



Road Pricing in the Netherlands

An introduction of the basic outlines

Dr. Joris Al, Rijkswaterstaat

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Contents introduction

- History road pricing in the Netherlands
- Current pricing policy
- Technology & organisation
- International issues

History: '70s – '90s

Previous Dutch Road User Charge attempts

- '70s-'80s: road pricing in the picture
- 1988: Highway toll project I
- 1992: Congestion charge
- 1994: Highway toll project II
- 1999: Congestion charge+ investments package
- 2001: Kilometer Charge

All failed because of **insufficient public/political support**

The Netherlands

- Population: 16.4 million people
- 8+ million vehicles
- 2400 km highway
- >134.000 km roads in total
- >100 billion km made on yearly basis
- 350 km border crossings
- Daily congestion problems, related to the economic centre Randstad (Amsterdam, Utrecht, The Hague and Rotterdam)
- Few toll locations
- €7,8 billion vehicle taxes annually



2004 Draft Transport Policy



Estimated congestion 2020
without extra programmes

- Transport keeps growing
- Expanding infrastructure capacity is not sufficient to:
 - keep travel times acceptable and predictable
 - increase reliability

Introduction of road pricing

The motive for introducing road pricing: **congestion**

Development of congestion without (left) en with kilometre charge (right)

(ambition Mobility Plan agrees with an index of 60)

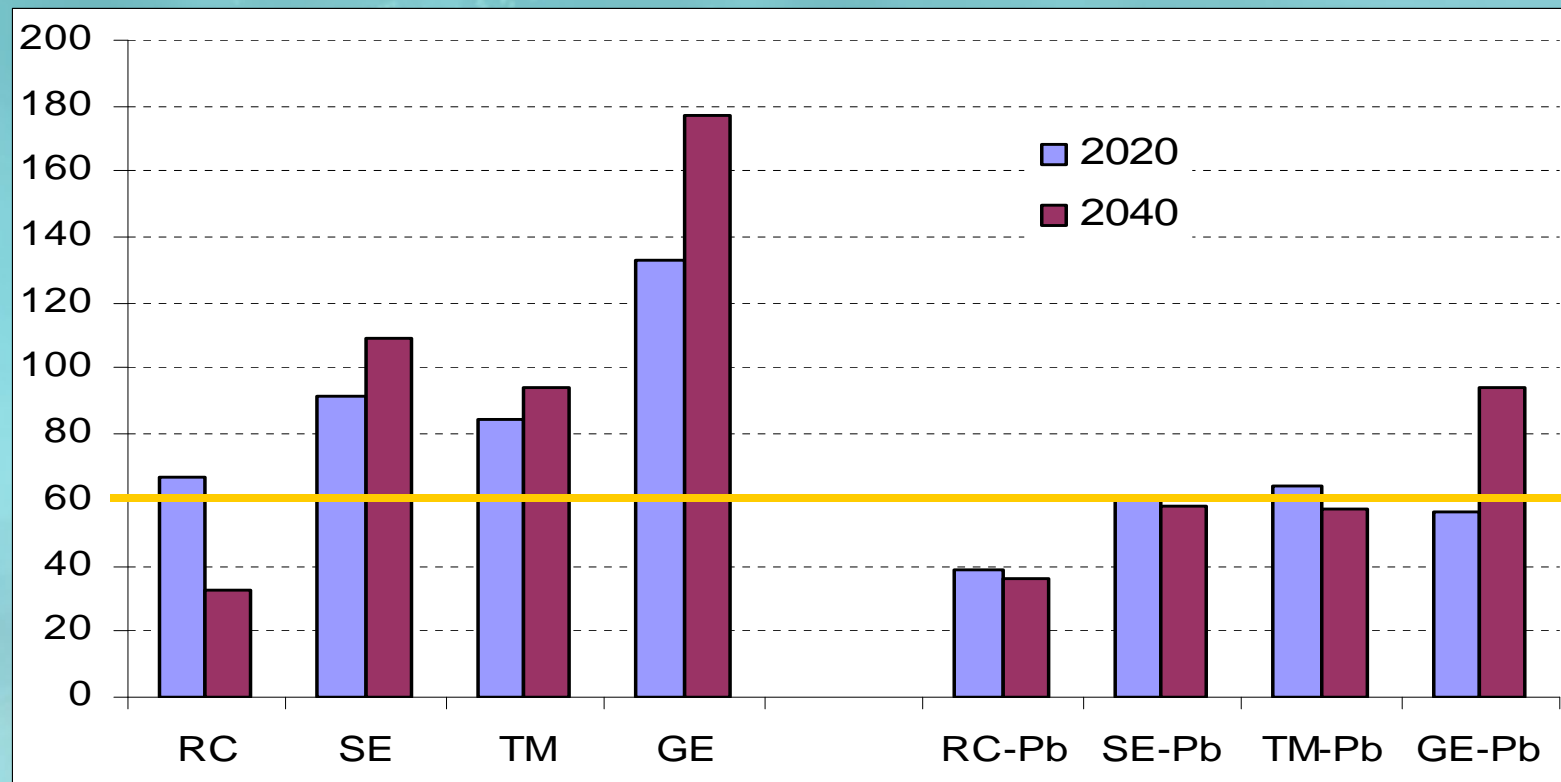
Different scenarios for national economy:

