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CERRE 2019-2024 WHITE PAPER

Mobility Ambitions

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Improving network and digital industries regulation

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URBAN MOBILITY

INTRODUCTION

The challenges of delivering sustainable mobility



Yves Crozet

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INTRODUCTION (1/3)

- ▶ The European Commission has published several White Papers, notably in 2001 and 2011, with ambitious objectives to reduce the environmental impacts of mobility **without curbing the mobility (?)** of citizens or goods.
- ▶ Both papers focused on ways to reduce the external costs of transport: impacts on climate and biodiversity, accidents, pollution and noise.
- ▶ They identified the reduction of Greenhouse Gases (GHG) emissions as a key priority. It is today a more and more crucial issue.

INTRODUCTION (2/3)

- ▶ In the fields of GHG emissions and pollution in urban areas, the results of national and Europe's mobility policy to date are mixed.
- ▶ However, the objectives of the 2011 Commission White Paper were correctly grounded, for instance in an understanding of how a decarbonised transport sector can be created.
- ▶ Therefore, in the period 2019-2024, the EU should continue to focus on achieving greater modal shift, making use of market-based incentives and pricing (**to reduce traffic (?)** and/or increase occupancy rates), as well as technological change (to lower vehicle emissions).

INTRODUCTION (3/3)

- ▶ For each mode of transport, total emissions depend on the following variables:

$$\text{GHG emissions} = \text{Traffic (in p.km or t.km)} \times \frac{\text{Emissions per vehicle.km}}{\text{Occupancy rate}}$$

- ▶ For each mode of transport, reducing GHG emissions offers four options:
 - a) Reduce traffic
 - b) Lower vehicle emissions
 - c) Increase occupancy rates
 - d) A modal shift, reducing traffic from modes producing most emissions

LONG DISTANCE MOBILITY



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AMBITION #1

**Complete the introduction of competition
in all modes of transport, including rail**

- ▶ Competition in road and air transport has long been completed but rail is proving more problematic

Intramodal competition in rail

1. European rail freight market completely opened for competition in 2007
2. International passenger market opened in 2010
3. Domestic market to be opened under the 4th railway package
 - open access on commercial routes, 2020
 - competitive tendering for public service contracts, 2023
4. Requirements regarding vertical separation (at least into the holding company model) and independent regulation in place.
5. Priority is not for more legislation but **better implementation.**

Why so little impact on mode shift?

- ▶ **Lack of competition** in practice (around 40% of freight new entrants; little in passenger except in a few key countries)
- ▶ **Barriers to entry** remain (e.g. access to rolling stock; treatment of staff, characteristics of contracts)
- ▶ Problems with **fragmentation** (especially vertical separation on densely used networks)
- ▶ **Slow implementation of innovation**

But circumstances very diverse; **no 'one size fits all' solution.**

Issues for policymakers

- ▶ While the introduction of competition, including in rail, is almost complete, issues remain. These are best tackled at Member State level. However, **the European Commission must play its role in monitoring developments, enforcing legislation and disseminating best practice.**
- ▶ Policymakers should support **strong, independent regulators** dedicated to improving the efficiency of the rail sector and with adequate powers to implement their conclusions.

AMBITION #2

Support smarter, economically viable investment

- ▶ The European Commission called for a trebling of the length of high speed lines in the EU by 2030, to improve long distance passenger services as well as to release capacity on the existing network for freight.
- ▶ *European Court of Auditors, 2018.* A European high-speed rail network: not a reality but an ineffective patchwork.
- ▶ Many lines not economically justified.

Issues for policymakers

- ▶ How to balance the target of creating an integrated, effective high-speed rail network with the **economic feasibility** of new lines or upgrading?

AMBITION #3

Fully internalise the external costs of mobility

- ▶ Europe must finally get to grips with internalising the external costs of mobility. In the long distance market, the **pricing of road goods vehicles and of air transport** are two crucial issues.

Internalising externalities

Percentage of variable infrastructure costs and externalities covered by taxes and charges:

Rail	79%
Road	45%
Aviation	37%
Inland waterway	13%
Maritime	4%

Source: C E Delft (2019) State of play of Internalisation in the European Transport Sector

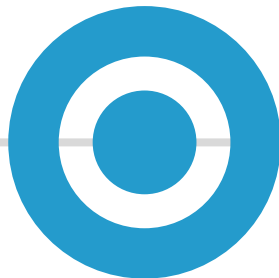
Priorities for internalisation

AIR



Inadequacy of ETS:
need for additional passenger taxes or a kerosene tax within Europe

ROADS



Road haulage:
1999 legislation allows charging full marginal social cost but not compulsory and permits time as well as distance based charging

CONGESTION PRICING



Need for progress with **road pricing** particularly in urban areas
(growth of electric vehicles makes this even more urgent)

Issues for policymakers

- ▶ How can Member States be convinced to support a level playing field in long-distance mobility by adequately pricing roads goods vehicles and air transport?
- ▶ Policies such as the provisions of investment funds should be considered for those countries most affected.

Conclusions

- ▶ Revitalising railways not easy; there is no simple solution.
- ▶ The key European legislation is now in place.
- ▶ Diversity of conditions means the thrust must now come from Member States, with the Commission monitoring implementation and disseminating good practice.
- ▶ Strong independent regulation at the national level is crucial (not just about non discrimination, but also about efficiency, investment and innovation).
- ▶ Investment needs to be smarter and less reliant on new high speed rail.
- ▶ A level playing field with other modes remains crucial.

