

DIRECTORATE-GENERAL JOINT RESEARCH CENTRE

Report of the STTP Stakeholder Workshop on Logistics, urban mobility and intermodality

Participants:

Stakeholders: Patrick Auwerx (EPOMM), Yves Amsler (UITP), Niels Beuck (CLECAT), Simon Godwin (EUCAR), Andrea Grisilla (EIA), Sylvain Haon (POLIS), Christopher Irwin (EPF), Ian Johnson (IMPACTS), Steve Kearns (Eurocities), Jan Moellmann (EPTO), Bernd Pill (AEL), Dirk 't Hooft (EIRAC).

Chairs: Joost De Bock (DG RTD), Patrick Mercier-Handyside (DG MOVE), Pawel Stelmaszczyk (DG MOVE), Wolfgang Hoefs (DG INFSO)

Other participants: Rein Juriado (DG MOVE), Vincent Leiner (DG MOVE), Guido Müller (DG MOVE), Natascia Lai (DG RTD)

Rapporteur: Pierpaolo Cazzola (DG JRC)

Venue: Brussels, 28 February 2011

1. SCOPE OF THE WORKSHOP

The European Commission is currently developing a Strategic Transport Technologies Plan (STTP). The adoption of the STTP is foreseen for mid-2011 and it will play an important role in the definition of the Commission's future transport research and innovation priorities. The aim of the STTP is to match the most appropriate policy instruments to the needs of different technologies at different stages of the development and deployment cycle. It will address the entire innovation chain, from basic research to market uptake. The STTP will facilitate coordination of European and national public and private efforts and help achieve greater leverage through flagship EU instruments.

The STTP will include roadmaps for a set of leading edge technological solutions, including the supporting organisational, financial and governance frameworks, which are necessary for a future competitive and clean European transport system. The availability of appropriate research coordination structures has been identified as a potential critical issue for the transition to such a transport system.

The involvement of the stakeholder community is crucial to reach a shared European vision on the role of transport technologies as a follow-up to the White Paper and to produce a credible and widely supported STTP. At the same time, the process of



preparing the STTP will help to identity the measures needed from the different stakeholders to attain their goals, and will exploit synergies across them.

2. SETTING THE CONTEXT

A presentation on the STTP provided the stakeholders with insights on: rationale, objectives, structure, preparatory phase and indicative planning as well as expectations from stakeholders' hearings. It was emphasised that the term 'technology area' within the STTP is a comprehensive set of methods, practices and technologies with a shared focus of application.

Discussion during the workshop has been structured in accordance with a previously circulated questionnaire in: (1) transport vision and activities: current status, development perspectives and expected impacts in first block; (2) competitive solutions; (3) achieving the vision, essentially focussing on: barriers, shortcomings, funding and organisational requirements; (4) specific questions logistics and (5) specific questions on urban mobility.

The discussion therefore centred on how technology areas are expected to help the European Commission achieve its transport policy and transport research policy objectives, on the one hand, and how the European Commission can optimise resource use by investing in properly selected and prioritised technology areas via properly designed governance and funding schemes.

Stakeholders' advice is one of the inputs to the scientific process leading to the STTP Communication, as work is now focussed on identifying key technology areas in the ITS domain. Other input was requested by the second week of March. It was made clear that an internet consultation will open soon for 8 weeks and stakeholders are also welcome to give their opinions either through the internet consultation or by sending emails to move-sttp@ec.europa.eu. The Commission will take into consideration any input received in time.

3. SUMMARY OF MAIN DISCUSSION POINTS

3.1. Transport Vision and Activities

The discussion focussed on a broad set of objectives, roughly reflecting those that are likely to constitute the core of the transport White Paper. In particular, some stakeholders noted the need to include GHG emission mitigation as well as land use planning and seamless mobility through enhanced interoperability (EIRAC, UITP). The debate led to a broad set of suggestions, but – given the uncertain nature of the research and the likely overlap of different contributions – it did not address in detail issues like technology penetration targets.

All stakeholders pointed out the importance of vehicle efficiency and some advocated reliance on what they consider to be the most efficient modes. Many (AEL, EPOMM, EUCAR, Eurocities, UITP) pointed out that electric vehicles could be part of the solution



for urban mobility (but not for long-distance freight transport), also underlining that they should be considered alongside all other viable propulsion technologies.

