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Freight Transport Logistics Action Plan

SUMMARY OF THE IMPACT ASSESSMENT

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Summary of the Impact Assessment of an Action Plan for Freight Transport Logistics

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1. INTRODUCTION

A number of factors are converging to put pressure on the transport-related costs of logistics services in Europe and to threaten the sustainability of the practices of the logistics and freight transport industries.

The growing share of logistics in the economy means that these trends may have wide-spread repercussions for European competitiveness.

A second aspect of concern in the evolution of logistics is its environmental impact and specifically its contribution to greenhouse gas emissions. At a time when the environmental performance of many industries is improving, the transport-related emissions of CO₂, of which one third are attributed to freight transport are increasing and could jeopardise the EU's greenhouse gas emission targets. This trend is clearly not sustainable and needs to be checked.

Both trends, the economic and the environmental, call for the mobilisation of untapped efficiencies in logistics in order to make more judicious and more effective use of freight transport operations. This need is all the more pressing seen against the backdrop of expected freight transport growth and the evolution in fossil fuel prices.

2. PROCEDURAL ISSUES AND CONSULTATION OF INTERESTED PARTIES

Since adoption of its Communication on Freight Transport Logistics in June 2006, the Commission has encouraged interested parties to voice their opinions on how the domains for action identified in the Communication should be taken forward into a Logistics Action Plan. This effort has included an expert seminar, co-organised in October 2006 with the Finnish Presidency of the EU Council, the launching in December 2006 of an open call to industry and other interested parties to identify and report impediments to the efficient provision of logistics services, various events on specific topics of concern, such as the European Intermodal Loading Unit (EILU) or the application of information and communication technologies to logistics, a questionnaire-based survey that was launched in March 2007 and finally a public conference co-organised with the German Presidency of the EU Council in early May 2007.

These consultations confirmed that policy recognition of the importance of logistics is highly valued by industry actors. There is also a shared perception that efficiency as well as the sustainability of the logistics industry cannot be taken for granted. As concerns the measures proposed, the views of respondents have generally been positive with, however, certain differences of view between actors. Thus, industry in

general attaches particular importance to transport infrastructure requirements, to the reduction of the costs of administrative compliance and to the need to render rail more efficient for freight transport. By and large, it also endorses measures to facilitate take-up of information and communication technologies and in support of training in logistics. As compared to this, there is no unanimity of opinion over proposals to introduce quality recognition schemes and multi-modal liability regimes or to reconsider the limits for vehicle dimensions.

3. OBJECTIVES OF THE FREIGHT LOGISTICS ACTION PLAN

The general objective of the Logistics Action Plan is to mobilise untapped efficiencies in logistics in order to make more judicious and more effective use of freight transport operations. This need is all the more pressing seen against the backdrop of expected freight transport growth and the evolution in fossil fuel prices. Through the actions proposed, the Logistics Action Plan pursues the principle of co-modality, i.e. to improve the efficiency of each transport mode and to overcome interoperability obstacles between modes in order to help mobilise capacity reserves in Europe's transport systems and put these on a path towards sustainable growth.

More specifically, the Action Plan will help

- achieve a better utilisation of transport infrastructure, including through vehicle management and loading factors, and the pin-pointing of infrastructure investments that would benefit freight,
- improved cross-border management of freight flows and the associated administrative reporting requirements,
- better integration of transport modes and the reduction of friction costs affecting intermodal transport,
- more emphasis on quality criteria in modal choices,
- and higher competence levels, mobility and attractiveness of the logistics professions.

4. OPTIONS FOR ACTIONS

In view of the challenges confronting the logistics industry, the alternative to continuing as at present (the "business as usual" scenario) was considered to require a mix of measures and a range of instruments. These were classed in a set of sub-options that address the areas e-Freight and intelligent transport systems (ITS), sustainable quality, simplification, vehicle dimensions and urban transport. The urban environments and high-density transport corridors are priority areas of implementation of these actions. In total, close to 30 measures were identified that should be undertaken by the EU in order to ensure the sustainability and continued efficiency of freight logistics in Europe.

