【欧州】【自動車】

Road/Railways – Environmental friendly vehicles: Study on the way forward regarding modal shift in the EU presents recommendations on measures and policies to European Parliament's TRAN Committee

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【概要：Summary】

Based on a request by the European Parliament's Committee for Transport and Tourism (TRAN Committee), the TRT Trasporti e Territorio, and TEPR Transport & Environment Policy Research, and the Policy Department for Structural and Cohesion Policies of the European Parliament prepared a Study on Modal Shift, entitled "Research for TRAN Committee – Modal shift in European transport: a way forward".

Focusing on passenger and freight transport, the study comprehensively analyses and discusses the progress and potential of a modal shift from road to more sustainable transport modes. Regarding the freight transport in the EU, despite an increase in freight volumes, the modal shares of road, rail and inland waterway transport have remained substantially unchanged between 1996 and 2016. Also in passenger transport, road transport has remained predominant in the same period of time. While analysing the current situation and the main barriers and factors that are hampering a more effective modal shift, the study makes a number of recommendations for a more effective future modal shift in the EU. The study's targets include differentiated aims related to the individual transport segment, investments in multimodal terminals and measures to level the playing field among different transport modes.

On 24 July 2019, the study was presented by the Policy Department for Structural and Cohesion Policies to the European Parliament's TRAN Committee. The TRAN Committee discussed the results of the study, its recommendations and the potential progress on the future modal shift in the EU.

【記事：Article】

1. Background of the study on modal shift

The 2011 White Paper on transport envisages a 60% reduction of GHG emissions in the EU's transport sector compared to the level of 1990. The overall objectives regarding modal shift include a 30% shift of EU road freight of over 300 km to more sustainable modes of transport such as railway and waterborne transport by 2030 and more than 50% by 2050. Additionally, the 2011 White Paper on transport proposes that the majority of medium – distance passenger transport should be covered by rail transport, and that by 2050 the European high-speed rail network should be completed. Based on these White paper targets, the study on modal shift entitled "Research for TRAN Committee – Modal shift in European transport: a way forward" was commissioned by the TRAN Committee to analyse the progress, potential and further challenges for the EU in transferring part of road transport to more sustainable modes. This study's analysis particularly focuses on the period 2011-2018, in order to better evaluate whether the policies and measures that have been implemented and which are currently in force are

delivering on the envisaged results. The study's aim is to support the TRAN Committee Members in considering the further way forward regarding the implementation of policies and measures towards a further improvement of the modal shift in European transport.

2. The study's analysis

The study analyses the most important issues and trends relating to passenger and freight transport in the EU, which are expected to have a continued impact and influence on modal shift. The study provides an overview and also evidence regarding the current situation and the modal shift trends in the EU. The study focuses on factors like access charges, interoperability as well as EU financing that may influence the cost of different transport modes and therefore could have an impact on modal choice. In particular to further support the provision of the current situation and to further support the process of a modal shift towards more sustainable transport modes, there are presented useful insights and recommendations for possible further initiatives in the EU.

3. The study's main results

The number of factors influencing modal shift in the transport sector are numerous. As key determinants for passenger transport linked to spatial patterns, the study points out factors like urban density and the proximity to infrastructure and services, as well as socio-demographic characteristics, among others. Regarding the key determinants for freight transport, the shipment characteristics and the cost, time and quality transport services can influence the choice of transport modes. Regarding the progress and potential of modal shift from road to more sustainable transport modes, despite an increase in freight volumes, the modal shares of road, rail and inland waterway transport have remained substantially unchanged between 1996 and 2016. Also in passenger transport, road transport has remained the predominant mode of transport. Regarding the future development, it is also expected that road transport will keep its predominant position for the passenger and freight transport sectors.

The analysis of the progress in the development of the transport network has shown that multimodal connectivity within Member States and their regions is diverse, with the highest connectivity seen in the Benelux area and western Germany. The designation of the TEN-T network - both core and comprehensive - and the rail freight corridors (RFCs) intend to create an integrated system of infrastructure aimed at ensuring an efficient level of service for freight and passenger transport.

Regarding high-speed rail, the most extensive networks are in Spain and France, followed by Germany and Italy. Other Member States such as the Czech Republic, the three Baltic States, Poland, Portugal and Sweden have planned to implement new high-speed railway lines. However, the planned extension of the high-speed railway network is still far from reaching the objectives set in the 2011 White Paper on transport.