Several stakeholders (Eurocities, POLIS, AEL) mentioned that solutions targeting organisational and information-related issues would play a relevant role in the development of a more sustainable transport system. In particular, the organisational problems concern the need to include all actors, including local authorities, for an effective achievement of the objectives. Information-related questions refer to the need to exchange information between freight operators: this is seen as an issue that is likely to face barriers, since few companies are likely to be willing to provide information to competitors. Some stakeholders (e.g. EIRAC) noted that some of these problems may be eased by an externally defined set of information that should and should not be shared, provided that this is agreed with the relevant industrial and public actors (like for instance transport service providers and local authorities).

Most stakeholders (EIRAC, EUCAR), highlighted the need to adopt an "integrated approach", involving measures targeting vehicle efficiency together with solutions capable to mitigate congestion and increase load factors. Some of the options mentioned include urban mobility and land use planning, mobility management (eventually including the setup of dedicated local authorities), an effective gathering and use of real time information to improve traffic management (Eurocities) and, more broadly, the application and use of information technology to improve the communication amongst vehicles and the transport-relevant infrastructures in cooperative systems (EUCAR), providing drivers with information aimed to foster their most efficient exploitation. The need to assure interoperability of transport services was also mentioned in the discussion (UITP).

Some stakeholders mentioned the need to provide EU-wide action in order to overcome the discrepancies existing amongst local solutions, calling for the provision of a common regulatory framework (UITP). Other stakeholders underlined the need to adopt solutions that guarantee accessibility and simplicity for users (EPTO, UITP), avoiding in particular the exclusion of elderly people, especially in an ageing society (UITP).

3.2. Achieving the Vision

Some of the instruments suggested to achieve the vision included risk-bearing financial instruments (EIRAC), joint procurement (POLIS), the need to reinforce planning with respect to transport-related targets (e.g. with respect to the need to match long-distance and urban logistic terminals, but also for the development of urban areas), and the need for the integration on vehicles and in infrastructures of those features that would be capable to allow a better provision of information (Eurocities). This is especially relevant for IT tools. Another solution mentioned concerns vehicles that take advantage of the setup of modular systems for freight transport (EUCAR), particularly interesting for the opportunity to enhance flexibility and interoperability. The idea builds on the opportunity to match load and vehicle characteristics, allowing the optimisation of their use according to the different delivery needs and distances and ultimately minimising energy needs and



transport-related emissions. Supportive stakeholders also mentioned explicitly the City Log EU project, when talking about this solution.

Several stakeholders noted that a standardisation process is likely to be helpful for all the options related to the integration of different elements and capable to assure a better flexibility and interoperability of transport services. They also mentioned the need for scalable solutions (replicability, economies of scale), the need for the cooperative attitude of the different actors involves (vehicle manufacturers, local authorities, construction companies in charge of building the infrastructures, companies involved in the development of the IT tools), and the need to try to address the whole transport system rather than focussing on specific sub-sectors.

3.3. Sector-specific/additional points

3.3.1. Logistics

When looking specifically at the logistics sector, the stakeholders agreed on a number of solutions that deserve attention. Such solutions include e-freight, modular systems, cooperative systems and instruments fostering the integration of logistics. Other options mentioned by some include advanced vehicle technologies (like hybridisation and alternative fuels). The need to consider the full range of viable vehicle propulsion technologies, from conventional engines up to the progressive reliance on electricity as an energy carrier and propulsion fuel and the use of hydrogen and fuel cells, was also highlighted (EUCAR).

In particular, e-freight has been characterised mentioning the evolution towards a paperless system, assuring the security of the information and the possibility to track dangerous goods, the use of standardised coding that is working for all modes (and not just road) and in all Member States. According to the stakeholders, e-freight should be favoured making sure that it is supported by Member States and the major EU actors operating in the freight transport sector, while also being viable doe SMEs. The stakeholders mentioned that the EU should focus on the support of the development of appropriate standards the use of mandatory standards only when this is absolutely unavoidable, supporting research on the necessary technologies, and financing the implementation of the solution while avoiding picking winners amongst the available technological options.

Modular systems refer specifically to the need to match load and vehicle characteristics, as already mentioned earlier.

Cooperative systems refer in particular to solutions that match the needs of clusters of suppliers and customers, allowing them to share transportation services. They match well with the use of e-freight and modular systems, as well as the development of IT tools. Nevertheless, they need to be conceived in a way that respects the existing regulation concerning competition.



Integrated logistics are also linked to the previous concepts. They include the ideas of integrated journey planning for goods and extend to freight the concept of integrated ticketing for seamless mobility that is generally applied to passenger transport.

