EUROPEAN
COMMISSION

Brussels, 20.4.2016
SWD(2016) 140 final

COMMISSION STAFF WORKING DOCUMENT

REFIT EX-POST EVALUATION

of

Combined Transport Directive 92/106/EEC

Final Report

{SWD(2016) 141 final}

1. INTRODUCTION

The negative externalities of transport such as pollution, climate change, noise, congestion and accidents are posing serious problems to the economy, health and well-being of European citizens. The EU has acknowledged in the 2011 White Paper on Transport[1] that the problems continue to grow as freight transport, and in particular the road freight transport has been continuously growing and is projected to increase by around 40% by 2030 and by little over 80% by 2050 (compared to 2005). The EU transport policy, as described in the 2011 White Paper on Transport, aims towards a form of mobility that is sustainable, energy-efficient and respectful of the environment. The aim is to reduce the adverse effects of freight transport by using multimodal transport - optimally combining various modes of transport within the same transport chain with a preference to non-road transport for long distance freight transport. Such a modal shift – a reduction of the share of road transport in all transport - towards less polluting and more energy efficient modes of transport can help to reduce the overall environmental impact of freight transport. The target set in the White Paper is to achieve "a modal shift of 30% of road freight over 300 km by 2030, and more than 50% by 2050" with respect to business as usual developments.

Combined transport (CT) as a specific form of intermodal transport is a tool to achieve these aims by supporting the shift of long distance transport away from road, to rail, inland waterways or short-sea shipping.

Definitions[2]:

Multimodal transport is carriage of goods by at least two different modes of transport.

Intermodal transport is movement of goods (in one and the same loading unit or a vehicle) by successive modes of transport without handling of the goods themselves when changing modes. Vehicle can be a road or rail vehicle or a vessel. It is hence a type of multimodal transport.

Combined transport is intermodal transport where the major part of the journey is by rail, inland waterways or sea and any initial and/or final leg carried out by road is as short as possible.

1.1. REFIT

In December 2012, the European Commission announced the launch of the Regulatory Fitness and Performance Programme (REFIT) [3]. REFIT emphasises the importance of EU regulation effectively and efficiently pursuing only those public policy objectives which are clearly best achieved at the EU level. According to the Communication, the programme will "identify, assess, adopt, and monitor the implementation of, initiatives which will result in significant regulatory cost reduction or simplification".

Directive 92/106/EEC on the establishment of common rules for certain types of combined transport of goods between Member States (Combined Transport Directive) was identified in

[1] COM(2011) 0144, White Paper Roadmap to a Single European Transport Area – Towards a competitive and resource efficient transport system, 28.3.2011

[2] OECD Glossary of Statistical Terminology, referring to original definition by European Conference of Transport Ministers, https://stats.oecd.org/glossary/detail.asp?ID=4303

[3] COM(2012) 746, Communication form the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, EU Regulatory Fitness, 12.12.2012

2013[4] as one regulatory measure for which regulatory fitness will be checked through an evaluation.

1.2. Purpose of the evaluation

The Combined Transport Directive was adopted in 1992 with the aim to shift road transport to underutilised and more environmentally friendly modes. Over the years there have been developments on how the combined transport market works as well as changes in the general legal framework for transport. In this light, it is important to assess, if the measure in place is still achieving its objectives, and whether there are any inconsistencies, obsolete provisions or gaps in view of changes in the legal and economic environment which impact the combined transport. The REFIT focus of this evaluation is hence to assess if the legislation is still fit for purpose.

The results of this evaluation may be used as an input for possible future policy development, including for impact assessments.

1.3. Scope of the evaluation

The underlying objective of the Combined Transport Directive is to better utilise the existing transport infrastructure and resources and to reduce negative externalities of road transport to the environment by incentivising the use of other means of transport (rail, short sea shipping (SSS) and inland waterways (IWW)). To achieve this goal, the Combined Transport Directive attempts to foster the competitiveness of cross-border CT as compared to road transport by providing common rules and fiscal incentives for operators using combined transport.

The evaluation assesses to which extent the Combined Transport Directive has contributed to reaching its objectives of modal shift and a resulting reduction of negative externalities of road transport (congestion, accidents, pollution). The evaluation is based on standard evaluation criteria of relevance, effectiveness, efficiency, EU value added and coherence. Based on the above, the evaluation assesses whether the provisions foreseen by the Combined Transport Directive were and still are "fit for purpose" between 1992 and today. The evaluation covers the same geographical scope as the Directive that is the whole EU; however some of the data comparison is carried out based on EU-15 as no comparable data exists for EU-28 for 1992.

2. BACKGROUND TO THE COMBINED TRANSPORT DIRECTIVE

2.1. Baseline

Freight transport in the EU had increased by more than 50% in the period 1970-1990, with an average annual growth rate of 2.3%, bringing along excessive road traffic that in turn caused congestion and environmental pollution as well as damage to health and danger to life. The biggest contributor to these problems was road transport; and road transport grew both in absolute and relative terms considerably faster than other modes of transport (rail, inland waterways transport). By the 1990s, road transport accounted for almost 70% of total inland freight transport (ca. 40% of total freight transport)[5], expanding its share by as much as 20%

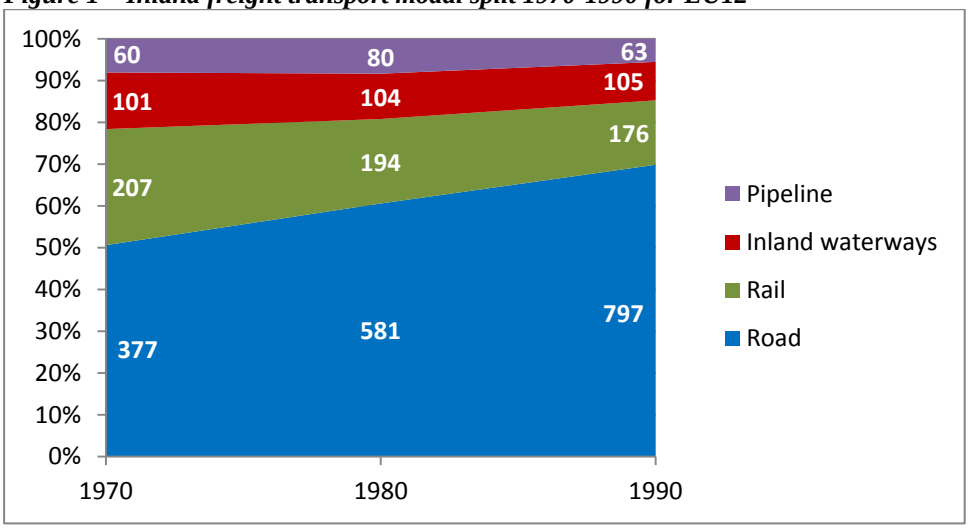
[4] COM(2013) 685 , Regulatory Fitness and Performance (REFIT): Results and Next Steps, 2.10.2013

[5] Inland transport excludes maritime transport (both short-sea as well as ocean going) and air transport. Total inland freight transport for EU-12 (without East-Germany) was 0.75bn tkm in 1970 and 1.14bn tkm in 1990. The data-series currently used start from 1995, when road transport accounted for 42% from total freight transport and for 73.2% from total inland freight transport.

within 20 years' time, while rail transport volumes had contracted by 15% in absolute terms and its market share dropped from 28% to 15% within the same period. As regards the transport by inland waterways, despite the modest increase in overall volume, its relative share in transport market had decreased from 14% to 9% between 1970 and 1990.

This was due to the fact that the structural economic changes between the 1970s and the 1990s such as a growing importance of services' industry and the development of production technologies had significantly affected freight transport shifting the emphasis from volume to frequency and speed. The road haulage sector is characterised by high flexibility and relatively little short-term investment that allows it to take up services quickly when the demand grows. In addition road transport is relatively cheap for the users. The upcoming completion of the Single Market in the beginning of the 1990s along with the continuously growing demand for transport were expected to further increase problems caused by freight transport: by 1991, almost a third of environmental costs was coming from road freight haulage, compared to 3% and 1% caused by rail and inland shipping respectively[6], and the 1992 Green Paper[7] predicted the growth of road haulage by 42% between 1990 and 2010 (in tkm) compared to only 33% increase of the rail sector in the same period.

Figure 1 – Inland freight transport modal split 1970-1990 for EU12[8]



Source: 1992 White Paper

Furthermore, by 1990 the EU infrastructure capacity proved insufficient to cope with the growing demand for transport. Between 1970 and 1990 the volume of road traffic in vehicle-kilometres had doubled and these developments were worsened by a relative decline in infrastructure investment. This in turn meant that the road network had reached saturation at many points resulting in **growing congestion.**

This did not only adversely affect the operational efficiency of the transport system, but it also substantially increased **energy consumption** and pollution and thus exacerbated the environmental problems. The biggest contributor was again the road sector, which consumed over 80% of the total final energy used in the transport sector.

[6] TERM 1999, Towards transport and environment reporting mechanism (TERM) for the EU, Technical Report No 18, European Environment Agency, May 1999

[7] COM(92) 46, Green Paper on the Impact of Transport on the Environment, A community strategy for "sustainable transport", 20.2.1992

[8] Belgium, Denmark, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, United Kingdom

With regard to **atmospheric pollution**, road transport emissions had seen a substantial increase over the two decades. In 1989 it accounted for 75% in the overall CO_2 output of the transport sector. Road freight transport was responsible for 22.7% of total CO_2 produced by the transport sector in the EU, compared to merely 1.1% and 0.7% share of rail freight and inland waterways freight transport, respectively[9]. According to the 1992 Green Paper, in 1990 the emissions of carbon dioxide by road transport equalled 710 million tonnes, compared to 13.1 million tonnes produced by the rail sector. It was estimated that road freight (heavy goods vehicles) accounted for 23.7% of all nitrogen oxide (NO_x) emissions, 2.2% of all volatile organic compounds (VOC) emissions and 1.44% of all SO_2 emissions of all transport.

The environmental cost of freight transport was assessed to be €54.9 billion in 1991, from which road freight transport accounted for a whopping 95%.

Table 1 – Environmental external cost of transport in EU15 MS in 1991, billions of EUR

	Road freight	**Rail freight**	**Inland waterways freight**	**Total inland freight**	**Total**
EU15	52.3	1.87	0.7	54,87	256.5
% of total	20%	0.73%	0.3%	21.39%	100

Source: TERM 2000[10], Green Paper 1992, COM calculations

Growing road transport was also responsible for the majority of **road accident deaths**. Though the situation had improved compared to the 1970s, the level of deaths per year in 1992 was still approximately 47000, while the number of accidents with injuries and material damage was about 40 times as many. Road accidents were responsible for the largest number of injuries and fatalities, especially when compared to the rail sector where around 1150 fatalities occurred in 1992. The economic cost of road accidents was considered a substantial financial burden on the economies of the then 12 Member States, valued at between €45 billion and €90 billion a year in 1990.

These concerns were addressed in the 1992 White Paper *The future development of the common transport policy*[11]. The White Paper concluded that the market rules alone were not able to produce a viable solution and that without a substantial change in transport policy the problems would continue to persist and increase. It proposed a shift away from a transport policy that approaches different modes of transport separately to an integrated policy that looks at multimodal transport. The 1992 White Paper stressed that the above inefficiencies could be resolved by an appropriate pricing and infrastructure policy in the long term perspective, however in short and medium term costly investment in the necessary infrastructure and introduction of fair environmental charging systems were not feasible. The solution was to promote the take-up and use of transport modes other than road transport by improving, on the one hand, the connections between different modes and by creating, on the other hand, a legal framework that would help the users to choose the optimal combination of the different modes of transport. Promoting multimodality was considered an overarching approach to which other specific EU transport policies such as liberalisation of access to transport markets, developing the Trans-European Networks (TENs) and promotion of fair and efficient pricing contributed.

[9] COM(92) 494 final, White Paper: The Future Development of the Common Transport Policy: A Global Approach to the Construction of a Community Framework for Sustainable Mobility, 2.12.1992

[10] TERM 2000, Indicators on transport and environment integration in the EU, Environmental issues series No 12, European Environment Agency, February 2000

[11] COM(92) 494, White Paper: The Future Development of the Common Transport Policy: A Global Approach to the Construction of a Community Framework for Sustainable Mobility, 2.12.1992

However, the existing multimodal transport flows were very low in 1992. For example, the total share of combined road/rail systems was estimated at merely 4% of total international road flows in the EU. In the light of the above, the Commission proposed to promote the combined transport of road with rail, inland waterways or short sea through the Combined Transport Directive. The Combined Transport Directive introduced support measures that would make it a viable choice for the market operators that would counterbalance the fact that due to the inbuilt characteristics of CT, it is less competitive pricewise than single road transport[12].

2.2. Intervention logic of the Combined Transport Directive

Legislation establishing common rules for combined transport in the EU had existed since the mid-1970s. Council Directive 75/130/EEC[13] aimed to free the rail-road combined transport from all quantitative restrictions (quotas) and to abolish certain administrative formalities. This Directive was amended five times, inter alia, to extend the scope of the measures to the transport of units by inland waterways; introduce the reimbursement of national road tax on vehicles used in combined transport; and abolish compulsory tariffs on feeder and final delivery road haulage legs.

In line with the conclusions of the 1992 White Paper, the Commission suggested to further promote combined transport in the *Communication concerning the establishment of a combined transport network and its operating conditions*[14]. It called for the broadening of the scope of the policy measures aimed at a modal shift and support for combined transport with the aim to support the completion of the Single Market by promoting the interconnectivity and interoperability of transport networks, as well as serving to reduce environmental pollution and risk to life and health.

The Communication proposed a three-tier approach consisting of an EU legal framework for the CT sector, EU investment plans for CT network and extension of regulations allowing public incentives to investments in CT services. Following the proposal, the Council adopted Directive 92/106/EEC[15] as a recast of previous measures, while investment-related issues were merged into general transport-related investment plans and rules (see more for section *6.5 Coherence*).

As described above, the Combined Transport Directive was established with the objective of encouraging and improving the competitiveness of combined transport as an alternative to road transport, and thus contributing to road traffic safety, reduced congestion and environmental pollution, as well as better management of transport resources. The aim was to promote international CT, that is to say CT between Member States, which would allow the sector to reach economies of scale. While the above-mentioned investments were important contributors to the effects, investments alone would not have ensured elimination of barriers between the Member States that were currently hindering international CT, making it even more costly compared to international road transport.

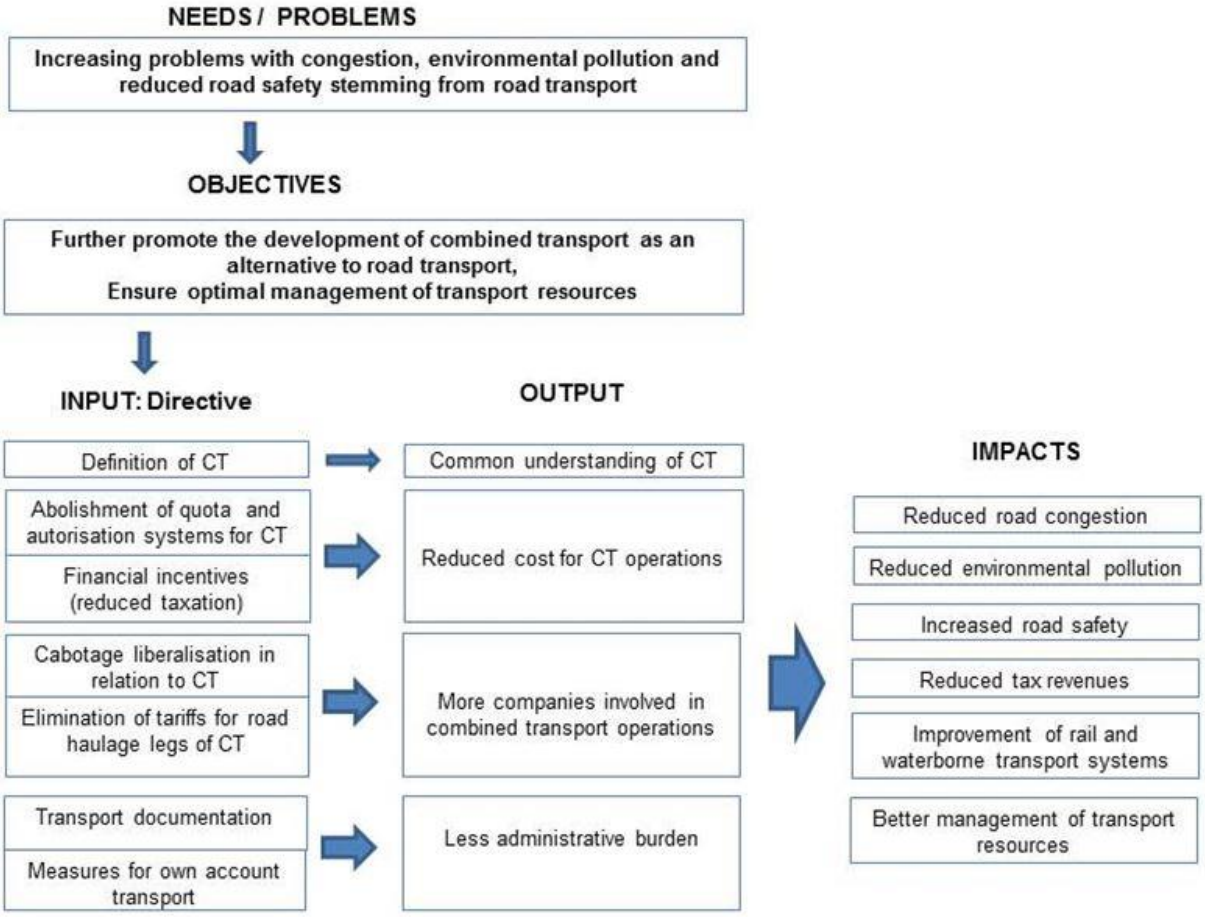
Figure 2 - The intervention logic Combined Transport Directive

[12] It needs expensive technical and organizational arrangement as it often involves several operators, transhipments are needed between the modes of transport as are special infrastructure and equipment.

[13] Council Directive 75/130/EEC of 17 February 1975 on the establishment of common rules for certain types of combined road/rail carriage of goods between Member States, OJ L 48, 22.2.1975

[14] COM(92) 230, Communication from the Commission concerning the establishment of a combined transport network and its operating conditions, of 2.7.1992, OJ No C 282 of 30.10.1992

[15] Council Directive 92/106/EEC of 7 December 1992 on the establishment of common rules for certain types of combined transport of goods between Member States. It repealed the Directive 75/130/EEC.



Source: European Commission

The Combined Transport Directive defines the CT as the transport of goods between Member States where the lorry, trailer, semi-trailer, with or without tractor unit, swap body or container of 20 feet or more, uses the road on the initial and/or final leg of the journey and, on the other leg, rail or inland waterway or maritime services.

The length of the road leg is limited in distance to ensure that long-distance road transport is limited. Road leg(s) combined with a maritime/inland waterway leg have to be each shorter than 150 km as the crow flies (in direct line). In case of rail-road combined transport, the road leg is limited to transport to the nearest suitable rail loading and unloading station.

A minimum length of the non-road leg (rail/sea/inland waterway) is also provided. The non-road leg has to be longer than 100 km as the crow flies.

The definition does not cover CT operations within one Member State, or between one Member State and a third country.

The Combined Transport Directive liberalises the sector by establishing the exemption for CT from all quota systems and authorisation schemes as well as from compulsory tariff regulations (for road legs of CT operations).

The Combined Transport Directive also establishes that the road legs of a CT operation can be carried out by non-resident hauliers setting it at bar with international road transport. According to Article 4 of the Combined Transport Directive, all road hauliers established in a Member State who meet the conditions of access to the occupation and access to the market

for transport of goods between Member States can carry out initial and/or final road haulage legs which form an integral part of an international CT operation, including when the road legs do not cross of a border. This means that the cabotage restrictions applying to national road transport by non-resident road hauliers do not apply to CT road legs, because the CT road legs are an integral part of an international transport operation and not national transport.

Taking into account the more beneficial regime, the road leg operator has to be able to prove that the road leg is part of an international CT operation. In this regard Article 3 stipulates that a transport document is required to provide evidence that the road leg is being performed as part of a CT operation, specifying details of the rail station, inland port or sea port used for delivering or picking up a load unit. Other minimum requirements for information in the transport document are established in Regulation (EC) No 11/1960[16]. A more liberal regime applies to own account transport.