5. EXPECTED IMPACT

The Impact Assessment considered the likely economic, social and environmental consequences of the proposals and in particular their contribution towards mitigating the problems identified at the outset.

As far as the economic dimension is concerned, the analysis applied the concept of total logistics costs which seeks to measure a company's logistics-related costs in terms of transport-related factors and by incorporating also upstream costs, such as the ordering of transport services, and ancillary costs related to the need to establish safety and warehouse stocks. This micro-economic analysis was complemented by an attempt to evaluate the repercussions for the broader economy, in terms of the effects on GDP.

The environmental effects were evaluated primarily against the impact on greenhouse gas emissions which arguably currently pose the greatest challenge for transport. However, in particular in urban contexts, the emission of pollutants continues to be a cause for concern.

The social dimension analysed relates first and foremost to those employed in the logistics and related sectors of the economy. Thus, issues such as training and mobility were given primary attention, although the Impact Assessment also strove to consider the likely effects of the proposed measures on society at large, in particular in terms of its effects on the quality of life in urban contexts.

5.1. Micro-economic benefits

By laying the foundation for electronic service descriptions for logistics, for enhanced predictability and monitoring of freight movements and greater load factors as well as more efficient use of vehicles the actions under the sub-option eFreight/ITS can be expected to reduce the costs related to ordering of transport services, to inventory and storage and to the transport costs proper.

The measures grouped under the heading "Sustainable quality and efficiency" should positively impact logistics cost components by improving logistics training, allowing shippers to apply quality criteria in the selection of transport operators and helping transshipment platforms improve their performance and efficiency by comparing themselves with other such operators.

Simplification of logistics chains will bring about major savings due to a reduction in the administrative burden and a mitigation of the costs incurred through legal uncertainty as regards liability in multi-modal transport chains.

The impacts of vehicles dimensions need to be studied in depth before conclusions are drawn on their economic repercussions. As regards the definition of standards for intermodal freight transport units, it can be assumed that they will render loading, unloading and transshipment of freight less costly and improve terminal productivity. Furthermore, they will reduce transport costs by substantially improving loading factors over ISO-containers and certain swap bodies.

Placing special emphasis on improving transport efficiency in the urban context and on long-distance freight corridors should reduce transport-related costs and reduce freight distances in urban goods deliveries.

The expected direct and indirect effects of the options on reducing total logistics costs are summarised in the following table.

	Ordering and communication	Inventory, storage and risks costs	Loading, unloading and transshipment	Transport
E-Freight / ITS	+	+		+
Sustainable quality	+		+	+
Simplification	+	+		+
Vehicle dimensions and loading units			+	+
Urban Transport				+
Green corridors	+	+	+	+

In the subjective assessment of logistics operators and shippers, a clear differentiation by effectiveness of each of the options emerges (see table below). It is important to underline that the absolute values indicated express the perceived rather than the measured benefits. Furthermore, analysis of these results should take into account the general bias towards policies that have an immediate effect as opposed to measures which address long-term objectives.

Perceived benefits of actions proposed¹

	Estimated financial savings	Estimated savings in time
E-Freight / ITS	8%	10%
Sustainable quality	10%	12%
Simplification	4%	5%
Vehicle dimensions and loading units	11%	9%
Urban Transport	14%	14%