3.3.2. Urban mobility

On urban mobility, stakeholders pointed out the importance of the provision of information (especially in the context of the diffusion of new mobile devices) for traffic management, particularly to foster the cooperation amongst travellers, to improve the availability of passenger transport services and, in the longer term, also to provide a knowledge base for the offer of new and innovative transport services. In this context, some stakeholders (EIRAC, UITP, EUCAR) also underlined the importance of the interoperability of modes, as well as the relevance of intermodal connection platforms for passenger transport and integrated ticketing for this purpose. In addition, the provision of information is something that would contribute to integrating journey planning, linking closely with IT developments.

On the provision of information, stakeholders noted that the EU role should be focussed on the identification of the information that should be made available, on privacy concerns, on the link with the required infrastructures, as well as aspects that affect public and private actors at the same time. Some stakeholders also underlined the importance of using open architectures that comply with broadly accepted, technical standard protocols.

Some stakeholders (POLIS) also pointed out the need to encourage long-term commitments from local administration to foster their development in agreement with EU policy targets. They noted that is something that should also build on the tendency to support the early adoptions of innovations that characterises some urban areas. In particular, the reinforcement of the transport dimension of existing voluntary initiatives like the Covenant of Mayors (a commitment by signatory towns and cities to go beyond the objectives of EU energy policy in terms of reduction in CO₂ emissions through enhanced energy efficiency and cleaner energy production and use) was mentioned as a potentially effective tool to foster innovation in urban transport.

The need to couple technological solutions with policy actions was also underlined. In particular, the possibility to harmonise the transport-relevant policy measures that are targeting urban green zones, congestion charging and access restrictions (linking them to the technological characteristics of vehicles) was specifically mentioned by some participants as one of the instruments that could help promoting policy coherence, ultimately favouring advanced and innovative technologies.

The need to support the integration of advanced vehicle technologies requiring new infrastructure (like for instance electric vehicles) in the urban context also received attention. This would also be coherent with the need to couple technological solutions with policy actions. The promotion of the necessary standardisation and the provision of



financial support (e.g. through joint procurement and risk-mitigating instruments) have been mentioned as priorities in this respect.

Finally, stakeholders mentioned the need to foster the research and the implementation of urban mobility planning practices. In this context, the setup of local agencies in charge of mobility and land use issues has been quoted as an instrument that could reinforce the introduction of transport-related innovations.

4. CONCLUSIONS AND NEXT STEPS

Participants to the Stakeholder Workshop on Logistics, urban mobility and intermodality contributed productively with a pro-active attitude to the preparation of the STTP. They provided ideas on policy instruments and the needs of different technologies that may foster innovation in transport.

The main elements underlined include:

- the importance of IT and its application to transport vehicles and infrastructures in cooperative systems;
- the importance of harnessing the information that can be provided by IT devices, its synthesis and its use for traffic management, the cooperation amongst travellers and service providers, as well as the improvement of the availability of transport services;
- the need to address organisational issues involving different actors (e.g. public and private);
- the need to support research but also deployment (e.g. through risk-mitigating financial instruments);
- the need to setup a policy environment capable to promote innovative technologies applied to logistics and urban mobility in a coherent way across the EU:
- the promotion of a framework capable to stimulate the adoption of innovations, using instruments that stimulate best practices amongst local authorities and eventually providing an homogeneous framework for local policy development;
- the need to support solutions that provide enhanced flexibility and interoperability.

These elements will be taken on board and included in the evaluation of the preparatory documents needed for the definition and preparation of the STTP.



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Chairpersons: Pawel Stelmaszczyk, DG MOVE

Joost De Bock, DG RTD

APPENDIX 1

Stakeholder Workshop on Logistics, urban mobility and intermodality

Monday, 28 February 2011, 14.00 – 17.30 Meeting Room SDME 1F

- AGENDA -

	Wolfgang Hoefs, DG INFSO
14.00 – 14.10	Welcome and introduction of the participants (All)
14.10 – 14.30	Objectives of the STTP, purpose of the hearings (<i>Rein Juriado</i> , DG MOVE)
14.30 – 15.30	General questions (Part 1 of questionnaire) (All)
15.30 – 16:15	Specific questions on logistics (Part 3 of questionnaire) (All)
16.15 – 16.30	Coffee break
16.30 – 17:00	Specific questions on urban mobility (Part 3 of questionnaire) (All)
17.00 – 17.20	Open floor for further stakeholder interventions (All)
17.20 – 17.30	Summary (chairs)



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APPENDIX 2

Questionnaire on Logistics, urban mobility and intermodality

1. QUESTIONNAIRE

These questions are designed to facilitate the stakeholder hearings. We would appreciate, if you could send us your answers to the questions 1 week before the next meeting. Please answer them in the way you consider most appropriate to convey your key messages. It would be helpful, if you could identify to which mode/technology area your answer relates to. To help answering the questions some suggestions are given regarding what could be explained under each question.

