end{pmatrix} \cdot \begin{pmatrix} \text{passenger} \\ \text{freith} \end{pmatrix} = 12$$

$$NKI = \left( \sum Vkm_{ijk} \cdot C_{Vkm_{ijk}} \right) + F \cdot \left( \sum BRTkm_{ij} \cdot C_{BRTkm_{ij}} \right)$$

$$\begin{pmatrix} \text{main} \\ \text{regional} \\ \text{local} \end{pmatrix} \cdot \begin{pmatrix} \text{electrified} \\ \text{non - electrified} \end{pmatrix} \cdot \begin{pmatrix} \text{passenger} \\ \text{freith} \end{pmatrix} = 12$$

$$\begin{pmatrix} \text{Subotica} \\ \text{Beograd} \\ \text{Novi Sad} \\ \text{Lapovo} \\ \text{Pančevo} \\ \text{Niš} \end{pmatrix} \cdot \begin{pmatrix} \text{electrified} \\ \text{non - electrified} \end{pmatrix} \cdot \begin{pmatrix} \text{passenger} \\ \text{freith} \end{pmatrix} = 24$$

$$NKII_a = \left( \sum Va_{lmn} \cdot C_{Va_{lmn}} \right) + \left( \sum BRTkm_{lm} \cdot C_{BRTkm_{lm}} \right)$$

$$\begin{pmatrix} \text{Subotica} \\ \text{Beograd} \\ \text{Novi Sad} \\ \text{Lapovo} \\ \text{Pančevo} \\ \text{Niš} \end{pmatrix} \cdot \begin{pmatrix} \text{electrified} \\ \text{non - electrified} \end{pmatrix} \cdot \begin{pmatrix} \text{passenger} \\ \text{freith} \end{pmatrix} = 24$$

# TAC methodology



“New” methodology

$$\left( \begin{matrix} \text{electrified} \\ \text{regional n.el.} \\ \text{local n.el.} \end{matrix} \right) \cdot \left( \begin{matrix} \text{passenger} \\ \text{freith} \end{matrix} \right) = 6$$

$$CP = \left[ \left( \sum Vkm_{123} \cdot C_{Vkm_{123}} \right) + \left( \sum BRTkm_{123} \cdot C_{BRTkm_{123}} \right) \right] \cdot k_1 \cdot k_2 \cdot k_3 \cdot k_4$$

$$\left( \begin{matrix} \text{electrified} \\ \text{regional n.el.} \\ \text{local n.el.} \end{matrix} \right) \cdot \left( \begin{matrix} \text{passenger} \\ \text{freith} \end{matrix} \right) = 6$$

# TAC methodology

„old“ methodology	„new“ methodology
Marginal (variable) costs	Direct train operation costs
Network model based on rail line categories and nodes	Simplified network model with three rail line groups
Projected values based on historical cost and traffic data	Direct use of historical cost and traffic data
Variability matrix	Predefined cost allocation accounts

