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Internalizing external costs of transport

A Position Paper of the European Shippers' Council

The European Shippers' Council (ESC) represents the interests of European industry as users of freight transport services in all modes of freight transport (deep sea shipping, short sea shipping, air transport, road transport, rail, inland waterways both within Europe and overseas). Shippers are primarily producers of goods and services which they market, sell and distribute to their customers. As such ESC represents the interests of some 100,000 companies involved in international trade, within, to and from the EU.

Introduction

The ESC has taken note of the European Union's intention to make legislative proposals which will lead to the "internalisation of external costs of transport," which means that users must pay for the "hidden" costs generated by transport such as air pollution, noise, climate change, congestion and accidents in road transport. A communication on the internalization of external costs for all modes of transport is due to be published in June 2008 together with a proposal to revise the directive on the charging of heavy goods vehicles (Directive 1999/62/EC as amended by Directive 2006/38/EC of 17.5.2006: also known as the "Eurovignette Directive"). This document contains the ESC's point of view on this policy issue.

As an organization representing the interests of *users* of transport services, the ESC would not be defending one mode of transport above another mode of transport; all modes must play their part to accommodate the growing transport demand. Transport providers in every mode should be encouraged to compete for customers and to improve their service levels. Shippers often want to make use of variety and a combination of modes of transport within their supply chains. For this reason ESC welcomed the Commission's review of its White Paper on transport policy which departed from its enforced modal shift policies. Whereas the Review of the White Paper has clearly recognised that the modal shift policy as outlined in the Commission's 2001 White Paper has failed and that the new policy was one of co-modality, ESC notes that the Commission seems to go back to its outdated modal shift policy and believes that pricing could be seen as an instrument for modal shift. This we find disappointing.

Transport efficiency is seriously hampered by the lack of infrastructure. A large part of external costs stems from the lack of or insufficiently maintained/developed infrastructure. Therefore ESC believes that in the coming years, the EU should strive for a structural improvement of the infrastructure used by all transport modes. By *structural improvement*, we mean a lasting solution that benefits the economy, the environment and employment as much as possible.

Executive Summary

The European Commission plans to have transport providers (which means ultimately the shipper) pay for the external costs generated by transport.

The ESC agrees that the European Commission has to take action to reduce the external costs of the transport modes. We even support the internalisation process, but we would suggest the following basic requirements aimed at reducing external costs that would make the policy proposal more fair and effective:

- **The revenue generated must go towards solving the problem:** The levy must be geared towards reducing the social damage caused by transport. To that end, the revenue raised needs to be earmarked and used for preventing external costs. This will be invested in solving the problem at which the levy is targeted.
- **Cross-subsidizing is only warranted, if the other transport mode yields greater economic benefits:** The ESC is adamant that the income generated by the levy should be used for solving the problem for which the levy has been created in the first place. This not only applies to specific negative social consequences, but also to the various transport modes. The revenues from road transport may only go towards other transport modes, if these produce significantly greater benefits than by investing them into road transport.
- **All transport modes need to pay for the external costs (damage):** All forms of transport create external costs (damage to society). It would only be fair, if the less detrimental transport modes paid less for the external costs. This method creates a level playing field for all forms of transport. As part of this, all transport modes need to pay for their external costs (damage).
- **Private passenger cars must also be included:** The majority of traffic on European roads comprises private cars. The external costs of road transport (such as congestion) are in large part directly attributable to private car use and therefore any proposals for internalising external costs must apply also to users of private passenger cars.
- **Transparent structure, low administrative costs:** A possible levy resulting from internalizing external costs needs to have a clear and transparent structure. Also, the benefits should clearly outweigh the administrative costs. The ESC sees no need for a levy whose administrative cost (for the benefit of a bureaucratic organization) exceeds 5 percent.
- **Keep in mind the costs already paid:** Internalizing social costs does not mean that no taxes are being levied at present. However, the existing taxes have a limited relation to the social costs (damage) created. For example, the road transport sector is paying for more than half of the external costs (damage) through petrol duty and toll charges. When internalizing external costs, we need to factor in, the percentage already being paid.
- **This is not a modal shift policy:** the policy will not create modal shift away from road transport. It will increase the costs of alternative modes and siphon revenue away from remedies that reduce the external damage, and put more revenue towards administration of the charges.
- **Discouragement of innovation:** The policy will not encourage innovative solutions by the transport industry to reduce the external damage it causes or contributes to. By making transport more expensive it will merely divert money that could otherwise be invested in new ways to reduce the external damage. A policy for innovation would represent an effective way to tackle the external costs to society brought about by that society's reliance on transport.
- **The Polluter Pays Principle is flawed:** the Polluter Pays Principle effectively reduces the amount of money available to spend on reducing the external damage. If responsibility for reducing the external damage fell to the person, party or body that could do so at the lowest cost and be reimbursed by the polluter or user of the transport, this would be more effective at reducing the external damage caused by transport, and reduce the costs to industry and individual transport users. This adheres to the so-called 'Cheapest Cost Avoider Principle'.

