

A SUSTAINABLE FUTURE FOR TRANSPORT: TOWARDS AN INTEGRATED, TECHNOLOGY-LED AND USER FRIENDLY SYSTEM:

COM(2009) 279 Final

**Response from: Mouchel Plc,
Severn House,
Lime Kiln Close,
Stoke Gifford,
Bristol
BS34 8SQ**

Introduction

1. Mouchel welcomes the opportunity to respond to the Commission's initial thoughts on the direction of European Community transport policy over the period from 2010 to 2020. Our response recognises that the Commission's Communication identifies the important challenges and objectives for European transport policy (ETP) for that period and provides observations and proposals consistent with the stated direction of policy. Amongst our conclusions we argue that supporting the EU's competitiveness and mitigating adverse environmental impacts from transport, should be at the top of the objectives hierarchy, which is not to denigrate other highly important objectives such as safety, security and accessibility.

Contextual Background

2. Mobility of people, goods and services defined the very first developed economies, enabling agglomeration of production (from the earliest, agriculturally based economies), development of skills and specialisation, exploitation of comparative advantage (whether in natural resources or knowledge) and trade. In the later years of the 20th century and the early years of the 21st, transport has defined the global economy, with wider and more complex networks of goods, services and skills than ever before in human history. As far as we can foresee, this trend is likely to continue. While it poses many challenges in the political, social and environmental dimensions, it offers compelling opportunities to advance living standards, improve life outcomes across the developing world and thereby to cement relationships and interdependencies between peoples, helping to guarantee global peace.

3. As the world's largest and most diverse trading block, with a rich heritage of specialist skills and expertise, the European Union will be a key player in the 21st century global economy. Efficient and effective transport links, both within and without the EU, will be vital in supporting and sustaining the EU's contribution, as the Commission has recognised in its Communication. In the ensuing paragraphs, Mouchel offers some comments and observations on the specific transport policy issues and priorities which the Commission has identified.

Review of 2000-2010

4. Mouchel agrees with the statement in paragraph 15 of the Communication that the most difficult policy challenge is to reduce the adverse environmental impact of transport

activities. It is true that the transport intensity of GDP has been decreasing (para 16), and in the UK there has been a more marked decoupling of freight transport activity from GDP. However this may partly be explained by the outsourcing of manufacturing activities to China and other Asian economies, which has led to a proportion of domestic goods transport movements being substituted by land transport movements in those countries, combined with long distance shipping, especially by container.

5. Overall, Mouchel agrees that progress in improving the fuel efficiency of transport over the past ten years (and more) has been disappointing (para 17). This area deserves intensive focus in the decade to come. Fossil fuel efficiency gains have the potential to help solve the most pressing and difficult environmental challenge (mitigating carbon output), while contributing to overall economic efficiency and growth (by reducing production input costs) and simultaneously reducing legitimate concerns about longer term energy supply security. Given that carbon is a commodity, logic suggests policy prioritisation by order of cost. Policies that save carbon and save money, (such as increasing fuel efficiency) deserve higher priority than policies that save carbon at a price. Indeed, if carbon savings are to be 'bought', decisions need to be made in a context which extends much wider than just transport (even transport 'as a whole'), as cheaper carbon savings may be available in other economic sectors.

Trends and Challenges

6. The Commission's Communication identifies six specific challenges for EU transport policy from 2010:

- An ageing population, which has implications both for transport demand and service specification and for affordability (because it creates wider pressures on public services, such as health care).
- Migration and internal mobility, which may add to transport demand through population increases and greater labour mobility.
- Environmental challenges, notably carbon and pollutant emissions.
- Energy supply security, driven by declining fossil fuel resources and dependency upon overseas sources of production.
- Urbanisation, increasing congestion problems for the city-dwelling majority.
- Globalisation, placing pressures on international transport links and contributing to environmental and economic problems (especially carbon emissions and congestion) beyond the borders of the EU.

7. Mouchel agrees that all these challenges are material to the development of EU transport policy over the next decade and beyond. Some additional, related challenges may be worth considering:

- An ageing population may give rise to greater demand for local delivery of goods and services, particularly as a higher proportion of people survive into their late 70s, 80s and beyond. While life expectancy is predicted to extend, health outcomes may

not keep pace, leading to greater numbers of people experiencing longer periods of constrained mobility in later life. This may accelerate the expansion of home delivery – a trend which is already evident thanks to the increasing take-up of internet shopping. The older generation will become progressively more ‘computer-literate’ as time passes.