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# Network Statement



**2016 – 2017 Adopted by Government**

Rulebook on the Content and Form of the Network Statement

**2018 – present**

NS Common Structure – RNE

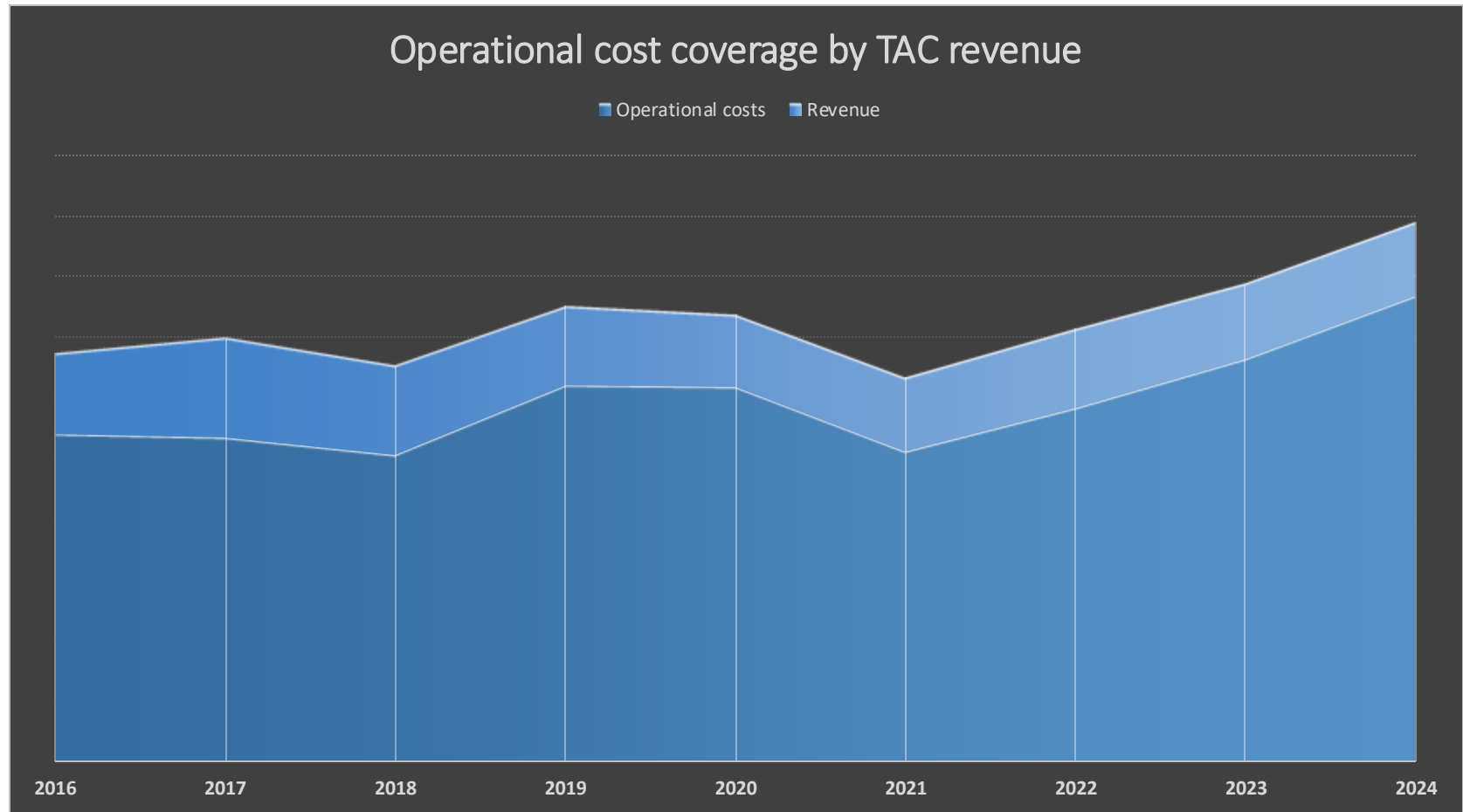
**Publishing TAC in NS**

# Contract with RU's

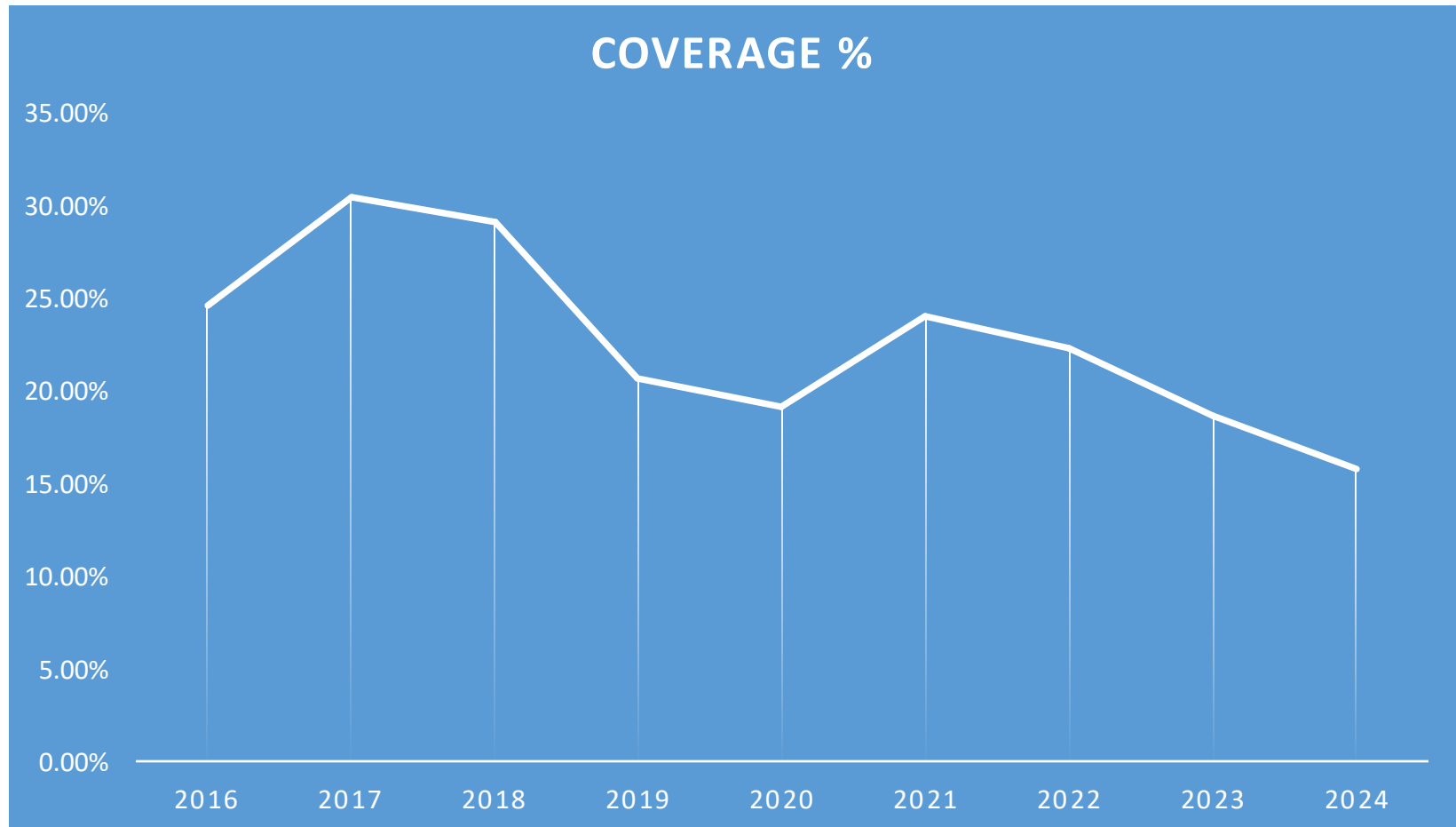


- ✓ First Contract in 2016. with Srbija Kargo and Srbija Voz