ESC is concerned that by applying the principle of internalization of external costs at this stage only to road freight transport – as the Commission believes that this is the mode with by far the highest unpaid costs – other modes of transport (like rail, waterway and personal transport) will not be addressed or at a far later moment in time. This would be unfair and unjust and anti-competitive. As long as the Commission has not

been able to identify clear, practical and enforceable rules to be applied fairly and without restrictions on all modes of transport, ESC does not support the urgency with which the Commission would now intend to propose legislative action which would only address one mode of transport: road freight.

Policy history

Article 174 of the EC Treaty and the guidelines 1999/62/EC, 2006/38/EC can be seen as the framework for the policy intention to internalize external costs. What we have here is a combination of the Polluter Pays Principle (internalizing external costs) and the User Pays Principle with respect to infrastructure. In the *White Paper on European Transport Policy* (2001), the European Commission mentions the poor state of the infrastructure network and points to large parts of the road and rail networks as a problem. The EU summit in Goteborg (2001) decided that the transport companies would have to pay for the social and environmental costs (damage) caused by them. Moreover, with the Eurovignette Directive (2006/38/EC), the EU made a start with passing on the financial infrastructure costs to the road transport companies. The European Commission is now looking into the possibility of internalizing external costs with respect to all modes of transport. These costs can be broken down into financial infrastructure costs and social costs (environmental matters such as emissions and noise pollution, as well as the material and human cost of accidents). Internalizing external costs is seen as a fairer form of paying for the damage caused by transport, but is it also the best way forward?

The objectives of Internalizing external costs are confused

The EU recognizes that goods transport is becoming evermore energy-efficient. But according to the European Environmental Agency (EEA), the transport sector is performing badly in comparison to other sectors of the economy. To meet the ambitious Bali Targets (within the framework of the Kyoto Treaty), the amount of transported goods must not grow by more than 4 percent between 2010 and 2020, says the EEA. However, in reality, the autonomous growth of freight transport (here meaning the expansion achieved regardless of how the whole economy is faring) will be about 15 percent over this period (EEA 2007: 4). As a result, transport companies, it is suggested by this, would need to transport less and do it in a smarter fashion. So it appears to be necessary to increase efficiency in moving goods to customers.

Internalizing external costs is about applying a fair methodology for paying for the damage caused by transport; it should not be used to reduce the growth of transport or emissions. Transport companies will of course have to pay in proportion to the level of pollution created. By internalizing the external costs, the more polluting modes of transport will become more expensive in relation to the less polluting ones.

The ESC favours equal treatment for all transport modes, including passenger transport and private cars. That means that, if the financial external costs are passed on to road transport, the same should apply to other forms of transport. In short, what is good for the goose is good for the gander.

The ESC believes that all modes of transport contribute to paying for the external costs. There will be cost advantages for the relatively more environmentally friendly transport modes over the less environment friendly ones. This will be fair. The fact that it may provide an incentive for users to use more environmentally friendly transport (an assumption which this paper shortly goes on to challenge), use less transport through smarter utilisation of transport and logistics, reduce the total level of emissions from freight transport and help the EU attain its Bali Targets are additional and welcome benefits but not the objective of the policy. The policy is to create a fairer mechanism for paying for the external costs of transport, not to create modal shift. Therefore it must be applied to all modes, equally, fairly.

Many external costs are already being borne

In its research into internalizing external costs, CE Delft (2007) makes more or less the assumption that external costs are not yet being paid for by users. This assumption is at odds with reality. For example, road

transport companies pay duty on petrol, road tax, insurance premiums, the special Eurovignette charges and toll charges for particular stretches of road, tunnels and bridges.

