EVOLVEMENT AND ACHIEVEMENTS OF ROAD TOLLING AND USER CHARGING SYSTEM IN HUNGARY

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Brief history of the Hungarian road tolling and user charging system

Effectiveness and efficiency of policy framework

Brief history of the Hungarian road tolling and user charging system

Effectiveness and efficiency of policy framework

- In the middle ages, until end of 1800s:
 - > Every user should pay direct tolls for "higher" quality of infrastructure: solid roads, bridges, ferries
 - Often such roots were designated for merchants
 - Revenues to finance nvestment costs, wear and tear costs, financing costs



Carl Bschor: A view of Pressburg /Bratislava/ with ferry, coupe and wagon, 1815

- 1890: milestone for setting up-to-date toll policy
 - > Act I. of 1890 on public roads and tolls
 - Similarities to the current Eurovignette Directive ->

Directive 62/1999/EC on the charging of heavy goods vehicles for the use of certain infrastructures:

Article 7b: (1) "The infrastructure charge shall be based on the principle of the recovery of infrastructure costs.

> The weighted average infrastructure charge shall be related to the construction costs and the costs of operating, maintaining and developing the infrastructure network concerned.

> The weighted average infrastructure charge may also include a return on capital and/or a profit margin based on market conditions."

(2) "The costs taken into account shall **relate to the network** or the part of the network on which infrastructure charges are levied and to the vehicles that are subject thereto."

Act I. of 1890 on public roads and tolls:

85. § "Declarations shall be taken into consideration by proposing toll rates.

By proposing and setting toll rates the following factors shall be taken into consideration: on the one hand the required capital for production and installation of infrastructure, respectively the annual expenditures on its interest carrying and repayment, content of tolling authorisation, annual operation cost of infrastructure and its equipments, and the date when the reproduction of infrastructure perspectively will occur, on the other hand the expected traffic volumes and revenues from toll collection.

Furthermore, by proposing and later setting toll rates it shall be also taken into consideration, that the **tolling authorisation** shall not produce extra revenues.

The tolls shall be **related to individuals**. vehicles and animals or weight of transported **objects** and materials, and the allocated rates shall be **proportional to the use of** infrastructure."

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- Early 1900s:
 - Growing traffic, economic and other policy considerations
 - Step by step from direct tolls to indirect taxation
- 1918: free of charge use of public roads
 - "Public roads are a welfare service for citizens."
- Second half of the 1900s:
 - Several ideas to boost the Hungarian motorway network by private capital and collecting tolls
 - Effective steps only after the change of regime in the '90s
- 1988: launch of Road Fund
 - Predictable financial sources for the road sector
 - Could not solve the lacking sources

Early 1990s:

- Vehicle fleet doubled in 10 years
- > 300 km of motorway network
- Creation of acts on concession opened new perspectives in finance
- Two new, concession projects with direct tolls were initiated:
 - M1/M15 between Budapest (capital) and Hegyeshalom (AT border) / Rajka (SK border)
 - M5 between Budapest (capital) and Röszke (RS border)

Late 1990s:

- 1998: cancellation of Road Fund
- Direct tolls were 50-100% higher than the rates in developed countries
- Drop aways in charged traffic on motorways led to financial crisis at consessionaires
- > 1999: the Hungarian State bought out the M1/M15 concessionaire

Early 2000s:

- Initialisation of user charge (vignette) system in steps on the whole Hungarian motorway network
- Introduction of availability payment mechanism for concession companies
- Launch of electronic motorway monitoring and enforcement system – control stations and mobile control with vehicles



- Several category could reach the one-day vignette
- Further charged network elements (including some 1st class roads) for lorries
- Launch of electronic vignettes



Early 2010s:

- Initialisation of user charge (vignette) system on the whole Hungarian motorway network (including as the existing and former concession motorways, as well the further on motorway developments)
- Revision of vignette products: 10 day monthly yearly
- 2013: HU-GO mileage based direct tolling system for lorries
- New vignette type: the only yearly regional (county based) vignettes



The changes resulted new prosperity in the user charging system.

