



# Infrastructure Access Charging Issues

ECMT Group on Discussion of Rail Infrastructure  
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# Objectives for Infrastructure Separation and Access Charge Regimes: Why Are We Doing This?

- ◆ Because the Commission Told Us To ...
- ◆ Efficiency in Transport and National Economy
- ◆ Balancing Social Costs
- ◆ Financial Stability for Infrastructure Provider
- ◆ Clarifying Government Roles and Costs
- ◆ Business Focus of the Parts (inc. infrastructure!)
- ◆ Influence Public/Private Roles
- ◆ Promote Competition: Intramodal and International

# Basic Choices

## ◆ Pure Social Marginal Cost

- Assumes government is rich and reliable
- Assumes comparable treatment of all modes and efficient taxes

## ◆ Marginal Cost Plus Markup (MC+)

- Social charges to government (?)
- Need to know government contribution
- Objectives of the markups?

## ◆ Financial Cost Minus Government Contribution (FC-)

- Same issues as MC+

## ◆ Major Issues

- Defining and calculating marginal costs
- Calculation of social costs
- Agreed and consistent definitions and calculations

## ◆ MC+ and FC- same issue: charging the leftover $\Delta$

# The $\Delta$ Drivers

- ◆ Complexity and Intensity of Traffic
- ◆ Mix of Traffic
- ◆ Growth in Traffic
- ◆ Number of Operators
- ◆ Competition Goals (intramodal, international)
- ◆ Freight, ICP and Sub'n Passenger Incentives
- ◆ Slot Rigidity versus Market Demands
- ◆ Hidden Question: Overcharging Freight to Reduce Passenger Charges

# Implementation

## ◆ Simple – variable with traffic

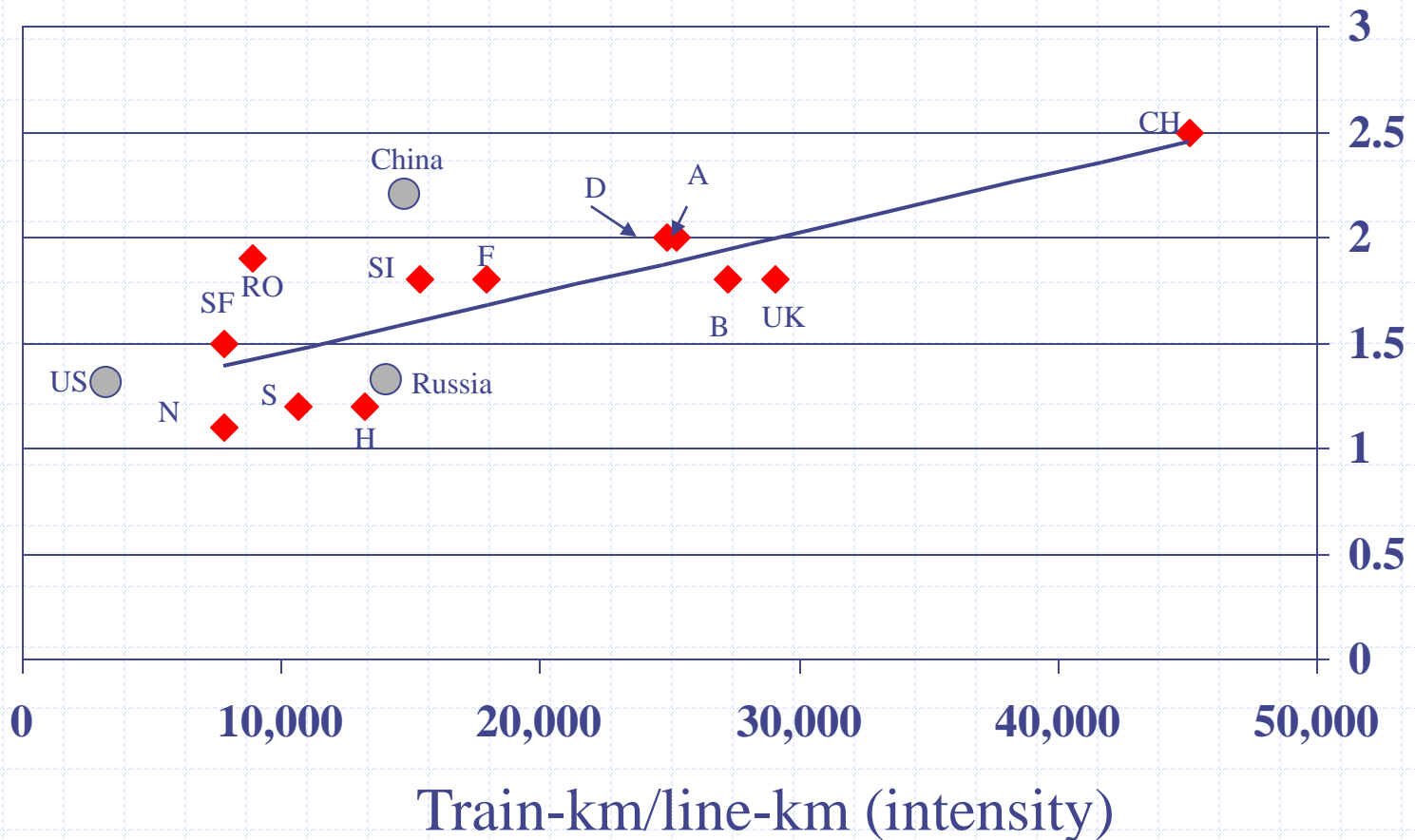
- gt-km, nt-km, p-km, train-km, % revenue
- Weighting factors (speed, axle load, equipment design, specific route, time of day, commodity, other)