In addition, the Combined Transport Directive provides two types of financial incentives for vehicles engaged in CT, namely: mandatory reduction or reimbursement of taxes for road vehicles in the country where the vehicles are registered, when these vehicles are transported by rail in CT operations (Article 6 (1)); optional exemption from taxes for road vehicles used exclusively in collection or final delivery of CT services (Article 6 (2)).

Lastly, the Combined Transport Directive requires the Commission to draw up a bi-annual report on the EU CT market. The report should assess the state of application of EU legislation in the field, as well as the economic development of CT, and propose, where necessary, further measures to promote CT.

3. METHODOLOGY

3.1 Data sources

The quantitative analysis is based on large parts on the **fact-finding study** *Analysis of the EU Combined Transport*[17] (CT Study) carried out by a consortium of KombiConsult, Intermodality, PLANCO Consulting and Gruppo CLAS in 2014/2015.

The study included an extensive data-gathering about the CT market in the EU as well as an analysis of the CT industry. The study looked at CT as defined in the Combined Transport Directive as well as defined by the industry (with no 150 km limitation of the road legs) and covered the three subsectors of the CT market (CT rail/road, CT inland waterways/road, CT short sea/road). The reference year for statistical data was set at 2011[18], while time-series analysis with historical data was used were available and relevant. The study further gathered information about the transposition and implementation of the Combined Transport Directive and about the available support schemes in EU Member States for CT.

The methodology used for the gathering of statistics on CT in the EU consisted of collecting information from published sources at EU and Member States level, including Eurostat, national statistical offices, relevant associations in the field (such as the International Union of

[16] Regulation No 11 of 27 June 1960 concerning the abolition of discrimination in transport rates and conditions, in implementation of Article 79 (3) of the Treaty establishing the European Economic Community

[17] Analysis of the EU Combined Transport, carried out by consortium of KombiConsult, Intermodality, PLANCO Consulting and Gruppo CLAS, 15 January 2015, http://ec.europa.eu/transport/themes/strategies/studies/doc/2015-01-freight-logistics-lot2-combined-transport.pdf

[18] The CT Study was launched in October 2013. At the time, the 2011 data was the latest comprehensive/comparable data available for all Member States.

Road-Rail Companies (UIRR)) and CT operators, along with in-house and third-party research reports and data. In particular, the consortium used the extensive database on CT, originally commissioned by the International Union of Railways (UIC) in 2005, which is based on bi-annual surveys of primary sources (questionnaires to CT rail/road providers covering nearly 90% of providers).

Furthermore, questionnaires and interviews with CT operators were used to gather missing data, while questionnaires and interviews with Member States authorities were used to gather information on CT data gathering systems as well as on the transposition and implementation of the Combined Transport Directive in Member States. Remaining limited data gaps (mostly relating to maritime transport) were filled with statistical estimations based on extrapolation or interpolation. Finally, the findings of the above were then compared, cross-checked and validated. Double or multiple counting of consignments between countries and/or operators was eliminated to avoid significant errors or bias in the results. The resulting statistical data set can be considered the best reliable statistical detailed data set on CT in the EU.

The quantitative data from the study was supplemented with **other technical sources**, such as data from Eurostat and other studies, projects and models in the field. In addition, other policy papers by the Commission and stakeholders were used where relevant.

From the main technical sources, the two Reports on the Implementation of the Combined Transport Directive, for years 1993-1995[19] and 1996-1999[20] respectively should be noted. These reports have been used for both the data on the CT market in the given years as well as references for qualitative assessment. Furthermore the explanatory note (impact assessment) of the Commission proposal for an amendment of the Combined Transport Directive in 1998[21] has been used as source when assessing in particular the effectiveness of the Combined Transport Directive.

For the calculation of external costs, the PRIMES-TREMOVE transport model[22] and the Handbook on External Cost of Transport[23] were used. The data on road transport environmental impacts was derived from inter alia EU White/Green Papers, EU Environmental Action Programmes and the TERM Reports of the European Environment Agency.

The main source for qualitative data is the outcome of the **stakeholders' consultations** carried out by DG MOVE in parallel to the above-mentioned study, which included two elements: a public online consultation[24] carried out by the Commission between 23 May 2014 and 15 August 2014 and a workshop organised on 27 June 2014 in Brussels for key stakeholders in CT (with 38 participants). While the public online consultation was open to all interested parties and received a wide response (113 replies, from which 72% were industry

[19] COM(97) 372, Report from the Commission to the Council on the application during the years 1993 to 1995 of Council Directive 92/106 of 7 December 1992 on establishment of common rules for certain types of combined transport of goods between Member States, 18.7.1997

[20] COM (2002) 215, Report from the Commission on the application during the years 1996 to 1999 of Council Directive 92/106 of 7 December 1992 on establishment of common rules for certain types of combined transport of goods between Member States, 2.5.2002

[21] COM(1998) 0414, Proposal for a Council Directive amending Council Directive 92/106/EEC on the establishment of common rules for certain types of combined transport of goods between Member States, 19.8.1998. The proposal was withdrawn by COM(2001) 763 final/2 of 21 December 2001 due to negative opinion of the European Parliament.

[22] http://ec.europa.eu/environment/archives/air/models/tremove.htm

[23] Update of the Handbook on External Costs of Transport, Ricardo-AEA, 08/01/2014, http://ec.europa.eu/transport/themes/sustainable/studies/doc/2014-handbook-external-costs-transport.pdf

[24] http://ec.europa.eu/transport/media/consultations/2014-combined-transport_en.htm

representatives including associations, 7% NGOs, 9% individuals and 12% public authorities), the stakeholder workshop was open by invitation to major CT operators, their associations and users (associations) (for further detail on participation, see *Annex II)*.

In the framework of these two exercises, stakeholders were asked to assess the strengths and weaknesses of the current Combined Transport Directive, clarify their opinions about different measures in the Combined Transport Directive and their usefulness, describe their experiences with its implementation and problems encountered, assess whether a revision of the Combined Transport Directive would be desirable and, which possible enhancements should be considered in any future revision of the CT policy in general.

The information gathered in the stakeholders' consultation complements the statistical data gathered by the study. In particular the qualitative information received from the stakeholders has been used in assessing the perceived effectiveness and efficiency of the Combined Transport Directive in the situation where statistical data does not give the full picture due to a changing context during the last 22 years.

Finally, the information gathered within the framework of the external study and the stakeholders' consultations was complemented by additional **desk research**. This data collection process was carried out with a view to even better understand the underlying problems and to respond to the supplementary information needs necessary to address the evaluation questions. More importantly, the information gathered through desk research was used to verify the evidence from the other data sources, ensuring the robustness of findings and an unbiased approach.

3.2 Evaluation methodology

The data collected from the three main sources was used to respond to the **evaluation questions**. All the analytical findings constitute the basis for the assessment on how the Combined Transport Directive has scored on the five defined evaluation criteria of relevance, effectiveness, efficiency, coherence and EU added value. This is in turn allowed to establish the causality and the attribution of effects to the intervention.

When developing the methodology for answering the evaluation questions, it became necessary to answer further questions that had not been established in the Evaluation Mandate, but which proved essential to evaluate the five evaluation criteria. To overcome the problem, some additional issues that were not covered by the evaluation questions are addressed in the evaluation. Furthermore, to improve the readability of the evaluation, the order of questions under each of the five criteria was reorganised.

The evaluation process was assisted by a **Steering Group** composed of the representatives of selected Directorates General including DG TAXUD, DG ENV, DG GROW and DG CLIMA as well as the Secretariat General. DG COMP was also consulted.

The Steering Group steered and monitored the progress of the exercise, ensuring the necessary quality, impartiality and usefulness of the evaluation. Being composed of members from different functions and having the necessary mix of knowledge and experience, the Steering Group brought together a range of different perspectives and provided the necessary input, in particular where the evaluation touched different policy areas.

3.3 Limitations – robustness of quantitative findings

The evaluation faced some difficulties in producing robust quantitative comparisons with data from 1992. These are linked to three major factors: the changing global economic and technical environment, the cross-impacts of other EU and national measures and the shortage

of reliable or comparable statistical data on some aspects of CT operations in the EU. The results and impacts delivered by the Combined Transport Directive over the last 22 years have to be looked at in this broader context, and the quantitative assessment needs hence to be complemented by qualitative analysis.

Changing global economic and technical environment

The freight transport market is strongly affected by changes in the global economy and in particular trade as well as technical developments. Changes in trade patterns and volumes influence directly the need for freight transport. The globalisation of the world economy and in particular the spread of global supply chains has generated a considerable increase in freight transport volumes in the world and in the EU. The enlargement of the EU from 12 to 28 Member States between 1992 and now has further influenced the trade flows and therefore the transport market of the EU. These trends have supported the continuous growth of the transport volumes in the EU, including growth of CT volumes. It is not possible to eliminate the effects of these global trends on the CT market and hence calculate the absolute growth without the external effects. For this reason, this evaluation bases the assessment on comparison of growth rates of different modes of transport as opposed to absolute volumes.

However, it needs to be pointed out that some technical developments during the last 22 years can be assumed to have influenced multimodal transport more than single modal transport. In particular the widespread use of containerized transport can be seen as having supported intermodal transport, while the greater use of ICT have made it easier to plan and execute multimodal journeys. It is impossible to quantify these effects on the CT, and thus it is also impossible to eliminate it from the results of the Combined Transport Directive. For this reason, it was decided to ask the stakeholders in the public consultation to give a qualitative assessment on the effects of the Combined Transport Directive on the CT market development.

Cross-impacts from other initiatives

While the Combined Transport Directive has been one of the key pillars in a package of EU measures aimed at the development of multimodal transport, it is not a standalone instrument that supports modal shift in transport and the development of CT.

First, over the years the EU has established a number of initiatives addressing the same problems as the Combined Transport Directive, i.e. the de-congestion of the transport network, the improvement of transport safety and the reduction of the environmental and climate change impact of freight transport. Taking this into account, this evaluation uses as an indicator the annual savings caused by the shift of freight to CT instead of comparing the absolute reduction of the externalities.

Secondly, the CT depends heavily on the dynamics of the single transport modes it consists of. Hence, initiatives such as the liberalisation of road and rail transport, improving the interoperability of modes or state aid rules have also had an impact on the CT sector in the EU. For example, road transport enjoyed greater competitiveness because it was liberalised already in the 1990s, while railways continued to be protected from competition. This can be seen as having negatively influenced the comparative advantage of CT. However, it is not possible to quantify the effects of these initiatives on the absolute volumes of CT. The (co-) effects of these initiatives are hence discussed under the section *6.5 Coherence*.

Thirdly, in addition to regulatory initiatives, economic initiatives with similar or the same objectives as the Combined Transport Directive have been used over the years as foreseen by the original Communication from 1992. Subsidies for the construction of terminals and for the

purchase of special equipment, and other financial incentives outside the scope of the Combined Transport Directive have been provided in various degrees in different Member States. EU funding for CT from the Marco Polo programmes until the end of 2013 and the EU wide support measures such as TEN-T/Connecting Europe Facility as well as other ongoing initiatives can be considered to have substantial, yet not quantifiable impact on the development and efficiency of the CT. The evaluation stresses hence the qualitative assessment provided by the stakeholders on the effects of the Combined Transport Directive in the public consultation.

Lack of comparable statistical data

The lack of comparable data on the CT market constitutes another limitation to the delivery of robust quantitative conclusions on the CT sector.

The first problem relates to the fact that not all Member States collect systematically data on CT. As already concluded by the two Combined Transport Directive implementation reports, Member States have only incomplete data on CT and there are no appropriate data collection systems in place in the Member States. The survey among national offices for statistics conducted in the framework of the fact-finding study showed that only 13 Member States collect and analyse statistical data on CT operations on a systematic and regular basis, but even that not for all modal combinations.

Secondly, the findings of the survey indicated that the methodology, scope of statistical items, including definitions, and the comprehensiveness of CT data gathered varied substantially between Member States. Furthermore, even if some Member States provided comparatively good data, the study could not identify a single Member State that collected the data by the scope and the terminology of the Combined Transport Directive.

The current evaluation is hence based on the data gathered for the CT Study using a complex methodology examining a variety of primary and secondary sources as well as cross-checking and collating the evidence. However no such detailed data exists for years prior to 2007 and certainly not for years prior to 1992. Even the general transport time-series used by DG MOVE starts only in 1995 and hence in some analysis 1995 has been used as the closest available reference year.

4. TRANSPOSITION AND IMPLEMENTATION – STATE OF PLAY

4.1 Transposition – state of play

Article 10 of the Combined Transport Directive obliged the Member States to bring into force the laws, regulations and administrative provisions necessary to comply with the Combined Transport Directive by 1 July 1993 and communicate them to the Commission. By the foreseen deadline 11 Member States had not communicated to the Commission their transposition, so the Commission launched 11 non-communication infringements in 1993, which were all closed subsequently.

A further assessment was carried out in 1997 in the framework of the first Commissions' Report on the application of Directive 92/106/EEC for the years 1993-1995[25], which established that, by the end of the time-limit for transposition, the majority of Member States had transposed the Combined Transport Directive into their national legislation. Two infringement proceedings were launched, one in 1995 for bad application (Italy) and one in 1997 for non-conformity (Finland). In case C-444/99[26], the Court declared that by keeping in force a system of authorisations and quotas for combined transport operations between Member States and despite having converted all special authorisations into general authorisations, Italy failed in its obligations under Article 2 of the Combined Transport Directive. Finland put an end to the non-conformity amending its legislation in 2000.

By 2002, when the second implementation report for the years 1995-1999 was published, all 15 Member States had notified measures of transposition. All new Member States notified measures of transposition in the context the enlargements of 2004, 2007 and 2011. However it should be noted that the Commission has not carried out systematic assessment on the quality and completeness of transposition.

The complaints received by the Commission from the industry since the second implementation report indicate that problems on transposition and implementation in the Member States still exist. In this light, the Commission decided to re-examine the state-of-play and establish an overview of not only the transposition of the Combined Transport Directive into Member States' national legislation, but of the actual implementation of the Combined Transport Directive.

First, fact-finding task was assigned to the contractors of the CT Study, who looked into the transposition and implementation of the Combined Transport Directive in 2014. The consortium addressed a request to the Member States to provide the information on all national transposition measures in force that transpose the Combined Transport Directive into national legislation. Based on the replies, the CT Study indicated that the Combined Transport Directive has been transposed into national legislation by most Member States, though the quality of transposition is not homogenous. Secondly, the public consultation confirmed that considerable differences exist in the implementation of the Combined Transport Directive.

The Commission is currently analysing the abovementioned complaints and claims. According to preliminary results, it seems that some Member States' legislation misses parts of the measures, while in others the measures in place are different from provisions in the Combined Transport Directive or allow contradictory or misleading interpretation. The Commission has already initiated several EU-Pilot procedures.

Beginning with the **definition of CT**, the problems reported by the industry relate both to transposition as well as to interpretation. Most problems reported by the industry relate to the road leg of the CT (see more in section *6.1 Relevance*). Several of these issues were already highlighted in the 1990s and addressed in the 1998 Commission proposal for an amendment of the Combined Transport Directive.

The first problem indicated relates to whether CT that takes place between Member States but originates or is destined to third countries, is covered or not. The industry has reported that some Member States interpret this as not being covered even if the CT operation between Member States fulfils the criteria of the Combined Transport Directive. Member States who

[25] COM(97) 372 final

[26] Judgment of the Court in case C-444/99, Commission v Italy It is interesting to note that the Court already declared that Italy did not comply with Article 2 of the Combined Transport Directive in case C-45/89 (Commission v Italy), due to the system of authorisations/quotas.

exclude these operations from the coverage exclude the majority of the volume of CT operations.

The second problem indicated relates to whether the "initial or final leg" in Article 1 means that there can only be one road leg, or two road legs. Some Member States have interpreted it as covering only one road leg, some allow one or two legs, while others have interpreted it as requiring always two road legs.

The third problem indicated relates to the use of the term "nearest suitable rail loading station". This problem was raised by stakeholders in the public consultations as one of the most ambiguous parts of the Combined Transport Directive. The Commission has received over the years several complaints in this regard from the industry. The CT Study has identified that 6 Member States have added criteria and/or limitations to the term that do not derive from the Combined Transport Directive. The issue was among other questions referred to the EUCJ in the case C-305/06; however the EUCJ reached a decision based on the first question on transport documents and hence did look into the issue of suitability[27].

Another set of identified problems with transposition relates to the **non-application of cabotage restrictions on CT operations,** established in Article 4. Industry has reported that they face problems when executing the road legs in several Member States as the implementing authorities (usually the police) is either not aware that cabotage limitations do not apply to road legs of CT operations or because the national legislation or its interpretation maintains that CT operations are not or are only partly excluded from cabotage limitations (for example that only one road leg is excluded, or that only road legs that involve border crossings are excluded). The CT Study reported that only 22 Member States explicitly exempt the CT road legs from cabotage limitations and that at least 5 Member States apply restrictions. A number of complaints received by the Commission from CT operators suggest that several Member States impose administrative restrictions and undue fines on the road legs of CT operations.

As regards the **documents required to prove that the road legs are part of a CT operation**, the provisions of Article 3 apply together with those of the Council Regulation No 11 of 27 June 1960[28] (as last amended by Regulation (EC) No 569/2008). Article 6 of Regulation No 11 lists part of the information that needs to be available for control of eligibility. The amendments brought in 2008 to this Regulation clarified that existing documents such as consignment notes or any other document that includes the required information have to be accepted and no special new documents are needed. However, the preliminary analysis shows that at least 8 Member States have limited the types of transport documents that can be used.

The CT Study has also established, based on questionnaires sent to Member States' relevant authorities, that the **tax measures** in Article 6 of the Combined Transport Directive are not fully implemented. Several Member States seem to have failed to implement the requirement for reduction or reimbursement of the annual vehicle taxes granted in Article 6 (1). The possibility offered by Article 6 (2) to exempt eligible road vehicles engaged in CT operations from vehicle taxes is applied only by three Member States.

4.2 Results of implementation – state of play of CT market in EU

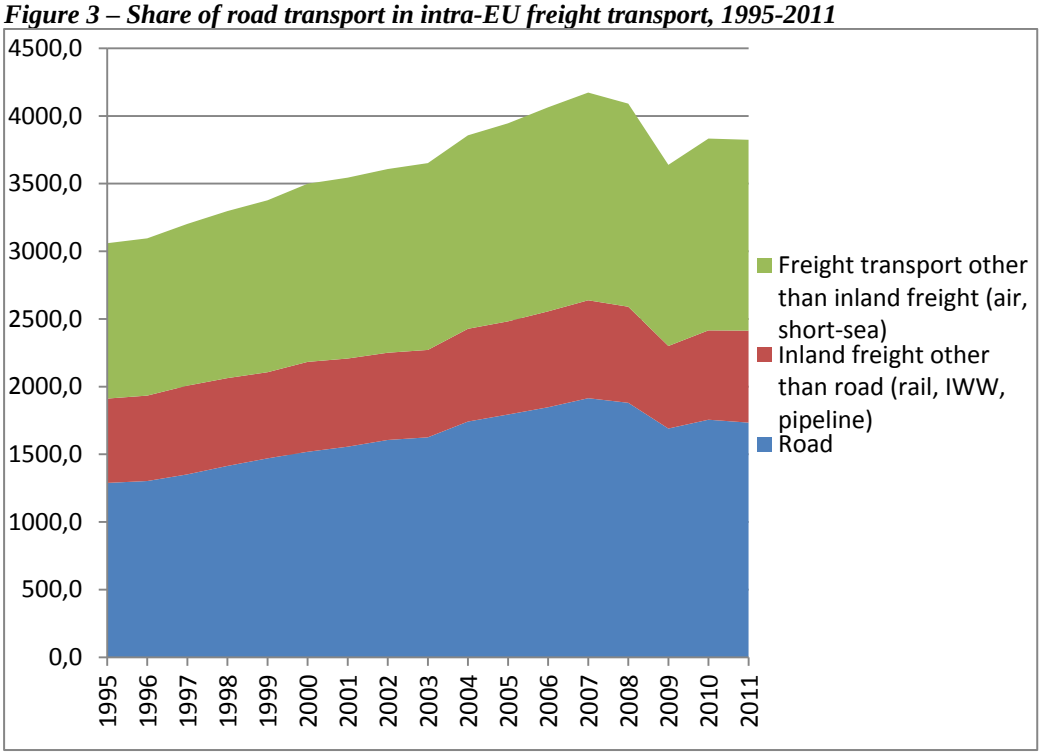
[27] C-305/06, Commission v Greece, Judgement of the Court from 15.10.2008

[28] Regulation No 11/1960

Total freight transport in the EU has increased considerably as compared to 1992. As described in *Section 4.3 Limitations – robustness of quantitative findings*, the growth of freight transport is correlated to the increase in global merchandise trade. The problem for transport policy lies in the fact that this growth has been led by the growth of road transport that increased by 35%, while inland waterways transport increased by 16% and rail transport only by 3%.