- The global trend towards internet shopping for many types of goods and services may drive significant shifts in transport and distribution patterns, particularly in urban areas where traditional (shop-based) retailing has been a strong component of transport demand.
- Environmental concerns affecting transport range beyond carbon and pollutant emissions and the consequences of prospective climate change for infrastructure risk exposure (storms, flooding etc). Rising affluence, an ageing population and increasing population densities may combine to increase the perceived value of environmental amenities such as open space, rural landscape, ‘unspoilt’ habitats and quality of life factors in cities. These can – and should – be seen as positive developments. However they are also likely to increase the challenges faced by transport planners and service providers. Demands for mitigation measures and their associated costs are likely to rise (e.g. land take, noise, visual intrusion), pushing up the costs of new transport infrastructure and service investments and making it harder and more expensive to secure public support and necessary consents/permits.
- The development of new and more extended trading and distribution links, whether on regional or global scales, will increase interdependency and complexity in the supply chain. While this may be associated with beneficial socio-political trends (helping to reduce inequalities in wealth and social conditions; increasing movement, communication, access to information and mutual understanding), it will bring new challenges in managing extended supply chains and potential failure modes, including continuity and security vulnerabilities.

Policy Objectives for Sustainable Transport

8. Para 38 of the Commission’s Communication states that “The most immediate priorities appear to be the better integration of the different modes of transport as a way to improve the overall efficiency of the system and the acceleration of the development and deployment of innovative technologies”. These priorities are set within the context of an overall policy goal for the ETP “to establish a sustainable transport system that meets society’s economic, social and environmental needs and is conducive to an inclusive society and a fully integrated and competitive Europe”.

9. This depiction of the overall goal for transport policy is certainly comprehensive. Mouchel would argue that the two most pressing challenges for transport policy are to sustain and enhance Europe’s competitiveness in a rapidly developing world, while at the same time substantially mitigating the adverse environmental impacts of transport.

10. Enhancing competitiveness merits priority because delivery of the other goals of transport policy (whether social or environmental) will depend upon our ability to generate wealth to pay for the desired improvements. Many studies (such as the Eddington

Transport Study in the UK) have demonstrated the important linkage between transport investment and overall economic competitiveness, as well as the economic costs represented by transport system constraints (notably congestion costs).

11. Mitigating the adverse impact of transport on the environment merits priority because of the potential long-term costs of environmental degradation and climate change and because present trends are still adverse, with limited gains in fuel efficiency failing to offset rising overall demand, as noted in the Communication (paras 16 to 18).

12. This does not mean that other objectives lack legitimacy or are relatively unimportant. The point is simply that setting clear policy priorities will be helpful to avoid dissipating limited resources, whether human or financial.

13. If the two most important transport policy goals are enhancing competitiveness and mitigating environmental damage, Mouchel would question whether it is necessarily right to focus on modal integration as one of the two most immediate priorities, while the case for technology deployment needs to be developed in the appropriate context, as technology is a policy input or facilitator, not an outcome.

14. Given that some 90% of inland surface transport throughout the European Union is by road, and that road transport accounts for an even greater share of overall environmental impact (whether measured in carbon or pollutant emissions, noise, land take or other environmental factors), does it not follow that the most immediate priority for transport policy should be to make road transport more efficient? Effective modal integration is certainly necessary, and modal shift has an important role to play in achieving key transport policy goals, particularly in the environmental dimension. But it can be demonstrated by straightforward arithmetic that technically accessible road vehicle fuel efficiency improvements are capable of delivering far greater carbon and pollutant emission savings than any plausible level of modal shift. (A small percentage of a very large number – such as the carbon tonnage emitted by road transport across the EU – is bigger than a larger percentage of a much smaller number – such as the assumptions one might reasonably make about passenger volumes transferring from road to rail within the next 10 to 20 years.)

15. Measures which make road transport more efficient have the added benefit of contributing strongly to the competitiveness objective, which we argue should be prioritised on a par with the environmental agenda. Clearly measures which save fuel also save money (and improve Europe's balance of trade outcome), reducing production input costs. However fuel economy is just one – albeit one of the most important – aspects of road transport efficiency. Other aspects include labour and vehicle utilisation, payload management (vehicle loading factors and empty running), trip optimisation and congestion mitigation. Policy aspects which may impact on these factors include labour and vehicle regulation, price signals and incentives, infrastructure design and operation, information and education.

16. Making road transport more efficient across the EU would strengthen competitiveness, reduce environmental damage and help to complete the single internal market. The EU agreement on new car fleet fuel efficiency represents an important step in the right direction. At Mouchel we believe that realising other opportunities to enhance road transport efficiency should be a key and immediate priority of transport policy, not in

substitution for the modal integration objective, which is also legitimate and worthwhile, but in parallel. We suggest some specific opportunities and priorities below, many of which echo aspects identified in the Commission's Communication.