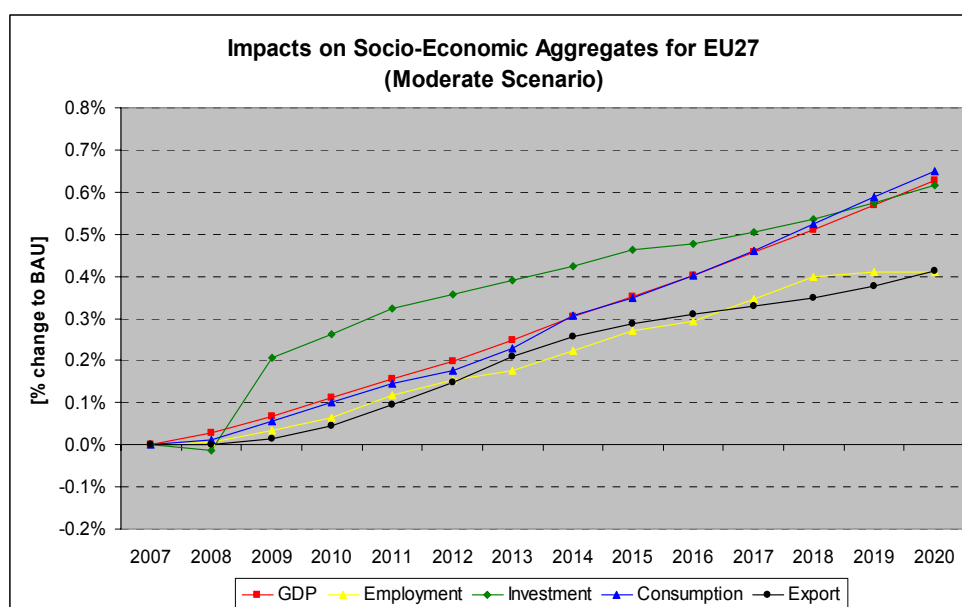
¹ For the methodology applied by the survey, please refer to the document Preparatory Study for an Impact Assessment on a EU Freight Logistics Action Plan, Stakeholders' demand for policy measures, April 2007.

5.2. Macro-economic benefits

The Impact Assessment described an optimistic and a realistic scenario, corresponding to the breadth of effects expected from the Action Plan. For reasons of succinctness, only the realistic scenario is presented here.

The realistic scenario assumes that the Action Plan will improve productivity rates in the logistics sectors by at least 3% in inland transport, by 5% for auxiliary transport services and 3% for communications. It will furthermore decrease freight logistics costs will by 2% and freight transport times by 3%, as well as increase load factors by 3%. These figures are based on expert judgements of the expected overall effects of the measures proposed in the Logistics Action Plan.

Using the ASTRA model for computation, it was calculated that these changes will lead to an increase of the average yearly GDP growth rates for EU27 by +0.04% compared to a "business as usual" scenario. Despite the relatively smaller figure, this would still result in several billion euros additional growth per year.



5.3. Environmental impacts

At a time when the environmental performance of many industries is improving, the transport-related emissions of CO₂, of which one third are attributed to freight transport are increasing and could jeopardise the EU's greenhouse gas emission targets. The mix of actions proposed will help address these issues by helping to reduce unnecessary transport activity, improving the integration of transport modes and the attractiveness of those which are more environmentally friendly and by facilitating the consideration of qualitative criteria – including environmental impacts – in customer choice. The notion of "green transport" and the priority area urban transport will help apply new, environmentally friendly technologies to where their impact will be greatest.

Specifically, the Logistics Action Plan will be environmentally beneficial because

- efficient routing, especially in road transport will reduce CO₂ emission levels by relieving congestion and improving load factors;
- electronic monitoring of freight movements improves predictability of deliveries, helps avoid unnecessary freight runs and energy-intensive "quick fix" supply solutions for disruption-sensitive production or distribution;
- the utilisation of multimodal loading units will improve interoperability of different transport modes and facilitate a move towards the less polluting modes;
- administrative and legal simplification will lower the costs of multimodal freight transport and thus render it more attractive;
- the spread of good practice and improvements to logisticians' training will ensure that freight transport decisions are fully informed about alternatives and about their environmental and social as well as economic repercussions.