This means that notwithstanding the objectives of the 1992 White Paper to decouple the growth of road transport from economic growth and to reduce its share in total freight transport, the share of road transport has still grown in the EU28, although not by much - from 73% to 75% of total land freight movements (from 42% to 45% of total freight movements)[29]. At the same time, rail transport and inland shipping make up only 11% and 4% respectively of all freight movements.

Figure 3 – Share of road transport in intra-EU freight transport, 1995-2011



Source: EU Transport in figures 2014

Hence the situation on the EU freight transport market has not considerably improved as it is still to a large extent founded on road transport in moving both freight and passengers. This, as in 1992, is one of the main causes of persisting unsustainable trends such as growing greenhouse gas (GHG) emissions, an excessive use of infrastructure and mounting congestion.

As regards the optimal use of transport resources and **congestion** in particular**,** the continuous increase of road transport volumes, both for freight as well as passenger transport, has led to levels of congestion which cannot be sustained in the long term. While in the 1990s the problem was described as mainly relating to the saturation of networks and subsequent delays, today road congestion is viewed as creating, in addition to delays, a negative impact on the environment resulting in increased air and noise pollution and generating higher fuel consumption. According to the 2011 White Paper, the costs attributable to congestion had

[29] Eurostat, 1995/2011

increased significantly since the 1990s and were estimated at around 1.1% of EU GDP per year in 2008.

The 2011 White Paper indicates that congestion would continue to represent a huge burden on the society with congestion costs projected to increase by about 50%, to nearly €200bn annually by 2050. The cost of road freight transport related congestion is estimated to be between €26m and €42m annually according to the 2011 study on External Costs of Transport in Europe [30].

As the total volume of road transport has increased, the road sector is, despite the progress made in reducing emissions per tonne-kilometre, still the least environmentally-friendly mode of land transport in terms of energy consumption, air pollution and GHG emissions and the least energy efficient mode of land transport.

Within 20 years, the share of the road sector in the total **final energy consumption** of transport in the EU has increased by 2 percentage points and reached 82%, as compared to the 2% and 1% shares of rail and domestic navigation respectively[31].

As regards **emissions**, the road sector, despite the successive tightening of vehicle emission standards and improvements in fuel quality, accounts for more than two thirds of total pollutant emissions from transport. Road emissions of carbon dioxide (CO_2) have grown from 710 million tonnes in 1990 to 833 million tonnes in 2012, i.e. by 17.3%[32]. With a 72% share, road transport is responsible for the largest part of the CO_2 output of the transport sector[33].

Table 2 – Carbon dioxide (CO_2) emissions from transport in EU28 by mode (million tonnes)

	1990	**2000**	**2012**
Road	710.2	845.5	833.3
Rail	13.1	9.3	7.0
Inland waterways	22.6	20.0	17.0
Total transport	947.7	1 151.4	1 160.2

Source: TERM, Eurostat

With regard to road safety, it should be noted that policy measures since the 1990s have had a positive effect on the impacts of road transport - road traffic accidents and fatalities have been decreasing in spite of traffic growth. Between 1991 and 2012 the number of road accidents in EU-28 decreased from 1.4 million to 1.0 million per year and the number of road fatalities was reduced by two thirds, from 77,337 to 31,456. Yet, the road sector today is still producing the highest number of accidents and fatalities compared with other transport modes. The fatalities involving railways have reduced from 1,150 to 970 for EU12. It should be noted that the above number includes all fatalities. The fatalities involving road freight vehicles are considerably lower and show similar reduction of more than 50%. No data is available for rail fatalities involving only freight trains.

Table 3 - Comparison of road and rail fatalities in EU12/EU28 in 1991, 2001, 2012

	1991		2001		2012	
	EU12	EU28	EU12	EU28	EU12	EU28

[30] External Costs of Transport in Europe, Update study for 2008, CE Delft, September 2011

[31] EU Transport in figures – Statistical Pocketbook 2014, Eurostat 2014

[32] EU Transport in figures – Statistical Pocketbook 2014, Eurostat 2014

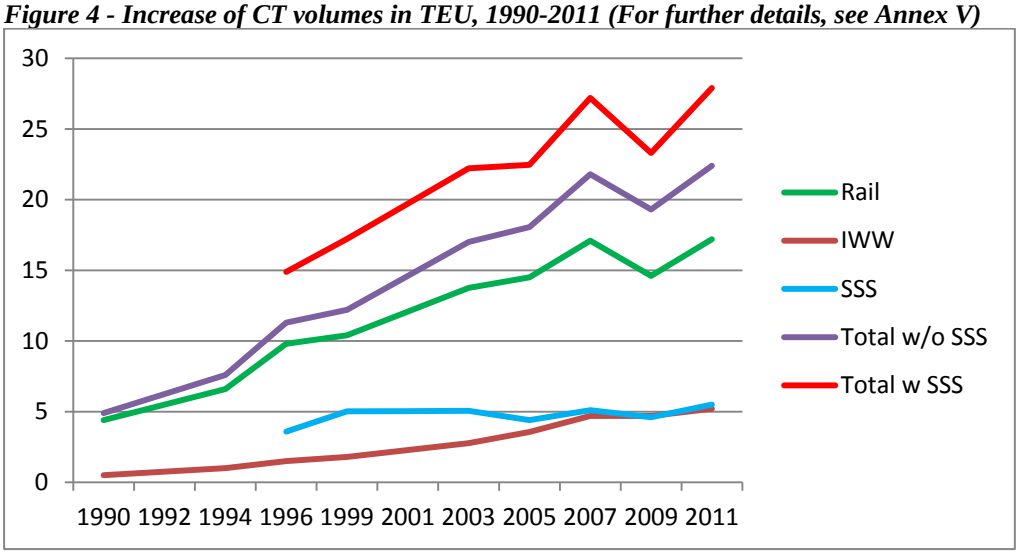
[33] If EU inland freight transport is counted separately, road is responsible for about 94% of the overall CO_2 emissions of the sector.

Total road transport fatalities	53076	77337	38292	54949	18048	31456
Rail transport fatalities	1150	N/A	N/A	N/A	970	1133
Road freight transport fatalities	N/A	N/A	2217	2576*	943	1416*

*Source: 1992 Green Paper, CARE[34], Eurostat, European Railway Agency safety database ERAIL[35], *the data is based on trend estimates for some MS*

As regards the changes to the CT market, one can observe considerable growth of CT services after the implementation of the Combined Transport Directive[36]. In 2011, the total intermodal/CT market in the EU was according to the CT Study 175 bn tkm. The CT transport covered by the Combined Transport Directive was assessed to be 76 bn tkm (for further details, see Annex IV). The Report on the implementation of the Combined Transport Directive covering the years 1993-1995 estimated the growth of the number of TEU transported in inland CT (total CT excluding maritime) between 1990 and 1994 at 55%. This growth continued for a while, but had slowed down by 1999. Due to data collection problems, there is no reliable data available for all CT sectors between 1999 and 2005, but it is clear that the growth of CT continued up to the 2008 economic crisis with inland CT growing by more than 30% in some years[37]. During the economic crisis of 2008-2009, the CT volumes reduced considerably only regaining their pre-crisis levels by 2011, mostly due to a fall in rail/road CT volumes. However, the 2011 volumes in TEU as compared to 1990 are still almost two times higher (and 6 times for inland CT), showing that the CT transport has grown very well in absolute terms (for further details, see annex V). In tonne-kilometres, the average annual growth can be estimated between 1996 and 2011 to be around 3.5% for inland CT with the total CT almost doubling (and tripling for inland CT) over the whole period. For comparison, the average annual growth of road transport was less than 2% at the same time.

Figure 4 - Increase of CT volumes in TEU, 1990-2011 (For further details, see Annex V)



[34] http://ec.europa.eu/transport/road_safety/specialist/statistics/index_en.htm

[35] https://erail.era.europa.eu/safety-indicators.aspx

[36] It should be noted that the data used both in the mentioned implementation reports as well as in the CT Study do not follow exactly the definition of the CT in the Combined Transport Directive. For 2011, it is estimated by CT Study that the ca. 38% of the volume covered by the study would be covered by the Combined Transport Directive's definition. The difference lies in the limits applicable to the road legs, which the Member States have transposed differently.

[37] The growth rates and shares have been calculated for EU-15 as no comparable data for EU-27/EU-28 exists for 1990 or 1996, According to the CT Study the EU-15 CT covers ca. 95% of all CT operations

Source: Reports on implementation of Combined Transport Directive, CT Study, Eurostat

The growth of the CT's share in total freight transport has also been considerable. It increased from 5.4% to 8%, meaning a 48% growth in its share in 16 years. If maritime CT is excluded, then it can be seen that the inland CT growth was even more impressive – it has more than doubled both in relation to total inland freight and in relation to total road freight (for further details, see Annex VI).

5. ANSWERS TO THE EVALUATION QUESTIONS

The following analysis assesses the Combined Transport Directive based on the evaluation questions. The evaluation focuses on the directive's relevance, effectiveness, efficiency, EU added value and coherence both in a general way to establish the overall fitness of the Combined Transport Directive as well as regard the specific measures (articles) of Combined Transport Directive.

5.1 Relevance

Relevance of the Combined Transport Directive and its objectives

The Impact Assessment accompanying the 2011 White Paper on Transport[38] carried out the assessment of current problems and needs of the EU transport sector. It concluded that the EU still faces the problems caused by sub-optimal use of EU transport resources and the resulting external costs (economic, environmental and social costs) of road transport as can also be seen in the overview of current situation in the section *5.2 Results of implementation – state of play of CT market in the EU* above. Based on the 2011 White Paper as well as the above analysis, it can be concluded that the road-induced environmental pollution, congestion and accidents are still relevant problems today.

The 2011 White Paper concluded that further efforts are needed to improve the use of EU transport resources, that is to change the transport patterns so that larger volumes of freight would be carried by the most efficient combination of modes (multimodal transport/intermodal transport/combined transport). The 2011 White Paper concluded that the key to achieving such a transport pattern is to shift road transport volumes over long distances (exceeding 300 km) to waterborne and rail transport. This conclusion confirms exactly the objectives of the Combined Transport Directive aiming at reducing the share of road transport in general freight transport and addressing through that the resulting problems of road congestion, road safety and pollution. Furthermore, the 2011 White Paper set a numerical target for this shift that now constitutes a new objective for the Combined Transport Directive. The target is to shift 30% of road freight of more than 300 km to multimodal solutions (including combined transport) by 2030[39], and more than 50% by 2050, compared with business as usual developments.

As could be seen in the section *5.2 Results of implementation – state of play of CT market in EU* above, the problems induced by the dominance of the road sector are present today as much as they were 22 years ago. The use of EU transport resources is still not optimal, with

[38] SEC(2011) 358 final, Impact assessment, Accompanying document to the White Paper Roadmap to a Single European Transport Area – Towards a competitive and resource efficient transport system, 28.3.2011

[39] This shift would amount to a shift of 216 bn tonne-kilometres. The calculation is based on modal estimates according to which 42% of road freight in 2005 reference year was above 300km

the majority of transport taking place on roads and causing thus considerable congestion which is estimated to cost 1.1% of the EU's GDP every year. The transport sector continues to be a major consumer of energy, with road transport accounting for more than two thirds of it, while at the same time being also a major polluter emitting 94% of total inland freight transport emissions. Finally, while the number of accidents and fatalities has gone down, road safety continues to be a major problem.

The 2011 White Paper, similar to the 1992 White Paper, acknowledged that without adequate interventions road transport would maintain its dominant role in freight transport within the EU and that market forces alone would not ensure the desired shift as road-alone transport continues to be more competitive than multimodal transport, and thus the 2011 White Paper concluded that further policy interventions are needed. The advantages of road freight transport relate to the fact that the cargo does not need to be transhipped (making it cheaper and faster) and that the road network is considerably more advanced than the networks of rail and inland waterways and transhipment terminals. Furthermore, as transport prices do not reflect today the full extent of external costs, road transport can offer low prices with high cost to the society. The 2011 White Paper concluded, similarly to the conclusion in 1992 that this situation calls for three types of interventions in order to ensure modal shift: investment into multimodal networks, regulatory intervention to ensure the internalisation of external costs, and direct support to multimodal transport to counterbalance the inherent disadvantages caused by the need of transhipment.

While the EU policy makers are looking at all three options, it is clear that in the short term it will not be possible to fully address the first two options. Extensive investment into terminals and connections to provide efficient alternatives to road transport is cost intensive. Substantial investment from national budgets and the private sector will be necessary in order to achieve a reasonable density of terminals and connections. The investment will also be heavier in some Member States; in particular those who joined the EU after 2004 and have hence had shorter time to implement previous EU initiatives on multimodal transport, which will make it politically and financially more complicated. Also, the full internalisation of the external costs of road transport is politically and economically difficult as it would impact a large category of operators and citizens – taking into account the widespread use of road transport (see also the section *6.5 - Coherence*). Furthermore, a practical and effective system for charging external costs needs to be available. Developments in ICT and satellite positioning are making this available, but a number of technical and regulatory issues would need to be addressed first to have EU wide solutions.

As regards direct support to multimodal transport, the Combined Transport Directive remains the only legislative measure to directly support the shift from single-mode road transport to more environmentally friendly intermodal combinations with shortest possible road legs and long-distance freight by rail, inland waterways or short-sea. It refers directly to the need of addressing the problems of road congestion, environmental pollution and safety and sets the objective of developing and promoting CT as an alternative to road transport. This view is confirmed by many stakeholders who consider the Combined Transport Directive as an important vehicle to promote alternative, sustainable and environmentally friendly transport resulting in fewer lorries on the road and less noise, congestion and CO_2 emissions.

The further question is whether the instruments foreseen by the Combined Transport Directive are still relevant for achieving the objectives. In this regard, it is first necessary to analyse the relevance of the scope of the directive and then the specific measures.

Relevance of the definition in the Combined Transport Directive

The Combined Transport Directive defines CT as the transportation of goods between Member States in defined load units by a combination of road leg with rail or inland waterway or maritime leg, where the entire load unit is transhipped between transport modes at interchanges. It is important to reiterate that the aim of the definition is to establish the eligibility for the favourable regime set out in the Directive.

The Combined Transport Directive's above mentioned definition is intended to circumscribe the scope of the Member States' obligations. The concept of CT is distinguished from inter- and multimodal transport, a focus being put on the shortest possible road leg (see definitions in the chapter *1. Introduction*). While the general EU policy aim is to support multimodal and intermodal transport in general, for the objective of reducing the road transport externalities, it is important to give special focus and support to multimodal transport operations with shortest possible road legs.

CT as defined in the current Combined Transport Directive stimulates the more energy-efficient and environmentally friendly modes of transport and facilitates the modal shift from road to these alternative modes. In contrast to "mode-neutral" intermodal transport/multimodal transport, the CT concept assumes using rail, inland waterway or sea modes for the majority of the journey and constraining the road sections to a necessary minimum. As such, the terminology used by the Combined Transport Directive remains relevant and most adequately reflects the current policy approach of promoting environmental transport solutions as an alternative to road transport on long distances.

The definition provides that combined transport is linked to "the transport of goods between Member States". The definition hence excludes CT within a Member State as well as CT between a Member State and a third country[40], but includes any connecting CT between Member States as long as other conditions are met. It should be recalled that about half of the CT volume is actually container hinterland transport, meaning that it originates or is destined to deep-sea transport, and it would not support the objectives of the Combined Transport Directive as laid out in the preamble if these volumes were excluded, nor would it support the modal shift to the desired degree[41].

As regards the covered **modal combinations**, according to the current definition CT operations are limited to the combination of road with either rail or inland waterway or maritime transport services. The scope excludes the combinations with other transport modes, such as maritime transport with third countries or air transport. While combinations with rail and inland waterways are widely considered as relevant, the combination with maritime transport raises some questions. Currently all short-sea shipping between Member States above 100 km distance is covered by the Combined Transport Directive. It is not limited to situations where a road alternative exists (i.e. excluding ferry crossings to islands). This continues to be a weak point in the definition as island transport does not support the objective of reducing road transport. For the same reason, deep-sea container transport is excluded as this kind of transport cannot be considered as a substitute for road transport[42].

[40] As confirmed by the judgment in case C-96/94 Centro Servizi Spediporto.

[41] The reliance on the objectives and preamble was confirmed by the EUCJ in C-2/84, where Italy claimed that transit through a third country (in this case Switzerland) is not covered. The EUCJ made it clear that the Combined Transport Directive does cover the CT operation even if one or more non-Member States are crossed in between because this is clear from the objectives

[42] The stakeholders' opinions are quite divergent when it comes to the subject of combination of road haulage with maritime services. About a third of respondents suggested limiting the maritime transport combination, half of whom suggested limiting it similarly to the 1998 amendment proposal (only where road alternative exits); while a quarter of respondents went the opposite direction by supporting the extension of coverage to ocean going maritime transport. It should also be noted that 14% of respondents supported the extension also to combination of road leg with air transport.

Another issue raised by stakeholders relates to combinations involving more than 2 modes of transport. As an increasing volume of freight is transported via more than 2 modes of transport to ensure the most efficient result[43], some stakeholders participating in the public consultation called for a specific reference for combinations of three or more modes. However - taking into account that the main aim of the definition is to establish eligibility for the support measures and in doing so, to ensure the shortness of the road leg - adding modal combinations of more than two modes supports the objectives only in cases where the journey's leg on one non-road transport mode is less than 100 km (and hence currently excluded), but where a combination of alternative modes is more than 100 km. In all other cases the eligibility would be established already with the two modes.

As regards the **limitation on the non-road legs**, the Combined Transport Directive currently limits the non-road leg to a minimum of 100 km as the crow flies. A minimum distance limitation is justified as the movement of load units should only benefit from specifically targeted incentives of the Combined Transport Directive when the ratio between the non-road and the road leg is reasonable. Rail, inland waterway and sea should be used for the majority of the total journey and road haulage limited to distances as short as possible. While the CT Study shows that the average non-road transport distances are clearly above the 100 km threshold (612 km in CT rail/road and 217 km in CT inland waterway/road and assesses that the share of rail- and water-borne CT operations below 100 km will remain very small due their specific economics (see section *6.3 Efficiency* for further details), the existing provisions actually allow an "inverse" ratio as the road legs in waterborne combinations can amount to 300km (2x150 km) and thus be three times longer than the non-road leg.

Furthermore, a range of waterborne and rail CT services operate over significantly shorter distances than this, e.g. barge services feedering containers between the ports of Antwerp or Rotterdam and terminals in the immediate hinterland. Those operations contribute greatly to decongesting the road networks in sea ports and in the immediate hinterland and to reducing environmental burdens in agglomerations. It could therefore be argued that it is inappropriate not to acknowledge this fact and exclude those operations from CT-oriented incentives.

Hence, it can be concluded that while there is a need for certain rules to ensure that the non-road leg remains the "long-leg", the 100 km limitation is not the best tool to ensure a good road-to-non-road ratio and can hence be considered not entirely relevant.

In relation to **road legs**, the current CT definition stipulates that the road legs on the initial and/or final leg of the journey have to be either between the point where the goods are loaded and/or unloaded and the nearest suitable rail loading station (for rail), or within a radius of 150 km as the crow flies from the inland waterway port or seaport of loading or unloading.

The views of the stakeholders are very diverging on the question of road-leg limitations, with three main question marks.

- First, a third of all respondents to the public consultation would like to see the same conditions to apply to all modal combinations as opposed to the current distinguishing between rail and waterborne transport.

