

DETAILED OBSERVATIONS ON THE RECENT EU PROPOSAL ON INTERNALISING EXTERNAL COSTS

by the International Road Transport Union (IRU)

Summary



This is the IRU

The International Road Transport Union (IRU), founded in Geneva on 23 March 1948, is the international organisation which upholds the interests of the road transport industry worldwide. Via its network of 180 national Member Associations in 73 countries, it represents the operators of buses, coaches, taxis and trucks, from large fleets to individual owner-operators. The IRU, which has a truly global vision, also acts effectively at a national and even local level through its national Members by "Working together for a better future".

Every penalty on transport is an even greater penalty on the economy as a whole

The liberalisation of economies and the globalisation of markets has created a new economic framework based on the free movement of people, goods and services. Due to its high quality door-to-door service road transport has become an integral part of any logistic system and thus a vital production tool. Thus any penalty on road transport is an even greater penalty on the economy.

Road transport industry is committed to strive for sustainable development

To date, the road transport industry is the only transport mode that has made the promotion of sustainable development a constitutional obligation. To strive for sustainable development and to fulfill the EU Lisbon agenda, the IRU's 3 "i" strategy for achieving sustainable development based on innovation, incentives and infrastructure is the most robust and cost-effective approach.





No modal shift through road pricing

According to the results of scientific studies¹, a 1 Euro per km road toll increase will only lead to a less than 1.22% shift of road transport volume to rail. Moreover, making goods transport by rail more attractive through higher charges for road will not result in the desired shift to rail as 70% of the volume of goods transported by road does not respond to changes in transport prices. Only increased quality service will foster a potential increase in rail transport, road pricing does not.

Many external costs are already internalised

A scientific study² by Piecyk and McKinnon concluded in 2007 that **two thirds of the external costs for road transport are already internalised** through duties on petrol, road tax, insurance premiums, existing Eurovignette charges and tolls for particular stretches of road, tunnels and bridges. When congestion is not taken into account 99% of the externalities are already internalised. However, it must be recognised that transport operators also paying for congestion costs through higher fixed and variable costs, time losses and lost opportunity costs.

Treat all modes equally

Fair competition on the goods transport market depends on a coherent application of the non-discrimination principle in the widest sense including, an equal fiscal level playing field for all transport modes. It is therefore crucial that the internalisation of external costs is applied to all modes of transport at the same time.

Earmark all revenues

Regarding the revision of the Eurovignette directive the IRU requests that all charging revenue must be earmarked for reinvestment in the mode it was drawn from, to effectively reduce external effects through at-source measures such as incentives for the introduction of clean vehicle technology. If the collected charges are allowed to cross-subsidise ineffective transport modes – mistakenly seen as a viable alternative – or to fill gaps in member States' general budgets, the EU will have established just one more tax collection scheme where the Polluter Pays but the Problem Stays.

The European Commission applies a wrong methodology to calculate external costs

Policy-makers consider the Polluter Pays Principle (PPP) the only way that society should pay for the external costs of transport. However, the PPP is a blunt tax collection scheme. It cannot reduce external costs in an optimal way because it does not foresee conducting proper cost-benefit analyses. Rather it automatically pre-determines which party should cover the external costs without conducting a sound cost-benefit analysis.

² Internalising the external costs of road freight transport in the UK, Piecyk and McKinnon, November 2007.

¹ The Influence of Road Toll for Trucks on the Modal Split Road – Rail in Transport of Goods, TransCare, March 2006



Polluter Pays - Problem Stays

In economic circles, the Cheapest Cost Avoider Principle (CCAP), which won Ronald Coase a Nobel Prize in 1991, has superseded the PPP. The underlying principle of the CCAP is that a cost-benefit analysis is conducted and the stakeholder who can prevent external costs at the lowest cost for the overall economy should pay. The European Commission needs to apply this principle in their internalisation approach, if the intent is to solve the problem, rather than collecting another tax.