## ◆ Two Part

- variable factors as above
- fixed part (capacity used, path reservation)
- focus of discrimination: efficiency versus equity

# Network Complexity versus Intensity of Use

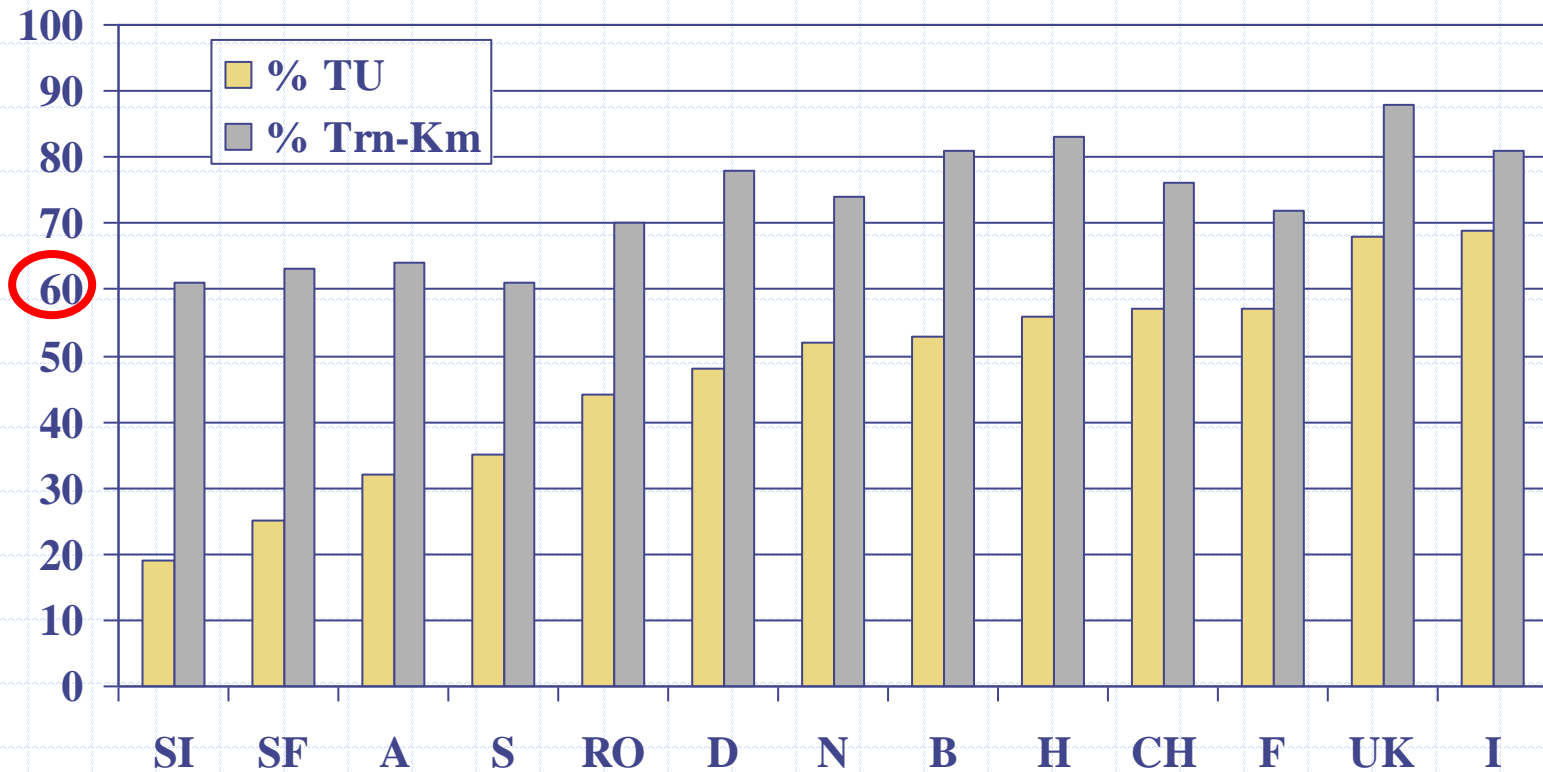
Ratio: track-km/line-km (complexity)