- ✓ Identical for all RU's
- ✓ Instrument for securing payment
- ✓ Rights = Obligations

# Contract with the Government



# Revenue



# Track access implementation

people, methods, data, software



# Traction Energy



- ✓ Stationary consumers
- ✓ Re-invoice
- ✓ Gross-tone kilometers
- ✓ Accumulates debt

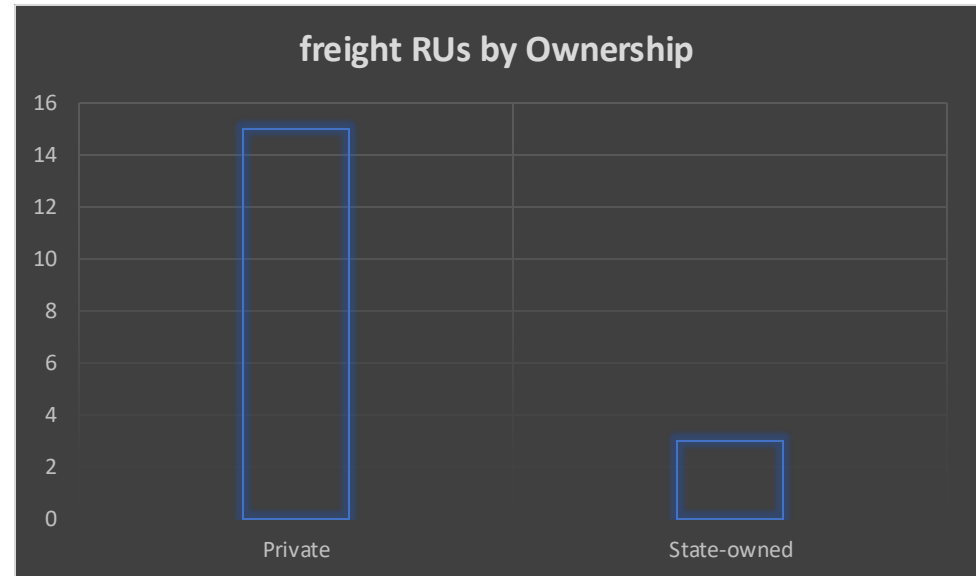
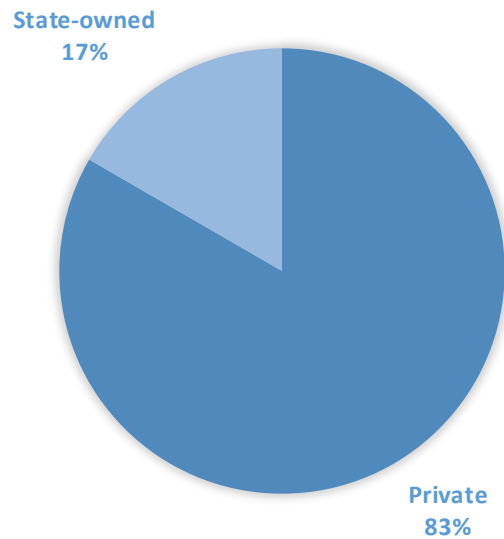
# Railway Undertakings