URBAN MOBILITY



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AMBITION #1

Support the introduction of sustained, ambitious efforts to reduce the external costs of road traffic in urban areas

- ▶ As indicated in the recent EU Handbook, external costs are particularly high in urban areas. Noise, pollution, congestion and GES emissions remain at a very high level.
- ▶ In order to address this issue, it is not enough to put the focus on the centres of big agglomerations. It is necessary to address road traffic in the peripheries or between the peripheries and the CBD.

Modal split in urban areas

- ▶ **Modal shift is very often a success in densely populated areas** where it is also easy to adopt traffic calming measures or even to ban diesel vehicles.
- ▶ Indeed, while car traffic has decreased in the centres of large cities, **traffic is still growing outside urban areas**, particularly for journeys from and within the periphery.
- ▶ **The rate of change in vehicles fleets is slow** and, in most countries, electric vehicles still account for a very small share of sales.

Issues for policymakers

- ▶ Coordinate and facilitate **collaboration** within the wide range of actors in the energy, urban planning, transit, digital and government sectors, including by sharing best practices and expertise.
- ▶ Policymakers should set more ambitious policy goals and make use of economic tools, including **urban tolls**.

AMBITION #2

Policymakers should embrace the opportunities of digitisation, without being blind to its challenges

- ▶ The most radical transformation offered by digital platforms is a **more collective use of cars**. Increasing the load factor of cars is one approach to reducing the external costs of urban mobility.
- ▶ However, such services can only be deployed if a new division of labour between new and traditional mobility providers and a new regulation of mobility services are implemented.

Digitisation of urban mobility

- ▶ One question is therefore whether digitisation can bring about change by lowering the costs of services, so that commuters abandon private vehicles and turn to new mobility services and to shared mobility.
- ▶ But: the business models of new mobility providers are challenging, and many new entrants have gone bankrupt. The question then arises as to whether public action is required and, if so, what form it should take (from BtoC to BtoG).
- ▶ Up to what extent can new mobility services reduce congestion, pollution, noise and GHG emissions?

Issues for policymakers

- ▶ How to foster a **shift** to shared mobility services that replace individual vehicles?
- ▶ **What kind of public support** – both financial and in terms of the use of public space – should be made available to these new services?

AMBITION #3

Empower public transport authorities (PTAs) to deliver Mobility 2.0

- ▶ In relation with the enlargement of the spectrum of mobility services, **PTAs should support a better integration of all the vectors of urban mobility, provided, directly or indirectly by them.**
- ▶ Due to complex interactions between land-use and transport, social conditions and environmental issues, **the regulation of urban mobility must be extended, unified and integrated.**

Digitisation and the role of PTAs (1/2)

- ▶ A first necessary extension of the role of PTAs is on the **regulation of road traffic**:
 - PTAs must, in one way or another, intervene on the uses of roads and even sidewalks and pedestrian zones. Encouraging the development of carpooling will require limiting access to roads for vehicles transporting one person only.
 - The fragmented regulation of mobility (public transit on one side and road management on the other side) must be abandoned.

Digitisation and the role of PTAs (2/2)

- ▶ A second necessary extension of the role of PTAs lies in the “**digital space**” and stems from the increasing role that the management of databases, platforms and applications will play in the coming years:
 - PTAs must value their own data as well as their brand name. They must not refrain from developing their own platform, even if, or more precisely, because they will be faced with the opening of sales channels.

Issues for policymakers

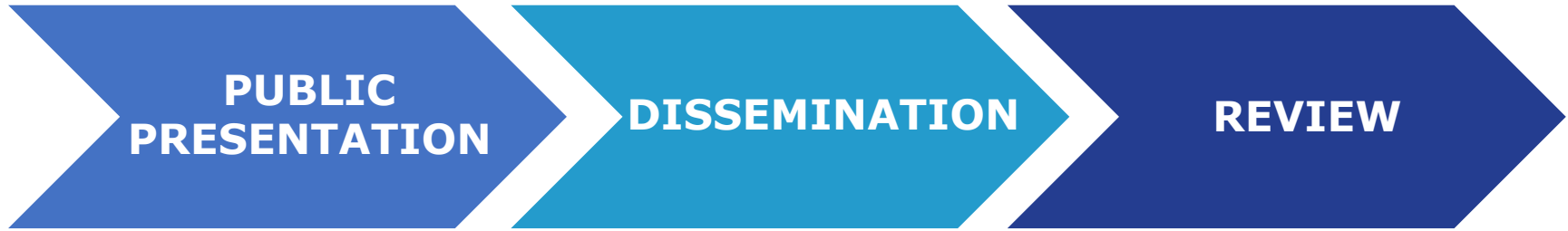
- ▶ What **data sharing/access arrangements** might be needed?
- ▶ Will public authorities remain the **key organising agent** of mobility systems, and if so, **how and to what extent should new services be integrated?**

Conclusions

- ▶ There is a **sizeable gap** between the accepted consequences of pollution and climate change and the relatively conservative measures adopted to date.
- ▶ Regulations have largely been focused on technical issues such as vehicle standards, when it is apparent that **economic tools** would be much more powerful (curbing mobility?).
- ▶ Public policies, via the development of MaaS, must favour transport modes that **optimise the use of public space**, and not those that offer infinitesimal time savings to users.

NEXT STEPS

2nd Semester 2019



24 September, Brussels


Evaluate progress of
White Paper ambitions


Mid-2021





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