

1 Summary of the possible congestion charge in Budapest

1.1 Introduction

Similarly to other large cities the **congestion** in the inner city of **Budapest** became more **frequent** in the past few years. As a result, the surface transportation got slower, the travel times became unreliable for cars and for public transport vehicles as well. These generate higher general travel costs, and decrease environmental quality (air and noise pollution). Urban road pricing systems are established in many European cities. The main example is London and Stockholm, but Rome and Milan also made some steps in the same direction.

Based upon previous **pre-feasibility studies** the preparation of a decision support document has been started in order to justify the introduction of the congestion charge in Budapest by the **Centre for Budapest Transport** (hereafter referred to as **BKK**) accordance with the decision of the General Assembly of the Municipality of Budapest (13/2011 I.12). BKK has been allocated the necessary financial and human resources for the **preparation phase**.

1.2 Framework of the project

Taking into account the **traffic situation** in Budapest and the condition of Metro Line Nr. 4. funding, BKK suggests the introduction of congestion charging system. **Congestion charge**, as a **complex financial control tool** for transport needs, increases environmental quality, and with the appropriate allocation of the large-scale revenues it provides additional funding possibility for the transportation system in **Budapest**, which **suffers from the lack of financial resources**.

The European Commission White Paper [COM (2011) 144] paragraph 32 highlights the role of congestion charging: „Road pricing and the removal of distortions in taxation can also assist in encouraging the use of public transport and the gradual introduction of alternative propulsion.”

The **main objective** of the proposed congestion charging scheme for Budapest is to reduce the number and the scale of congestions, which increases the environmental quality within the city, and makes the transportation system more efficient.

The introduction of congestion charging:

- increases average travelling speed within the affected areas,
- realizes more reliable and shorter travel times,
- makes public transport more reliable,
- reduces environmental impact (air and noise pollution, GHG emission)
- increases energy efficiency of the transport network,
- creates a more livable environment in the inner city,
- generates revenue, which can be used for the improvement of the transport system.

The lack of financial resources for environmental friendly and sustainable (primarily public) transport system in Budapest are indicating the need for mapping of possible financing solution.

Two pre-feasibility studies were made related to the possible introduction of congestion charging in Budapest:

- „Efficient transportation management in Budapest” – Study of the justification, possible introduction and zone system of the congestion charging in Budapest (2008),
- „Preliminary feasibility study of the congestion charging in Budapest” (2009)

These studies were determined only the basic concepts of the congestion charge, but detailed analyses of the possible effects are still missing.

Meanwhile the decision of the European Commission related to funding the **Metro 4 project (CCI No. 2008HU161PR003, 2009.09.02)** stated that congestion charging has to be introduced for the inner areas of Budapest in accordance with the accepted Transport Development Plan of Budapest (BKRFT). Therefore the **introduction of the congestion charge in Budapest is a criterion for the Metro 4 project funding.**

The decision of the Municipality of Budapest by the General Assembly on introducing congestion charging scheme in Budapest is expected in summer 2012 after discussing the decision support study currently under preparation by BKK.

1.3 Possible technical alternatives

The implementation of congestion charging is possible in several ways according to the technical parameters, financial options and operating alternatives. The next table (Table 1) shows these possible alternatives.

Possible alternatives for the introduction of the congestion charging in Budapest					
		Option „A1”	Option „A2”	Option „B1”	Option „B2”
Technical parameters	Function	Congestion charge with some additional features (e.g. controll for truck permits and smog alert)		Complex traffic monitoring, managing and security system (differentiated pass. car and truck charges, parking fees, traffic monitoring and counter-terrorism)	
	Type	Zone(s) and cordon		Zone(s)	
	Technology	Automatic licence plate recognition system		Automatic licence plate recognition system with/or On-Board Units	
Financing options		Municipality own resources, EU funds, EIB/EBRD loan	PPP	Municipality own resources, EU funds, EIB/EBRD loan	PPP
Operator		Municipality / BKK	Concessionaire	Municipality / BKK	Concessionaire
Indicative investment costs (only the core infrastructure)		3-5 billion HUF	No investment cost, but revenue sharing according to the contract	10-12 billion HUF	No investment cost, but revenue sharing according to the contract
Indicative time frame		30-45 month	25-30 month	42-60 month	30-45 month
Indicative list of the main risks		Legislative environment, lack of resources, lack of infrastructure developments	Legislative environment, additional risks due to PPP	Legislative environment, time overrun, lack of resources	Legislative environment, additional risks due to PPP
Joint investments have a key role in the succesfull implementation of the congestion charge scheme. These necessary investments are including M4 metro and other investment projects currently managing by BKK (reconstruction and extension of tram lines Nr. 1 and 3, interweaving tram lines in Buda, modernization of PT fleet, etc). Further investments: public transport network, parking system, modal shift possibilities (P+R, B+R), communication and campaigns will be specified during the current preparation phase.					

Table 1: Possible alternatives for the introduction of the congestion charging in Budapest

1.4 Premises

The current worldwide economic and financial crisis and the lack of financial resources for the Budapest transport system indicated the acceleration of the

preparation process. To speed up this procedure the following premises has been stated based on the preliminary feasibility studies.

In the preliminary studies there are three possible zone boundaries as the possibilities of the core network are very restricted:

- Inner ring road (Nagy körút)
- Outer ring road (Hungária körút, Budai körút)
- City border (M0 motorway)

From which the outer ring road (Hungária körút, Budai körút) is suggested.

The second main decision is related to the pricing scheme. The concrete financial model is under development, but BKK have some guidance for the price. A driver who drives in the zone every day should pay the same amount as a monthly public transport ticket. Therefore a daily limit has to be around a 1/20 of a monthly PT ticket. Other regulatory consideration is to improve the attractiveness of the modal shift.

Possible discount for the citizens within the zone boundary and others will be designed carefully.

These premises led BKK to focus on option “A1” during the preparation phase.

Provisional assumptions for financial framework are the following:

- investment costs of the core infrastructure: **16-22 million EUR** (5-7 billion HUF),
- system operation and maintenance costs: **16 million EUR** (5 billion HUF) per year,
- expected revenue: **38-80 million EUR** (12-25 billion HUF) per year.

1.5 Action plan

The preliminary work plan were composed by BKK for “A1” option, where BKK defined the **following milestones** of the process (see Table 2).

Possible schedule of the milestones during the introduction of congestion charging in Budapest		
	Milestone	Provisional deadline
1.	Assembly of BKK congestion charging workgroup	November 2011
2.	Detailed elaboration of recommendations for congestion charging	June 2012
3.	Ensure of the regulatory environment	End of 2012
4.	Owners decision about the introduction of congestion charging	August 2012
5.	Implementation and introduction of congestion charging	January 2014

Table 2: Possible schedule of the milestones during the introduction of congestion charging in Budapest

Budapest, 2012. január 12.