- Road infrastructure design can contribute to transport efficiency by reducing congestion, smoothing and enhancing flow capacity and providing better information to drivers. Examples of current best practice include the UK "managed motorways" programme, which addresses these outcomes while avoiding new construction and land take. Technology solutions can play an important part, provided that they are clearly outcome focussed. ETP can contribute to knowledge sharing and the development of best practice, supported by standards, particularly where cross-border transport is significant.
- Creation of an 'intelligent trans-European road network' could simultaneously improve safety outcomes, which the Commission has rightly noted as an important objective for ETP.
- Aspects of road traffic regulation which impact upon transport efficiency could be reviewed and their relative benefits and costs assessed. For example, the development of common practices for licensing trucks and trailers used in international transport might facilitate more efficient pooling of movements, reducing empty running. Re-assessment of regulatory conditions for urban operations, such as truck delivery bans, may point to opportunities for time-shifting inter-urban movements and improving fuel consumption, asset utilisation and safety outcomes.
- Consideration should be given to initiating a European project to improve the fuel efficiency of new trucks (paralleling the established policy for passenger cars). Overall, the value density of distributed goods within the EU (as in developed economies generally) has been increasing. Most truck payloads bulk out rather than weigh out. In such circumstances it seems increasingly anomalous that truck tare weights can account for c. 40% of *maximum* gross vehicle weight, and by implication a significantly higher percentage of *typical* gross weights achieved under modern service conditions.
- Mouchel agrees with the Commission's perception that smart pricing has an important role to play in enhancing road transport efficiency (as well as encouraging modal shift where appropriate), particularly at locations where congestion is prevalent and acute. Unfortunately in the UK road pricing has acquired a very unfavourable press, largely explained by the present context of relatively high transport taxes (particularly fuel duty) combined with perceived shortcomings in service quality and investment (although new road building typically encounters substantial socio-political opposition). Mouchel believes that an independently regulated model for road pricing deserves further consideration, in which road users would be given specified service quality pledges, supported by penalties for non-delivery, as part of the 'social contract' for the introduction of user charges. This approach could apply equally for congestion charging at peak times in a city centre, as on congested sections of an inter-urban motorway. Building support for the introduction of road pricing is one key issue. Another is to ensure that road pricing, once implemented, has the desired impact on people's choices and behaviour. A regulated model could help to achieve this outcome, by ensuring that tolls would be

set in 'real time' to deliver desired service quality levels on congested sections of the road network, with sanctions (e.g. 'rebates' for road users) in the event of non-performance.

- Pricing is one potential form of behavioural engineering, but certainly not the only one. It is clear that behavioural issues will play a critically important role in driving (or preventing) the adaptations which we need to make in order to deliver a sustainable European transport system. This could potentially be another useful aspect for ETP focus, given the long term nature of education programmes, for example, and the desirability of achieving some consistency of direction and investment across the EU.
- Mouchel agrees that the science of infrastructure investment appraisal deserves further examination. Drawing on UK experience, there is reason to believe that traditional investment case practice may rely too heavily on valuing journey time savings and may not be good at estimating or valuing improvements in journey time reliability or predictability. In a world where carbon emissions are an increasingly important policy issue, it may become appropriate to adjust historic assumptions about the relative benefit of traffic speeds vs. flow volumes vs. journey times vs. carbon output. Carbon emissions in particular are a global issue in which national frontiers ultimately become irrelevant. There would seem to be clear arguments for consistency of practice in assessing and valuing carbon outcomes (a point potentially relevant for EU external as well as internal policy: it will be more difficult to achieve desired global outcomes if carbon is assessed and valued differently in the EU, USA, India and China).

Policies for Sustainable Transport

17. From paragraphs 63 onwards, the Commission's Communication discusses a number of potential policy instruments relevant to the realisation of the next phase of the ETP. Mouchel offers the following observations:

- The development of intermodal and transshipment platforms needs to be informed by market economics. These can be compelling in the case of major transport hubs (such as London Heathrow Airport or the Port of Dover in the UK), where a self-sustaining relationship develops between network connections, service frequencies and demand. Experience of 'artificially' created consolidation and transshipment platforms (e.g. platforms created by public intervention and regulation) has not been compelling. Such interventions may add significantly to overall transport costs.
- Infrastructure upgrades using ITS may indeed be the least costly way to enhance infrastructure capacity and service levels, improving economic, environmental and social outcomes. The Commission could facilitate a broad exchange of ideas and best practice between Member States, encouraging consistent and accurate data collection and analysis to identify the most promising policies and technologies.
- Properly implemented road pricing could be expected to deliver enhanced priority for road freight transport relative to the generality of road traffic, because freight movements are generally non-discretionary, time-sensitive and high value. One of the key benefits of road pricing should be to create an economically logical market

for road space in which allocation at the most congested times would be prioritised by value and therefore economic utility, rather than simply rationed by queuing and congestion.