Background study on internalisation of external costs is highly questionable

The so-called external costs handbook, which is actually only a collection of studies, lacks a proper definition of external costs. It is long on assertion with highly questionable figures and short on in-depth analysis. How can one quantify the costs that need to be internalized if one cannot, as a starting point, define what needs to be quantified? Consequently, the handbook is not a sound and reliable basis for the evaluation of potential internalisation scenarios and policy options.

Conclusion

The current approach by the European Commission on internalisation of external costs and the revision of the Eurovignette Directive undermines the European Union's "Lisbon Goals" of growth, jobs and competitiveness.

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The International Road Transport Union (IRU), founded in Geneva on 23 March 1948, is the international organisation which upholds the interests of the road transport industry worldwide. Via its network of 180 national Member Associations in 73 countries, it represents the operators of buses, coaches, taxis and trucks, from large fleets to individual owner-operators. The IRU, which has a truly global vision, also acts effectively at a national and even local level through its national Members by "Working together for a better future".

The IRU's Constitution obliges it to work towards the twin goals of Sustainable Development and Facilitation for Road Transport. Based on these two priorities, the IRU's mission is to facilitate road transport worldwide and use training to promote professional competence in the sector and to improve the quality of services it offers. It defends customers' freedom of choice between transport modes and the equal regulatory treatment of all modes. It works, with its Members, to ensure the harmonious development of road transport and to improve its image. It represents the interests of the road transport industry to public authorities, private bodies and the media. It promotes cooperation and complementarity with other modes of transport.

I. SUSTAINABLE DEVELOPMENT OF TRANSPORT: A COMMON OBJECTIVE

The liberalisation of economies and the globalisation of markets have created a new economic framework based on the free movement of people, goods and services. Due to its high quality door-to-door service, road transport has become an integral part of any logistic system and thus a vital production tool. Thus any penalty on road transport is an even greater penalty on the economy.

In this context it should be noted that 85% of road transport is under 150km, where there are no viable transport alternatives and that road transport carries 70% by volume and more than 90% by value of Europe's overland freight distribution.

It is true that road transport, like most human activity, has a negative effect (externality) on the environment such as emissions and noise. However, the main task of governments should not be limited to the protection of the environment by suppressing



any human activity or by suppressing transport, upon which modern life and society depends. Their task should rather be to optimise any lawful economic and human activity by promoting efficiency, especially in such an essential area as road transport. It must be understood that any penalty on road transport is an even greater penalty on the economy.

To date, the road transport industry is the only transport mode that has made the promotion of sustainable development a constitutional obligation. To strive for sustainable development and to fulfill the EU Lisbon agenda, the IRU's 3 "i" strategy for achieving sustainable development based on innovation, incentives and infrastructure is the most robust and cost-effective approach.

Innovation: to develop ever more effective "at-source" technical measures and operating practices to reduce environmental impact.

Incentives: to encourage faster introduction by transport operators of the best available technology and practices.

Infrastructure: without free-flowing traffic, the above measures are useless. Adequate investments in new infrastructure to remove bottlenecks and missing links, plus fullest use of existing infrastructure, are essential.

Following this approach the road transport industry has been able over the last decades to considerably increase its energy efficiency and reduce its toxic and non-toxic emissions.

- The fuel consumption and thus CO₂ emissions of commercial vehicles has been reduced by 36% since 1970 and by 20% since 1990.
- At the same time toxic emissions have been drastically reduced by up to 97% through the use of the Euro norms.
- o 25 modern trucks make no more noise than one built before 1980³.
- o By 2015: pollution from trucks will be reduced by another 30%.

II. THE VISION OF THE EU COMMISSION

In 2008 the European Commission developed a model for the assessment of external cost of transport. The European Parliament requested this when it approved the Eurovignette Directive in May 2006.

The European Commission has been advocating in this context for many years the need to internalise the external costs of transport and hopes to achieve sustainable development by making road transport more expensive and by encouraging a modal shift to so-called "more environmentally friendly" modes of transport.