Note: Russia, US and China added manually and do not affect the regression line.

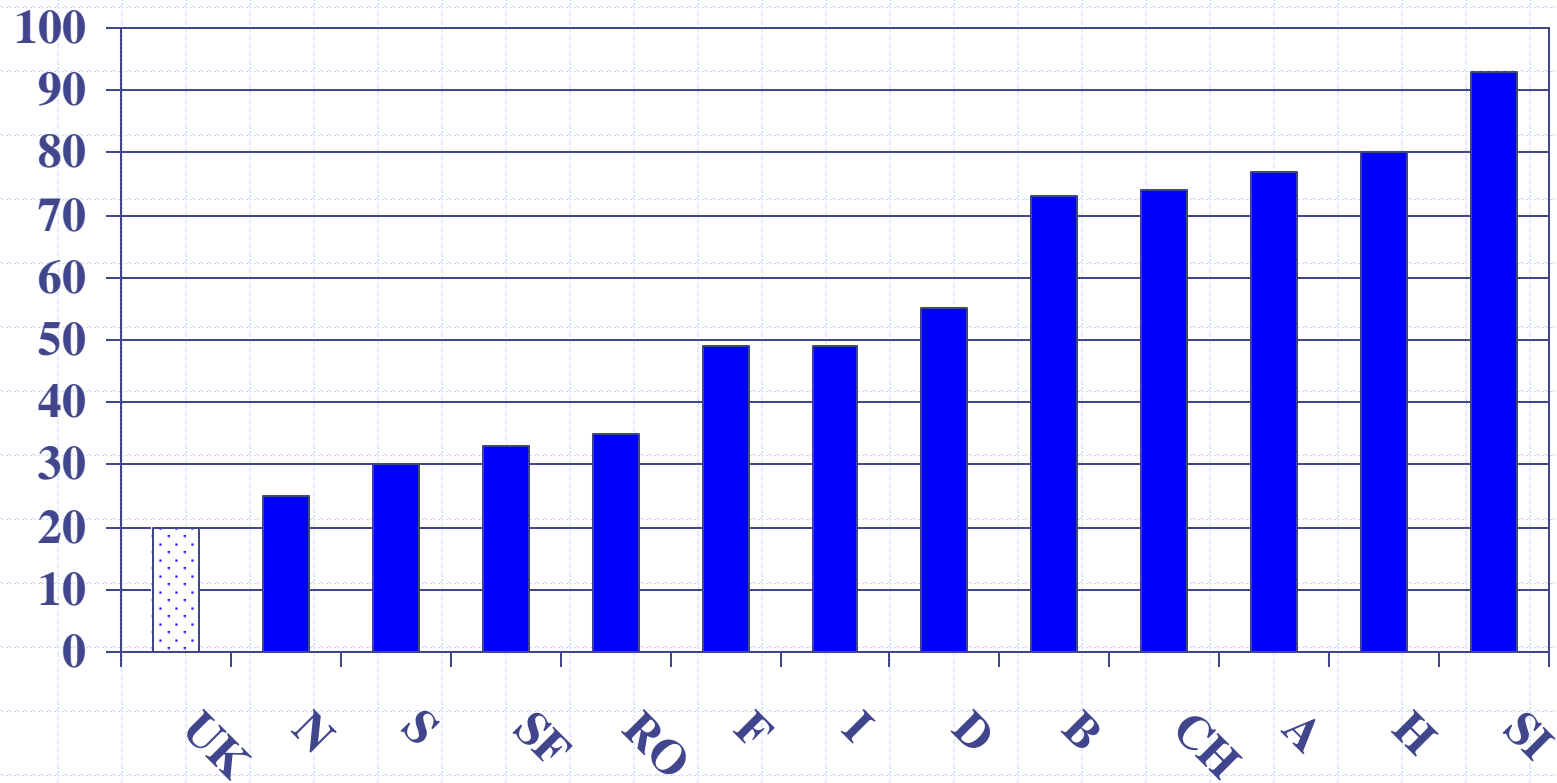
# Traffic Mix

(Percent Passenger Traffic)