- Transport documents and tickets have an important role to play in improving modal integration and facilitating smart choices. Smart card technologies are likely to become increasingly widespread. Common architecture and modal interoperability will be important. Ideally, the same smart card technology could and should be useable across the land transport modes, including taxis as well as buses, trams, trains etc, and for payment of road tolls on priced infrastructure corridors.
- Consideration should be given to the potential in the longer term for linking smart card use to the creation of personal 'carbon accounts', informing owners of their emissions profile on the basis of actual monthly usage across different modes.
- Mouchel supports the principle of cost internalisation for transport pricing. As noted earlier, we believe that there is scope to improve the public acceptability of road pricing by implementing charges within a regulated environment, with specified service quality safeguards for the infrastructure user. It is important that users should be convinced that they are "paying for something" rather than "paying for nothing".
- Standard setting will have an important role to play in creating the conditions for the realisation of the ETP. However, as the Commission notes, standards can carry risks of creating market barriers or simply 'backing the wrong horse'. It is important that they should be clearly outcome-related and as open as practicable, facilitating innovation and competition within the marketplace. Standard-setting must also be implemented with due awareness of the wider policy context. Just as it would be wrong to encourage a significant shift to bio-fuels without considering the economic and environmental impact within the agricultural sector, so it would be wrong to promote 'zero-emissions' vehicles without a full understanding of the wider energy supply picture, including in particular the fuel source / generation mix and overall 'well to wheel' efficiency. This applies as much to hydrogen-based fuel chains as to electrical propulsion.
- As noted earlier, Mouchel very much agrees that 'soft' policy tools with behavioural impacts need to be considered and implemented alongside 'hard' tools, such as technology solutions. Behavioural change can take a generation to achieve, but once delivered, the impact can be both lasting and powerful (as with drink-driving in the UK). Given the compelling environmental objectives for transport policy it may be especially pertinent to consider how information and education could, over time, change people's awareness and behaviour in relation to environmental outcomes. It seems strange, for example, that notwithstanding the impressively ambitious EU programme to improve new car fuel efficiency, the overwhelming majority of new car advertising, together with automotive journalism, continues to stress non-environmental (or even counter-environmental) factors, such as engine capacity and power, speed, acceleration etc.
- The point that urban transport policies and outcomes necessarily connect with inter-urban (para 88) is a telling one. Mouchel believes that a wide area network

management approach will increasingly be needed in order to deliver the desired mobility and environmental outcomes. Cities are the most important traffic generators. Policy, operational and regulatory decisions made by City authorities inevitably condition and constrain utilisation of the wider transport network. Such impacts can be observed with information systems, traffic management decisions (including vehicular access and parking policies), priority systems, public transport investments and service decisions and in many other ways.

- Mouchel also agrees that the external aspects of ETP will become increasingly important. This is particularly (though not exclusively) the case with the environmental agenda, where progress within the European Union could so easily be vitiated in the absence of co-ordinated and effective international action, exposing Europe to a 'double whammy' of high transition costs combined with deteriorating relative competitiveness. The EU has a powerful international voice, which must be used effectively.

Conclusion

18. Mouchel considers that the Commission's Communication correctly identifies the most important challenges and objectives for European transport policy, looking forward to the next decade and beyond. Of the many individual issues and goals, we would argue that supporting the EU's competitiveness and mitigating adverse environmental impacts from transport should be placed at the top of the objectives hierarchy, which is not to denigrate the importance of other objectives, such as safety, security or accessibility.

19. In making this submission our objective has been to support the future development of the ETP by offering some specific observations and proposals which are consistent with the stated direction of policy. As important delivery agents with a track record of successful innovation, companies such as Mouchel are well placed to contribute to the development of the ETP and support aspects of its implementation.

20. Mouchel would be pleased to engage in further dialogue with the Commission on any of the policy aspects covered in this note. We should be pleased to be made aware of the stakeholder conference being organised in autumn 2009.

B S Moore

**Mouchel Plc,
Severn House,
Lime Kiln Close,
Stoke Gifford,
Bristol
BS34 8SQ**