- Secondly, the majority of the respondents would like to see the road leg limited to the "nearest suitable loading station", 52% without any distance limitation and another third in combination with a maximum distance (either as absolute number or percentage of total journey). However, among those who want a distance limitation in kilometres, there

[43] The CT Study estimates the volume of operations involving more than two modes amount of 13m TEU per year (almost half of total CT operations)

is no agreement as to the actual value of the limitation for the road leg. Some stakeholders are against any limit claiming that flexibility is needed to provide competitive services and limits on road legs will only cause some intermodal transport not to be eligible for support, which will make it uncompetitive and through that indirectly support reverse shift back to road. Others strongly support the current limits in the fear that otherwise a reverse shift will take place.

- And thirdly, the term "suitable" creates very strong, if diverging, opinions among stakeholders, including implementing Member States. While the majority of service providers believe the suitability should be left to the customer[44] to decide, the authorities seem to prefer to have a clear definition in place. It is clear that this has created problems already in the implementation of the current Combined Transport Directive (for more detail see chapter *6. Transposition and implementation – state of play*)

In conclusion, it is clear that these limitations are the main tool to ensure the shortness of the road leg and through that the modal shift away from road transport, and hence continue to be very relevant.

Relevance of the Combined Transport Directive's measures

The Combined Transport Directive foresees four types of measures: liberalisation of market access (prohibition to have authorisations or quotas), liberalisation of prices, clarification that cabotage rules do not apply to road legs as these are an integral part of an international operation and two types of direct financial support measures (tax incentives).

Article 2 of the Combined Transport Directive aims at ensuring that for the road legs of CT operations **no authorisations or quotas** apply. This **liberalisation** ensures that the Member States do not hinder the provision of services by requiring authorisations or limiting the number of approved providers. It is particularly important in conjunction with Article 4 for cases where the road leg is provided by non-resident hauliers, taking into account that in case of road transport provided by non-resident haulier that is not part of a CT operation quantitative limitations and Community licence requirement apply based on Regulation 1072/2009/EC. Several Member States or their national operators have shown interest, in particular in recent years, to establish certain (quantitative) control to this type of service provision. However, in accordance with the case-law, applying quotas or authorisation schemes to CT road legs, whether these cross the borders or not, does not comply with the Combined Transport Directive[45]. Hence this Article remains relevant as a measure to avoid protectionist tendencies and in particular for the road legs that do not cross the border.

Furthermore, Article 4 of the Combined Transport Directive provides that all road hauliers established in a Member State (who meet the conditions of access to the occupation and access to the market for transport of goods between Member States) have **the right to carry out the initial and/or final road haulage legs** of the CT operation whether the road leg crosses or does not cross a border. This means that the cabotage limitations do not apply to CT road legs. This was also confirmed several times by the Court[46].

[44] Customer of the terminal, who can be the transport operator, the logistics service provider or the shipper depending on how the supply chain is organised

[45] In cases C-2/84 and C-444/99, Commission v Italy.

[46] The Court held in Case 2/84 *Commission* v *Italy* that "combined carriage should be regarded as a single operation from the point of departure to the point of arrival […] The mere fact that in the Member State of destination the goods are carried solely by road cannot remove the advantages of combined road/rail carriage".

This Article remains the main basis for complaints both by operators who want to benefit from it, but who have been unable to benefit under the national regime (see chapter *6. Transposition and implementation – state of play*) as well as by some national road hauliers who perceive this as a circumvention of the cabotage rules and against their interest[47].

To CT operators, this Article continues to be an important measure today as it can offer a substantial advantage to CT transport operators and CT users by allowing the use of hauliers with desired quality and price and through that better management of the entire transport chain. For example, the CT operator can use own lorries or use a provider with whom it has established contractual relationships in another Member State. The respondents of the public consultation perceived this to be currently the most useful and beneficial of all existing incentives under the Combined Transport Directive. It can hence be concluded that the Article on non-application of cabotage to CT road legs is still very relevant for promoting the use of CT and should be retained.

The **liberalisation of prices** (regulated tariffs) of initial and/or final road legs of CT operations remains relevant as the Council Regulation (EEC) No 4058/89[48] that liberalises the road transport prices applies only to a minor part (less than 5%) of CT (where whole vehicles are carried on non-road such as RO-RO trains and ferries). Thus Member States could regulate prices of majority of CT.

With regard to **tax incentives**, the Combined Transport Directive introduces two distinct fiscal support measures, both of which are aimed at reducing the final price of CT operations. Article 6 (1) Combined Transport Directive introduces an obligation to grant reductions or reimbursements of the taxes applicable to road vehicles used for CT operations either by a standard amount or in proportion to the journeys that such vehicles undertake by rail. Article 6 (2) gives Member States a possibility to grant tax exemptions for road vehicles used exclusively in collection or final delivery of CT services.

In principle, fiscal support to CT is still relevant in order to mitigate the inherent higher prices of CT as compared to single mode road transport, deriving on one hand from low investment costs, low infrastructure limitations and no transhipment costs, and on the other hand from the fact that the external costs of transport are not fully internalised. Fiscal incentives such as tax rebates constitute an additional stimulant for users to choose CT operations instead of road-alone and through that shift freight away from single-mode road haulage and contribute to the EU policy objective of reducing negative externalities of the road sector. The view is shared by the majority of stakeholders who point out that incentives through taxation constitute a vital support for CT services and should be continued in the future.

However, the stakeholders also mentioned in the public consultation that the current level of fiscal support is not adequate. While the vehicle taxes and similar charges on heavy goods vehicles (HGV) above 12 tonnes are applied in every EU Member State based on the common rules set by Directive 1999/62/EC[49], the fiscal benefits for operators are relatively low. Furthermore, the current measures only apply to particular types of CT, namely road/rail combinations, and hence have a very small effect on CT in general (for more detail, see

[47] CT competes with international road transport and not with national road transport. If the cabotage rules applied to CT and through that make it even more uncompetitive, the outcome would not be higher use of national hauliers, but higher use of international road hauliers for the whole transport chain. This in turn would mean reverse shift and even less work for national road hauliers as currently the majority of road-legs are still carried out by national hauliers.

[48] Council Regulation (EEC) No 4058/89 of 21 December 1989 on the fixing of rates for the carriage of goods by road between Member States

[49] Directive 1999/62/EC of the European Parliament and of the Council of 17 June 1999 on the charging of heavy goods vehicles for the use of certain infrastructures

section *6.2 Effectiveness*). Finally, currently the beneficiaries of the support are road operators based on distances on rail transport; such an approach does not necessarily translate into cheaper prices to users and thus does not always support the decision to use CT instead of long-distance road transport. It can hence be concluded that fiscal support to CT operations is relevant in principle, but the effectiveness and efficiency still needs to be analysed.

It should be also pointed out that Article 9 of the Combined Transport Directive extends the definition of **own-account transport** that was given in the First Council Directive in 1962[50] to certain specific cases thereby extending the benefits of this directive. However, the term "own account transport" as such is not anymore *expressis verbis* defined in EU rules succeeding the repeal of Directive 2006/94/EC. Thus the status of Article 9 is unclear. It should be noted that the stakeholders in the public consultation did not view this provision as particularly useful.

Finally, it should also be noted that the Combined Transport Directive establishes certain conditions for the **transport documents** for the road leg in order to prove the eligibility of the road leg for the benefits of this directive (including special requirements for own account transport). As the Combined Transport Directive includes benefits such as the non-applicability of cabotage rules that can be checked on the road, the aim is to ensure that eligibility can be proven, and that there are EU level requirements to avoid unnecessary burden to industry to produce different sets of documents for different Member States. Thus, it can be concluded that the requirement to prove eligibility continues to be relevant, while amendments to the current language maybe considered in order to improve efficiency (see *6.3 Efficiency* for more detail).

Conclusion on relevance

Based on the above, it can be concluded that the Combined Transport Directive remains very relevant today. Its main policy objective – to reduce the share of road transport by shifting long-distance freight transport to alternative modes of transport and thereby improving the optimal use of transport resources and reducing the problems of road congestion, road safety and pollution – was confirmed as the main objective of the EU transport policy in the 2011 White Paper. The Combined Transport Directive remains the only legal instrument directly contributing to this transport policy objective.

As regards the definition of CT in the Directive, it can be concluded that while the current modal combinations are generally relevant, the combination of maritime transport to islands is not supporting modal shift and hence it does not contribute to the policy objective. Furthermore, some stakeholders have claimed that not covering air transport and modal combinations without a road leg is a shortcoming of this Directive. As regards the limits on road legs, in can be concluded that in order to ensure the shift of long distance road transport to alternative modes, it continues to be relevant to limit the maximum length of the road section. However as regards the non-road legs (rail, inland waterways and short sea shipping), the current minimum limitation, while necessary in principle, does not ensure a good road-to-non-road ratio and is hence not entirely relevant.

As regards elements contained in the Combined Transport Directive intended to promote combined transport, it can be concluded that the majority of measures remain relevant (elimination of quotas and authorisation schemes, elimination of regulated tariffs, the right for non-resident hauliers to carry out the initial and/or final road haulage legs without cabotage

[50] First Council Directive of 23 July 1962 on the establishment of common rules for certain types of goods by road was repealed by the Directive 2006/94/EC, which in turn was repealed by Regulation (EC) No 1072/2009. Own account operations are now mentioned in Article 5 lit (d) of Regulation 1072/2009.

limitations applying and the provisions on transport documents). The extension of the definition of own-account transport remains somewhat relevant, but is not considered particularly useful by the industry.

5.2 Effectiveness

The analysis of effectiveness defines whether and to what extent the intervention has brought the envisaged effects with reference to its stated objectives. As described in section *4.3 Limitations – robustness of quantitative findings*, the impact of the Combined Transport Directive on the transport market is not easily deduced as parallel economic and legal developments have also had a strong influence, and it is not possible to clearly distinguish which measures had which results. In this regard, this evaluation will look at the general evaluation of the CT market in the EU, keeping in mind that the general liberalisation of transport markets in the EU and developments of ICT systems that influence greatly the logistics services in general are responsible for parts of the results. To make specific conclusions on the CT market, the results of the stakeholder consultation are used.

It should be noted first that the majority (55%) of stakeholders participating in the public consultation perceive that without the support of the Combined Transport Directive, CT services in the EU would not have grown at such a fast pace within the last two decades as operations would not be economically viable. Furthermore, according to UIRR[51], an association representing 50% of the European rail-road CT sector, the Combined Transport Directive was instrumental in ensuring the 6-7% long-term average annual growth rate achieved between the years 1990 and 2008[52].

These views are supported by the available data as described in section *5.2 Results of implementation – state of play of CT market in EU.* In particular, as could be seen in Figure 4 in section 5.2, the sharpest growth took place after the Combined Transport Directive entered into force (transposition deadline was 1st July 1993), supporting the conclusion that the measures provided for in the Combined Transport Directive have been effective in helping to increase the multimodal transport/CT in EU.

While the growth of the share of CT (4.2% on average) in total freight transport has been effective contributing to the objective of modal shift set in the 2011 White Paper, it is also clear that it will not be sufficient to achieve the 2011 White Paper goal alone[53], in particular if the competitiveness of alternative transport modes is not supported further for it to improve considerably.

Of course, the already occurred doubling of the share of CT services in total freight transport means that there have been positive results in reducing the environmental pollution and other social externalities that the Combined Transport Directive aimed to address. An analysis will be given under the section *6.3 Efficiency*.

It should be reiterated here that there seems to be a general consensus among the CT operators and users that without any support measures or common rules in place, a reverse shift (shift back to single-mode road transport) would occur due to the inherent disadvantages of CT such

[51] International Union of Combined Road-Rail Transport Companies represents the interests of European road-rail Combined Transport Operators and Terminals. It consists of 17 member companies in 14 European countries. In 2013 UIRR opened its membership to Transhipment Terminal Operators; recently it initiated a dialogue with other combined transport modes.

[52] "Intermodal/Combined Transport in Europe" Conference, Summary Paper, UIRR, 4.12.2014

[53] Fulfilling the 30% by 2030 modal shift objective of the 2011 White Paper would imply a shift of 216 bn tonne-kilometres of long-distance freight away from road. This could be achieved if the CT operations would grow at an average rate of 6.9% until 2030.

as additional cost of transhipment, higher weight of load units, time delay and cargo damage risk. The overwhelming majority of public consultation respondents (94%) wants the EU to continue supporting CT operations, while the majority believes that the effectiveness of the Combined Transport Directive can be further improved.

Effectiveness of the definition and the instruments of the Combined Transport Directive

The main objective of the **definition of CT in Article 1** is to ensure that certain types of transport operations will be treated the same way all over the EU allowing operators to benefit from the internal market, which in turn will make it easier for operators to achieve economies of scale. Furthermore, as multimodal transport requires long-term investments operators require a stable regulatory framework

The respondents of the public consultation have agreed that the Combined Transport Directive has brought along an EU-wide stable legal environment and through that makes cross-border operations easier. Respondents also pointed out that the Combined Transport Directive is in addition an important tool to raise awareness among users about the possibilities to carry out CT operations.

However, as discussed in the chapter *4. Transposition and implementation – state of play*, transposition and implementation by the Member States is still inconsistent after 22 years. This leads to practical problems that reduce the competitiveness of CT services and thereby reduce the effectiveness of the Combined Transport Directive.

In particular various modifications of the CT definition by the Member States have led to different ways in which the CT operations are treated in the Member States. While the transposition of a directive allows for a certain level of flexibility, this should not result in the reduction of the rights provided for in a directive nor in discrimination of service providers. However, it seems that this has been the case with the Combined Transport Directive in some Member States. Several CT operators have launched complaints with the Commission in recent years after having faced problems with national authorities causing delays and even fines due to the heterogeneus transposition, interpretation and/or enforcement of the CT definition. In this regard, the Commission has launched 5 infringement procedures, and several EU-Pilot cases that address some of the issues in Member States.

The problem caused by slightly different definitions was expressly raised in the public consultation by stakeholders who call for harmonising the definition also for CT within the Member States. As mentioned above, the CT Study estimated that almost 2/3 of what Member States and/or industry consider as CT is actually not covered by the Combined Transport Directive.

The problems with the language used in defining the geographical scope were discussed under the section *6.1 Relevance* and shows that the current wording is clearly not effective. The CT Study points to differences in the transposition, linked to the geographical scope of CT operations qualifying for treatment in accordance with the Directive. Majority of Member States (16) have not limited the scope to combined transport to operations between Member States thus extended it to national and/or international CT operations with a 3rd countries. These differences extend the benefits of the Directive beyond what is provided for in EU acquis

This approach corresponds to the opinion of the majority of actors in the CT industry who emphasize that the scope of the Combined Transport Directive should not be constrained to operations between Member States. Almost half of respondents of the public consultation suggest that the future definition of CT should include national (within one Member State) CT

operations. Furthermore, 37% of stakeholders would like to see international CT operations with 3rd countries (without an eligible CT operation first between Member States) also added to the definition of CT. An extension of the Combined Transport Directive's scope to transport within a Member State and with third countries was also included in the 1998 amendment proposal. The justification was that the national CT, as well as CT operations which involve a transport leg in the EU and the other part of the journey outside the EU, also contribute to sustainable transport, provided that they fulfil the same conditions as cross-border CT within the EU.

It should also be noted that several respondents suggest that the terminology used in the Combined Transport Directive should be modernised and possibly further clarified. As much as 60% of the stakeholders believe that the definition in the Combined Transport Directive requires revision. Stakeholders indicated that a number of unclear terms in the definition make the provisions hard to enforce by the national authorities. The main problems in the definition's wording relate to the terms "nearest suitable rail loading station", "as the crow flies" and whether the definition allows for one or two road legs as discussed in the section *6.1 Relevance*.

First, the term "nearest suitable rail loading station" has caused considerable problems to industry. As discussed in chapter *4. Transposition and implementation – state of play*, several Member States have added conditions to this term. At least 6 Member States have established criteria to define 'suitability' that do not derive from the Combined Transport Directive and some of which are clearly discriminatory (such as requirements that the station has to be on the territory of the Member State or approved by the Member State). In the public consultation, the industry was of the firm position that "nearest suitable" is their preferred limit for the road leg, while the exact definition of suitability should remain with the industry. As mentioned above, the issue was among other questions referred to the CJEU in the case C-305/06; however the Court reached a decision based on the first question on transport documents and hence did not look into the issue of suitability[54].

There have been other complaints in this regard recently and the Commission has been in contact subsequently with several Member States, including starting one EU-Pilot case.

Secondly, there has been considerable confusion since the 1990s about the number of road legs included. The definition in its English language version says "…uses the road on the initial or final leg of the journey, and…" Other parts of the Combined Transport Directive use different language. The preamble mentions that the scope is "initial and final sections of a CT operation". Article 4 establishes that hauliers are allowed to carry out "initial and/or final road haulage legs …of the CT operation". Several Member States interpret the definition as allowing only one road leg per full journey. It should be noted that the CT Study assessed that if the CT operation would be limited to one road leg in a CT operation, the Combined Transport Directive would only cover about half of all CT operations (the other half being the container hinterland transport from ports, in which case there usually is only one road leg per CT journey and load units are directly transhipped from/to rail, barges or short-sea ships).

Thirdly, the limitation of road and non-road legs to distances "as the crow flies" needs to be discussed. While the term "as the crow flies" seems to have been a commonly used term to describe the direct line distance/radius in defining for example frontier zones, the most imminent problem lies with the difficulty of proving the direct line distance during a road check. The controlling authorities, usually the police, would only be able to assess a distance as the crow flies in case they have ready-made maps available with 100/150 km radius

[54] C-305/06, Commission v Greece, Judgement of the Court from 15.10.2008

marked from terminals and ports (or to have access to approved application on a smart-phone). This would require specific investments by Member States. In the absence of such maps/apps, confrontations and resulting delays on the road can be easily envisaged.

As regards the **load units**, the CT Study concludes that while the definition covers the vast majority of intermodal load units in use today, the restriction of the Combined Transport Directive to load units of at least 20-feet (6m) length hinders the opportunity to introduce smaller CT load units. Such units are used in some parts of the world, mostly in urban environments and environments where bigger vehicles/barges cannot approach. With growing urbanisation, these load units could also become increasingly important in the future in the EU. Making CT services more flexible and allowing smaller load units (which can be combined and redistributed at hubs) could potentially encourage more users to shift freight away from road.

This view is reflected by a considerable part of public consultation respondents who consider the Combined Transport Directive coverage of load units is outdated and not taking into account the developments in the transport and logistics sector. While the majority of stakeholders want the Combined Transport Directive to cover load units of 20-45 feet[55], as much as one third of them consider other sizes (less than 20' or more than 45') equally important. The respondents in favour of extending the scope of the definition point out that the market is constantly innovating and developing new types of load units. According to them, the legislation should allow these innovations to benefit from the Combined Transport Directive in order not to shift these load units to road. Several public consultation respondents indicated that the Directive should also support CT that does not use intermodal load units as the decision on not using long-distance road transport does not depend on the type of allowed load units. In this regard, it was mentioned that CT of new vehicles or goods that will be reloaded on conventional trains should also be covered, as well as pallets, bigbags, inloaders and small swappable container-boxes.

The **liberalisation of CT road legs from quotas and authorisations in Article 2** has been effective as it has allowed the CT operators to use the preferred road transport operator without additional cost of having them authorised in every single Member State. The problems identified in Italy in this regard were analysed by the Court in C-2/84 and C-444/99 (for further details see the section *6.1 Relevance)* and no other complaints have been filed in this regard (nor were any problems reported in the public consultation). It should be however noted that stakeholders have pointed out that it is economically not viable for a road transport operator to exercise only CT operations, meaning that the operator will most likely possess a Community license for international road transport or a national licence. Similarly, the **elimination of compulsory tariffs in Article 8** has been effective as it ensures that market forces can determine the price of transport services, as is the case in road transport. While it has not been possible to quantify exactly the increase of CT operation volumes in response to these two provisions (Articles 2 and 8), every second respondent to the public consultation considered these measures as useful for increasing CT operations.

As regards **Articles 7 and 9 on own-account transport**, it should be noted that it has not been possible to identify the effects of these articles extending the definition of own-account transport, mainly because the beneficiaries of these articles would normally be shippers/users of CT services, and as seen in Annex II, only a small number of end-user (organisations)

[55] The Combined Transport Directive does not provide for an upper limitation in respect of load units, be it in terms of weight or dimensions. Such limitations are however set out in the Weights and Dimensions Directive (96/53/EC). Some of the maxima contained therein are specific to "intermodal transport operations", covering also operations under the CT Directive. Member States can, and some do, allow under certain conditions vehicles on national roads that go beyond the maxima set out in the Directive.

participated in the public consultation and in the stakeholder meeting. However, as in general road transport, the importance of own account transport has considerably decreased, having dropped from 30% in 1986 to 15% in 2012[56], it can be assumed that similar trend has taken place in CT.