$$TU = P\text{-Km} + T\text{-Km}$$

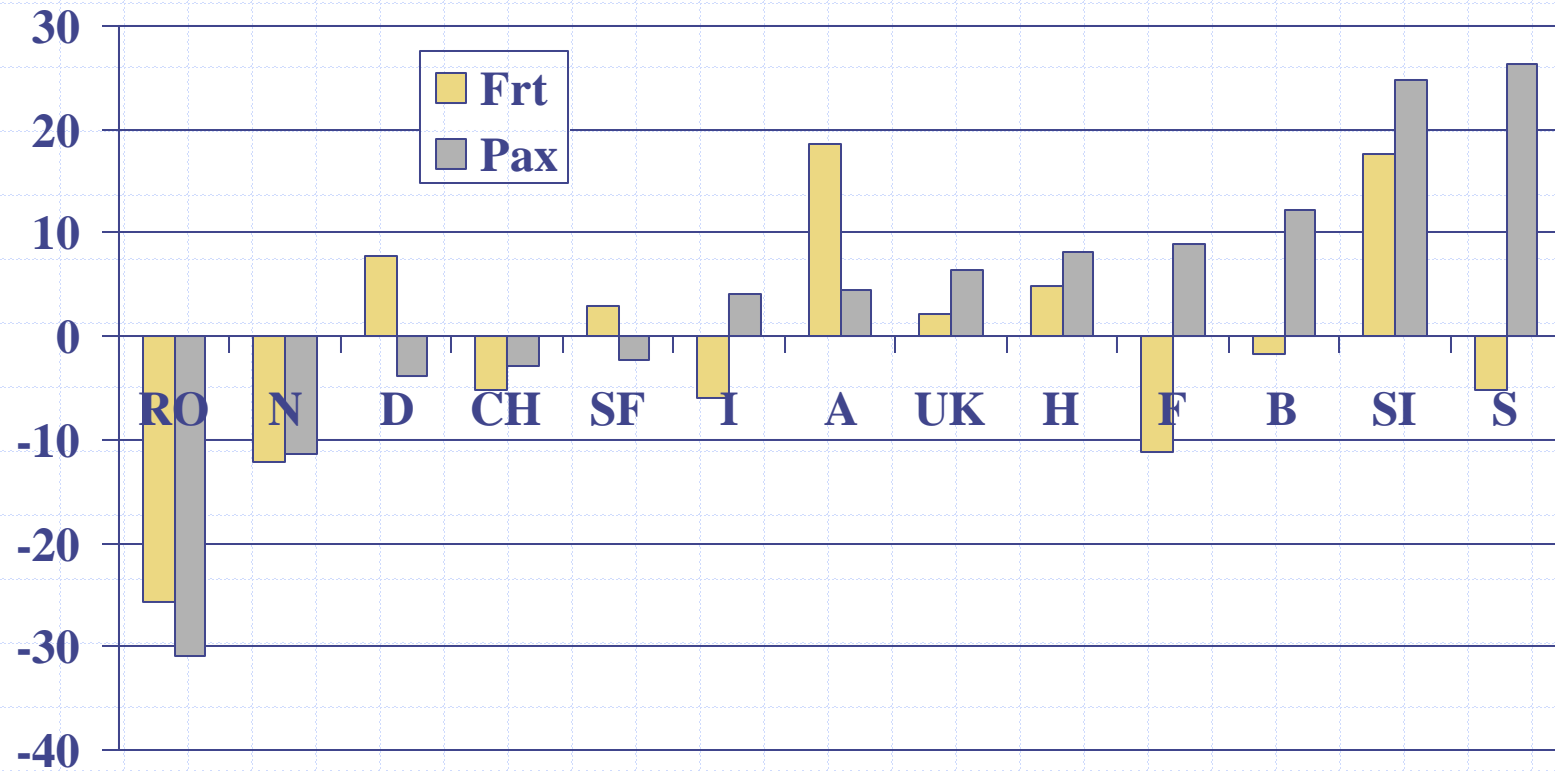
# Percent International Ton-Km





# Traffic Growth 1999-2003

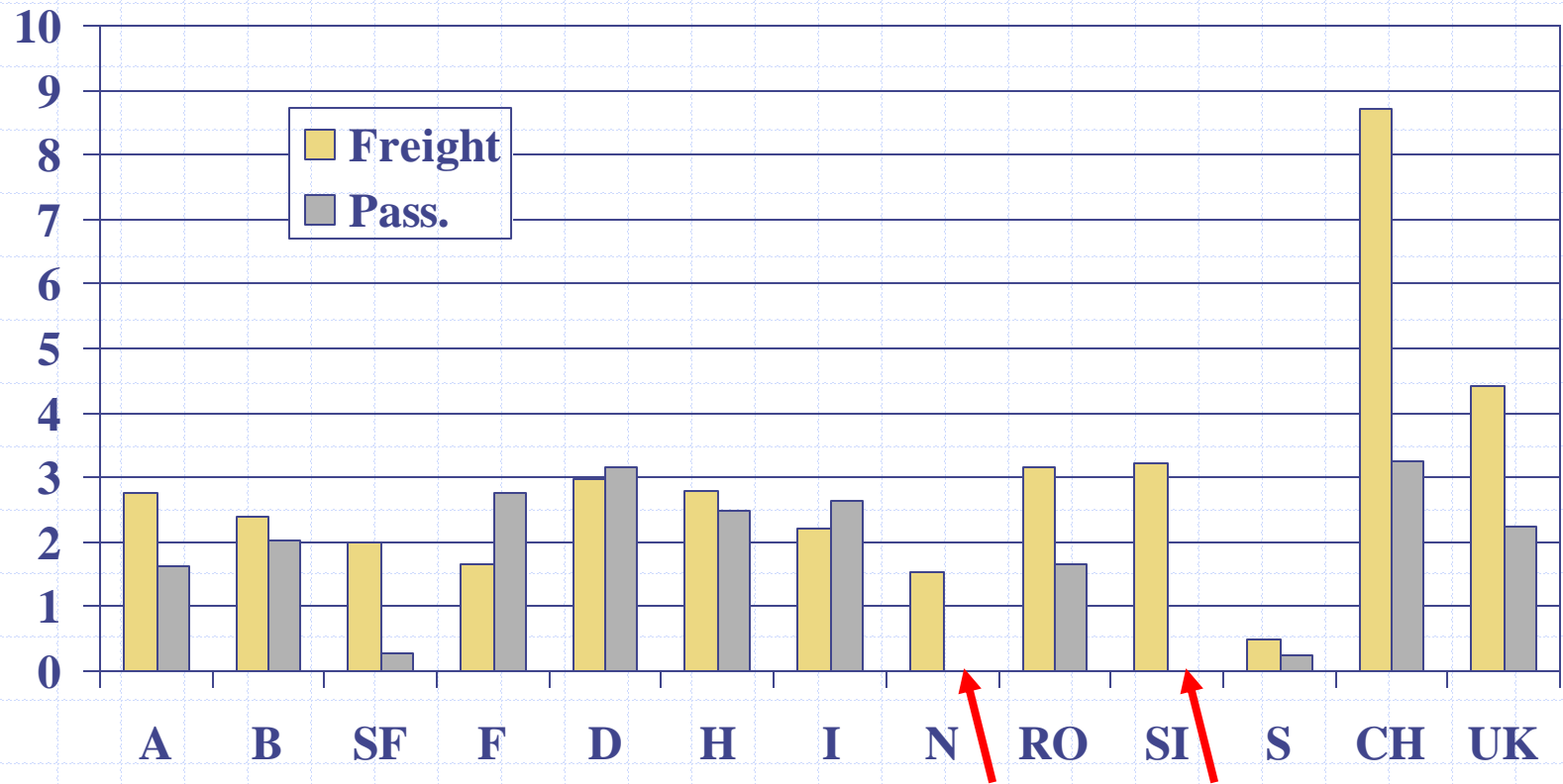
(% T-Km and P-Km)



# Some Results

- ◆ Wide Range of Charges, especially Freight
- ◆ Different Balance Freight versus Passenger
- ◆ Freight Freeways: Uniform Access Fees?

# Average Access Charges (€/Train-Km)



Note: Uses average of range shown on “Typology of Rail Networks and Access Charging Regimes”