

The potential impacts of vehicle telematics on the insurance industry

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Overview

- **The driving experience in the future**
- **The impact of new technology on the insurance industry**
- **The potential role of insurers**
- **National technical framework for ITS**
- **Engagement with Government**
- **Issues for the insurers**

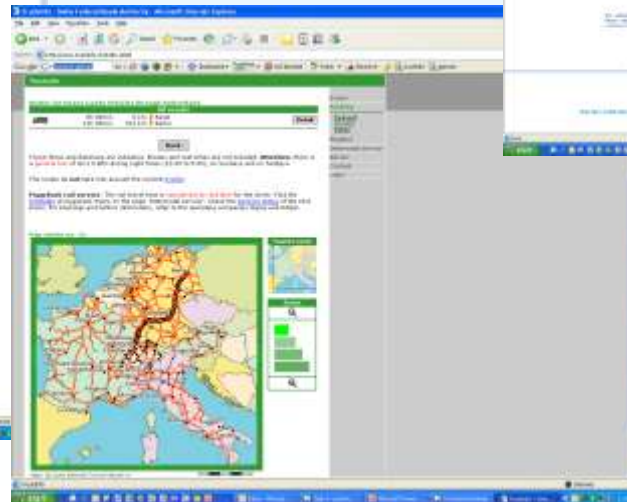
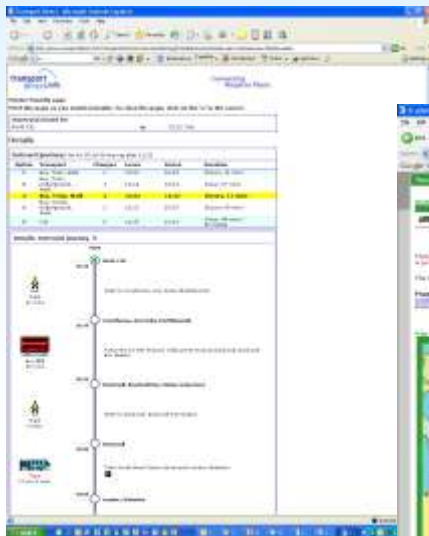
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The driving experience in the future

- **Planning the journey**
- **Setting off**
- **During the journey**
- **Responding to accidents and theft**

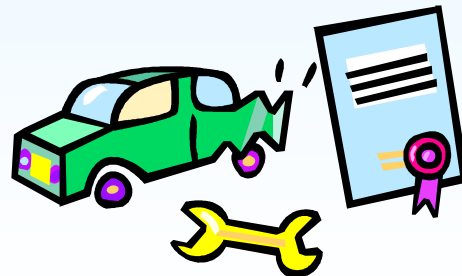
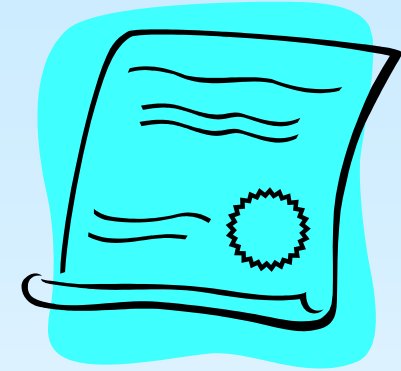
The driving experience in the future: Planning the journey

- Available modes
- Price of the journey
- Possibility of multi-modal trips
- Use of mobility cars



The driving experience in the future: Setting off

- **Person fit to drive**
- **Authorised to drive**
 - ◆ Licensed
 - ◆ Insured for vehicle
- **Vehicle fit for driving**
 - ◆ MOT (annual vehicle test)
 - ◆ Dynamic tests passed
- **Setting up the route**
 - ◆ Route Guidance



The driving experience in the future: During the journey

■ Driver Information

- ◆ Warning of incidents
- ◆ Vehicle – vehicle

■ Driver Assistance

- ◆ Adaptive cruise control
- ◆ Lane control
- ◆ Collision avoidance
- ◆ Automated highway

■ Dynamic route guidance

- ◆ Rerouting

■ Intelligent Speed Adaptation

- ◆ Speed limit information
- ◆ Speed control

■ Managed road space

- ◆ Charges for some roads
- ◆ Controlled access
- ◆ Differential prices

■ Getting a monthly statement



The driving experience in the future: Responding to accidents and theft

- **Warning of incidents ahead**
- **Management of incidents**
- **Problems with the load**
 - ◆ Temperature
 - ◆ Weight
- **Accident**
 - ◆ Notification of location to emergency services
 - ◆ Notification of hazard associated with the load
 - ◆ Recording of vehicle sensors immediately prior to accident
- **Theft – recovery of the vehicle**