Substantial impacts on the environmental performance of freight transport logistics can be expected where attractive modal alternatives are available. This closely links the success of the Logistics Action Plan to other policy initiatives in the transport domain, notably the promotion of a freight-oriented railway network and of the Motorways of the Sea. Their implementation and the reinforcement of freight transport in TEN-T financing will create the conditions that allow the logistics and transport operators to provide services that are not only economically efficient but also environmentally sustainable. Furthermore, an added impetus for the usage of environmentally friendly transport modes can be expected from the internalisation of external costs, for which work on methodologies is on-going.

5.4. Social impacts

The Logistics Action Plan will affect those employed in the industry and those who are concerned by its effects (noise, exhausts, emissions, congestion).

The Action Plan's proposed initiative to create a certification scheme for logisticians will improve training levels and create new career perspectives for its employees. The introduction of new technologies, particularly in the field of IT will increase the logistics sector's need for specialists and add value to the competencies of staff.

As far as the public at large is concerned, the effect of the Action Plan's measures on the social habitats is likely to be positive in the long term, due in particular to measures to promote good practice in urban environments. However, much will also depend on the technological evolution in transport technologies, and initiatives such as the promotion of "green corridors" should also consider how to render freight transport more compatible with our notions of quality of life.

5.5. Administrative costs

With the exception of the single administrative window, which will require additional investments in national IT capabilities, the administrative costs of implementing the Logistics Action Plan will be limited, both for businesses and for public authorities. For the public authorities, the major costs elements are expected to be related to the work on new standards, the introduction of a qualifications

certification scheme and the possible adaptation of national training curricula, the implementation of benchmarking and performance measurement and the operation of multimodal promotion centres. For businesses, the major cost factors are the adaptation to new standards and the compliance with certification and benchmarking demands.

6. CONCLUSIONS

There is a clear argument to be made – and great expectancy – for EU action in support of logistics. Policy-makers should facilitate the reconciliation of requirement for efficiency of logistics services (as a key factor in European competitiveness) and the sustainability of the industry's practices.

While there are clear differences in terms of expected effects between the various options considered, it is recommended that a mix of actions should be pursued, due to the synergies that can be developed between these and to the characteristic of freight logistics, which are affected by developments in a range of technology and regulatory fields.

Directly or indirectly, the mix of actions now proposed should have a positive effect on industry's total logistics costs, reducing the costs of ordering and communication, the costs associated with stock keeping and risk management, the costs associated with transshipments and finally the costs of transport itself. Some of these actions are preparatory in nature. They will not themselves have any immediate effects on the efficiency of logistics services in the EU but are necessary steps on the way to improving the framework of logistics.

Small and medium-sized enterprises stand to benefit specifically because standardisation (in information systems and vehicle technologies) as well as administrative simplification will allow them to disproportionately reduce their operational costs. Reinforcing the quality factor in freight logistics decision-making will open new market opportunities.

The proposed actions can be expected to have beneficial environmental effects by helping to reduce unnecessary transport activity, improving the integration of transport modes and the attractiveness of those modes which are more environmentally friendly and by facilitating the consideration of qualitative criteria – including environmental impacts – in customer choice.

The mix of actions will also have a positive social impact in that they will reinforce the quality of training and improve mobility opportunities. For citizens at large, more efficient freight transport logistics will help secure the quality of life that we have come to expect as consumers while reducing its negative effects on our habitats.

7. INTERNAL REVIEW

In view of its commitment to producing high quality and rigorous impact assessments the Commission has established an Impact Assessment Board whose task it is to support and monitor the quality of individual impact assessments prepared by the services. The Board reviewed the present document and delivered its

opinion on 23 July 2007. In view of these remarks the Impact Assessment has undergone a general review and been shortened.

Among the changes made, the problem statement and the objectives of the Action Plan have been given more precision, the policy context is more fully reflected, expected environmental and social impacts have been highlighted and more explanatory text has been given on the macro-economic modelling.