One of the principal means by which the EU Commission intends to use to make road transport more expensive is to increase road user charges through a revision of the Eurovignette Directive. This would enable EU Member States to charge the operators of heavy goods vehicles for a number of external costs incurred by society including congestion, air and noise pollution.

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³ European Commission 2005.



Additionally, the Commission proposes that revenue raised from such charges can be earmarked to finance projects and measures aimed at reducing the external costs of transport, notably traffic management systems, measures to reduce pollution at source, and the development of alternative infrastructure. The European Commission, however, also allows Member States to simply use the revenue in any way they choose.

III. ROAD PRICING AND MORE RAIL INFRASTRUCTURE WILL NOT CREATE MODAL SHIFT OR ENVIRONMENTAL BENEFITS

According to the results of scientific studies⁴, a 1 Euro per km road toll increase will only lead to a less than 1.22% shift of road transport volume to rail. Moreover, making goods transport by rail more attractive through higher charges for road will not result in the desired shift to rail as 70% of the volume of goods transported by road does not respond to changes in transport prices. Only increased quality service will foster a potential increase in rail transport, road pricing does not.

According to the same study an accompanying 1.6% rise in road freight operating costs would induce corresponding inflationary pressures, ultimately absorbed by business and the European consumer. Not least in view of the current global economic climate, it seems impossible to reconcile such a heavy price for the EU economy with such small and unlikely gains for rail freight. Moreover, in the past, improvements to the competitive position of rail were only used to raise rail freight prices, not to take advantage of the improved situation to generate more business.

85% of TEN-T (Trans European Networks – Transport) Priority Projects funds are designated for the rail sector (completion requires €210 billion by 2020⁵). For the IRU this misallocation of EU funds has taken place without an adequate cost-benefit analysis to assess whether this money could be invested more usefully in different ways. This use of funds seems to conflict with the logic of World Bank calculations which estimate that economic rate of return for road infrastructure is twice the average for all world bank funded infrastructure projects and with the results of studies⁶ comparing the CO₂ emissions and energy consumption of road transport and combined transport, proving that combined transport is not inherently more environmentally friendly than pure road transport. Comparative Analysis of Energy Consumption and CO₂ Emissions of Road Transport and Combined Transport Road/Rail, IRU/BGL, January 2002

IV. MANY EXTERNAL COSTS ARE ALREADY INTERNALISED

Bearing in mind the many external benefits that derive from road transport, a scientific study⁷ by Peicyk and McKinnon concluded in 2007 that **two thirds of the external costs for road transport are already internalised** through duties on petrol, road tax, insurance premiums, existing Eurovignette charges and tolls for particular stretches of road, tunnels and bridges. When congestion is not taken into account 99% of the

⁴ Influence of truck-tolls on the modal split in cargo traffic, TransCare AG, March 2006.

⁵ Key issues of the implementation of the TEN-T Priority Projects, Background and questions for discussion at the informal Transport Council of 6 May 2008.

⁶ Comparative Analysis of Energy Consumption and CO2 Emissions of Road Transport and Combined Transport Road/Rail, IRU/BGL, January 2002.

⁷ Internalising the external costs of road freight transport in the UK, Piecyk and McKinnon, November 2007.



externalities are already internalised. However, it must be recognised that transport operators also paying for congestion costs through higher fixed and variable costs, time losses and lost opportunity costs.

In addition to this, Peicyk and McKinnon conclude that **the percentage of externalities paid by rail freight is only approximately 2.5% of the total**. Moreover the considerable subsidies paid by EU national governments to European railway undertakings to maintain their operations need to be taken into account. These subsidies represent large costs for the general tax paying public.