The aim of **Article 3 on transport documents** was to ensure that controlling authorities can check the eligibility of the CT service providers for the benefits in the Combined Transport Directive. In this regard, the article addresses three questions: type of the documents, the availability of the documents and information to be provided in those documents.

As regards the type of the transport document, the choice of transport documents is left to the operators[57] as there are a multitude of formats available. Each transport mode has given rise to the emergence of distinct transport documents that take into account the special characteristics of the particular mode. It should be recalled that under international transport law, transport documents constitute a civil contract between the shipper and the transport operator, and as the conditions for operation in different modes are different, the standard documents are also. This means industry can use for example a CMR[58], a CIM[59], a national transport document, a company-related consignment note, a bill of lading or a multimodal document etc. as long as the information required is provided. In this sense, the type of the document does not necessarily affect the effectiveness (but has consequences on efficiency, see below).

As regards the availability of the documents, the Article 3, through a reference to Regulation No 11 from 1960 require that the documents have to accompany the goods. This ensures that the eligibility can be assessed on road-side controls and is thus effective for the aim of the Article. As a matter of fact, the issue of availability of transport documents was tackled in the case C-305/06. The Court acknowledged that Member States are entitled to request adequate documents proving the nature of transport operation[60].

As regards the information to be provided in the documents, the aim is to establishing the eligibility. For this, it is necessary to establish that the road leg in question as well as the full journey fulfils the conditions of Article 1 of the Combined Transport Directive. This means that the controlling authorities need to be able to check whether:

- the load unit is one of those in the list in Article 1
- the full journey of the load unit will include more than 100 km as the crow flies of non-road leg between Member States, and
- the road leg in question is less than 150 km as the crow flies in case of connection with waterborne transport or to the nearest suitable rail loading station in case of a combination with a rail terminal.

[56] COM(2014)222 final. Report from the Commission to the European Parliament and the Council on the State of the Union Road Transport Market.

[57] Article 6(3) of Regulation No 11 of 1960 as last amended by Regulation (EC) No 569/2008 states that "Where existing documents such as consignment notes or any other transport document give all the details specified /…/ carriers shall not be required to introduce new documents".

[58] Convention on the Contract for the International Carriage of Goods by Road is a United Nations convention signed in Geneva on 19 May 1956. Based on the CMR, the International Road Union (IRU) developed a standard CMR waybill.

[59] Uniform Rules concerning the Contract of International Carriage of Goods by Rail (CIM) - Appendix B to Convention concerning International Carriage by Rail, 9 June 1999, applicable with effect from 1 July 2006.

[60] C-305/06, Commission vs Greece, paragraph 43: "En effet, il ne saurait être reproché aux autorités helléniques d'avoir empêché la réalisation d'un transport combiné et, par conséquent, d'avoir violé les articles 2 et 4 de la directive 92/106 dès lors qu'elles n'étaient pas en mesure de déterminer, au vu des documents de transport dont elles disposaient, le caractère combiné du transport effectué".

Logically, in order to establish the above, the transport document should provide information on the full journey of the load unit, including on the road leg(s) and on the non-road leg(s). However, looking at the information required today[61], one can see that the information needed to establish eligibility is not really requested. While the place of loading and unloading for the road leg has to be given, no information is required on the length of the non-road leg. Specifying the loading station as well as the inclusion of stamps in case of the final leg only proves that transhipment has taken place, but does not add to proving the eligibility of the full journey. Furthermore, the controller has to establish the length of the legs as the crow flies.

Indeed, the vast majority of public consultation respondents, while agreeing with the need to be able to establish eligibility, claim to have encountered problems linked to documentation requirements, mostly causing delays and additional costs. Most important problems faced by industry relate to the requirement of stamps from ports and rail loading stations that are no longer generally used and hence prove sometimes impossible to acquire. At the same time, in case of an initial road leg, the road hauliers claim it to be difficult to acquire documentation from a CT manager showing also the other legs of the journey. Furthermore, several respondents pointed out that it should not be mandatory to carry all documents in the vehicle and the authorities should instead check the necessary documents in case of doubt with the CT operator within a reasonable time.

Hence it can be concluded that Article 3 on transport documents is effective as regards the types of documents allowed and their availability, but not very effective when it comes to specifying the information required that would help to establish eligibility.

The aim of **the right for all established EU hauliers to carry out CT road legs in another Member States** (Article 4) was to improve the competitiveness of the CT services. As it is the international road haulage that is the competitor of CT services, and not national road haulage, it was important to ensure a level playing field where CT operators are free to choose a road transport operator without restrictions[62] being applied in the destination Member State.

Article 4 of the Combined Transport Directive still provides an important advantage for CT. It ensures that CT operators can choose non-resident road transport operators (which may be the lorries of the CT operator itself) to perform an unlimited number of CT road legs the same way it would be able to choose a non-resident road haulier for road-only transportation. This has stimulated the cost and quality competitiveness of the pre- and post-carriage road legs of CT operations and fosters the overall economics of CT operations. However, the effectiveness has been somewhat hindered by several problems. First, the available information indicates that the level of implementation of Article 4 across the Member States is not uniform. The CT Study found that only 22 Member States have *expressis verbis* transposed Article 4, and problems with implementation occur in many Member States. Over the years, the Commission has received several complaints from CT operators on Member States' practices to impose administrative restrictions and undue fines on CT road legs claiming these are

[61] The pre-established documents shall specify the loading and unloading points to/from rail/barge/ship, provide information on the name and address of the consignor; nature and weight of the goods; place and date of acceptance of the goods for (road) transport and place at which the goods are to be delivered (by road haulier). In case of the final road leg, the transport documents should be stamped in the port/rail unloading station.

[62] As provided for in Chapter III of Regulation (EC) No 1072/2009 of 21 October 2009 on common rules for access to the international road haulage market, for purely national carriage by non-resident hauliers (cabotage), the Member States can restrict the non-resident hauliers to perform within their territory up to 3 national road trips during a 7 day period and only in conjunction with an international trip. After 7 days (or shorter if the 3 national road trips have been carried out in a shorter period) the non-resident haulier can carry out only international operations. For cabotage, the road operator also has to be able to show the record of previous trips.

cabotage operations instead[63]. The Commission has started several EU-Pilot cases recently in this regard.

It needs to be pointed out that also some stakeholders, Western European hauliers in particular, view Article 4 as an exemption from cabotage rules and claim that this results in unfair competition (commonly referred to as "social dumping") which forces local companies out of business. However there is no evidence to support this. The CT Study concludes that the share of CT road legs in national road transport is minor (ca. 0.6%) and the share of CT road legs carried out by non-residents is even less. Hence, the CT Study concludes that the increased problems perceived by road hauliers relate more to the recent price drop of road freight transport during the crisis years than to any CT operations[64]. Furthermore, in reality the increase in CT operations creates additional jobs for local road hauliers. If shippers would use international road haulage all the way instead of CT, the local road hauliers (in particular those who have only national authorisations) would not be competing for these jobs at all.

Notwithstanding the problems with implementation, the CT Study as well as the stakeholders in the public consultation[65] found that the right for all established EU hauliers to carry out CT road legs in another Member State has been the most effective measure in promoting CT operations as it allows the operators to organise the CT chain according to market forces. It has also been claimed by the respondents that the elimination of this provision would most certainly cause reverse shift to road-only transport.

As regards the **biannual reporting obligation in Article 5**, the Commission has produced only two reports covering years up to 1999, and in 2014 the CT Study, giving an overview of the market between 2007 and 2011. The reason for not drawing up further reports, as it has been discussed in chapter *4. Methodology*, was the fact that no comparable data was available, absent clear and uniform rules in this respect. It has turned out indeed that the Member States do not usually gather the data referred to in Article 5 (2). The best available dataset exists on road/rail CT and is gathered and published bi-annually by UIRR (same data is published by Eurostat); however, it uses definitions differing from those of the Combined Transport Directive for rail-road CT, and in any case, covers only ca. 1/3 of the CT volume. A further problem with Article 5 relates to the categories of data the Commission is required to report upon. Already in 2001, when the second report was produced, it was considered that those categories do not allow a proper description of market developments. The data to be reported should be comparable with other transport data gathered, both by industry as well as by Eurostat. It can hence be concluded that Article 5 does not reach its objective.

As regards the **fiscal incentives in Article 6**, the industry perceives the fiscal stimulation as an effective way of reducing heavy costs (transhipment, equipment) borne by CT operators

[63] There are considerable problems with application of the cabotage rules, which spill over to the CT, in particular in cases where the Article 4 is not correctly transposed (and the implementing authorities consider the CT roads to be covered by cabotage rules). Commission Report on the State of the Union Road Transport Market (COM(2014) 222, 14.4.2014), reports substantial differences in the methods used to enforce Regulation 1072/2009 as well as various discriminatory practices of the Member States.

[64] Similar conclusions have been reached in relation to cabotage operations, where both a study by German government (Bundesamt für Güterverkehr: Marktbeobachtung Güterverkehr. EU-Osterweiterung. Köln 2012) as well as a study by European Parliament (European Parliament, Cabotage Study, March 2013) concluded that even with an increase in cabotage operations by hauliers from Eastern Member States, there is no indication that this development has caused any significant increase in competition in the Western Member States as the share of cabotage in total road freight transport is small (on average 2.5% of the total national transport market for hire and reward in the EU-27 in 2012, with highest penetration rates in Belgium and Austria - 6.0% and 3.6%, respectively. The remaining 97,5% is carried out by national vehicles.

[65] Public consultation respondents (60%) perceived the Art. 4 of the Combined Transport Directive to be currently the most useful of the existing measures and should be retained

and consequently as a way for allowing CT services to compete with long distance road transport on price. However, this potential is not fully realised due to several reasons.

First, the tax provisions of Article 6 are very limited in scope. Article 6 (1) obliges Member States to reduce or reimburse taxes charged from road vehicles either by a standard amount or in proportion to the journeys that such vehicles undertake by rail, i.e. it only applies to rail-road CT operations called rolling road where the vehicles (and not containers) are loaded on the train. These rebates should be granted by the Member State in which the vehicles are registered on the basis of rail journeys carried out only within this Member State. Other kinds of CT involving inland waterways or short sea transport or rail-road transport of containers do not benefit from Article 6 (1).

Secondly, as Article 6 does not harmonise neither tax levels nor the reimbursement levels, the value of the support schemes varies significantly across Member States with tax reductions ranging from 10% to 100% applied on already varying tax levels, amounting to fixed amount support from €3 per road leg to €50 per rail journey with several proportional measures in the middle.

Thirdly, as the vehicle taxes have decreased considerably from the 1990s, the ability of these incentives to counterbalance the price disadvantages of CT transport is fairly low. According to the CT Study, for example in Germany, where 100% of vehicle tax (€556/year for a 40t vehicle[66]) is reimbursed, the actual benefit would amount to €1-2 per CT shipment. To put this into perspective, the EU road hauliers quoted freight rates of as low as €0.7 per vehicle-km or less in 2011, while transhipment costs of one load unit are on average €30-40 per handling. In countries with lower reimbursement levels or a lower vehicle tax, the actual benefit per shipment can be minimal. This was supported by several respondents to the public consultation, who pointed out that the levels of incentives of Article 6.1 are insufficient today.

Finally, the transposition and implementation of the scheme is far from homogeneous. The CT Study points out that merely 17 Member States have adopted schemes for the reimbursement of vehicle taxes, however often with conditions different from Article 6.1. For example, though the calculation basis is given in the Combined Transport Directive (length of rail journey), various Member States are using different criteria, e.g. number of performed journeys, time of rail services' usage, driven distances or operating periods. Some Member States have schemes in place that go beyond the measures foreseen in the Directive[67]. In the public consultation, about one third of respondents report that Member States have implemented tax incentives differently from the Combined Transport Directive and a few describe cases where there was in practice no possibility of receiving the reduction in vehicle tax, due to individual interpretation by a Member State.

As regards the possibility offered by Article 6 (2) on the exemption for road vehicles engaged in CT operations from vehicle taxes, this applies only to road vehicles used exclusively in CT operations and the respondents to the public consultation signalled that it is economically not viable to use some vehicles exclusively for CT (or to prove it). In any case, according to the CT Study, only three Member States make use of this provision. Moreover, the provision applies to all CT combinations only in Germany, while in the Czech Republic and in Austria it is limited solely to rail/road CT.

Conclusion on effectiveness

[66] In the 1990's, it was > € 5000 per lorry

[67] Any such support in so far as it involves State resources should be subject to State aid control.

It can be concluded that the Combined Transport Directive has been reasonably effective in promoting the development of the CT market in the EU. However, some problems have been identified. First, as regards the definition of CT, the current somewhat ambiguous wording of Article 1 of the Combined Transport Directive has not been entirely effective as its diverging transposition and the lack of enforcement by the Commission has led to different implementation across the EU and thus to some legal uncertainty in the CT market. This in turn has reduced the ability of the industry to benefit from the Combined Transport Directive. Furthermore, parts of the definition (load units, distance limits, requirements for information in transport documents) are claimed by some stakeholders to be partially outdated or too narrow and thus hindering the effectiveness of the Directive. In particular as regards the transport documents, the requirements on information in Article 3 do not ensure the effective control of eligibility and are causing problems for both industry and implementing authorities.

Some of the Member States have extended the definition provided in the Directive to cover also national CT operations, as well as operations involving that Member State and a third-country, while some Member States do not limit the load units at all or limit the road legs differently. These changes may have supported the development of national CT, however, as regards of the CT between Member States, the differences create rather uncertainty and therefore hinder the take up of cross-border CT services.

As regards the support measures, the elimination of quotas and authorisation schemes as well as the elimination of regulated tariffs have been effective in supporting the uptake of CT services. As regards the right of non-resident hauliers to carry out CT road legs (Article 4), this is considered the most effective tool in the Directive by both the stakeholders as well as the authors of the CT Study. However, problems with the implementation of this Article, in conjunction with problems on the interpretation of the definition and on controlling the eligibility, remain. The majority of complaints and infringement proceedings relate to this Article.

As regards the fiscal measures, while these could be potentially effective, they are not very effective today due to ineffective methodology due to which the support does not necessarily translate into price reduction for CT users. Furthermore, problems remain with a varying or incorrect application by Member States.

The Directive has not had any unexpected effects.

5.3 Efficiency

In order to assess the efficiency of the Combined Transport Directive, it is necessary to analyse whether its effects were achieved with a reasonable use of resources and whether the same results could have been achieved with less resources.

Implementation of new legislation usually brings along some costs for authorities and/or operators. These costs can be classified into implementation costs and compliance costs. The implementation costs cover the costs that national authorities have in transposing and implementing a new measure. The compliance costs are costs to industry which stem from the generic requirements of the legislation, and include the administrative costs, which are incurred by industry in meeting legal obligations to provide information on their activities[68]. Furthermore, all these costs can be divided into initial and running costs. A summary table of the below analysis is given in the Annex VII.

[68] COM(2006) 691, "Measuring administrative costs and reducing administrative burdens in the European Union", 14.11.2006

Benefits for the society created by the Combined Transport Directive

The Combined Transport Directive has brought along advantages to the society through reducing external costs as freight transport has shifted from road to CT as well as by creating jobs and revenues to the relevant companies.

The maximum environmental and social benefits of the CT can be calculated assuming that all the currently existing CT operations would take place as road freight transport operations. A significant amount of external costs can be saved by shifting transport from road to rail or waterborne transport. Although rail and waterborne transport also cause some external costs, these are considerably lower as compared to road transport. According to the European Commission's Marco Polo Calculator[69], for example, the advantage of rail over road is estimated to amount to €0.02 per tonne-km for an average road journey. The comprehensive PRIMES-TREMOVE Transport Model and the methodology of the Handbook on External Cost of Transport[70] were used to calculate the value of the external cost (air pollutants, noise, congestion, accidents and infrastructure costs) saved.

Based on these calculations, it can be said that the external costs for carrying the same amount of freight on the same distance (153 bn tonne-kilometres) as was carried by non-road legs of CT in 2011 would have amounted to maximum €2.1 bn (see table 4)[71]. This saving can be considered important taking into account that according to TERM2000 calculations used in the 1992 Green Paper, the environmental external costs in the then EU-12 in 1991 for inland freight transport were €54.9 bn.

Table 4 - Total external costs for CT non-road legs being carried out by HGV (million EUR, in 2010 constant prices)

Heavy goods vehicles	
External costs	Inter-urban
Accidents	410
Noise	73
Congestion	661
Air Pollution	607
Climate change	366
Total external costs	**2118**

Source: PRIMES-TREMOVE Transport Model

More specifically on greenhouse gases, the CT Study showed that for example the shift from road to rail/road CT has saved in 2011 alone (compared to road only transport) 7.3 million tonnes of CO_2, 93150 tonnes of NO_x and 1150 tonnes of particulates, while the shift to inland waterways has saved 0.96 million tonnes of CO_2, 909 tonnes of NO_x and 25 tonnes of particulates. This kind of savings is exactly what the Combined Transport Directive was designed to achieve.

[69] External Cost Calculator for Marco Polo freight transport project proposals. Call 2013 updated version. Authors: Martijn Brons, Panayotis Christidis, EUR Number: 26021 EN, Publication date: 7/2013, http://ipts.jrc.ec.europa.eu/publications/pub.cfm?id=6379

[70] Update of the Handbook on External Costs of Transport, Ricardo-AEA, 8.1.2014,

http://ec.europa.eu/transport/themes/sustainable/studies/doc/2014-handbook-external-costs-transport.pdf

[71] It has not been possible to assess the exact share of freight that would have not been carried by CT in case there would be no Combined Transport Directive. However, both the stakeholders in public consultation as well as actual examples from Member States support the assumption that without the support measures all or most of the CT freight shifts to road only transport.

As regards jobs and revenues, there was no baseline data available to allow comparison with, nor to allow analysis of growth rates[72]. The current situation has been estimated by the CT Study concluding that the CT rail/road sector employed 74000 employees and CT inland waterways sector 10000 employees in 2011. As regards the revenues, the CT rail/road sector has been estimated to have created €7.7bn, while the CT inland waterways created revenues of €1.3 bn in 2011 (both without road leg revenues). The relevant data for short-sea shipping is not available.

Cost for national administrations

Assessing the actual costs of an EU legal instrument for administrations[73] is difficult as there are usually several layers of governmental institutions involved and the budgets are usually not planned based on legal instruments. There is a clear lack of a consistent methodology for the assessment and monetisation of the costs and associated benefits of implementation measures in the EU and its Member States. Though the EU has tried to come up with a common methodology for measuring costs since 2005, little actual progress has been achieved. Some Member Stats are known to assess the administrative burden to industry, using variations of the Standard Cost Model, but no common methodology is used for assessing the cost for Member States administration[74].

The actual costs in each Member State vary and the level depends on the legal and administrative systems in a Member State. The reporting obligation in the Combined Transport Directive did not include an obligation to report on implementation costs and no public information is available on the costs carried by Member States. The public consultation on the Combined Transport Directive asked the representatives of public authorities for the assessment of their costs for the implementation of the Combined Transport Directive; however no public authority was able or willing to give a numerical assessment of the costs.

Furthermore, in the framework of the CT Study, questionnaires were sent to Member Stats on their CT support programmes asking information inter alia about the annual budget of a measure. None of the 22 Member States who have the measures in place were able to assess the budget for the tax incentives foreseen in the Combined Transport Directive. An assessment of tax incentives exists for Germany, according to which it is estimated that the annual cost for tax reimbursements and exemptions is €2 mio (for ca. 200000 applications) annually[75]. Information about the size of the budget related to tax reductions, reimbursements and exemptions is not available.

As regards costs of transport document requirements it is concluded that these requirements did not create costs for public authorities. The transport document requirements create some

[72] As discussed in *Section 4.3 Limitations – robustness of quantitative findings*, it would not be possible to separate the impact of the Combined Transport Directive from the impacts of changing economy, other legal initiatives such as liberalisation of labour markets and technological developments.