RC, SE, TM, GE

Pb = Pricing scenario added

= Policy Ambition

index:



2000 = 100

2005 Stakeholder Commission

- Main lesson learned:
 - political and public acceptance is key factor
- Therefore sought advice from a commission:
 - Chair Mr Nouwen (1999 main opponent)
 - Main social and business stakeholders involved
- The advice:
 - A km-price varying according time, place and the effects on the environment (for all Dutch roads and all motor vehicles)
 - Elimination of current (fixed, annual) taxes for purchase and ownership
 - Revenues invested in mobility policy: mainly road infrastructure, but also for infrastructure for public transport

2006 Final Transport Policy

Road pricing in the (officially adopted) Transport Policy

- Advice of Commission leading principle
- Introduction km-charge system, without increase overall cost of using the road
- Revenues are dedicated to the transport budget
- Conditions: much lower implementation costs (less than 3 billion) and operating costs $< 5\%$ revenues
- Road pricing is an addition to adding extra road capacity and more efficient use of existing roads. It does not replace investments in infrastructure in the near future

Current pricing policy: Government decision 2007

November 2007 cabinet decision on road pricing:

- system of fixed taxes to be converted into price per kilometre
- all roads, every km, differentiated to place, time (congestion charge) and environment (basic rate)
- start lorries 2011
- passenger cars 2012-2016
- 2008 start mobility projects
- based on latest satellite technologies
- start with a dedicated back-office and certified On Board Equipment (OBE) > build a system of multi service providers



Current pricing policy: Government decisions 2008

30-05-2008 cabinet decision on tax plan

- Full conversion of current fixed purchase tax and annual tax into km price

27-06-2008 Parliament gave green light and budget approval for

- Functionality and organisation
- Preparation of legislation
- implementation strategy

Ambition until next election (spring 2011)

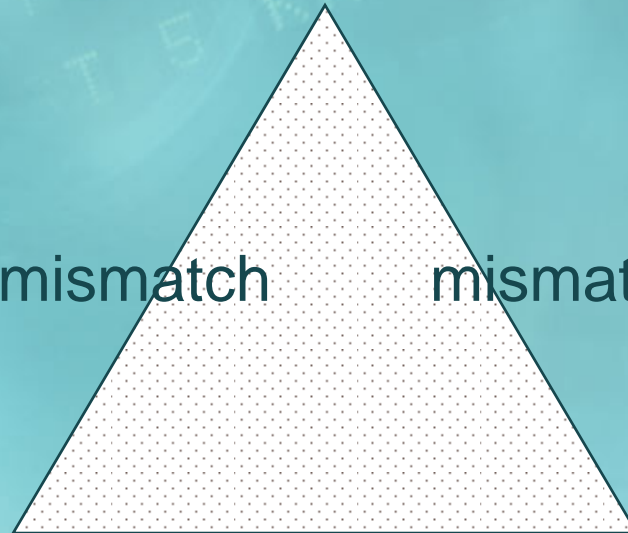
- The project must have taken irreversible steps
- Legislature & Tax conversion
- Tenders started

Choosing the right charge level

Effects on road usage
and congestion

mismatch

mismatch



mismatch

Needed budget for
road management

Future variable tax income
from road pricing

Two track implementation strategy

Main Private track: service providers

- Free market model
- Entry through certification of organisation & technology
- To be combined with other services like
 - Navigation & traffic information
 - Assurance per kilometre
 - Full mobility services, e.g. combining private & public transport in order to decrease road usage during rush hours
- Market must emerge