V. TREAT ALL MODES EQUALLY

For all of the reasons stated above the IRU asserts that the EU must not jeopardise the economy as the price for securing – at best marginal but more likely non-existent – environment benefits through an unrealistic modal shift policy. For capacity reasons the IRU is in favour of rail increasing its modal share. This, however, must not be achieved at the expense of road transport, but by its own merits and through fair competition. Fair competition on the goods transport market depends on a coherent application of the non-discrimination principle in the widest sense including, an equal fiscal level playing field for all transport modes. It is therefore crucial that the internalisation of external costs is applied to all modes of transport at the same time.

VI. EARMARK ALL REVENUES

Regarding the revision of the Eurovignette directive, the IRU requests that all charging revenue must be earmarked for reinvestment in the mode it was drawn from, to effectively reduce external effects through at-source measures such as incentives for the introduction of clean vehicle technology. If the collected charges are allowed to cross subsidise ineffective transport modes – mistakenly seen as a viable alternative – or to fill gaps in member States' general budgets, the EU will have established just one more tax collection scheme where *the Polluter Pays but the Problem Stays*.

VII. THE EUROPEAN COMMISSION APPLIES A WRONG METHODOLOGY TO CALCULATE EXTERNAL COSTS

Policy-makers consider the Polluter Pays Principle (PPP) the only way that society should pay for the external costs of transport. However, the PPP is a blunt tax collection scheme. It cannot reduce external costs in an optimal way because it does not foresee conducting proper cost-benefit analyses. Rather it automatically pre-determines which party should cover the external costs without conducting a sound cost-benefit analysis.

Thus, PPP is easy to implement but not an adequate response to the internalisation debate for the following reasons:

Today basic good governance principles demand that policy-making must be based on some form of regulatory impact assessment. This is nothing less than an in-depth cost-benefit analysis and is central to the EU's "Better Regulation Initiative". However, the PPP runs counter to this established approach since the decision over who should pay has automatically been taken before any cost-benefit analysis or impact assessment has been made. The basic rationale behind the PPP is that the polluter should pay the bill of



the external costs he produces, which is usually done via a tax. In this context it is, however, essential to recall the fundamentals of external costs:

- External costs are always the result of conflicting interests for the use of a scarce resource (such as the environment).
- Without rivalry for the use of a scarce resource there are no external costs and consequently all external costs are jointly caused by the polluter and the pollutee.
- External costs are to be considered as a loss of value to somebody caused by a change in the state/quality of the environment.

Furthering the interests of one group – whether citizens or businesses – necessarily damages the interests of the others which is known as the reciprocal nature of the issue. From an economic point of view, the PPP is an outdated, overly simplistic and narrow approach because it discounts those fundamentals and is not used in daily life or policy decisions (except by politicians intending to impose externalities on road transport!). In economic circles the shortcomings of the PPP have been exposed and its suitability as a sound basis for internalisation policies has been superseded by the Cheapest Cost Avoider Principle (CCAP), for which Ronald Coase received a Nobel Prize.

The fundamental principle of the CCAP is that:

The CCAP requires that the party which can prevent (or abate) the damage at the lowest cost for the overall economy should take action. In this context it must be understood that the mere existence of externalities does not, in itself, provide justification for governments to compel polluters bear the costs. The polluter might well be the highest cost avoider and thus the least appropriate party to bear the costs. Yet, if the costs are still allocated to this party the economic damage will supersede the economic benefit gained, thus weakening the general efficiency of the economy to meet the challenges of sustainable development as a whole.

A simple example can be provided concerning noise emissions:

When a truck drives through open fields the question of noise emissions plays only a minor role. However, when the truck uses a road nearby a house there is a conflict of interest. The house owner wants quiet and the truck needs to emit certain noise in order to carry out his economic activity. One of the questions that needs to be answered is: Is it more effective to build a sound barrier to solve the noise problem, or does it make more sense to simply charge the truck owner? While the PPP would automatically attribute sole responsibility and all costs for the damage to the truck owner, the CCAP would require that a calculation is made to determine how and by whom the responsibility for removing the damage can be attributed most efficiently and with least cost to the economy overall.