[73] These costs consist of initial costs and running implementation costs. The costs carried by national authorities relating to the initial transposition and implementation of the EU legislation are costs that occur once and are a normal part of the EU legal system. Implementation costs for national authorities can be high if particular investments are foreseen beyond the initial legal costs and training costs for operational personnel. The running costs for authorities consist normally from any additional training, personnel costs relating to administrators working on the particular topic as well as cost carrying out administrative procedures, inspections or as in this particular case, related to (loss of) tax income. Furthermore, reporting obligations also create additional costs relating to data gathering and reporting.

[74] http://ec.europa.eu/mart-regulation/refit/admin_burden/scm_en.htm

[75] Subventionsbericht. Bundesministerium der Finanzen. https://www.bundesfinanzministerium.de/Content/DE/Standardartikel/Themen/Oeffentliche_Finanzen/Subventionspolitik/2013_08_13_24-subventionsbericht-der-bundesregierung-anlage.pdf?__blob=publicationFile&v=5. It should be noted that the German definition of eligible CT is wider than from that in the Combined Transport Directive.

costs for the industry as analysed below, while the control of eligibility/transport documents is carried in standard road checks and hence no additional costs are carried by public authorities. As regards the costs related to regulated tariffs (prices), the liberalisation and allowing the private operators to negotiate the tariffs reduced the cost for public authorities who earlier needed to monitor and evaluate the CT market and establish the regulated tariffs.

Cost for industry

As regards the costs to industry, it should first be noted that the Combined Transport Directive does not create any absolute compliance costs. The failure to organise the transport according to the definition in Article 1 or the failure to provide the transport documents as described in Article 3 does not create a violation of the Combined Transport Directive, it merely means that the operator will not be eligible for the benefits foreseen by the Combined Transport Directive and relevant other EU measures. Hence, the compliance for industry is rather a choice than an obligation. Moreover, the Combined Transport Directive grants a series of benefits, also in monetary terms that operators can assess with a view to determine whether compliance with the Combined Transport Directive would leave them better-off. If the industry has chosen to opt for the benefits, the compliance costs can be of two types: costs relating to organising its transport chain so that it is covered by the definition and the administrative costs relating to the fact that the burden of proof of compliance lies with the operator as established by the case-law[76].

Concerning the take-up of CT operations, the main reasons for low uptake is its relative costliness compared to road-only transport. The CT Study looked into the cost structures of CT operators for different modal combinations and the results show clearly that the cost efficiency depends mainly on the length of the full transport journey, the load units used as well as the combinations used. Furthermore, as the transhipment price is the one component that the single mode transport does not have, the level of this cost component is important for the general price of CT as explained above in section *6.2 Effectiveness*. However, it is difficult to assess the average terminal handling costs as some Member States have subsidy schemes in place, which reduce considerably the terminal handling prices, while others do not have such support schemes. On longer distances, the transhipment costs can be compensated by lower transport costs of rail, inland navigation and short sea. According to the CT Study, the minimal transport distance in order to be able to compete with road transport (without support measures) is: inland navigation 50 km, rail 250 km and short sea 350 km. These distances may vary depending on the actual product and market environment. These observations were supported by the public consultation, where several respondents mentioned that CT operations are only cost-efficient on longer journeys.

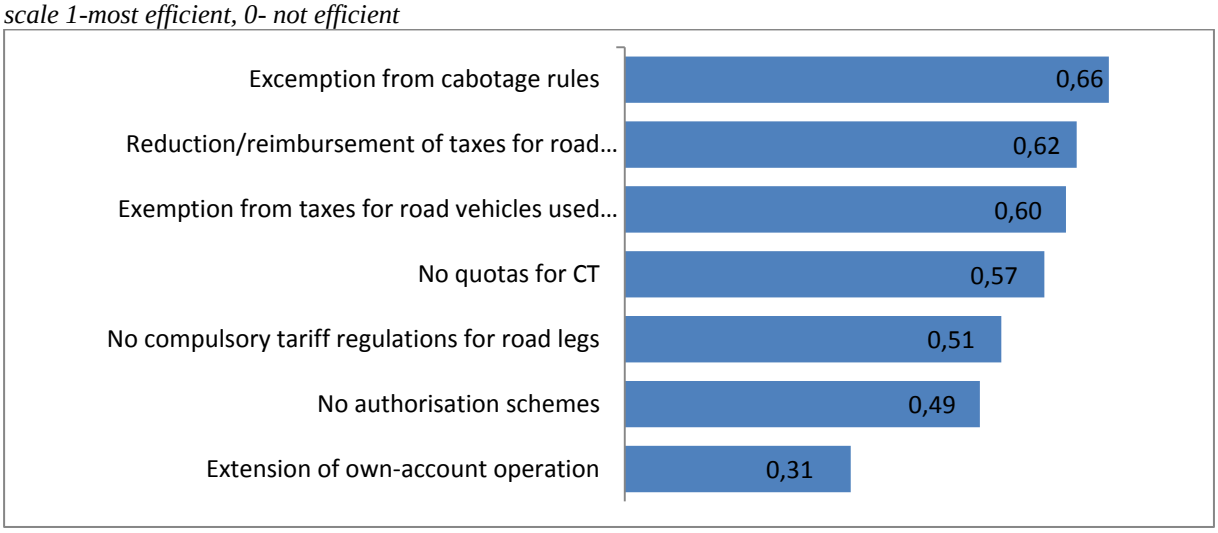
The incentives in the Combined Transport Directive were designed exactly for this reason - to balance the inherent price disadvantage of CT. The Combined Transport Directive foresees two types of benefits: direct tax incentives and regulatory incentives in the form of liberalisation that would allow the operator to reduce operational costs. The opinions of the stakeholders in the public consultation illustrate well the outcome of the analysis. Almost all respondents (94%) agreed that EU support is necessary and the majority of respondents (55% in total, and 90% of SME respondents) were of the view that CT operations would not be economically viable without the support of the Combined Transport Directive. While 28% of respondents claimed that less costly measures could have been used to achieve the same results, they did not suggest any alternative solutions (mostly asking for better implementation or higher subsidies). In assessing the importance of existing measures for

[76] Case C-305/06 Commission vs. Greece.

taking up CT operations, the right to carry out CT road legs as a non-resident haulier was valued as most important, followed by tax incentives.

As a matter of fact, there are a number of examples from the market bringing evidence that when support schemes for CT expire or are suspended, the operators move their goods immediately back to road transport. For example, this was the case in Belgium, as described in the CT Study, where subsidies had been provided to run trains from Antwerp to hinterland destinations. As the financial aid was gradually reduced between 2008 and 2013, a reverse shift towards road took place as CT services price became uncompetitive for operators.

Figure 5 – The efficiency of Combined Transport Directive's measures as perceived by stakeholders, *on the scale 1-most efficient, 0- not efficient*



Source: Public consultation, 2014

As regards the administrative costs for the industry, these stem from information obligations[77]. While industry often collects information in the cause of its daily operations (business-as-usual), some of the information obligations are solely collected because of legal obligations. The latter is considered an administrative burden. Though the aim of the EU is to reduce this administrative burden, it needs to be pointed out that some administrative burdens are necessary if the underlying objectives of the legislation are to be met[78]. In this regard, the Combined Transport Directive requires the industry to prove its eligibility through the relevant transport documentation with a minimum set of information to be provided. This requirement can be considered efficient.

Efficiency of Combined Transport Directive measures

The **transport document** requirements in Article 3 consist of three types of requirements: type of documents allowed, availability of documents and information required.

[77] Information requirements here should be understood in a broad sense, including obligations for labelling, reporting, registration, and certification as well as monitoring and assessment needed to provide the information. The information either needs to be provided actively to authorities or other private parties or will have to be available for inspection on request.

[78] COM(2007) 23, "Action Programme for Reducing Administrative Burdens in the European Union", 24.1.2007

It was found above that Article 3 is not effective as regards the information required making the analysis of efficiency unnecessary.

As regards the types of documents allowed, the choice of document types has been left to industry as to avoid additional costs and to enable them to use the contractual clauses most suitable for them. This ensures that there are no costs to industry deriving from requirements to introduce additional documents that are not used in single mode operations. The obligation to use different documents for different transport operations (most operators, who carry out CT operations also carry out single mode operations) would create both legal costs as well as costs from changing their document management systems.

It should be noted that public authorities and some (large) operators would prefer to have a harmonised CT or multimodal transport document made mandatory. However as the transport document is also a civil contract, harmonisation of the full document would require also harmonisation of liability regimes, and it would be difficult to envisage a new liability regime that would take into account the contractual nuances needed for different modes of transport. The issue of simplifying the contacts with and controls by the authorities could be solved easier through the introduction of harmonised electronic data fields.

As regards the efficiency of the provision on the document availability, the current requirements do not create any administrative burden to the national authorities. The transport documents have to accompany the goods and hence can be controlled on the road without any additional costs.

However, it was pointed out by the majority of stakeholders that the current conditions create considerable problems to the industry.

First, Article 3 requires the transport document to be stamped in the rail loading station or in the port before the on-carriage road leg. The stakeholders have reported that this is exceedingly difficult as most rail terminals or ports do not use stamps anymore, and this particular provision also effectively rules out the use of electronic documents. Hence the industry has reported that sometimes it will just not be able to get the required stamp, which in turn may lead to the inability to benefit from the Combined Transport Directive's benefits, and may result in fines on the road[79].

Secondly, in the current digital age, it would be considerably more efficient to allow the industry to use electronic means to prove that a transport operation is part of a CT operation. The current text does not allow the use of electronic transport documents, nor does it prescribe an obligation to public authorities in the EU to accept electronic formats. While electronic documents are already available in some transport modes[80], they are far from being widespread in day-to-day business as there are no commonly agreed standards available and there is no obligation on Member States to accept these and most Member States don't.

It should also be noted that after the initial investment to allow the acceptance and road-side control of electronic documents, the efficiency to the national authorities could also be

[79] If the transport operation is prearranged so that a non-resident haulier is carrying out the final road leg, the lack of a stamp on the transport document may lead to fine for illegal cabotage operation (as the eligibility for CT regime is not proven). Even if it is proven subsequently that the road leg was part of the CT operation, the fines, possible confiscation of load and even just delay cause considerable additional cost to operators.

[80] E-CMR for road transport is established in the Additional Protocol to the Convention on the Contract for the International Carriage of Goods by Road, United Nations Economic Commission for Europe, signed on 20.02.2008, entered into force 05.06.2011; while the United Nations Convention on Contracts for the International Carriage of Goods Wholly or Partly by Sea (Rotterdam Rules), signed on 11.12.2008, provides a basis for the electronic bill of lading. However, only a very limited number of Member States have ratified/recognize these electronic documents.

improved by introducing automation or similar possibilities. In this respect, the provisions on the availability of the transport documents are not efficient anymore.

As regards the costs relating to the **right for non-resident hauliers to perform CT road legs** (Article 4), it does not bring along any costs for industry or national administration other than those related to transport documents. The same applies to the **liberalisation of CT from authorisations and quotas** (Article 2). As a matter of fact, as it is prohibited to require any additional authorisations from industry and there is no need for additional road checks other than those carried out in business-as-usual, it means that the benefits described under section *6.2 Effectiveness* can be achieved without any additional cost.

As regards the efficiency of **tax incentives under Article 6**, it is important to keep in mind that while the costs occur to the national administrations, the benefits cannot be counted only in the support received by the industry, but obviously relate to the benefits to society as a whole as analysed above. As mentioned above, the information on the cost to national authorities is not available, except for Germany, while the calculation on benefits of the directive is based on a model designed for the whole EU. Furthermore, the definitions of the subsidy and Combined Transport Directive are not identical. However, taking into account that roughly 1/3 of the CT operations take place in Germany, it is clear that the cost (€2 million) is in any case much less than the benefit (€700 million). Based on this, one could conclude that the measures have been efficient, however it needs to be recalled that the social benefit is caused by a wider range of measures and that the tax incentives were concluded to be only marginally effective for achieving the goal of the Directive. As a matter of fact, the low level of support (that makes the support look efficient) was above concluded to be the reason for low effectiveness.

Conclusion on efficiency

By having shifted some of the long distance road freight transport away from road, the Combined Transport Directive has created benefits to the society by reducing the negative externalities. The monetary value of these benefits is calculated to be up to €2.1 bn annually. Further benefits have incurred to the CT industry and to the users of CT services from the growing CT market (more contracts, better prices, and better connections) as well as from job creation resulting from the growing market.

The evaluation has not been able to quantify the costs of creating the above-mentioned benefits. The public authorities of EU Member States have not been able to assess their costs in relation to fiscal measures provided in the Directive. A magnitude of costs can be seen from the example of Germany, where a budget of €2 mio is attributed annually to CT fiscal measures. For the industry, the Combined Transport Directive does not create mandatory information requirements and hence costs, but rather defines eligibility criteria for support. This means the industry can assess itself whether the benefits provided outweigh the obligations.

A vast majority of participants in the stakeholder consultation (both industry as well as public authorities) agreed that CT services would not be economically viable without the support of the Combined Transport Directive, and the majority believed that there would not have been less costly measures available to achieve the same results, except as regards transport documents.

In relation to transport documents, the provisions of the Combined Transport Directive are efficient in the sense that they do not create any additional document requirement and hence no additional costs to industry or national authorities; however the stamping obligation is difficult to implement and may cause unexpected costs. Furthermore, the current provisions

do not foresee the use of electronic transport documents disallowing the industry to benefit from faster and cheaper digital data exchange mechanisms.

5.4 EU value added

The assessment of the added value of regulating a policy at European level is a basic requirement for all EU legislation in order to show that the subsidiarity principle has been taken into account and the same results could not have been obtained by regulation at national level.

The objective of the Common Transport Policy is to remove obstacles at the borders between Member States so as to facilitate the free movement of persons and goods. To this end, its prime objectives are to complete the internal market for transport, ensure sustainable development and promote a better territorial cohesion. The development of the common transport policy has also to respond to wider objectives relating to sustainable development. The EU had committed itself to this end already in June 1990 with the Dublin Declaration[81]. As a matter of fact, the inclusion of sustainable development provisions in the common transport policy is particularly important as the transport sector is a major environmental polluter.

As discussed in the 1992 White Paper, the added value is highest for EU legislation in areas which relate to cross-border transport and hence where the existence of different regulatory environments of Member States would create barriers and/or additional costs for economic operators.

The scope of the Combined Transport Directive is transport of goods between Member States with an objective to increase the cross-border CT operations. Hence it is by definition an area where differences in the legal system and administrative procedures create at minimum additional costs while in certain situations they create prohibitive barriers that make operations impossible.

First, as the Combined Transport Directive's aim is the promotion of CT, a common (minimum) definition is needed to be able to ensure that the benefits foreseen in the Directive are applicable the same way and therefore benefitting cross-border operations. In this regard, the situation has not changed as compared to 1992 and EU action continues to be needed. If Member States use (even slightly) different definitions, it would mean that the operator might not be able to benefit from the incentives described above (tax incentives, liberalisation) throughout the transport chain. Some differences would not create serious problems, but rather result in additional costs such as for example the length of the road legs as operators would have to familiarize themselves with all legal systems along the itinerary and make necessary changes to their services. Others such as differences in the load units covered would make it impossible to carry out operations or would require an additional reloading at the border (which is economically not viable). This would hinder the development of the single market.

Secondly, at the time when the Combined Transport Directive entered into force, the transport and in particular road transport sector was not only not harmonised, but also not liberalised. Even today, restrictions apply to cabotage in case of road operations that are not covered by the Combined Transport Directive. The non-application of cabotage rules to CT road legs allows operators from one Member State to provide unrestricted services in another Member State and is hence by nature a cross-border issue. In the absence of an EU obligation, not all

[81] European Council in Dublin, 25-26.06.1990, Presidency Conclusions, Annex II, http://www.europarl.europa.eu/summits/dublin/du2_en.pdf

Member States would allow CT road operations by transport providers from other Member States, meaning that CT operators would not be able to carry out themselves the full service or to choose the service providers with desired cost and quality levels from all over the EU. This in turn would mean that the cost of CT services would increase and the CT operations would not be economically viable any more as compared to road only transport.

Thirdly, different document requirements in different Member States in case of cross-border operations create serious difficulties to economic operators. In CT transport in particular, where operators need to be able to prove eligibility, it is important that the same documents are accepted in each Member States the journey passes through, which can only be achieved by setting common EU level requirements.

The importance of EU value added is illustrated by the complaints by stakeholders who have experienced first-hand the problems, as described in several sections above. These kinds of problems would exist more widely if no common EU legislation were in place.

Last but not least, there seem to be a general consensus among the CT operators and users that without any support measures or common EU rules in place, the majority of current cross-border EU CT would have been carried by single-mode road transport due to inherent disadvantages of CT such as additional cost of transhipment, higher weight of load units, time delay etc. It should be noted in this context that the majority (55%) of stakeholders participating in the public consultation perceive that without the support of the Combined Transport Directive, CT services in the EU would not have grown at such a fast pace within the last two decades as operations would not be economically viable[82].

It can hence be concluded that the EU action continues to be needed as the Combined Transport Directive aims at improving cross-border transport operations where even slightly diverging measures by Member States create barriers to the development of the internal market. If the EU had not intervened, or would stop its support, CT operators would either face higher costs or be unable to provide a door-to-door service between Member States. In this regard the actions of the EU continue to add value also today. However, as noted in several sections above, the inconsistent transposition and implementation of the Combined Transport Directive by Member States, and the lack of enforcement by the Commission reduce the value of the Directive. Furthermore, the value added could be increased by addressing the shortcomings discussed in sections *6.2 - Effectiveness and 6.3 - Efficiency*.

5.5. Coherence

Coherence concerns the question of the Combined Transport Directive's complementarity and consistency with other EU policies and regulations with similar objectives. This part examines how well the Combined Transport Directive interacts with other EU interventions in achieving the shared goals of reducing road transport externalities and improving the use of EU transport resources and looks at the coherence with EU legislation with possible cross-impacts.

First, it has to be recalled that EU policies have for years taken great consideration to achieving sustainable growth. The EU 2020 Strategy[83], endorsed in 2010 made it clear that the EU is not aiming for growth at any price, but rather aims at smart, sustainable and

[82] 29% of respondents considered CT also viable without the Combined Transport Directive, however these were mostly the largest companies. 90% of SMEs considered it not viable without support. 16% did not answer that question.

[83] COM(2010) 2020, EUROPE 2020 A Strategy for smart, sustainable and inclusive growth

inclusive growth. The EU 2020 Strategy flagship initiative aiming at a resource efficient and low-carbon economy[84] aims inter alia at decoupling economic growth from resource and energy use and reducing CO_2 emissions, objectives that are shared in the 2011 White Paper on Transport Policy as well as by the Combined Transport Directive's objectives.

As discussed above in section *5.2 - Results of implementation* – state of play of CT market in EU as well as in sections *6.1 – Relevance, 6.2 – Effectiveness* and *6.3 Efficiency*, the Combined Transport Directive has helped, in coherence with the EU 2020 Strategy and the EU transport policy, to shift long-distance road transport away from road to more sustainable modes of transport and has thereby reduced the external costs to society.

Coherence with other initiatives aiming at reducing transport externalities

Different EU instruments in the field of transport, energy and environment legislation aim to reduce transport externalities and influence consumer behaviour to use more sustainable modes of transport and more energy-efficient and cleaner vehicles and products. As discussed earlier, road transport is the main source of transport externalities and hence the policies for reducing the externalities focus on shifting freight towards more sustainable modes of transport away from road. A prerequisite for this modal shift is the competitiveness of the rail and waterborne sectors as compared to road transport. Ensuring functioning markets in rail and waterborne transport, the existence of the relevant infrastructure and the internalisation of the external costs of transport to ensure socially fair competition are prerequisites for achieving this goal, and it is clear that all three components have to be addressed in order to meaningfully support the modal shift. Furthermore, specific measures addressing the environmental impact of the transport sector as well as those aiming at improving road safety will also contribute to the common goal of reducing the transport sector externalities. The EU has been active in all the mentioned fields and these actions coherently aim at the same objectives as the Combined Transport Directive.