In other words, the transport companies are already paying part of the external costs directly. In our opinion, the proposal will only create a different way of paying the external financial costs and not a better one. Piecyk and McKinnon (Heriot-Watt University) concluded that two-thirds of the external costs for road transport is already covered by taxes. When congestion is not taken into account 99 % of the externalities are already internalised. ESC would also argue that transport operators and their customers are also paying the costs of congestion through higher operating costs associated with congestion: the more congestion encountered, the higher the fuel consumption and therefore the more fuel duty revenue for the government is collected. Additionally, the more congestion the more equipment, drivers, inventory and other operational costs (fixed and variable) are incurred.

The percentage of external costs paid by rail freight for freight trains is only approximately 2.5 percent, while the percentage for inland-waterway shipping is a meagre 2 percent. If these two transport modes receive the same treatment as road transport in the internalization of external cost, they will become considerably more expensive in relation to road transport (TLN 2002: 17). What makes the overall picture for the EU rather patchy is that petrol duty differs sharply from one member state to the other.

The amount of external costs paid now by industry is not uniform across the EU economy. If it is more rigorously applied to the road freight sector than to the other modes and elsewhere in the economy, this will cause market distortions and unfairness in the implementation of environmental policies (Piecyk & McKinnon 2007).

Internalizing external costs will not promote rail transport and barging

The *White Paper on European Transport Policy* (2001) favours a move away from road transport to rail transport and barging. All subsequent Commission policies have been directed in promoting waterborne transport (example Marco Polo) and rail freight transport. The European Parliament, when adopting a position on the Eurovignette, forced the Commission to investigate the internalization of external costs in relation to *all* transport modes instead of confining itself to road transport. After all, it is uncertain whether the internalization of external cost will create a strong trend toward rail transport and barging, if road transport is the only transport mode that is footing the bill.

The liberalization of road transport – which received the green light in the mid-1980s – has made for a tremendous increase in efficiency and a reduction in costs within EU logistics. How different things have been in rail transport! In many countries, the national rail companies have not been liberalized or have undergone only a partial liberalization process. To all intents and purposes, many railroad companies still have a monopoly in the rail freight market. In those countries that did see a liberalization, the rail sector is still not functioning as a proper market and is being dominated by only a handful of players. As it did in the past, the rail lobby is now pushing for additional “taxes” on road use in order to improve the profit margins in rail freight transport. Another reason is to make the sector more competitive compared to road freight.

Germany, France and Switzerland already have a levy system for road freight transport, with the sub-objective of stimulating rail freight transport. However, none of these countries have experienced an increase in goods transport by rail. In fact, road transport is on the up, while rail transport has remained almost stable. The trends seen in these three countries are comparable to those in the other EU countries, which are not putting an additional charge on road transport (TransCare 2006: 15-17). Why is this so? Only 4 percent of the amount of goods now transported by road can economically be moved by rail. In fact, only 1.22 percent of goods now transported by road will be moved by rail, if the levy (charge) on road transport is set at €1 per kilometre (TransCare 2006: 32). So the impact of internalizing external costs on transport users in choosing

the most suitable form of transport is almost negligible, as is its effect on road traffic congestion. As a consequence, ESC remains extremely sceptical about the alleged reduction in traffic jams as a result of internalizing external costs in the road transport sector.

In this approach, the rail freight sector and waterborne transport sector industry are not burdened with external financial costs. ESC believes that if the Commission applies the scheme for internalising external costs to *all* transport modes, then the amount of goods transported by rail will probably fall drastically – the reason being that this move would substantially raise costs. The decrease in rail transport is estimated at 11 percent in Sweden, for example (SIKA 2003: 6). Improving the rail infrastructure and promoting much more competition within the rail sector may make rail transport a more attractive option for transport companies and therefore a more viable policy to pursue.

Polluter Pays vs. Cheapest Cost Avoider

The EU has committed itself to the Polluter Pays Principle (PPP) in Article 174 of the EC Treaty and is applying this principle in internalizing external costs. A report by CE Delft (published earlier this year) entitled *The Handbook on Estimation of External Costs in Transport* is based on this principle. Nevertheless, it is uncertain whether this principle is the best method to internalise external costs. CE Delft believes that the polluter/user has to pay for the social damage and pay the infrastructure costs to the government – as a sort of “sin tax,” if you will. The government’s role in this is to take measures reducing the external costs. This form of taxation is sometimes called the *Pigovian Tax*, which is a tax levied to correct the negative consequence of a free-market activity. In espousing this principle, the EU is ignoring the fact that, in a free market, the concept of the *Pareto Optimum* applies. This holds that the optimum allocation of the resources of a society is not attained as long as it is possible to make at least one individual better off in his own estimation while keeping others as well off as before in their own estimation. The internalisation of the external costs has automatically a negative impact on the road users, because it costs them money they cannot spend elsewhere.