Regarding the cross-border interoperability in the rail sector, which is an important aspect in achieving the modal shift at European level towards railways, is still far from being fully achieved. There do still exist many technical and administrative barriers, including different gauges, signalling technology, electrification and speed control, power systems adopted and others. Furthermore, different access charging schemes are applied across the EU road network, both for light private vehicles and HGVs. Currently, there is no common approach across the EU, although a transition to either distance-based or time-based systems can be observed over the last years. The importance and the need to establish a Single Window and one-stop-shop for administrative procedures in all transport modes across the EU has been recognized. However, currently, the implementation of Single Windows at the EU level is mainly concerned with maritime transport.

Regarding freight transport, the study's analysis clearly shows that road freight is the dominant

transport mode. Moreover, current projections seem to confirm that no particular shift between modes occurred in the period 2010-2016. Furthermore, the study's long-term prognoses toward 2050 suggest that road transport will maintain its dominant position for both passenger and freight transport. Consequently, a significant shift to less carbon intensive transport modes is still far from being fully achieved. Furthermore, the modal share for road freight transport is expected to remain stable in the long perspective, but the share for road passenger transport is expected to decrease from 74% in 2015 to 69% in 2050, expressed in passenger-kilometre (p-km). The study also found that the potential for modal shift would be more achievable where transport demand is concentrated.

Regarding passenger transport the potential for a modal shift towards more sustainable transport modes is largest in urban areas, particularly the largest agglomerations, while for freight, this is where multimodal connectivity is at its highest. Concerns about congestion and pollution in cities also support the local residents' openness to using more sustainable transport modes.

Regarding railways, the study concludes that it could deliver further modal shift in specific transport demand segments, but at the cost of large investments. However, the development of high-speed railway (HSR) seems not a factor sufficient enough to support a significant shift of passengers from road to rail, according to the study. Regarding multimodal freight transport, the study expects that the on-going process of amending the Combined Transport Directive will further facilitate the development of multimodal transport. In the past, the investment in multimodal projects like railroad terminals (RRT) or in inland waterway terminals has been low compared to other infrastructure and this needs to change in future.

4. The study's conclusion and recommendations

Considering the main outcome of the study, three cross-sectional barriers for a shift towards more sustainable transport modes were individualised and the resulting lack of a level playing field between the modes that delay the modal shift have been pointed out. First, all transport modes will have to equally pay their full external costs. Second, the way in which different modes are taxed differs not only between modes but also across the EU Member States. Third, the favourable tax treatment of company cars and the fuel that they use is another barrier for modal shift. Furthermore, there exist specific barriers in rail freight, in inland waterways, medium distance passenger transport and urban areas, which also would have to be addressed in order to facilitate modal shift. Based on the findings, the study states a number of recommendations in order to achieve a more effective modal shift at EU level.

The study's recommendations include to set clear objectives that are measurable over time, to establish targets differentiated by transport segment, looking at the evolution of demand. Clear and defined measures have to be adopted in order to level the playing field. The different treatment of modes regarding the charges and taxes have to be revised in order to avoid distortions in the market and to prevent the introduction of regulations that may be based on incorrect background assumptions. In order to apply the charges and taxes in a fair manner, they have to be applied under the "polluter pays" principle, as all transport modes will have to equally pay their full external costs.

Furthermore, the priorities of interventions and investment in the network have to be redefined. This could lead to shifting the focus away from high-speed rail projects towards ensuring interoperability between national networks. Also the support of investment in multimodal terminals needs to be strengthened, as well as the support for a consistent development of information sharing in freight transport and a support for the information and the integration between the modes for passenger transport. Multimodality is also essential for shifting passenger transport from private vehicle use to the use of more sustainable modes of transport. In this respect, increased interest in the concept of

Mobility-as-a-Service (MaaS) is pushing the development of platforms that can deliver a good integration of systems for information, ticketing and payment. Furthermore, the study recommends to further promote and to adopt Sustainable Urban Mobility Plans (SUMPs) and related actions in urban nodes. This is understood to be an area where the European Commission is already investing time and resources, given the growing importance of urban areas as centres of population and of economic activities. Finally, the study recommends the promotion and funding of multimodality and the future generations of mobility systems for passengers and freight, including the research and innovation in areas that would help to achieve multimodality, but which are not specifically related to a particular mode of transport, such as digitalisation, automation, artificial intelligence, energy management and others.

During the presentation of the study's findings to the TRAN Committee, the TRAN Committee and other members in the debate underlined the importance of modal shift for lowering GHG and other emissions from the transport sector and other aspects of the development of a more sustainable transport system. They recalled the need to further integrate the trans-European transport infrastructure and to use the potential of new digital technologies in order to incentivise multimodal transport.

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