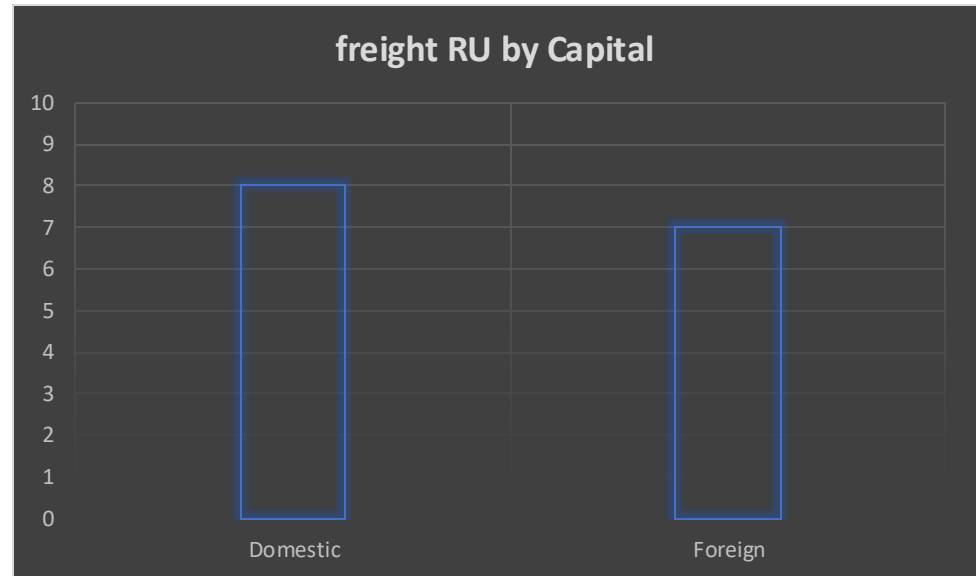
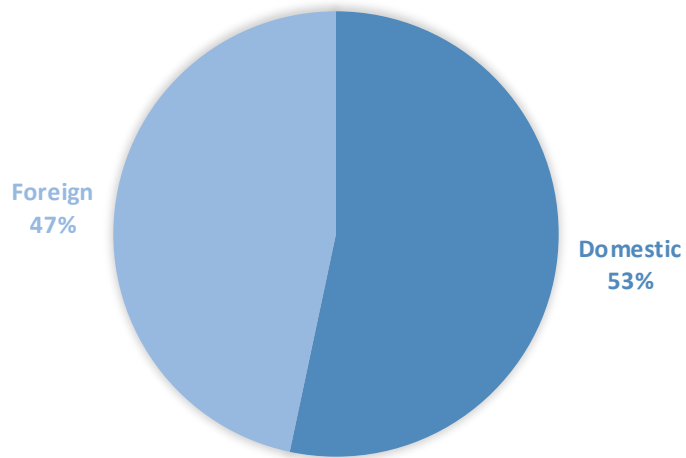
- ✓ 19 active contracts
- ✓ 1 passenger 18 freight
- ✓ 3 market exit
- ✓ Ownership
- ✓ Market share