The driving experience in the future: A vision of the future

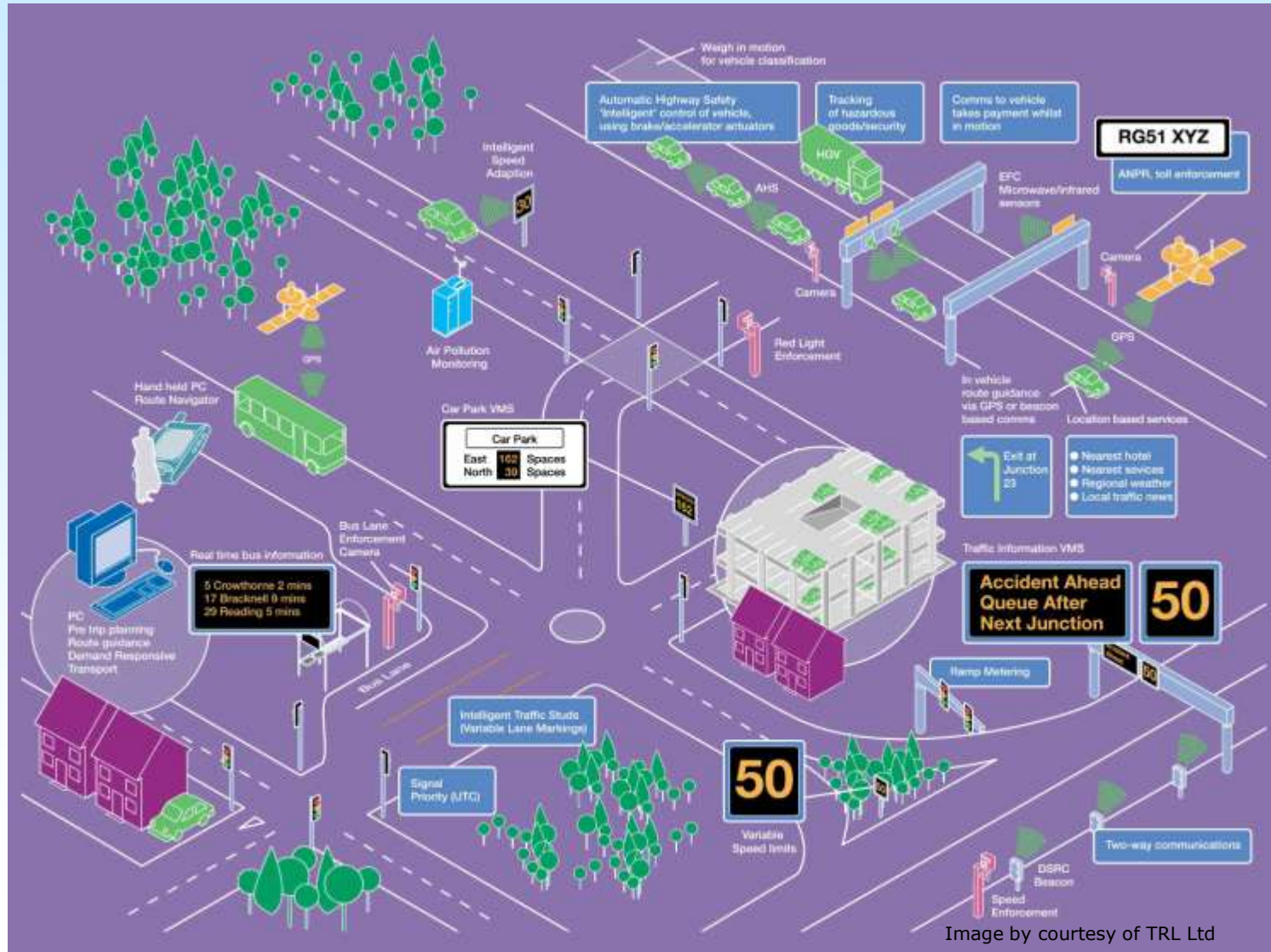


Image by courtesy of TRL Ltd

The impact on the insurance industry: insurance business processes

■ Assessing risk

- ◆ Changes in risks of accidents
- ◆ Changes in accident severity
- ◆ Variation in exposure to risk
- ◆ Disaggregation of risk

■ Pricing

- ◆ New possibilities of differentiation
- ◆ By distance, time, location
- ◆ By driver