The CCAP is an in-depth cost-benefit analysis which can be applied fairly and efficiently to each situation requiring an internalisation of external costs. A CCAP analysis may result in the polluter being identified as the Cheapest Cost Avoider and thus the right party to pay the associated costs. In this case the road transport industry is ready to take its share of responsibility. It is only important to ensure that this responsibility is not made automatic – which is what the CCAP does. By contrast the use of the PPP by policy-makers as an automatic response to all internalisation questions could lead to regulatory failure and to un-quantified and damaging economic costs.



VIII. BACKGROUND STUDY ON INTERNALISATION OF EXTERNAL COSTS IS HIGHLY QUESTIONABLE

Prior to the communication on the internalisation of external costs, the European Commission published a so-called handbook on the calculation of external costs which should look at:

- how external costs are to be defined and measured for various modes of transport with regard to a number of potential sources of external costs; and
- why and how external costs should be internalised, what problems arise with such internalisation in practice, and what internalisation scenarios should be further considered.

Having carefully studied the collection of studies the following assessment can be made:

- 1. Although crucial for any attempt to estimate external costs or assess the most appropriate way of internalisation, a proper definition of external costs and a consistent and coherent discussion of external effects are completely missing. It is long on assertion and short on analysis.
- 2. The handbook does not take into account that both the measurement of external costs and the choice of an appropriate internalisation strategy crucially depend on the insight that externality problems are reciprocal, and that external costs are caused jointly by all parties involved.
- 3. Efficiency can require charging a polluter, a pollutee or even that both parties pay. In brief, no single party can enjoy an automatic immunity from this joint responsibility as implied by the polluter pays principle. The question of how one should most appropriately deal with external effects is more complex than simply asking as the handbook does how much the party "causing" the external effect should be paying.
- 4. It seems inappropriate, and potentially dangerous, to rely on the cost estimates presented in the CE study as a basis for internalisation. The handbook lacks a coherent framework for measuring external costs, or assessing external cost estimates prepared by others. The handbook does not explore the potential reasons for the differences in cost estimates. Nor does it sufficiently take into account the enormous variation in the presented numbers, some examples of which are:
 - The handbook quotes results from a UIC study, which estimates the total external costs of road transport as € 650 billion, whereas a UNITE study estimates costs at € 129 billion.
 - Regarding accident costs, the handbook admits the under-reporting of fatalities and injuries in official statistics, as well as substantial differences in the valuation of lives lost. Estimates for the Value of a Statistical Life (VoSL), which are used in the estimation of external costs, range from less than US\$200,000 to US\$30m.
 - Air pollution and climate change externality costs represent respectively 500% and 383% of the minimal values.



- Establishing the costs of climate change is complex owing to the long-term effects of greenhouse gas emissions and to the difficulty in anticipating risk patterns such as natural disasters.
- 5. Even though one of the declared objectives of the handbook study is the collection of such third-party cost estimates, it is unclear how the various estimates can be compared and used in an internalisation framework without an appropriate methodology for the measurement of external costs.
- 6. The handbook fails to provide any reliable guidance with regard to the choice of potential internalisation scenarios, let alone help in relation to the assessment of their relative costs and benefits.
- 7. The handbook does not provide a comparative assessment of internalisation tools. What is missing is a comprehensive list of instruments that can be used, and a comparison of these different instruments with regard to their effectiveness and error tolerance, which is of particular importance given the substantial uncertainty about external costs implied by the vastly differing estimates collated in the CE study.

Consequently, the handbook is not a sound and reliable basis for the evaluation of potential internalisation scenarios and policy options.

IX. CONCLUSION

Only the EU is following such an approach by introducing yet another charging scheme even though road transport in Europe is already 20-40% more expensive than in the US. Making road transport more expensive through the increase of user charges will harm Europe's competitiveness and position in the global market and cause further delocalisation, which in turn will generate more road transport from abroad.

The current approach by the European Commission on internalisation of external costs and the revision of the Eurovignette Directive undermines the European Unions "Lisbon Goals" of growth, jobs and competitiveness.

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