ESC is of the opinion that more effective methods exist to avoid social costs. For internalizing external costs in road transport, Prof. Dieter Schmidtchen uses the Cheapest Cost Avoider Principle (CCAP), conceived by Nobel laureate Ronald Coase. This principle says that the player that must take action is the one that can avoid external damage at the lowest possible cost (Schmidtchen 2007). This can be both the polluter as well as another player like the government. In this scenario, the polluter must pay the costs to the party that took action. In this way, more external costs can be avoided in a more cost effective way. In addition, this method encourages innovations by companies. ESC therefore prefers this option to the one proposed by the EU. After all, optimum prosperity not only benefits the corporate world, but also society as a whole. Using market forces in avoiding external costs is the most effective and efficient way to go forward. ESC therefore believes that the Commission should also consider to assess the CCAP as a policy option.

Given that ESC does not endorse the approach being recommended by the Commission for ‘internalising the external costs’, we nevertheless feel it is necessary to outline ESC’s position in respect of how any revenue raised from such a flawed approach should be made and used.

A gradual introduction

The ESC holds the opinion that the internalization of external costs should be subject to a gradual process of implementation. The introduction of a levy must be spread out over multiple years; but unlike the European Commission’s intention to start with road freight transport, ESC advocates implementation across all modes in unison in order not to distort the transport market and not to create a false impression that one mode has less external costs over another on the basis that it does not yet have to charge for external costs. Therefore, during a time period of 10 years, the levy should increase in unison for all modes of transport from the current level to the level whereby all external costs are internalized. All modes of transport should increase their payment for external costs at the same time. So, for example, when the existing tax for the modes of transport is X and the external costs for road transport is X+5, rail X+10 and inland water transport is X+20, the

increase over a 10 year period will be at a different 'pace' (i.e. 0.5 a year for road, 1 for rail and 2 for the inland waterways). Thus, after 10 years all modes pay the total external costs, but the process towards paying needs to be gradual and based on the additional external costs (everything more than X) for each mode. Gradual introduction of payment for external costs will increase the efficacy and trust in the measure.

Internalizing external costs does not only mean paying differently, it probably also means that the users of infrastructure have to pay more. The external costs that are currently paid have to be raised to the level of the total external damage. This applies to all modes of transport. The instant internalization of external costs can result in social and transportation problems. The mode change that is the result of the internalization can cause problems with the availability of logistic personnel and materials if 100 percent implementation is applied over night. Also a capacity shortage can result. Gradual introduction of internalized external costs will help to prevent these problems arising.

Income from levy should be used for preventing external costs (damage)

The method favoured by the ESC for avoiding external costs also reflects the general position held by the organization that the income generated by internalizing external costs should go to preventing or lessening external costs (market-oriented model). Internalizing external costs is based on the Polluter/User Pays Principle. In that case, the polluter/user is paying for what he has polluted or used. The charges need to be levied in a transparent way. In our view, the money paid should be used to tackle the external costs (damage). For example, that part of the levy meant for reducing carbon emissions should also be used for this specific purpose. That applies equally to the specific social costs (such as traffic congestion, environmental damage and noise pollution) and the different transport modes. So the levy should be earmarked and not used for general needs.

A clear structure and low administrative costs

A possible levy should have a clear structure. The levy needs to be broken down into its constituent parts. It has to be clear which percentage of the levy is going to pay for which external cost (damage). Moreover, administrative costs should be in proportion to the revenue raised. The ESC does not want to see a levy which has administrative costs higher than 5 percent (going to the organization tasked with collecting the levy). Research has shown that this type of levy is often accompanied by a high administrative burden. Percentages of 20 to 30 appear to be not uncommon (Proost 2001: 23).

Lisbon Objectives are at risk

In March 2000, the European government leaders committed themselves to a strategy aimed at turning the EU into the world's most competitive economy by 2010. This Lisbon Strategy is meant to make the EU the world's leading economy in terms of employment, prosperity and innovation. However, the European economy has already fallen behind other parts of the world. Internalizing external costs does not give a boost to the entrepreneurial climate in the EU and therefore seems to be a step backwards.