A. Improving the functioning of rail and waterborne networks

The first precondition to help shift freight transport to more sustainable modes of transport is improving the functioning of the more sustainable rail and waterborne markets. As regards the **railway markets**, the EU has since 1991 been focusing its efforts on opening up the international rail freight market and also national rail freight markets to cross-border competition as well as improving railway interoperability and developing railway infrastructure. Rail freight transport operations were completely liberalised in the EU in 2007 by the Second Railway Package[85], for both national and international services. The liberalisation increased competition and efficiency of rail freight transport, new operators entered the market and rail became better able to compete with other transport modes. However, some problems both relating to access as well as quality are still reported by stakeholders, in particular in countries with strong incumbents. Entering the rail market requires considerable investments and hence the effects of full liberalisation will take time to fully manifest themselves. Furthermore, lack of connections, infrastructure and problems relating to technical harmonisation, including the gauge difference between Eastern Europe and Central and Western Europe continue to negatively influence the functioning of the EU rail market and through that the development of CT and other multimodal services.

[84] COM (2011) 21, A resource-efficient Europe – Flagship initiative under the Europe 2020 Strategy, 26.1.2011

[85] Including, among others, Directive 2004/49/EC of 29 April 2004 on safety on the Community's railways and amending Council Directive 95/18/CE on the licensing of railway undertakings and Directive 2001/14/CE on the allocation of railway infrastructure capacity and the levying of charges for the use of railway infrastructure and safety certification

As regards waterborne transport (maritime transport and inland navigation), the EU encourages growth through a number of actions such as the modernisation of infrastructures or the harmonisation of equipment and procedures. In the area of **inland navigation**, the freedom to provide transport services between Member States was established in Council Regulation (EC) No 1356/96[86]. However, the considerable potential of river transport has largely yet to be tapped. The EU is committed to breathing new life into the sector, particularly through the Naïades Action Programmes[87]. Several other initiatives are in place to support the development of the inland waterways such as support for infrastructure development, for information systems etc. In the area of **maritime transport** between Member States, the EU also has an active policy to promote short-sea shipping (SSS). In recent years, the EU has established strategic goals and recommendations in a Commission Communication[88]. Further legislative, technical and operational initiatives and measures were foreseen in the SSS Action Plan[89] and in the Communication on a "European maritime transport space without barriers"[90], such as establishing maritime Single Windows that was realised through the Directive 2010/65/EU[91].

These measures are both a prerequisite for the effectiveness of the Combined Transport Directive as well as complementary Combined Transport Directive for achieving the transport policy goals as established in the 1992 and 2011 White Papers. It can hence be concluded that there is coherence between the Combined Transport Directive and these measures.

B. Ensuring availability of multimodal infrastructure

The second precondition for growth of multimodal transport is the availability of the necessary infrastructure. The EU has continuously supported the investment into rail and waterborne transport and multimodal terminals. The funding for investments for freight transport services and in particular multimodal transport services is and has been an integral part of the Trans-European Transport Network (TEN-T) funding, the Marco Polo programs as well as the new Connecting Europe Facility (CEF)[92]. In addition, a specialized support scheme Pilot Actions for Combined Transport (PACT) was in place between 1997 and 2001 for CT.

[86] Council Regulation (EC) No 1356/96 of 8 July 1996 on common rules applicable to the transport of goods or passengers by inland waterway between Member States with a view to establishing freedom to provide such transport services. Official Journal L 175 of 13.7.96

[87] COM(2006) 6 final, Communication from the Commission of 17 January 2006 on the promotion of inland waterway transport "NAIADES": "an Integrated European Action Programme for Inland Waterway Transport" and COM(2013) 623 final, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions of 10 September 2013, Towards quality inland waterways transport: Naiades II.

[88] COM(2009) 008 final, Commission Communication - Strategic goals and recommendations for the EU's maritime transport policy until 2018

[89] COM(2007) 575 final, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions of 10 October 2007 on an Integrated Maritime Policy for the European Union

[90] COM (2009) 10 final, Communication and action plan of 21 January 2009 with a view to establishing a European maritime transport space without barriers

[91] Directive 2010/65/EU of the European Parliament and the Council of 20 October 2010 on reporting formalities for ships arriving in and/or departing from ports of the Member States and repealing Directive 2002/6/EC

[92] 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 and repealing Decision No 661/2010/EU

Regulation (EU) No 1316/2013 of the European Parliament and of the Council of 11 December 2013 establishing the Connecting Europe Facility, amending Regulation 913/2010/EU and repealing Regulations 680/2007/EC and 67/2010/EC

The support to EU transport infrastructure through the **TEN-T projects** has existed for 20 years and during all these years support to rail and waterways infrastructure has been a priority. Between 1998 and 2005, on average ca. 45% of investments were directed to rail infrastructure, while ca. 8% went towards waterborne transport. The share of the support of sustainable transport modes increased in the 2007-2013 programming period, when (by 2012) ca. 62.5% of funds (of €6.71 billion) were invested into rail (290 projects, €4.2 billion), 13,2% into waterborne transport (131 projects) and 4% (51 projects) specifically into multimodal transport.

From 2014 onwards, the new **Connecting Europe Facility** (CEF) framework covers the support to multimodal transport, which will provide support for innovative and sustainable freight transport services, aiming at improving the efficiency of the European freight transport and logistics sectors that support the policy objectives of the 2011 White Paper, inter alia: deployment of clean fuels, optimisation of the performance of multimodal logistic chains and use of more energy-efficient modes, increasing the efficiency of transport and of infrastructure use including the deployment of information systems. In order to ensure the maximum added value of EU financial support, it will not exclude any mode or any technology, and will provide funds directly and to environmentally efficient and cost-effective solutions, thus leading to a direct reduction of external costs of transport. The initial allocation foreseen for freight transport services amounts to €150 – 200 million for the 7-year period (2014-2020). The first CEF call received (end of February 2015) 64 proposals in this priority for a total funding of €189 mio (some other projects under other priorities may also have aspects of multimodality, but are not taken into account in the above number).

There has also been specific support to multimodal transport and CT in particular. Council Regulation (EC) No 2196/98[93] was a first support scheme (PACT) dedicated exclusively to the goal of improving the quality of CT services. In force from 1997 to 2001 and with the overall budget of €35 million during the five-year period, the programme provided EU subsidies to undertakings for starting-up intermodal services for combined container transport, shifting freight off the road to short sea shipping, rail and inland waterways. The idea behind the pilot projects was to devise CT operations which would serve as a test bed for new ideas and organizational methods. The support was limited to initial assistance with the development of the project and financial support in the time-limited start-up phase of its operation. The PACT final evaluation report[94] showed that the instrument had had a rather high success rate (75%, whereas ca. 50% of the projects were assessed as highly successful). It should also be noted that about 60% of participants were SMEs.

PACT was succeeded by the **Marco Polo Programmes** (2003 – 2013)[95] that had a goal to reduce road congestion and to improve the environmental performance of the freight transport system in the EU by supporting intermodality with road legs as short as possible. The Programme supported commercial actions in the freight transport and logistics markets. With a budget of €840 million the Marco Polo programmes were focused on projects supporting

[93] Council Regulation (EC) No 2196/98 of 1 October 1998 concerning the granting of Community financial assistance for actions of an innovative nature to promote combined transport

[94] Commission Staff Working Paper, Results of the Pilot Actions for the Combined Transport (PACT programme), SEC(2002)91,

[95] Regulation (EC) No 1382/2003 of the European Parliament and of the Council of 22 July 2003 on the granting of Community financial assistance to improve the environmental performance of the freight transport system (Marco Polo Programme)

Regulation (EC) No 1692/2006 of the European Parliament and of the Council of 24 October 2006 establishing the second Marco Polo programme for the granting of Community financial assistance to improve the environmental performance of the freight transport system (Marco Polo II)

modal shift. Between 2003 and 2012, in total 198 projects (with more than 700 companies participating) were financed shifting more than 4 million trucks (more than 65 billion tonne-kilometres of cargo) away from roads. The associated benefits have been calculated to be avoidance of more than 4.5 mio tonnes of CO_2 emissions, saving more than 75 lives and reducing traffic jams by about 64,000 km[96].

The financial support provided by the Union is complementary to the regulatory approach taken in the Combined Transport Directive and other legal measures supporting the policy aims of the Transport White paper and can all be considered to be coherent.

C. Internalisation of external costs for road transport

Thirdly, the EU has supported the implementation of the "polluter pays" principle. The idea is simple, when the cost of internalisation charges is transferred to the price of transport services, the prices of different modes will reflect better the external cost to the society. As the external costs are highest in the road sector, the competitive position of road against the other modes will change and it should become more economical to use rail, short-sea shipping or maritime transport instead. The main instrument for the internalisation of external costs of road transport is the Eurovignette Directive 1999/62/EC[97]. It provides a legal framework for road charging systems for HGV used on certain infrastructure and contains specific provisions on the calculation and allocation of infrastructure and environmental costs. It allows charging transport by lorries according to their environmental performance as well as charging hauliers for their vehicle's impact on air quality and noise levels. However, the Eurovignette Directive provides only a possibility for and not an obligation to introduce such charging schemes and furthermore does not foresee charging for congestion and accidents costs.

The internalisation of external environmental costs of transport is also supported by fuel taxation. The Energy Taxation Directive[98] lays down the rules on the taxation of energy products and electricity. Among others, the directive sets minimum levels of taxation for motor fuels (aviation and maritime shipping being in principle tax exempt; Member States may apply reduced levels or exemptions to shipping on inland waterways). Minimum levels of taxation for motor fuels are mostly higher than those for heating fuels, and this applies in particular to gasoil used by the road haulage sector. This supports the aim of reducing negative externalities of road transport.

However, in its current form, the Energy Taxation Directive does not create sufficient incentives for energy efficiency and reductions of CO_2 emissions. The Commission is reflecting on a possible reform of this Directive.

The measures for the internalisation of external costs are coherent with the Combined Transport Directive as they help to better reflect the external costs of road transport in freight rates and through this contribute to raising the competitiveness of multimodal/CT services. It should be reiterated here that the internalisation of the external costs of road transport will alone not counterbalance the inherent price disadvantages of multimodal transport (most importantly the transhipment costs).

D. Emission reduction and decarbonisation policies

[96] http://ec.europa.eu/transport/marcopolo/files/infographics-marco-polo-results.pdf

[97] Directive 1999/62/EC of the European Parliament and of the Council of 17 June 1999 on the charging of heavy goods vehicles for the use of certain infrastructures

[98] Council Directive 2003/96/EC of 27 October 2003 restructuring the Community framework for the taxation of energy products and electricity

Common rules for air quality, vehicle emission standards and fuel quality rules are other important elements in achieving the EU objectives of decreasing air pollutant emissions and the energy consumption of road transport.

The Air Quality Directive[99] sets limit values for the atmospheric concentrations of main pollutants, including sulphur dioxide (SO_2), nitrogen dioxide (NO_2), airborne particulate matter (PM10, PM2.5), lead (Pb), carbon monoxide (CO), benzene (C_6H_6) and ozone (O_3) for Member States. These limits are only implicitly related to transport, but create a target for specific instruments in the transport area.

The protection of air quality is the raison-d'être of Regulation (EU) No 582/2011[100] which defines common technical requirements for the type approval of motor vehicles in respect to emissions, laying down rules for in-service conformity, durability of pollution control devices, on-board diagnostic systems and measurement of fuel consumption. Vehicle emission legislation has led to the production of more energy-efficient vehicles capable of adhering to the increasingly strict emission standards.

In addition, the Fuel Quality Directive[101] aims to reduce the carbon footprint of transport fuels by higher standards for petrol and diesel reducing their contribution to climate change and air pollution. A key measure of the Directive is a target set for 6% reduction of greenhouse gas intensity of the fuels used in vehicles by 2020. This should cut emissions by 500 million tonnes of carbon dioxide by 2020.

Statistical data[102] shows that neither fuel nor new vehicle technologies have so far been able to decouple the relationship between growing freight transport demand and emissions from freight transport as there has not been sufficient modal shift to more sustainable and environmentally friendly modes of transport. Hence, the legislation on fuel quality and vehicle emissions complements and enhances the Combined Transport Directive in reducing the environmental externalities of road transport, but cannot substitute it.

E. Policies to reduce road accidents

In addition to measures that aim to slow down the growth of road transport and the related risks, various EU road transport legislation aims directly or indirectly to improve the safety on roads. Rules on access to profession of drivers as well as on driving licences, on working time and rest periods, on transport of dangerous goods and requirements relating to vehicles such as rules on type approvals, technical controls, tyres, safety belts, lights, mirrors etc. all contribute to increasing the safety on the road. All these measures are coherent with the general policy aim of reducing road transport related accidents and fatalities. In relation to Combined Transport Directive, one instrument should be looked at closer.

[99] Directive 2008/50/EC of the European Parliament and of the Council of 21 May 2008 on ambient air quality and cleaner air for Europe

[100] Commission Regulation (EU) No 582/2011 of 25 May 2011 implementing and amending Regulation (EC) No 595/2009 of the European Parliament and of the Council with respect to emissions from heavy duty vehicles (Euro VI) and amending Annexes I and III to Directive 2007/46/EC of the European Parliament and of the Council.

[101] Directive 2009/30/EC of the European Parliament and of the Council amending Directive 98/70/EC as regards the specification of petrol, diesel and gas-oil and introducing a mechanism to monitor and reduce greenhouse gas emissions and amending Council Directive 1999/32/EC as regards the specification of fuel used by inland waterway vessels and repealing Directive 93/12/EEC

[102] Eurostat, 2011

The Weights and Dimensions Directive[103] establishes the maximum size/weight of road vehicles in the EU with the aim to ensure that overly large and/or heavy vehicles would not create a safety risk on EU roads. As regards coherence with the Combined Transport Directive, the Weights and Dimensions Directive adds to the advantages established in the Combined Transport Directive by allowing to use lorries with heavier weights (44t) for 40-feet ISO containers to be carried in road legs of CT operations (as opposed to 40t for normal road transport). The reason for this exemption is the fact that the intermodal load units are heavier than standard trucks as they also have to carry the weight of load units themselves (such as a container). This additional weight is not a serious risk to the safety on road as the length of the CT road legs is limited and the overall safety risk is considerably reduced by moving the long distance transport away from road. The provisions of the Weights and Dimensions Directive that relate to CT create a positive effect for the CT market and can hence be considered coherent with the aims of the EU transport policy and its own more specific aims of road safety.

It should be noted that the Weights and Dimensions Directive has recently been amended by Directive 2015/719/EU[104] which has to be transposed by 2017. It has increased the length of containers allowed to be used in CT from 40 ft to 45 ft. This takes into account the size of standard maritime containers used today. It also offers 12% more freight capacity as the additional 15 centimetres allow to load more pallets into the container, thereby considerably increasing the efficiency of CT operations[105]. Furthermore, the Weights and Dimensions Directive in its current version extends the benefit originally given only to CT also to intermodal transport in combination with waterborne transport including ocean-going transport retaining the limited road leg. This addition has caused some opposing views from stakeholders claiming it undermines the CT benefit as up to 44t lorries could be travelling from hinterland all the way to ports including crossing borders for much longer than 150 km and thereby not shift to other modes of transport. While this might be true in some limited cases, the aim of this extension was to ensure the higher take-up of intermodal transport in general and in combination with waterborne transport in particular. Furthermore, this extension was necessary to ensure the competitiveness of the EU products on global markets (bigger load units allow for more efficient intermodal transport that in turn translates into cheaper transport prices in the final value of goods).

Coherence with certain other transport legislation

A. Coherence with Regulation (EC) No 1072/2009 (cabotage rules)

Two further issues should be analysed for coherence. First, some respondents in the public consultation as well as occasional articles in the press in some Member States have raised the question whether the Combined Transport Directive is coherent with the cabotage rules in Regulation (EC) No 1072/2009[106]. Secondly, the issue of coherence of the Combined Transport Directive's provisions with initiatives relating to transport documents and/or transport information will be discussed.

[103] Council Directive 96/53/EC of 25 July 1996 laying down for certain road vehicles circulating within the Community the maximum authorized dimensions in national and international traffic and the maximum authorized weights in international traffic

[104] Directive (EU) 2015/719 of the European Parliament and of the Council of 29 April 2015 amending Council Directive 96/53/EC laying down for certain road vehicles circulating within the Community the maximum authorised dimensions in national and international traffic and the maximum authorised weights in international traffic

[105] CLECAT Position Paper, Proposal for a Directive amending Directive 96/53/EC laying down authorised dimensions and weights in national and international traffic, August 2013

[106] Regulation (EC) No 1072/2009 of the European Parliament and of the Council of 21 October 2009 on common rules for access to the international road haulage market

The coherence of Article 4 of the Combined Transport Directive and the cabotage rules have been questioned by several stakeholders in the public consultation. As discussed above, Article 4 of the Combined Transport Directive allows non-resident hauliers to carry out an unlimited number of road legs as part of a CT operations in other Member States even if these road legs do not cross the border. Some national road hauliers and their associations claim that this is a circumvention of the cabotage rules. As discussed above in section *6.2 - Effectiveness*, this claim is not justified. The Combined Transport Directive must be understood as meaning that road legs do not represent a separate transport operation. Hence road legs confined to the territory of a given Member State are not treated as national transport, but as part of international transport (full CT operation between Member States). Intentionally, cabotage rules do not apply to this type of transport, whatever component part of it may be concerned. This is confirmed not only by the case-law[107] but also by Regulation (EC) No 1072/2009, which confirms in recital 16[108] that only operations not covered by the Combined Transport Directive fall within the definition of cabotage operations.

The reason for complaints - as well as the reason for not having liberalised the cabotage market entirely - relates mostly to differences in Member States' labour market and fiscal conditions. Hauliers from Member States where the labour market conditions are such that they can quote lower prices have an advantage over the hauliers in Member States where the labour cost, including pay applicable to drivers, are higher, resulting in higher prices for transport services. The lower prices result in pushing out of the market the less competitive hauliers. Some describe this situation as social dumping. These opinions, as reflected both in the CT public consultation as well as in interviews carried out in the framework of the 2014 study on the *State of the EU road haulage market*[109], must however be looked at in perspective. As described in section *6.2 Effectiveness*, statistical data on the importance of cabotage and relevant recent studies show that around 97.5% of national road haulage is carried out by national road hauliers and therefore cabotage represents only a small percentage of all national transport and cannot be considered to be a reason for creating widespread difficulties for national road transport sectors.

Furthermore, the existing EU legislation contains safeguards against unfair competition as the Posting of Workers Directive[110] requires that undertakings established in one Member State when posting their workers to another Member States, in the framework of transnational provision of services, to another Member States apply the minimum employment conditions of that host Member State including maximum work, minimum rest, holidays and minimum wages. Recital 17 of Regulation (EC) No 1072/2009 stipulates *expressis verbis* provides that transport undertakings performing a cabotage operation fall under the scope of the Posting of Workers Directive. There is no reference to the Posting of Workers Directive in the Combined Transport Directive as the latter entered into force predates the former, nor is there a reference to the Combined Transport Directive in the Posting of Workers Directive.

[107] In case C-2/84, Commission v Italy, the Court confirmed that the CT road leg is an integral part of a single international CT journey from the point of departure to the point of arrival, and that therefore they are not to be looked at as national carriage.

[108] "This Regulation is without prejudice to the provisions concerning the incoming or outgoing carriage of goods by road as one leg of a combined transport journey as laid down in Council Directive 92/106/EEC of 7 December 1992 on the establishment of common rules for certain types of combined transport of goods between Member States. National journeys by road within a host Member State which are not part of a combined transport operation as laid down in Directive 92/106/EEC fall within the definition of cabotage operations and should accordingly be subject to the requirements of this Regulation".

[109] Collection and Analysis of Data on the Structure of the Road Haulage Sector in the European Union, AECOM, 3 February 2014

[110] Directive 96/71/EC of the European Parliament and of the Council of 16 December 1996 concerning the posting of workers in the framework of the provision of services(3) OJ L 18, 21.1.1997

Application of the Posting of Workers Directive to combined transport has not been assessed by the Court.

Thus it can be concluded that the provisions of the Combined Transport Directive are coherent with cabotage rules in the Regulation (EC) No 1072/2009 and, as mentioned earlier, the economic difficulties of some national road hauliers cannot be considered to be deriving from Article 4 of the Combined Transport Directive, but are more likely a result of the general race-to-the-bottom of road haulage prices in the EU.

