Avoiding Evasion

Introduction

The environmental effectiveness of a market based, technical or operational measure, depends heavily on the level of compliance and limited possibility for evasion. Compliance can be ensured with a robust monitoring, reporting and verification system and clear enforcement policies with deterrent and appropriate sanctions/penalties in the case of non-compliance. The above elements have already been discussed in the first ECCP meeting, and an important question for the second meeting which should be addressed is to what extent evasion is a major concern in the context of a regional policy for GHG emissions from maritime transport.

Draft IHS Study "Ships Visiting European Ports" (2011)

This study helps shed some light on which shipping sectors/segments are more susceptible to change their traffic patterns should a carbon charge be imposed on them. Its conclusion is that carbon leakage is more likely to occur in the container shipping sector.
Various options exist for deep-sea container carriers to load and unload in non – EEA countries. The following areas are identified:
- the Balkans and countries around the Black Sea
- North Africa – where port developments are taking place
- The Middle East – where large ports are being developed

It is suggested that these port developments will lead to changes in traffic patterns and that a carbon charge would raise the speed and increase the change of this development.

A general point made about the shipping markets, is that if a ship calls at a port it is there for a reason, i.e. it should either discharge or load cargo. There are two exemptions however.
The first is where cargo is being stored for trading purposed (mostly oil) and thus is discharged at a storage facility and then could be consumed somewhere else. The second exemption relates to part loading - this is most common for container ships. Ships that part load and/or part discharge trade between two, three or more ports that are quite often located close to each other.

German report "Integration of Marine Transport into the European Emissions Trading System" (2010)

This study assesses three options/scopes for integrating international ocean shipping in the EU ETS. In assessing each option, the study looks at various elements including the risk of evasion for each option. For each option the following evasion possibilities are identified:

Option 1. Fuel consumed in the last period prior to the port of call (time based):

- Most fuel efficient ships deployed to European ports
- Limited number of ships calling at European ports.

Option 2. Distance travelled and fuel consumed in the last trip prior to the port of call (highest evasion risks):

- Most fuel efficient ships deployed to European ports
- Call at non EU port located close to EU port to reduce last trip distance
- During monitoring of emissions to calculate baselines, carriers might over-report and send more polluting vessels to European ports

Option 3. Distance the cargo has travelled (smallest evasion risks)

- This option requires a methodology for calculating emissions associated with the transport activities. A calculation would need to combine cargo mass, distance sailed and fuel efficiency. The evasion risks are therefore small because it would require complicated re-declaration fo cargo, which would engage a complex set of stakeholders.

Overall, Option 1 is regarded as the most favourable as it has the highest level of environmental effectiveness: it covers at least one third of international seaborne emissions. With regards to evasion, Option 2 is the less favourable one as it covers fewer vessel voyages and leads to more evasion possibilities. The study suggests that these evasion possibilities arise due to the fact that a false or real stopover would be easy to carry out and would involve low costs. It is therefore suggested to improve the reliability of the AIS data and amend the existing reporting requirements (EU Directive 2002/59; SOLAS V).

CE DELFT Study (2009)

The CE DELFT Study concludes that the risk of evasion is very limited and only likely for certain segments of shipping, especially the container shipping sector and in situations of low market and high CO2 fee.

Similarly to the German Report, the CE DELFT identifies possible risks of evasion in a route based scheme for some types of shipping sectors. Indeed, to minimise the final distance to an EU port and reduce the fee imposed under an EU tax, EU ETS or Baseline and Credit System, a vessel might:

- make an additional (artificial) port call (at an 'evasion port') just outside the EU borders
- offload cargo in a port just outside the EU from where it is carried by another ship to the EU (transhipment)
- by ship to ship transfer outside EU sovereign (or jurisdictional waters)

Moreover, under an efficiency limit or charge on fuel consumption for ships in EU ports a carrier may decide to deploy his efficient ships to EU ports and the non efficient ones outside EU ports. A global agreement would therefore always be desirable.

Contrary to the DE report, the CE DELFT report finds that evasion by making an additional port call becomes prohibitively expensive for ships with a single bill of lading when a voyage is defined as the route from the port of loading to the port of discharge.

In other words, where a 'port call' is defined so that transhipment is necessary, the potential for evasion from an economic point of view would be very limited. In most cases it would be much more expensive to unload a bulk carrier outside the EU and transport cargo by truck to its final destination in the EU than for the ship to proceed direct to the destination to discharge. Similarly, the cost of transhipment where the cargo is offloaded in another port and then carried by another ship to the EU is also very costly and time consuming.

Regulation could be made to avoid this by port authorities examining the origin of the cargo or port of loading as identified on the bill of lading so as to determine the proper duration/length of the voyage.
However, if 'port call' is defined so that no transhipment of cargo is necessary, potential for evasion is higher, as the costs savings related to lower CO2 fees are not counterbalanced with such high costs related to such an additional port call. For ships with multiple bills of lading (container ships, general cargo ships), it is difficult to unequivocally determine a port of loading. Hence, for these ships, some avoidance could occur.

If this type of evasion were attempted it may lead to ships making longer voyages, which would incur extra CO2 emissions and the extra calls, would also incur extra CO2 emissions. However, these additional costs could discourage evasion.

The following questions arise:

- Will the new EU (feeder) ports have the capacity to accommodate an increase in ships?

According to the CE DELFT the following ports would be most likely to be used as 'evasion ports' because of their geographical proximity to the EU ports and size:
- The largest North African ports: in Egypt, Libya, Tunisia, Morocco
- Southern European countries not being members of the EU: Croatia, Albania, Montenegro
- East Mediterranean/Near East: Turkey, Syria, Lebanon, Israel
- Northern European countries not being members of the EU: Russia (Kaliningrad, Saint-Petersburg, Murmansk)

Many of these ports, especially in Africa, do not currently have sufficient capacity in terms of depth and port infrastructure to accommodate very large ships. The CE DELFT study concludes that based on low profitability of evasion of the CO2 reduction policy, investments in non- EU ports are not envisaged for this purpose.

- Research carried out for WWF by CE DELFT, suggests that this type of evasion might be attractive to shipowners for some types of shipping at a carbon price of around 30 dollars/tcO2 (HCEC, 2009). What values do you consider may have a significant effect?

- The CE DELFT study concludes that a route-based scheme should be developed in such a way so as to include where possible the entire journey of the vessel from the load port of the cargo onboard the vessel to be discharged in the EU port, rather than focusing on the emissions of the vessel from the last port of call to its EU port destination. Do you share this opinion?

- What incentives could be given to ensure compliance and thus avoid evasion?

- How could MBM revenues be used to promote avoidance of evasion?

- How should potential evasion be assessed?

- Which segments are most likely to seek to pursue evasion?

Disclaimer

The purpose of this background paper is to indicate possible areas for discussion and assist participants with their preparation. This document should not be seen in any way to limit the scope of discussion or to exclude any relevant aspect. ECCP participants are requested to raise and address all relevant aspects. This document is not intended to indicate any preferences or views of the Commission.