The application of the PPP does not result in a maximum level of prosperity and thus contrasts sharply with the CCAP, which does just that and also encourages industry to develop innovations. The PPP is detrimental to the economy and thus the entire European community. Internalizing external costs can have a negative impact on the economy, if the levies are not invested in infrastructural improvements. The costs made by transport companies would go up, and the final products would become more expensive for consumers. This would reduce purchasing power and increase inflation. Ultimately this would thus adversely affect the economy and lead to job losses and not improve the environment.

The EU can avoid external costs by pursuing an ambitious innovation policy. This innovation policy would not only enhance the knowledge economy, but also encourage transport companies to move goods in a smarter and more sustainable fashion. That would help Europe to reach its Lisbon objectives. Road freight operators

should use their money to upgrade their fleet instead of paying taxes for higher external costs. In other words, it would be better, if the EU took stimulating measures instead of punitive ones.

Let us not overlook the benefits of the transport sector

The Commission is very ambitious in outlining the negative external effects of transport, but never mentions the benefits from transport advantages offered by the transport sector for employment, economic growth and prosperity. Before internalizing external costs, the European Commission ought to map out what the positive impact of road transport on society is.

Internalizing external costs is being touted by the European Commission as a solution for the problems created by the transport world. It is supposed to ease congestion and lessen environmental pollution by enticing transport users to switch from one transport mode to others. But would this policy achieve these goals in actual practice?

The price elasticity in the road transport sector is very low, and few are expected to abandon road haulage. Congestion would improve very little because the European infrastructural network is already overstretched and the main instigators of congestion (passenger transport) are currently left out of the internalisation process. In the coming years, the need for transport will only increase because of the ever-growing demand for consumer goods. It therefore seems unlikely that the policy would be effective. Internalizing external costs does not appear to be an effective policy tool.

The Commission has other policy choices and options open to them that are likely to be more cost effective and less damaging for the transport industry. The Commission should adopt a serious freight best practice measure such as the one developed by the UK Department for Transport's Freight Best Practice model, which is a proven model for reducing freight transport externalities (www.freightbestpractice.org.uk).

Concluding Remarks:

The objective of a policy to internalise the external costs of transport is to produce a fairer mechanism to cover the costs of damage caused by freight transport.

It is not for generating modal shift or reducing emissions in order to meet international targets on reduced green-house gases (GHGs)

- The policy will not create a modal shift
- Rail and inland waterways freight transport will become more expensive
- It would remain uneconomic for most road freight to switch to alternative modes
- The policy will not reduce external costs of transport, but simply make freight transport more expensive
- It will be costly to administer and reduce available money that might otherwise go towards reducing the external costs.

ESC has brought forward a number of recommendations on the way forward and would hope that the European Commission and the European Parliament take these recommendations into account in order to, bring about a more sustainable-logistics sector in the European Union. This includes:

Cheapest Cost Avoider Principle instead of Polluter Pays Principle: Internalizing external costs aims to reduce the social damage to society. But this measure should not be at the expense of the economic performance and competitive strength of the European Union. The negative social impact of transport needs to be

lessened as effectively and efficiently as possible. The Cheapest Cost Avoider Principle provides this possibility, while the Polluter Pays Principle fails to do so.

Policy must be innovation-oriented: Industry is keenly aware of the need to reduce the negative social impact of freight transport. The European Commission can bring this about by making freight transport more expensive or more difficult or it can take the long view and opt for the innovation route. An innovation-focused policy would eventually reduce the adverse social impact of transport and enhance economic performance and thus help the Commission to achieve its Lisbon Objectives. The policy plans now lying before us would only discourage companies from investing in sustainable developments.

Applying the internalisation of external costs only to road freight transport would be anti-competitive and in breach of the competition principles enshrined within the Treaty of Rome. Until there is equal treatment given to all modes of transport in the internalisation of external costs, with implementation at the same time and in equal measure (in proportion to the external costs of each mode), ESC sees no justification for the urgency the European Commission is giving to the implementation of this policy. The pursuit of this policy starting only with road freight would be a big political and economic mistake and must be halted.

The ESC can be contacted through its Brussels office: please contact:

Nicolette van der Jagt
Secretary General
European Shippers' Council
Rue Wiertz 50
1050 Brussels
+32 2 2302113
+32 2 2304140
nicolettevdjagt@europeanshippers.be
www.europeanshippers.com