Current state

See plenary session tomorrow: Experiences of Hungarian electronic road toll system Vince Tibor Börzsei CEO, National Tollpayment Services Plc.

Brief history of the Hungarian road tolling and user charging system

Effectiveness and efficiency of policy framework

- Evaluation criteria of toll policy framework:
 - > Toll rates
 - > Toll categories
 - Tolled network
 - Financing, operation and maintenance of roads
 - Network development



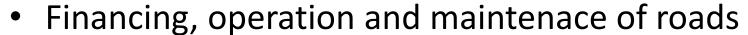
Manage criteria as a policy package!



Challenge

- ➤ Acceptability keep as simple as possible VS(?) Effectiveness and efficiency reach the desired goals
- Other policy considerations may overwrite the technical reasons

- Toll rates, categories and network
 - More or less willingness to regulate them on county level
 - Noblemen typically travelled free of charge



- No effective regulation
- Counties implemented self interests in front of state interest







- Network development
 - > Growing traffic demand required new infrastructure
 - Plans for set a public fund failed
 - 2nd half of 1700s: toll collection linked to road operation & maintenance obligation









- Network development
 - Boom at railways and inland waterways focus of transport policy – roads had secondary role



> Supply oriented, oligopolistic market in service provision



- Toll rates, categories and network
 - > 1849: "Széchenyi" Chain Bridge over Danube gave new impetus in fair toll policy (also charging noblemen)
 - ➤ 1853: state decision about implementing general toll collection on state road (following the Austrian model), failed in months due to ineligible service level
 - After this failure change to a tax type regulation
 - > 1870: imperial decision confers tolling rights to Ministry of Public Works and Transportation

- Toll rates, categories and network
 - Wear and tear focused only on priority roads
 - > Step by step from direct tolls to indirect taxes





- Network development
 - Boom in motorisation worked out competition disadvantages for road transport



Early decades – social opinion: rail is for community, road is for private actors – later the boom changed the opinion



- Financing, operation and maintenace of roads
 - ➤ Ineligible revenues of road sector required crossfinancing from other public sources



➤ Plans to invite private capital and implement direct tolls failed due to political and economic reasons (until the '90s)



➤ After change of regime the new acts on concession the state could invite private capital to develope new, tolled motorway sections



Toll rates, categories and network



> Extremely high toll rates, drop away in tolled traffic



- Toll rates, categories and network
 - Implementation of user charging (vignette) system on motorways (following the Austrian model again) with acceptable rates
 - Later on: additionally charges for HGVs on several primary roads



- Financing, operation and maintenace of roads
 - Unfair cross financing between:
 - ad hoc users vs. regular users
 - passenger cars vs. buses, lorries
 - Lagging growth of revenues compared to traffic growth, running low revenue potential
 - High share of availability fees for concessionaires in the budget





- Toll rates, categories and network
 - Replacing the vignette system with direct tolls on tolled network for lorries above 3,5 tons



Reducing free of charge motorway sections for passenger cars and buses – municipalities protested, several parallel roads became congested again



- Financing, operation and maintenace of roads
 - Boom in revenues, even in the vignette system



Brief history of the Hungarian road tolling and user charging system

Effectiveness and efficiency of policy framework

- Passenger traffic on motorways
 - Current vignette system seems to be fair and efficient from viewpoint of motorway network, revision of indirect taxes in long term
- Freight traffic on motorways and state roads
 - External effects should be substantially managed in short time
 - > Lorries below 3,5 tons needs further considerations
- Urban areas
 - Congestion would be an acute problem in the medium term
 - ➤ Road user charging should be managed together with environmental, parking and public transport policies
 - Seamless interoperability with the national system

THANK YOU FOR YOUR ATTENTION!

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