■ Responding to accidents or theft

- ◆ Real-time

■ Assessing liability

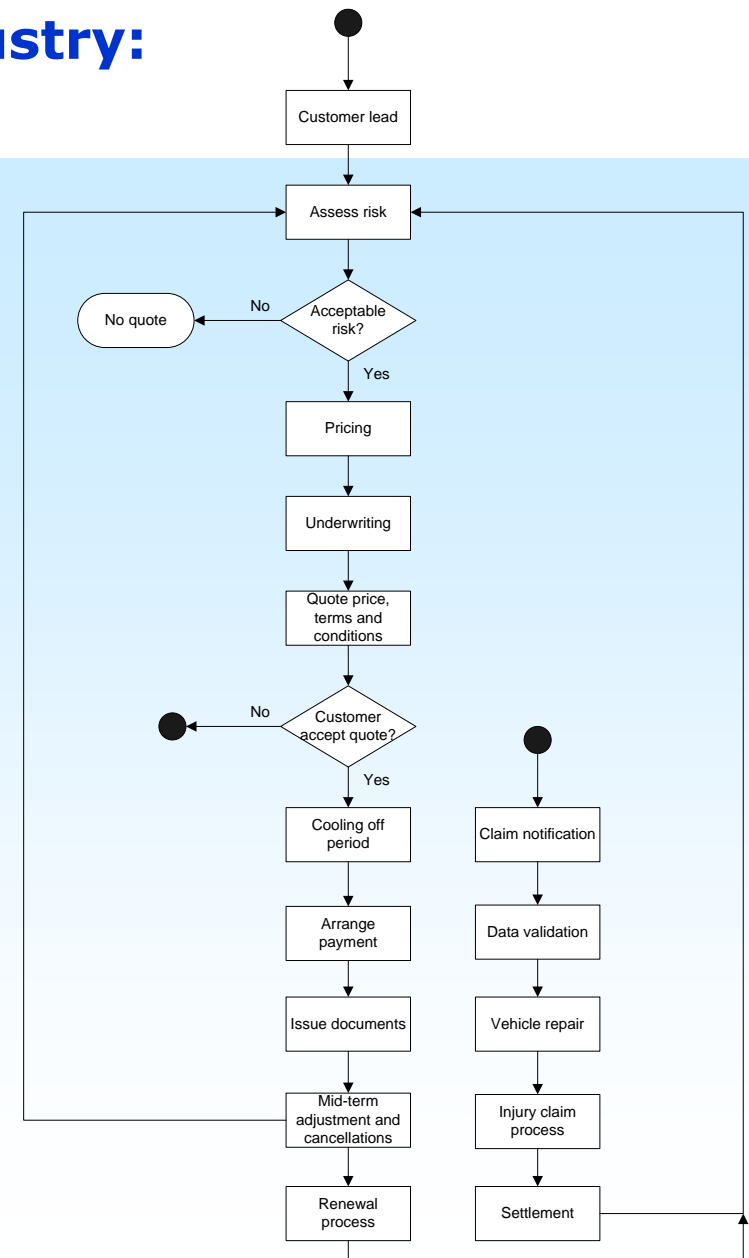
- ◆ Detailed vehicle information
- ◆ Improved accident information
- ◆ Accident causation factors

■ Vehicle repair

- ◆ More complex technology
- ◆ Variations in costs of vehicle replacement

■ Potential for new services

- ◆ Based on location and account



Risk
management

The impact on the insurance industry: Access to the customer

■ Competition with other industries

- ◆ Possible service providers
 - Vehicle manufacturers
 - Telecoms providers
 - IT companies
- ◆ May be more difficult to access the customer directly
- ◆ Customer may be reluctant to change service providers

■ Competition within the industry

- ◆ Other insurers will also be keen to capture the customer
- ◆ New insurance services could provide a competitive edge

■ Piggy-backing with road pricing

- ◆ How to share costs with the Government?
- ◆ How to share risk and ownership?

The impact on the insurance industry: Motoring Environment

- **People may change their behaviour**
 - ◆ Avoiding congestion
 - ◆ Avoiding late night driving
 - ◆ Driving more carefully (knowing they are monitored)
 - ◆ Driving less
- **The number and severity of accidents may change**
 - ◆ Advanced vehicle safety systems
 - ◆ Speed management
- **This may change the assessment of risk**
 - ◆ Generating the need for new data
 - ◆ Generating the need for new pricing models