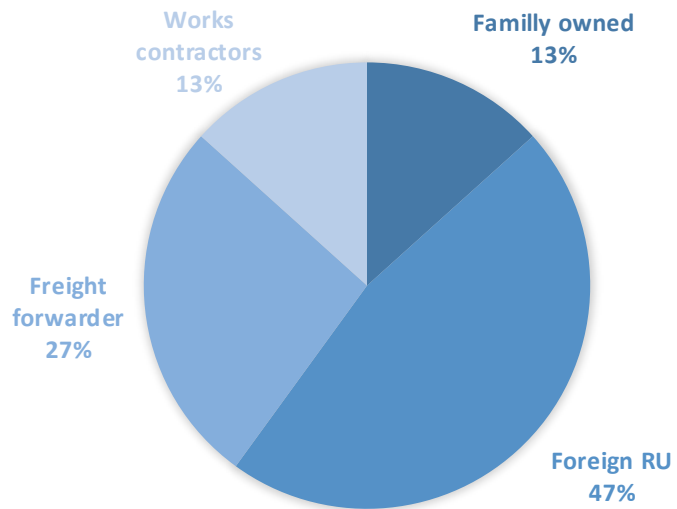
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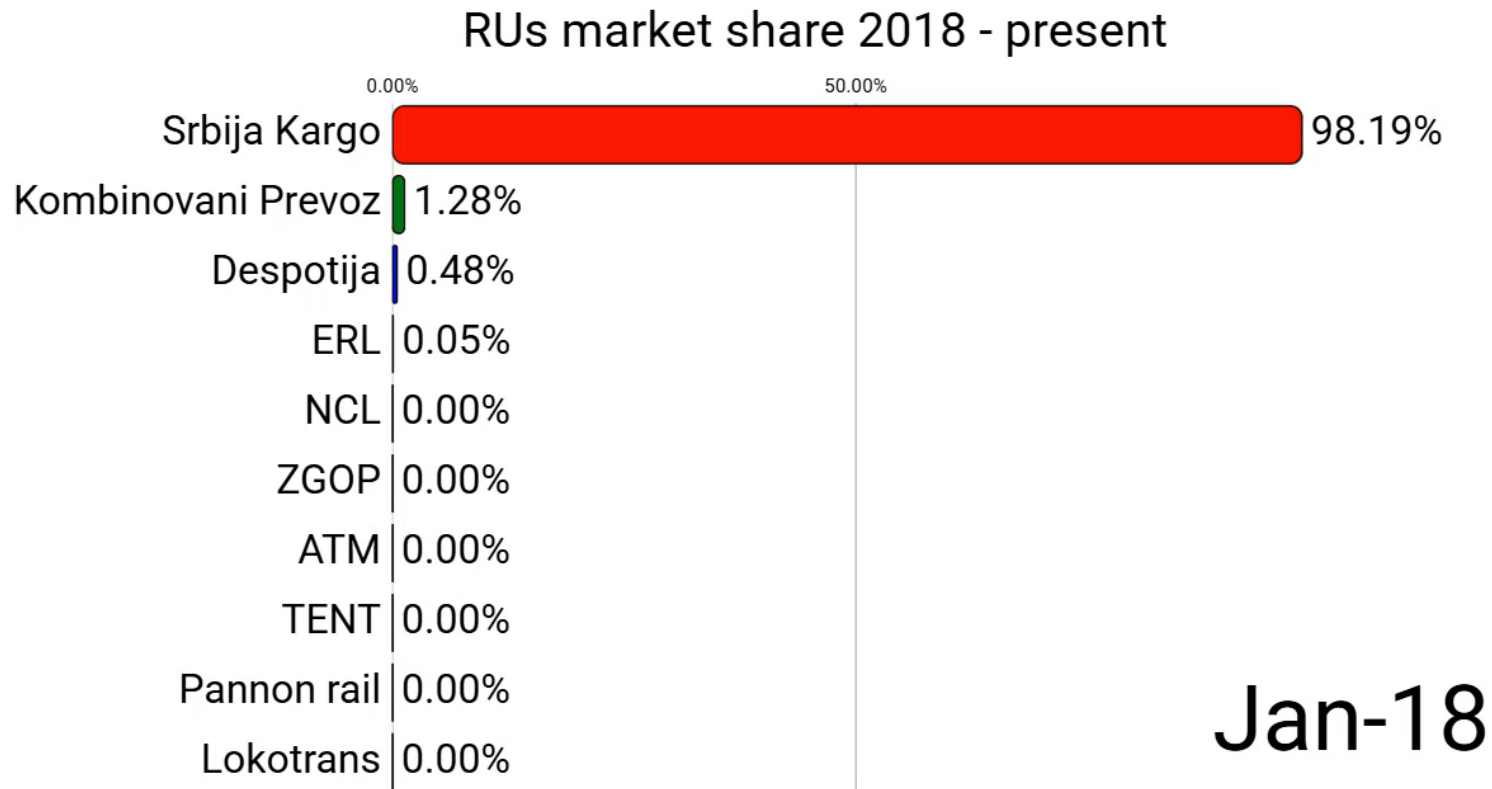
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# Freight transport market share