B. Coherence with initiative on transport documents/ transport data exchange

As regards the requirement for transport documents for road legs, established in Article 3 of the Combined Transport Directive, it was discussed in section *6.1 Relevance* that it is necessary to ensure that the eligibility of the CT operation for the benefits of the Combined Transport Directive can be controlled. Furthermore, it was discussed in sections *6.2 Effectiveness* and *6.3 Efficiency* that the provisions of Article 3 in conjunction with Regulation No 11 of 1960 are neither effective nor efficient.

As a matter of fact, the Commission together with stakeholders has come to similar conclusion as regards general freight transport related information requirements. In July 2015, in the framework of the European Commission's Digital Single Market Strategy[111], the Commission launched the Digital Transport and Logistics Forum that builds on the previous work on e-Freight and will inter alia address the issue of digital data exchange for freight transport, including minimum data fields, acceptance of electronic documents by authorities, data protection and quality issues etc. and will produce recommendations and concrete solutions where applicable, for electronic data exchange for freight transport. Based on these recommendations, the Commission may make a proposal on electronic data on freight transport.

However, Article 3 of the Combined Transport Directive together with Regulation No 11/1960 requires the existence of paper documents and these documents to be stamped in certain cases. The requirement to use paper documents is outdated and as such may be seen as incoherent with the current Commission's key priority to improve the digital economy in EU, and in particular with policy target to move towards electronic documents and e-government as defined in section 4.3.2 of the Digital Single Market Strategy.

Conclusion on coherence

It can be concluded that the Combined Transport Directive is coherent with other initiatives of the EU in related fields, including with initiatives aiming at reducing transport externalities. It can also be considered coherent with EU cabotage rules as well as rules on weights and dimensions of road vehicles. On the other hand, the requirement to use paper documents may be seen as incoherent with the current Commission's key priorities.

6. CONCLUSIONS

The analysis shows that the Combined Transport Directive, during the 22 years it has been in force, has considerably contributed to the development of the CT market in the EU. However, during the same time, the general freight transport volumes have grown even more, and thus it has not been possible to reduce the share of road transport in the modal split of EU freight

[111] COM(2015)192 final, a Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of Regions. A Digital Single Market Strategy for Europe.

transport activities. This was acknowledged in the 2011 EU White Paper on Transport that reconfirmed the objective of the EU's Transport Policy to reduce the share of long-distance road transport by shifting part of it to other modes of transport. The Combined Transport Directive directly supports this objective. In this regard, it is clear that the Combined Transport Directive **continues to be as relevant** today as it was in 1992 for two reasons: first the general objectives of the EU transport policy have not changed and still aim at fostering modal shift away from road to ensure less negative externalities for the society, and secondly, the road transport continues to be cheaper and more flexible for various reasons and hence support for the use of alternative modes is needed.

By improving cross-border CT operations the Combined Transport Directive improves the functioning of the internal market and the competiveness of the CT industry, which in turn helps to reduce negative externalities in the EU. Without EU level action, the cross-border CT services would be faced with barriers resulting from different legal systems making the cross-border CT services less competitive and possibly causing a reverse shift to road. Hence, it can be concluded that the Combined Transport Directive **continues to add value at EU level**.

The analysis shows that the CT operations in the EU measured in TEU have quadrupled during the last two decades and with that helped to shift a considerable amount of freight away from road. In tonne-kilometres, the average growth per year over the last 16 years has been 3.5%, while road transport has grown on average just below 2% annually. The current evaluation has estimated that the shift from road to CT transport has brought along an annual saving of €2.1 billion in external costs. The stakeholders, who have been consulted in the public consultation on the Combined Transport Directive, consider that the CT market would not have grown at this speed on its own as the CT operations in EU would not be economically viable without the support offered by the Combined Transport Directive. In this light, it can be concluded that the **Combined Transport Directive continues to be an effective tool in principle** to support the modal shift. However, taking into account the trends in the whole transport and logistics industry as well as implementation problems in the Member States reported by the industry, this evaluation shows that there is **significant margin for further improving the effectiveness** of the Directive, owing to the fact that some of its **provisions are** outdated, its language is sometimes obsolete and ambiguous, and its scope is limited. The shortcomings relate in particular to the fiscal incentives, the provisions relating to transport documents and the definition of CT.

As regards the **efficiency** of the Combined Transport Directive, it needs to be reiterated that the Combined Transport Directive does not create any absolute obligations to industry as it is aimed at establishing the eligibility for support measures and not at regulating the market. As such, it only creates additional information obligation to those undertakings who choose to use the benefits offered. In the public consultation, the stakeholders overwhelmingly believed that **similar results could not have been achieved with less costly/burdensome measures**. Inconsistent implementation by Member States and not enough enforcement by the Commission are the main elements causing efficiency loss. The provisions on the transport documents are also inefficient.

Finally, as regards the **coherence** with other EU policy measures, the Combined Transport Directive is coherent with the EU approach to sustainable development and **no contradictions could be observed with related legislation**. Problems claimed by some stakeholders in the public consultation seem to mostly derive from the problems relating to the transposition and implementation of the Directive.

ANNEXES

Annex I: Procedural information concerning the process to prepare the evaluation

1. Identification of the lead DG; Agenda planning/Work Programme references

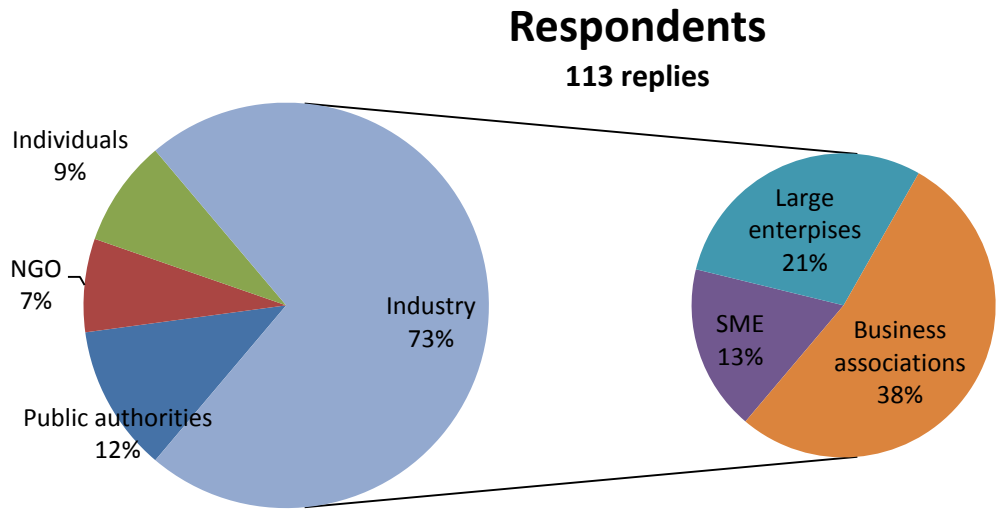
- DG MOVE is the lead Directorate General for the evaluation of Combined Transport Directive.
- The REFIT ex-post evaluation of Combined Transport Directive 92/106/EEC was announced in the second Commission Communication on REFIT ("Results and next steps") of October 2013[112].
- The evaluation was validated in the Agenda Planning by European Commission's Vice-President Maroš Šefčovič on 13. February 2015 under reference N° 2014/MOVE/018.

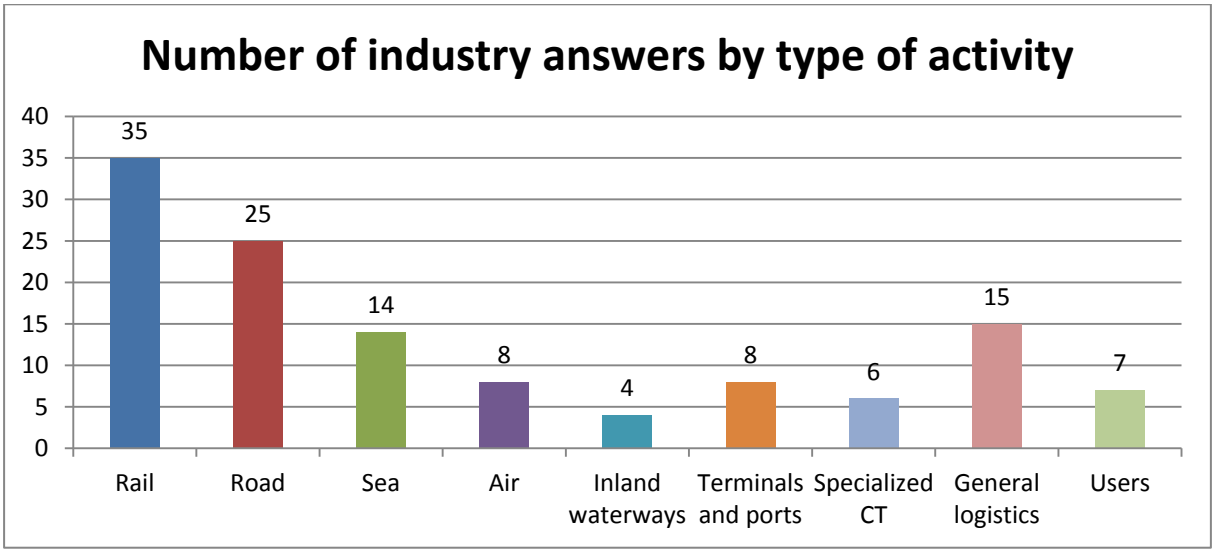
2. Organisation and timing

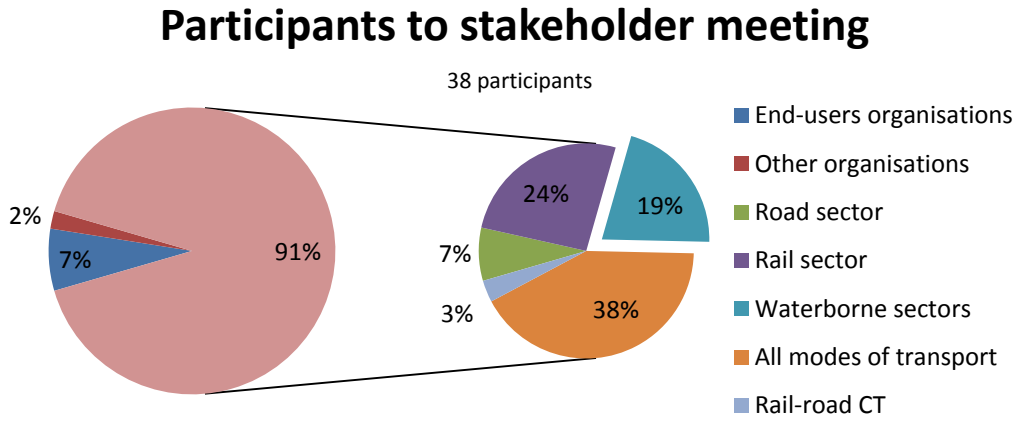
- The evaluation of the Combined Transport Directive was launched on 7 November 2014 with the first meeting of the Steering Group, including representatives from Secretariat General, Directorate-General for Mobility and Transport (MOVE), Directorate-General for Taxation and Customs Union (TAXUD), Directorate-General for Environment (ENV), Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs (GROW) and Directorate-General for Climate Action (DG CLIMA);
- The evaluation mandate, including the evaluation questions, was approved by the Steering Group on 19. November 2014
- Inception Report for the evaluation of Combined Transport Directive was sent to the Steering Group on 28 November 2014 and the amended version of Inception Report was sent on 18 December 2014;
- Intermediate Report for the evaluation of Combined Transport Directive was sent to the Steering Group on 4 March 2014;
- Draft Final Report for the evaluation of Combined Transport Directive was sent to the Steering Group on 3 June 2015;
- The second meeting of the Steering Group for the evaluation of Combined Transport Directive was held on 16 June 2015 in the premises of DG MOVE;
- The Final Report for the Combined Transport Directive was sent to the Steering Group on 7. August 2015, the Final Report was approved by the Steering Group 9 September 2015.
- The consultation of the Regulatory Scrutiny Board did not take place as the evaluation was finalized before the newly created Scrutiny Board took up its activities.

[112] http://ec.europa.eu/archives/commission_2010-2014/president/news/archives/2013/10/pdf/20131002-refit_en.pdf

Annex II: Public consultation – overview of the stakeholders involved







Annex III: Evaluation questions

Relevance

- To what extent is the Directive addressing the need of an optimum use of EU transport resources?
- To what extent is the Directive addressing the problems of road congestion, road safety and pollution?
- To what extent does the scope of the directive still match the current needs or problems a) in terms of combination of transport modes (rail/road, inland waterways/road, short-sea/road), b) in terms of road-leg limits c) in terms of loading units?
- Are all the support measures (cabotage liberalisation, elimination of quotas and authorisation, elimination of tariffs, taxation measures, measures for own account transport and measures for transport documentation) still relevant for current needs?

Effectiveness

- Have all Member States implemented the directive completely and effectively? Were there any factors that hampered or slowed down the implementation of the directive?
- To what extent has the liberalization of quotas and authorization systems and elimination of tariffs increased the share of CT?
- To what extent did the cabotage liberalisation help cross-border CT operations?
- Was the reduced taxation an effective incentive to increase CT? If so, to what extent?
- To what extent have the measures on own-account transport increased the share of CT?
- Have Member States introduced additional measures that have an effect on CT? What effects can be attributed to them?
- Has the directive had any unexpected effects (direct or indirect/positive or negative) or lack of impact? What are the reasons for these?

Efficiency

- To what extent has the directive generated costs and administrative burden to national authorities a) related to tax reductions, reimbursements and exemptions; b) related to transport documentation requirements; c) related to tariff exemptions?
- To what extent has the directive generated costs, administrative burden or benefits to transport operators and users?
- Could the same effects have been achieved at lower costs?
- Would there be less burdensome options available currently for achieving the same effects (such as the use of IT based solutions etc.) that were not available in 1992?

EU added value

- In 1992 the added value of EU action for ensuring optimum management of its transport resources by boosting CT was considered justified. Is it still justified to maintain and extend EU action in the field of Combined Transport?
- What would have happened in the sector of CT at national level and EU level if EU had not intervened?
- Would continuing the actions established in the directive add value in the current context? Could the value added be improved?

Coherence

- What economic social and environmental impacts (positive or negative) have arisen from this legislation?
- Is the directive coherent with other initiatives aiming at reducing transport externalities (road congestion, pollution) or increasing the overall safety of the European network?
- Has the exception to cabotage rules in this directive created positive or negative effects that contradict the objectives of the cabotage regulation?
- Has the link to Directive 96/53/EC on weights and dimensions created positive or negative effects that contradict the objectives of the weights and dimensions regulation?
- Is the requirement on transport documentation coherent with other legislation in this area and other initiatives aimed at improving freight transport information exchange (such as e-Freight)?

Annex IV: The combined transport in EU in 2011

	Transport volume			Tonnes moved (bn tkm)		
	mTEU	units (mio)	Tonnes lifted (gross tonnes, mio)	Only road legs	Only non-road legs	Road and non-road legs
Intra-MS intermodal/CT transport	4.84	3.23	41.59	3	20	23
Intra-EU intermodal/CT transport ~ CT as per Combined Transport Directive	8.69	5.79	86.20	10	66	76
International intermodal/CT transport	14.34	9.56	143.03	20	57	77
Total	**27.89**	**18.58**	**270.82**	**22**	**153**	**175**

Source: CT Study

Annex V: Combined transport trends 1990-2011

CT in TEU	EU-15						EU-28							
	1990	1994	1996		1999		2005		2007		2009		2011	
	mTEU	mTEU	mTEU	% of CT	mTEU	% of CT	mTEU	% of CT	mTEU	% of CT	mTEU	% of CT	mTEU	% of CT
Rail-road CT	4.4	6.6	9.8	65.8	10.4	60.4	14.5	61.0	17.1	62.9	14.6	62.7	17.2	61.6
IWW-road CT	0.5	1	1.5	10.1	1.8	10.5	3.6	15.0	4.7	17.3	4.7	20.2	5.2	18.6
SSS-road CT			3.6	24.1	5.0	29.1	5.3	22.3	5.4	19.9	4.6	19.7	5.5	19.7
CT w/o SSS	**4.9**	**7.6**	**11.3**	75.9	**12.2**	70.9	**18.5**	77.7	**21.8**	80.1	**19.3**	82.8	**22.4**	80.3
Total CT w SSS			**14.9**	100.0	**17.2**	100.0	**23.8**	100.0	**27.2**	100.0	**23.3**	100.0	**27.9**	100.0

Source: Eurostat, CT Study and the CT implementation reports
Fields highlighted yellow are estimates (relating to maritime transport)

Annex VI: Combined transport shares (tkm)

CT share in tkm, EU-28	1996				2011				Growth	
	bn tkm	Road as % of	CT as % of	CT w/o SSS as % of	bn tkm	Road as % of	CT as % of	CT w/o SSS as % of	bn tkm	%
Total freight	2879.1	45.2	3.4	3.4	3561.7	49.0	**4.9**	4.0	682.6	1.3
Total inland freight	1935.6	67.3	5.0	5.0	2426.4	71.9	**7.2**	5.9	490.8	1.3
Total road freight	1302.6	100.0	7.4	7.4	1743.9	100.0	**10.0**	8.3	441.3	1.7
Total CT	**96.7**		100		**175**		100	82.3	**78.3**	**2.8**
CT w/o SSS	71.5			100	144			100	72.5	3.1

CT share in tkm, EU-15	1996				2011				Growth	
	bn tkm	Road as % of	CT as % of	CT w/o SSS as % of	bn tkm	Road as % of	CT as % of	CT w/o SSS as % of	bn tkm	%
Total freight	2344.2	48.9	3.3	2.5	2714.1	48.0	**6.1**	4.9	369.9	0.9
Total inland freight	1564.7	73.3	4.9	3.7	1776.0	73.4	**9.9**	8.1	211.3	0.7
Total road freight	1147.3	100.0	6.7	5.1	1304.0	100.0	**13.4**	11.0	156.7	0.8
Total CT	**76.9**		100.0	75.9	**166.3**		100	86.6	**89.3**	**3.4**
CT w/o SSS	58.4			100	131.8			100	73.4	3.5

Source: Eurostat, CT Study and the CT implementation report 2001
Fields highlighted yellow are estimates (relating to maritime transport)

Annex VII - Matrix of measures and costs of Combined Transport Directive

Measures	**Member States**		**Operators**	
	Costs of initial implementation	**Running costs**	**Costs of initial compliance**	**Running costs**
Definition	Cost of changing the laws, training the overseers (mostly road police)	Occasional need to train the overseers	Possible cost of changing equipment/routes /documents in order to benefit from Directive	None
Documents			None, as freedom to choose transport documents	None
Right to perform road legs by non-residents			None	None
No tariff regulation	Cost of changing the laws	None	None	None
Authorisation schemes		Possible loss of licences fees	None	
Tax incentives	Cost of changing the laws	Loss of tax revenue	None	Administrative costs for those who apply for different benefits
Own transport exemption	Cost of changing the laws, training the overseers (mostly road police)	None	None	None
Reporting obligation	None	Bi-annual	None	Depending on reporting obligations established by MS, some cost may incur from reporting obligation

Annex VIII: List of abbreviations

bn	billion
CEF	Connecting Europe Facility
CT	combined transport
CMR	Convention on the Contract for the International Carriage of Goods by Road
CO_2	carbon dioxide
€	euro
EC	European Commission
EEC	European Economic Community
EU	European Union
EUCJ	Court of Justice of the European Union
ft	feet
GDP	gross domestic product
GHG	greenhouse gases
HGV	heavy goods vehicle
ICT	information and communication technologies
Intra-EU	within the European Union
Intra-MS	within Member State
ISO	International Organization for Standardization
IWW	inland waterway
km	kilometre
LSP	logistics service provider
m	million
MS	Member State
NOx	nitrogen oxide
OECD	Organisation for Economic Co-operation and Development
PACT	Pilot Action for Combined Transport
PM	particulate matter
REFIT	Regulatory and Fitness Performance Programme
SME	small and medium sized enterprises
SO2	sulphur dioxide
SSS	short sea shipping
TFEU	Treaty on the Functioning of the European Union
TEN-T	Trans-European Transport Network
TEU	twenty-foot equivalent unit
t	tonne
tkm	tonne-kilometre
UIC	International Union of Railways
UIRR	Union Internationale pour le transport combiné Rail-Route
VOC	volatile organic compounds
ZARA	Ports of Zeebrugge, Antwerp, Rotterdam and Amsterdam