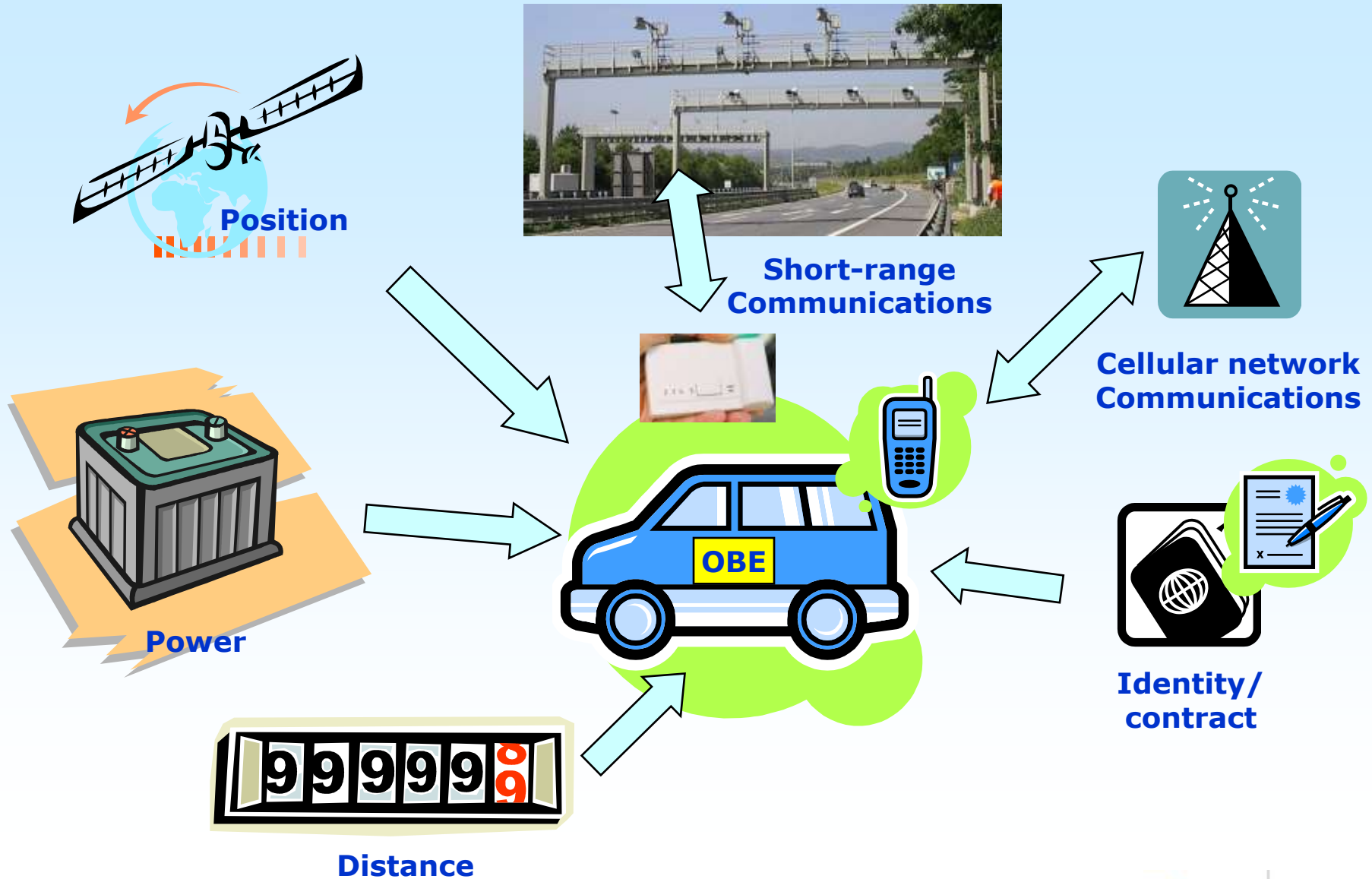
The potential role of insurers

- **The environment for insurers will change**
- **How might insurers get involved in the delivery of telematics systems?**