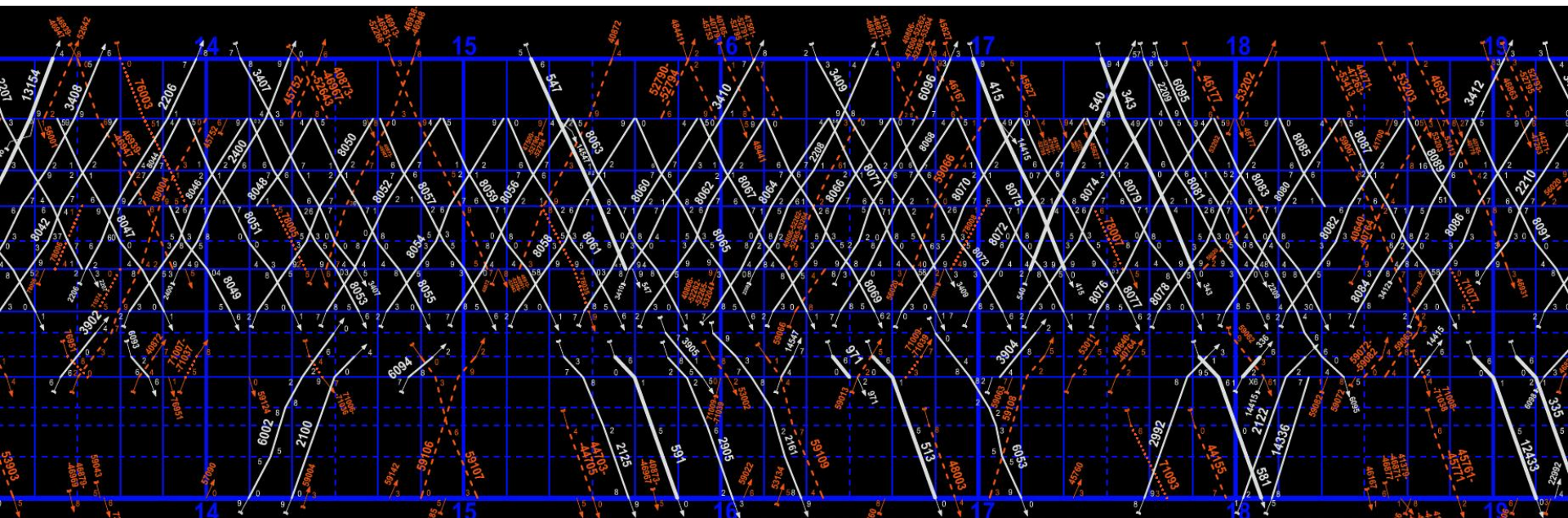
# Freight transport market share

## RUs market share 2018 - present



1. Srbija Kargo	98.19%
2. Kombinovani Prevoz	1.28%
3. Despotija	0.48%
4. ERL	0.05%
NCL	0.00%
ZGOP	0.00%
ATM	0.00%
TENT	0.00%
Pannon rail	0.00%
Lokotrans	0.00%
Transagent	0.00%
S Rail	0.00%
NIS	0.00%

Jul-25



**Thank you for your attention and patience.**

**We are available for further discussion:**

# Nemanja Tošić

## Rail Infrastructure Access Department

## Infrastructure of Serbian Railways

[nemanja.tosic@srbrail.rs](mailto:nemanja.tosic@srbrail.rs)

+381 64 894 7307