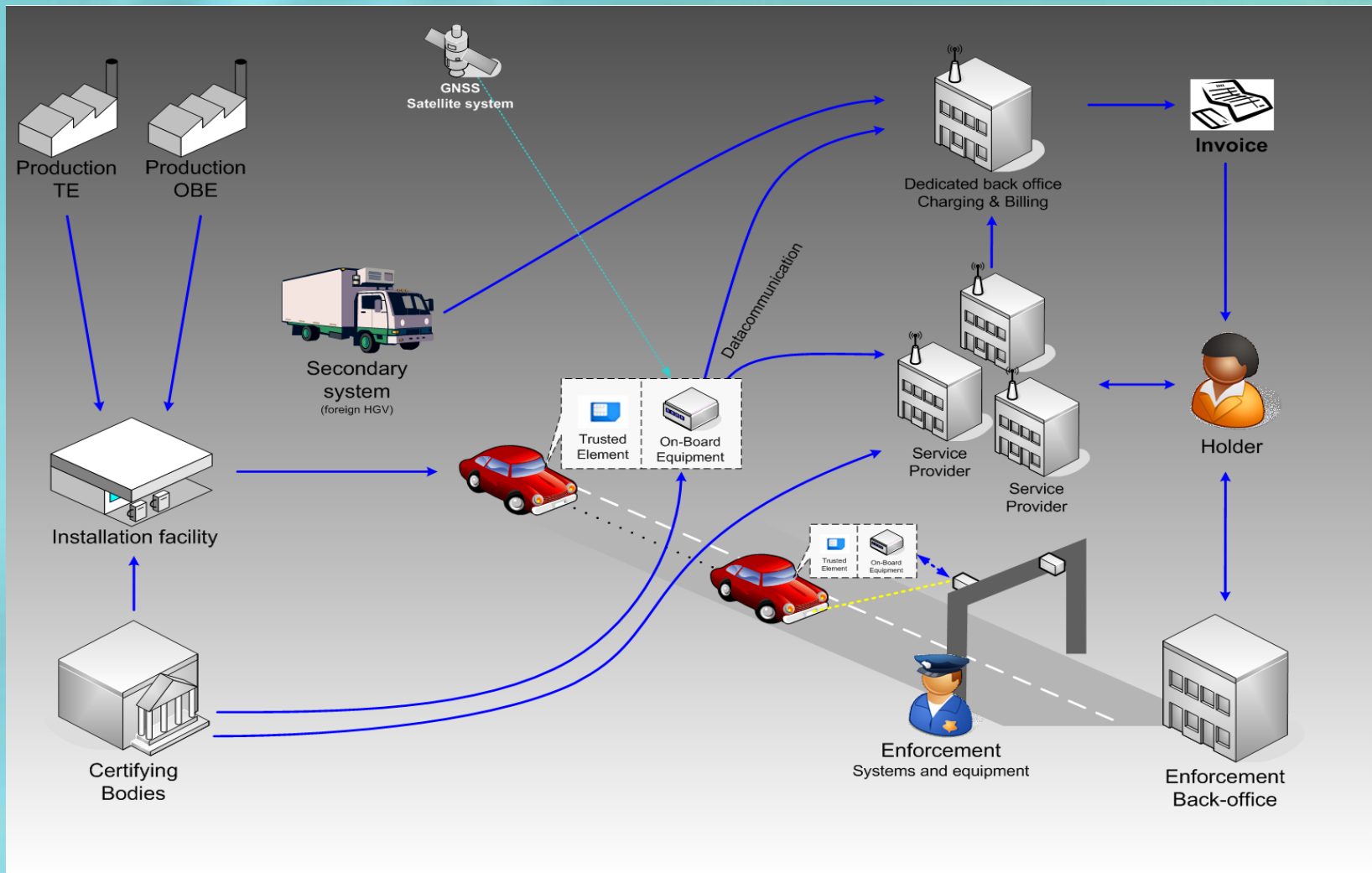
Backup public track

- Public controlled organisation
- A backup to ensure implementation with or without the emerging market for mobility services
- No other services

Mobility projects

- First step in private track
- Two goals:
 - Short term reduction of congestion
 - Stimulation of emerging mobility services market
 - In order to integrate with kilometer charge at the long run
- Regional stimulation of
 - Reduction of commuting by car
 - Commuting outside rush hours
 - Intelligent use of in-car technology
 - Intelligent combination of mobility services
- Agreements between
 - Regional authorities
 - Major employers
 - Financial support from the national project

Organisational model: open market & back-up track



Technology outcome

- Functional demand: register road usage on all roads in the Netherlands (not only highways)
- Traditional toll technology therefore not applicable
- The only reliable technology to support this is GPS
- Conclusion based on extensive research and market scans
- The on-board-equipment (OBE) registers all vehicle movements on paved roads (national, regional and local)
- For enforcement purposes, the OBE will have DSRC technology

Organisational model

Main track Private Service Providers + Public Back-up track:

- The upcoming public procurement procedure concerns a large scale test of 60.000 vehicles with an option to continue services for the backup-track
- The acquisition of back-up track will be an option
- The procurement procedure does not concern certification of (potential) Service Providers.

Impact of privacy requirements

- Personal data is protected by Dutch law
- Supervision by the National Privacy Commissioner
- No central registration of vehicle movements will be allowed
- The OBE therefore must be 'smart': only aggregated data is sent to back office (number of kilometers in a certain tariff area)
- Use of personal data by private service providers is allowed only after written permission of the user
- Consequentially, the aggregated data collected in the back office is probably unsuitable for public (real time) traffic management
- Only when private service provides combine the OBE with other technology, this type of data may partially become available in the future.

European/ international issues

Some international issues to be handled multilaterally:

- Interoperability
- Eurovignet terms
- Secondary users
- Enforcement

Interoperability

Interoperability is an important issue. It must ensure European users only have one in car system and one billing method, while travelling through different European countries.

- User-friendly
- Economies of scale
- Higher effectiveness policy goals

European strategy:

- Bilateral / multilateral convergence through cooperation
- European Electronic Toll System (EETS): ensuring a workable definition (before that no start of implementation period)
- EETS standards will not be ready before Dutch implementation
- EETS will be implemented as a *secondary system*
- Foreign users will pay a fixed fee until EETS has been implemented



**Thank you for your
attention**

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