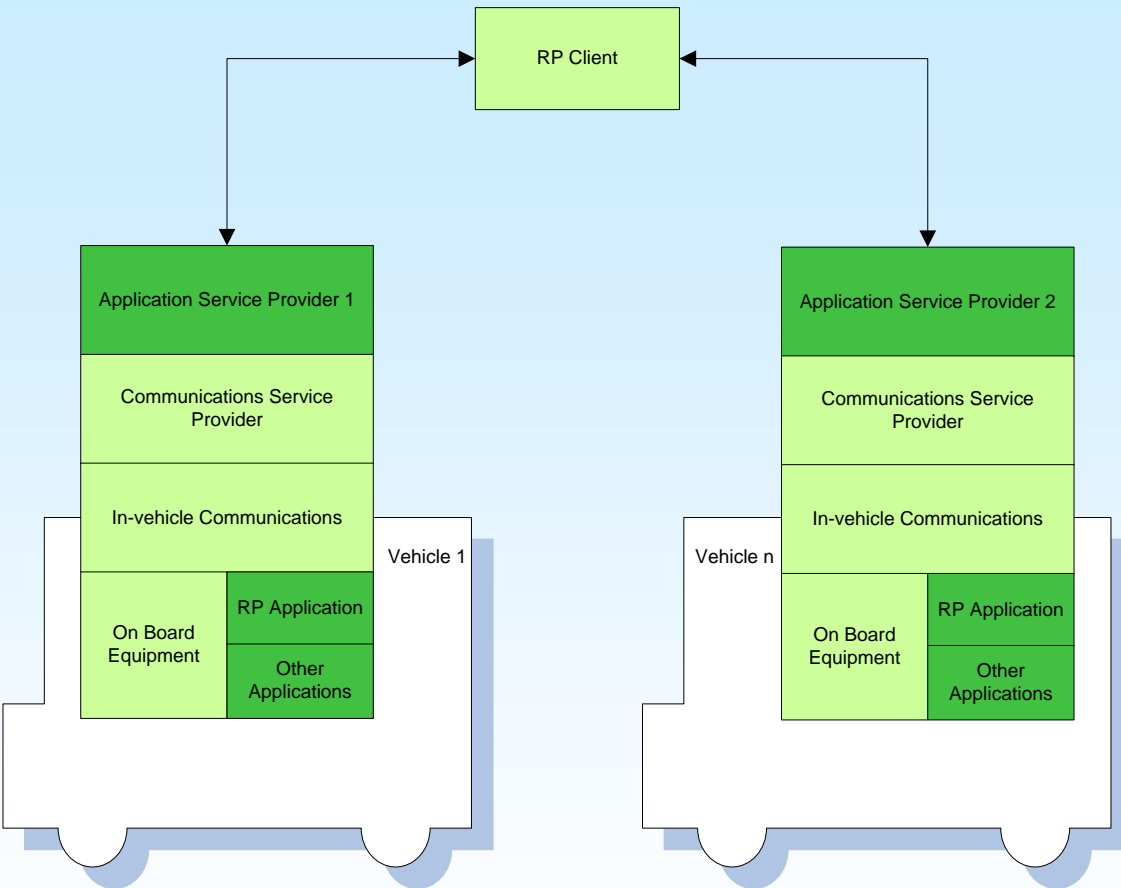
The potential role of insurers: Using road pricing as an example

- **Suppose Governments decide to promote national road pricing:**
 - ◆ Covering all vehicles
 - ◆ Based on distance, time and location
- **This would increase the market for in-vehicle equipment dramatically**
- **What are the possibilities for insurers?**
- **Let's start by looking at the technologies involved...**

