7. Die LKW-Kilometersteuer in Schweden - Aktueller Stand für die Abgabe auf allen Straßen

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A Swedish kilometre tax – State of Play
Presentation outline:

- I will give an update on the policy situation
- I will describe basic elements of the proposed concept

A Swedish kilometre tax – Policy status

- Proposed by governmental investigation on road (transport) taxation in 2004
- Parliamentary decision in favour, and to proceed with investigation in May 2006
- Governmental investigations carried out during 2007 (Public hearing finalised a few weeks ago)
- Proposed by the Governmental Climate Commission March 2008
- Expected to be forwarded as part of a climate bill in March 2009, to be implemented 2011-2012
- Key objective is internalisation of external costs
Road network and other facts

- 26,000 kilometres primary roads (whereof 2,000 4-lane)
- 72,000 kilometres secondary roads
- 40,000 km municipal roads
- 284,000 km private roads (mostly forest roads)
- 29 harbour border crossings
- 39 (N) + 5 (Fi) + 1 (DK) road network border crossings
- 80,000 domestic and 20,000 foreign HGV’s

Expected policy requirements

- All heavy goods vehicles with a maximum laden weight above 3.5 ton are liable to pay kilometre tax
- Also foreign vehicles
- The tax is due for the entire public road network (including most municipal roads) and parts of the private road network
- It shall be possible to differentiate the tax on the road used
- It shall be possible to differentiate the tax on vehicle characteristics
- It shall be possible to differentiate the tax on time of day
- Decisions on the tax due are made by the tax authorities and are public information
Interoperability requirements

• The Swedish kilometre tax will be interoperable with the European Electronic Toll Service (EETS). This means that it shall be possible to use foreign EETS OBU’s in the Swedish kilometre tax system

• The kilometre tax system shall be fully interoperable with other road user charging systems in Sweden

• The kilometre tax system shall be a part of NORITS, the Nordic interoperability agreement and cooperation on road user charges (The EasyGo service)

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Barriers to implementation

• The fuel price has soared, and new taxes are currently (quite suddenly) not very popular

• Our current transport models have serious problems proving socio-economic benefits (the fiscal effect is however quite positive)

• Our secretary of state for transport has personal links to the forest industry (i.e. someone else has to be the driver)

• The interpretation of EC directives are ”not crystal clear” and subject to discussion
Support to implementation

- The government has in its recent Infrastructure bill pointed at the application of fiscal and other economic tools to reach transport policy goals
- There is a broad political consensus on the result from the climate commission
- The opposition strongly promote a kilometer tax
- In the end: It pays off (estimated income from foreign drivers will pay the entire system)

Which are the key elements of the concept?

- The thin client
Thin or heavy client

Heavy client: The main processes in the OBU

Thin client: Limited OBU function
Which are the key elements of the concept?

- The thin client
- The secure module

The secure module

- The concept is based on storage of vital information in a protected environment in the OBU – e.g. in an IC card
- This “protected environment” is issued by the tax authority, similar to issuing SIM-cards
- This will eventually allow for the OBU function to be integrated in a vehicle telematics platform
- And also open up for added value services
Which are the key elements of the concept?

- The thin client
- The secure module
- Selectable position indicators

Selectable Position Indicators

- The system could accept different kinds of position indicators
- The Toll Service Provider is responsible for accountability and precision of trip recordings
- Combinations of indicators would do just fine!
- This will enable interoperability with other (e.g. DSRC) systems, and
- Opens up for a dynamic development of positioning methods
Which are the key elements of the concept?

- The thin client
- The secure module
- Selectable position indicators
- Toll Chargers key interface
Which are the key elements of the concept?

- The thin client
- The secure module
- Selectable position indicators
- Toll Chargers key interface
- Enforcement focusing on audit and trust
Enforcement system characteristics

- Trust until security is under threat
- Toll Charger keeps track on level of fraud and violations - use random check to measure violations
- Focus Toll Charger monitoring on business processes and quality systems of transport operators
- Toll Charger audit “OBU population performance” rather than error rates of single OBU’s
- Delegate to the TSP to monitor associated subscribers (OBU users)
- Synchronize and use parallel enforcement mechanisms
- Focus on non-real time enforcement measures, separate the debiting and monitoring functions
- Other authority than the Toll Charger is in command of enforcement

Finally: Our belief in market forces

Six principles for establishing interoperability in autonomous systems by market forces:

1. Road users are obliged to declare their road usage
2. Toll Charger sets quality of service criteria
3. Service Providers design their own solutions
4. Toll Charger monitor and controls the Service Providers
5. Service Providers monitor and control their subscribing road users
6. Toll Charger monitor and control road users without SP subscription

Prerequisite: Toll Chargers are separate from Service Providers
Thanks!
Questions?

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