2. GENERAL QUESTIONS

2.1. Transport Vision and Activities

2.1.1. Current state of play within transport?

Indicate: market readiness/penetration of the different technologies within the activity area for each mode or cross-modal issues; on-going or planned public, public-private or private initiatives relevant for the STTP; type and scale of initiatives at which level - International/EU/MS/Regions

2.1.2. Likely evolution of transport?

Indicate: major trends in the transport sector (technology and actors); evolution of transport needs (volume and quality); likelihood of structural changes as a result of new business models, globalisation, competition, ageing population; influence of the market structure on future market potential; possible effects of legislation etc

2.1.3. Key technology penetration targets (2020, 2030, and 2050)? What are the main assumptions underlying these estimates? What are the main barriers to overcome to achieve them?

Indicate: main constraints and showstoppers, risks, needs for technological breakthroughs, resource/feedstock availability, consequences for the current infrastructure, etc



2.1.4. If these targets are met, what will be the contribution to EU policy goals in the field of transport?

Indicate: Contribution to (1) achieving low-carbon transport (reducing CO2 emissions and dependency on imported oil), (2) achieving seamless mobility in a Single European Transport Area (establishment of a seamless European TEN-T network that is intelligent, efficient, and green, single European 'transport ticket' for passengers and freight), (3) competitiveness and innovation (e.g. future market sizes for a given technology, European share of new market, additional jobs, export revenues), (4) other policy goals (such as reduction of congestions, local/urban pollution, noise reduction, damage to cultural heritage, etc.)

2.1.5. Contribution to the overall ('well to wheel') energy efficiency?

Indicate: Effects on energy efficiency in electricity and fuels supply, as well as in use; evolution over time and depending on market penetration, etc

2.1.6. Are there any interactions with other community policies and initiatives?

Indicate: Potential contribution of the technology to other EU policies; need for measures and initiatives in other policy areas to support the market penetration of the technologies

2.1.7. Which are the main competing or synergetic technologies within the activity area? (in relation to the indicated market penetration targets)

2.2. Achieving the Vision

2.2.1. Is your vision achievable under a 'business as usual' scenario?

Indicate: Current support programmes and policy measures and their expected impact

2.2.2. Are there barriers to innovation? Is there a need for change in the innovation system?

Indicate: For the mode in question any weaknesses in the current system

2.2.3. Does the considered mode/sector already benefit from or plan to setup initiatives to bridge the gap between the current state of technology and a cost-effective market entry? What would be the critical mass (e.g. investment) needed for such initiatives? What new approaches could be considered to accelerate innovation?

Indicate: i.e. how could the STTP help the sector; which actions of it would be most effective; what impact could be expected with respect to 'business as usual (i.e. No STTP)?



- 2.2.4. What actions need to be carried out at European level? What actions would be better implemented at national and or regional level? Is there a need, or a potential benefit, to integrate or to better coordinate action carried out at different levels?
- 2.2.5. International Dimension Is there a potential for international cooperation? What type of cooperation?

Indicate: Major initiatives in other countries; assessment of specific opportunities for international cooperation

3. SECTOR/ISSUE SPECIFIC QUESTIONS

Logistics, urban mobility and intermodality:

- 1. Innovation in logistics is to a large extent driven by user demand based on business criteria. Apart from the standard regulatory and monetary measures that may affect these decisions, do you consider that other instruments at EU level can stimulate innovative practices at EU level?
- 2. Given the limitations from the subsidiarity principle, how can the EU support the uptake of innovation at urban level? Can you suggest suitable instruments?
- 3. R&D and innovation activities differ significantly across modes. How do you think they can be better coordinated in order to improve intermodality?



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APPENDIX 3

List of respondents

- CLECAT (European Association for Forwarding Transport, Logistic and Customer Service)
- EIRAC (European Intermodal Research Advisory Council
- EPF (European Passengers' Federation)
- EPOMM (European Platform on Mobility Management)
- EUCAR (European Council for Automotive R&D)
- POLIS (European cities and regions networking for innovative transport solutions)