The potential role of insurers: In-vehicle technologies

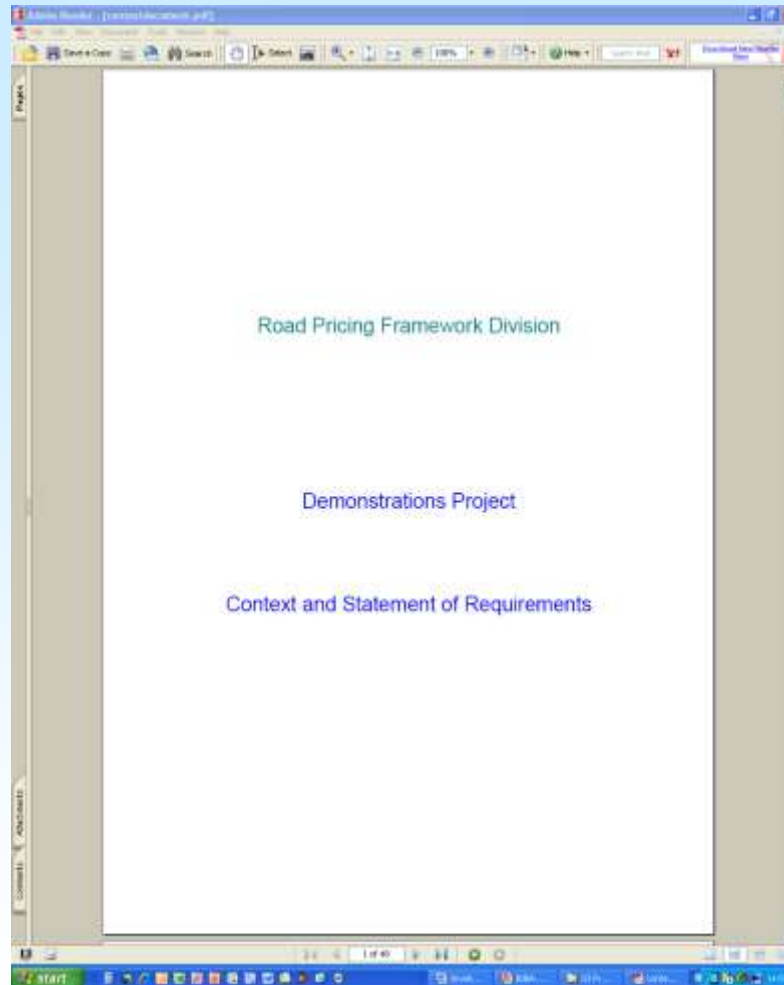


The market approach to road pricing



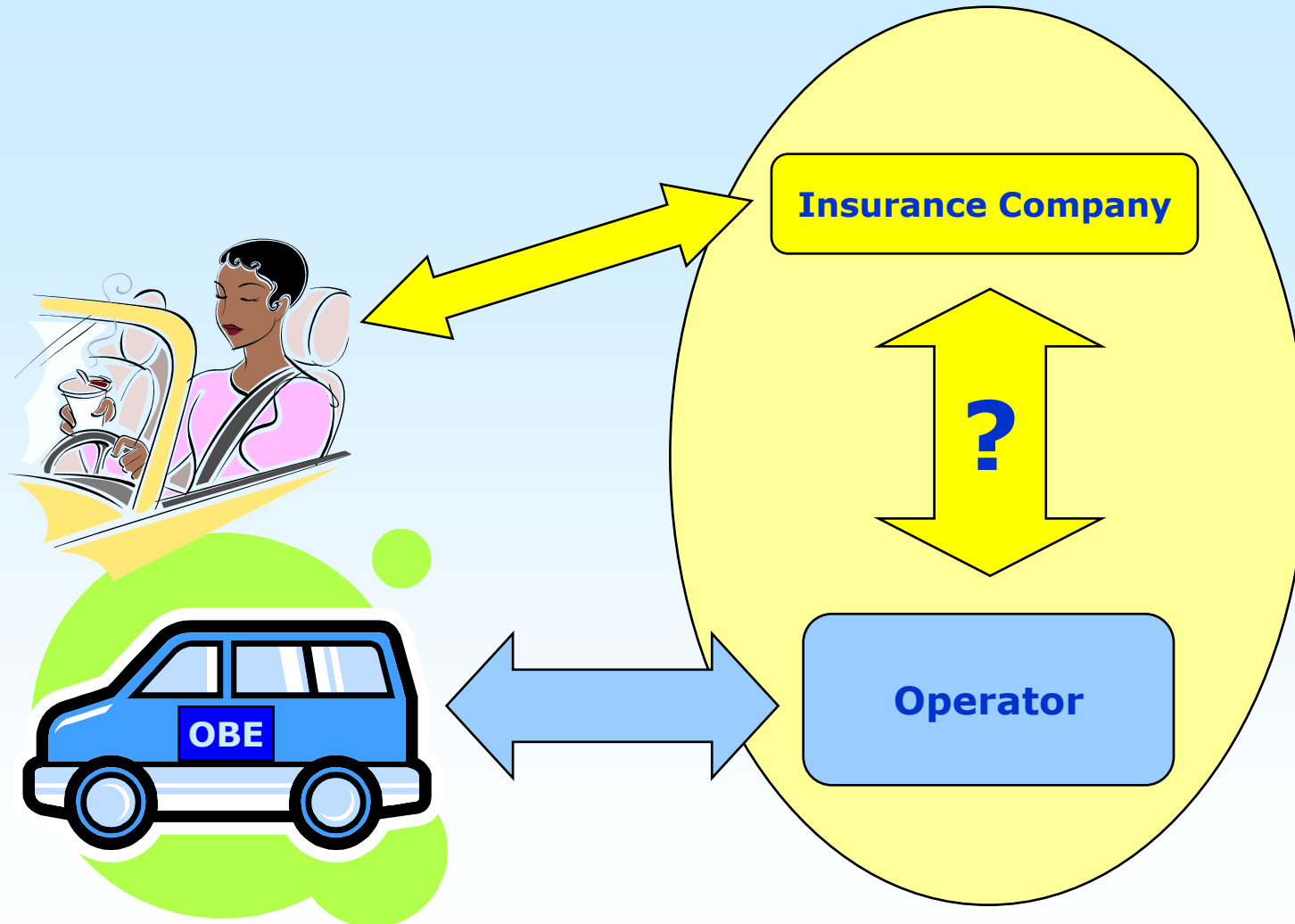
- Department for Transport
- Road Pricing Demonstrations Project
- Investigating the feasibility of a market approach to road pricing
- Invitations for Road User Service Providers to offer road pricing services
- Demonstrations will start during 2008

