BRIEFING - The « Med-Atlantic Ecobonus » Action

A feasibility study on a financial incentive mechanism to support the trans-European transport network goal of developing sustainable freight transport services

(November 2018)

1 Setting

Due to the constant increase of international trade over the last thirty years the European Union (EU) has been faced with a number of social and environmental challenges addressing the negative impacts of freight mobility. In this context, the need to foster a sustainable freight transport market behavior reducing the external costs of transport has become a major goal, firmly addressed in the EU policy.

In a constant debate to allow the market for the uptake of this goal, the EU institutions have been setting the policy priorities and the subsequent implementing rules and supporting mechanisms through different Communications, Directives and Regulations concerning all modes of transport.

On a national level, Members States (MS) have been taking decisions not only to transpose these rules but also to develop their own national strategies, legislations and supporting mechanisms consistently.

As a result of this on-going debate, the concepts of integration, modal balance, optimization, resource efficiency and green mobility have become the main priorities to operate a sustainable freight transport behavior. Consequently, these priorities have been tackled and supported by the EU and the MS through different means and with different intensities at each time depending on the circumstances of each mode of transport and the evolution of the overall transport market and of the socio-environmental challenges.

For instance, as for the EU support, between 2003 and 2013 the Marco Polo programmes were directly aimed at shifting freight off the roads by directly compensating the maritime, rail or inland waterways operators for the launching of services demonstrating and impact on modal shift. As from 2013, and partly due to the evolution of the market, these modal shift actions were replaced by the current approach on sustainable freight transport given by the Trans-European transport network (TEN-t) guidelines[1] and its financial mechanism (CEF)[2], with a greater focus on clean fuels to reduce carbon emissions and other environmental impacts.

On the other hand, the charging principle (pollutant pay) is also accepted by the EU institutions as a means to reduce external costs, particularly for the case of road transport.

[1] Regulation (EU) No 1315/2013 of the European Parliament and of the Council of 11 December 2013 on Union guidelines for the development of the trans-European transport network

[2] Regulation (EU) No 1316/2013 of the European Parliament and of the Council of 11 December 2013 establishing the Connecting Europe Facility

Ultimately, from today's perspective, and partly due to a smart combination of regulatory and financial measures performing together as a sort of "*stick and carrot*" mechanism, the transport market is performing better than in the past in many aspects.

However, the socio-environmental challenges for all modes of transport are getting stricter in the coming years. Decarbonisation is now in the upfront of the international agenda. For the first time, the maritime sector is facing real targets for CO_2 emissions reduction after the recent adoption by the International Maritime Organization of the initial strategy on decarbonization in shipping. As well, the insufficient contribution of road transport to overall CO_2 emissions reduction is on the debate within legal framework for charging heavy goods vehicles, currently under revision[3]. Air pollutant reduction targets are also getting stricter from the environmental regulation and extended to all modes of transport. In particular, this is a short-term challenge for the maritime industry by 2020 with the entry into force of the new Sulphur cap on marine fuels[4], whereas road transport has already made great improvements following the implementation of the EURO class regulation. However, road transport generates a number of social impacts, related mainly to congestion and accidents, that are still to be reduced.

With the CEF Regulation under revision for the next period and the TEN-t policy to be starting the revision process in the short term, it seems the right time for the debate on possible approaches to tackle these socio-environmental issues coming in the next years while securing the conditions for the furhter transport market development and competitiveness.

This context set the grounds for the « Med-Atlantic Ecobonus » (MAE) Action, a policy study aimed at taking the largest experience and lessons learnt that the EU has accumulated so far to propose a possible approach to the further development of sustainable freight transport services with a combined effort from the EU and the MS.

The study takes over the recommendations from the European Commission (EC) Communication on the results of the Marco Polo program (COM (2013) 278 final), the European Court of Auditors' Special Report N°3/2013 *'Have the Marco Polo programs been effective in shifting traffic off the road'* and the EC's reply to this Special Report (COM(2013) 321 final). As well, it follows the recitals 30 to 32 of the Sulphur Directive where the EC and the MS are recommended to provide targeted assistance, including operators, so as to minimize the risk of modal (back) shift from sea to land-based transport which might increase road congestion. Finally, the study accounts for the best practices from the different national schemes supporting freight transport, namely the Italian ecobonus that was in place during the period from 2007 to 2010.

[3] Proposal for a Directive of the European Parliament and of the Council amending Directive 1999/62/EC on the charging of heavy goods vehicles for the use of certain Infrastructures (COM(2017)0275)

[4] Directive (EU) 2016/802 of the European Parliament and of the Council on the reduction of the sulphur content of certain liquid fuels

This project has been developed by the transport ministries of Spain (as coordinator), France, Italy and Portugal, and benefits from EU funding under the CEF programme.

2 MAE Action. Goals

MAE Action is a policy study (not an implementing Action), with the following goals:

i. To set up a debate on a possible common EU approach on eco-incentive schemes to stimulate a sustainable freight transport market behavior. The approach is intended to be transferable to all modes of transport and EU regions. If broad consensus were to be achieved, these eco-incentive schemes could become a part of the EU funding priorities, as eligible actions within the next Multiannual Financial Framework 2021-2027 (i.e. CEF2).

ii. to perform a complete ex-ante analysis, taken the case of the Motorways of the Sea (MoS) as example to prove the impacts of the proposed approach (MAE example)

3 MAE common EU approach (to the debate)

The vision of the proposed common EU approach to eco-incentives schemes is aimed at a combined effort from the MS and the EC support, enabling the MS to target a transport market of their interest, to decide on the goals they want to address with the scheme and to establish the socio-environmental merit which is to be incentivized.