Context for the Road Pricing Demonstrations Project

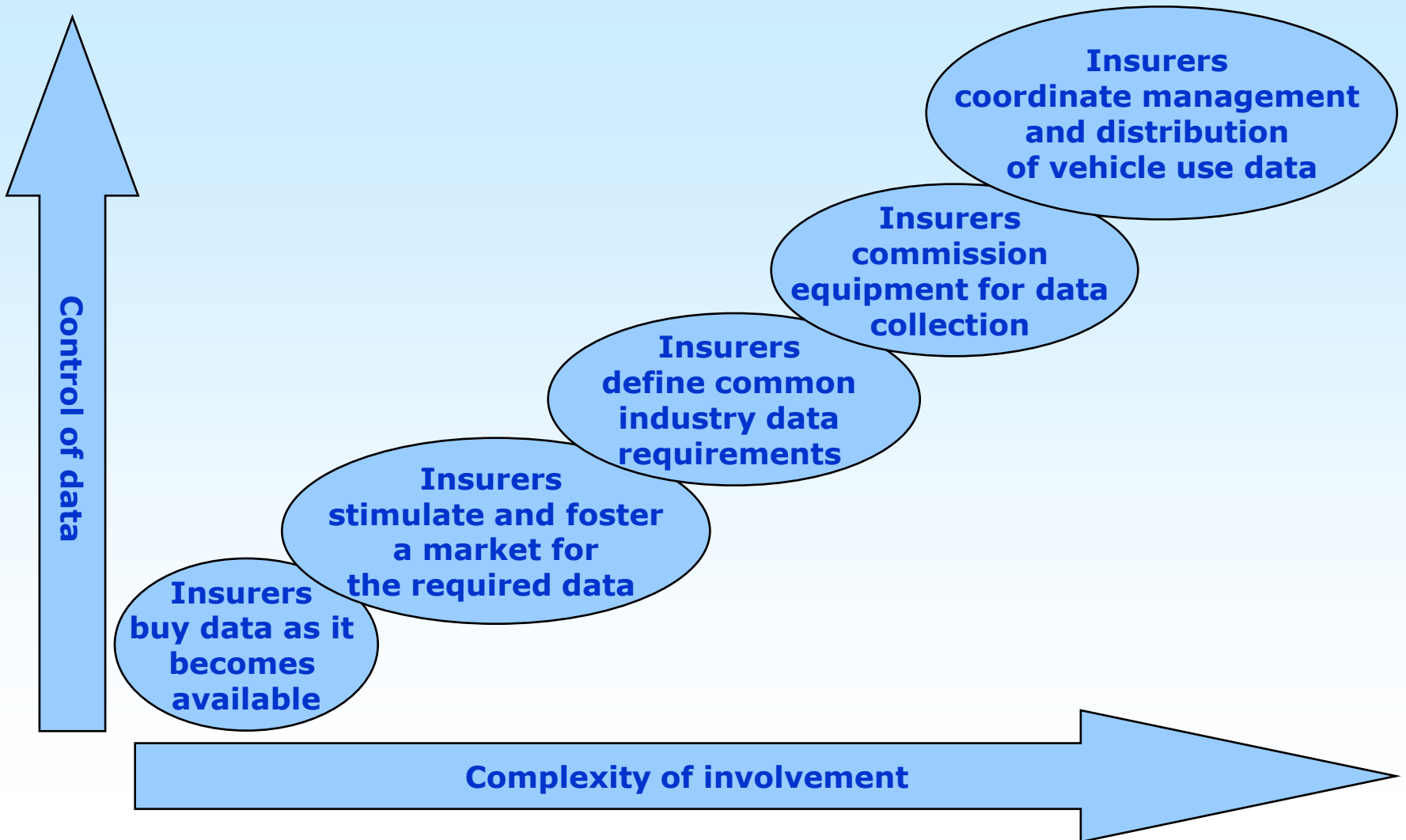


website: <http://www.dft.gov.uk/pgr/roads/roadpricing/debate/systemsandtechnology/contextdocument>

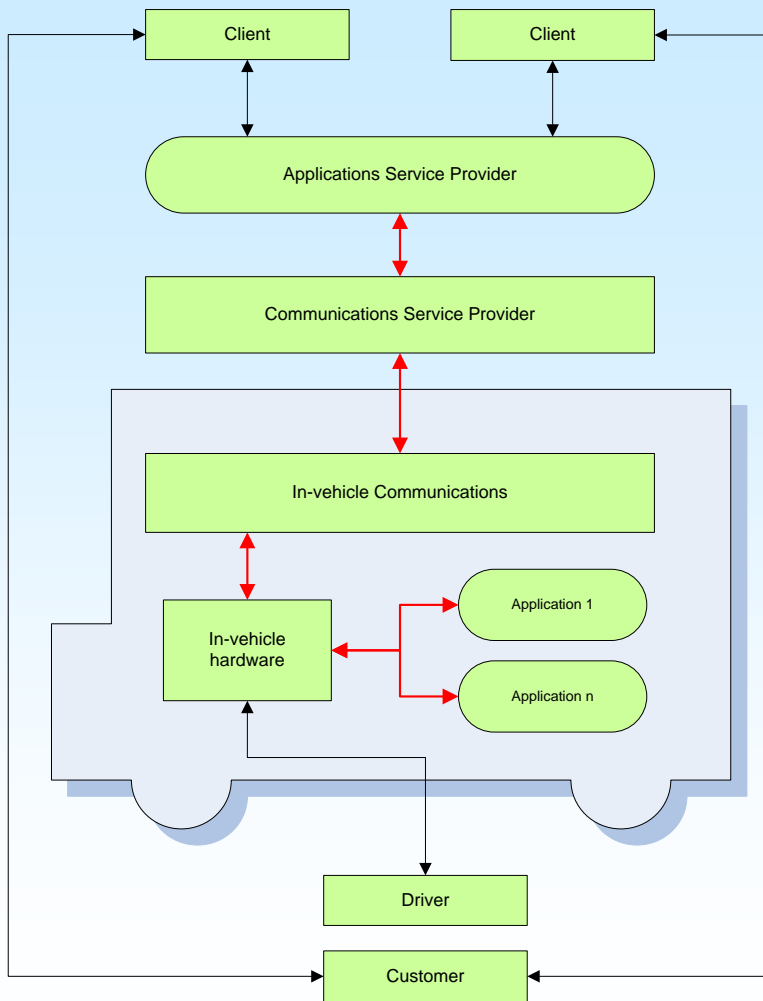
Think about the possible role of insurers: What is involved in delivering this vision?



The potential role of insurers: Possible levels of involvement



National Technical Framework for ITS



- Applications requiring in-vehicle equipment are complex
- Many different market players
 - ◆ Telematics service providers
 - ◆ Telecommunications Providers
 - ◆ Vehicle manufacturers
- All try to “own” the complete solution

Engagement with Government – needs of insurers

■ **Investors need a stable environment**

- ◆ Clear political commitment to introduce road pricing
- ◆ May be an opportunity or a risk for insurers

■ **Working with affected industry sectors**

- ◆ Could be a big impact on insurers
- ◆ Government needs to facilitate involvement of industry
- ◆ Discussion of proposed commercial arrangements

■ **Need for clear requirements for the road pricing system**

- ◆ What is required?
- ◆ How will Government access private sector equipment?

■ **Need for firm implementation plan**

- ◆ Need for more detail on roll-out

■ **Identification of suitable business models**

- ◆ How will the services be secured?
- ◆ How will the private sector get involved?
- ◆ How will risk and reward be determined?

Issues for the industry

- **Complex market for in-vehicle services**
- **Need to be a “big player” to compete in the market**
 - ◆ Means insurers considering the need to work together
- **Encouraging signs for service providers**
 - ◆ Demonstration of road pricing in the UK
 - ◆ Development of the European Electronic Toll Service
- **Discouraging signs for service providers**
 - ◆ Governments tend to use single dedicated supplier
 - ◆ Difficulty in subsidising other applications

Conclusions

- **Huge potential in in-vehicle telematics for Insurers**
- **Road pricing offers most potential**
 - ◆ but public acceptability is very important
 - ◆ do insurers want to be associated with road pricing?
- **Becoming a market for “big players”**
- **These benefits may not be fully realised if insurers act individually**
 - ◆ Market for in-vehicle services is complex
 - ◆ Need “buying-power”
- **Governments find it difficult to work with the market**
 - ◆ Policies subject to change
 - ◆ Timescales uncertain
- **Without government involvement, development of in-vehicle services is rather disappointing**