The schemes shall comply with the following main principles to get the EU funding support:

- Targeted to mature markets. Not intended to start-up services, to compensate market losses or to pure modal shift goals (different approach from Marco Polo programmes);
- Stimulating a sustainable freight transport market behavior;
- Incentive calculation based exclusively on demonstrated socio-environmental merits reducing negative externalities in transport (i.e. measuring external costs savings is needed based on common references -EC's Handbook of Transport External Costs-);
- Technologically agnostic on how the socio-environmental merit is achieved;
- With the funding being conditioned to results;
- Demonstrating performance achieved (i.e. monitoring);
- With the MS being the promoters of the schemes (regional approach) and those who mobilise and implement the necessary budget (as with the national schemes) provided there is EU co-financing.

In addition to these principles, granting any financial support shall be conditional to an “ex-ante” analysis showing in advance the impacts of the scheme. This "ex-ante" analysis is conceived as a simulation exercise to assess the impacts of the eco-incentive measure in the targeted market. The simulation must be carried out with the use of relevant tools based on common references, developed *ad hoc* for the targeted market and limited through eligibility criteria. As a result, the “ex-ante” analysis shall demonstrate the impacts of the scheme and the budgetary needs.

Furthermore, the contribution from the EU budget could be modulated by the intensity on the CO_2 reduction attained by the eco-incentive scheme, whereas the MS contribution might be allocated to the more localised impacts coming from air pollutants and social costs. This way the EU support could be justified on grounds of the global impacts, which is consistent with the main goal on decarbonisation.

Infrastructure externalities are not considered (purely socio-environmental impacts). The charging principle operates for the infrastructure externalities.

4 MAE example

Following the proposed approach, the main features of the MAE example are:

- Targeted Market: MoS servicing alternative routes to the road transport in the West-Mediterranean and Atlantic regions.
- Goal: Triggering green actions in the maritime leg (improving environmental performance of vessels)
- Socio-Environmental Merit incentivized: The external cost savings from a truck using a maritime service compared to the ‘road-only’ route.
- The road transport receives the eco-incentive when using the maritime service. The eco-incentive is directed through demand (Italian ecobonus approach)
- Only for maritime services adopting green actions (technology or not technology based)
- An external cost calculator tool has been developed specifically for the targeted market to measure the environmental merit which is incentivized, as described. This calculator is based on the latest update available of the EC’ Handbook of External Costs[5]
- Two scenarios are simulated:

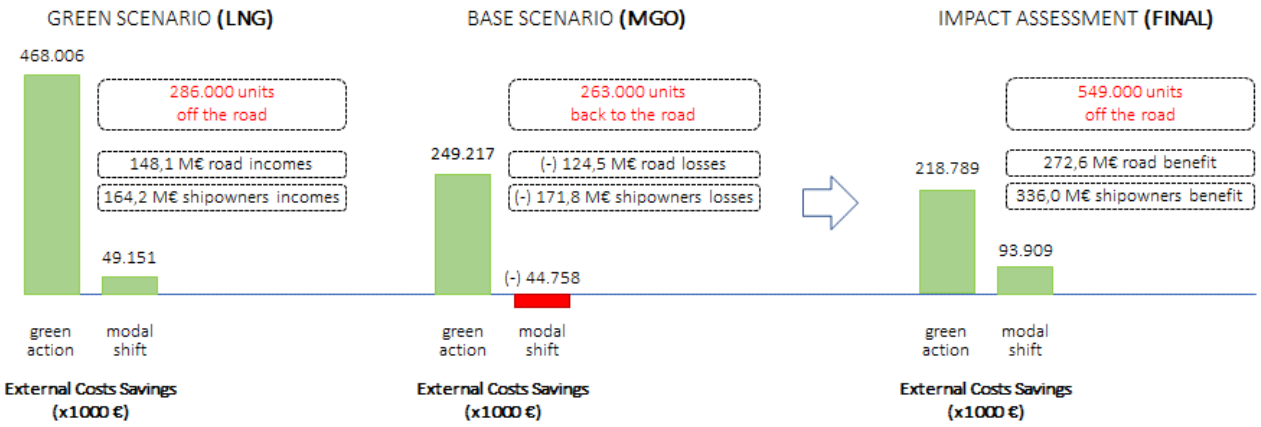
  Base Scenario (MGO): All lines using low Sulphur fuel for the strict compliance with the environmental regulation. No eco-incentive is given. The maritime prices increase (due to more expensive fuel) and there is a modal back shift effect.

[5] Update of the Handbook on External Costs of Transport (Ricardo-AEA, 2014). Report for the European Commission (DG MOVE)

Green scenario (LNG): All lines switch to LNG vessels (this would be the green action in the maritime leg which is the goal of the eco-incentive scheme). Sea rates are maintained. The environmental merit is the highest possible. The maximum eco-incentive is given. As a consequence, there is a modal shift effect leading to indirect benefits for the shipowners.

Both scenarios induce external cost savings in the transport system. The base scenario due to a 'regulation merit'. The green scenario due to the 'green action', as well as to the modal shift effect induced by the eco-incentive. The 'eco-incentive merit' is then the difference (comparison) between the two scenarios.

The following figures presents the main outcomes accumulated on a 5 years period (2020-2024).



IMPACT ASSESSMENT (ACCUMULATED 2020-2024). MAE EXAMPLE

5 Final remarks

As a result, the study seems to sufficiently demonstrate the viability of the approach, as well as the positive impacts of the scheme in the example of the study. However, these results are based on different assumptions that require broad consensus on several levels.

Furthermore, the MAE Action ends at proposal level and is just intended to set the debate on the potential use of eco-incentive measures at EU level to stimulate an improved sustainable transport market behavior.

Ultimately, at the institutional level, the validation of the approach by the EC, the MS and the European Parliament is essential to provide with the legal and policy basis and further with the possible financial resources for such schemes.