



Study on market access and competition issues related to MaaS

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1 Introduction

The latest developments, both in technology and in everyday transport practice, have led to a reappraisal of existing approaches towards passengers and transport services offered within the European Union. Some key milestones that have shaped public discussions over the past decade include:

Directive 2010/40/EU on the framework for the deployment of Intelligent Transport Systems¹, which focused on security issues and the optimal use of road, traffic and travel data. The Directive aimed to promote cooperation with regards to technical innovations but *did not provide a new legal basis for contractual coordination between the operators.*

The European Commission`s 2011 White paper *Roadmap to a Single European Transport Area - Towards a competitive and resource efficient transport system.*² In this programme document, the deployment of smart mobility systems, including the intelligent transport systems (ITS)³, has been considered as part of the innovative solutions for future technology and behaviour. One of the 10 major goals set out in this document is to develop a *multimodal transport information management and payment system by 2020*. Multimodal transport information management in fact comprises the traffic and travel information measures envisaged as a key element of the ITS deployment.

The 2016 evaluation of the implementation of the 2011 White Paper on transport⁴. Carried out five years after the publication of the White Paper, this document assesses *inter alia* the achievement of the goal to develop a multimodal transport information management and payment system by 2020 and concludes that “reaching this goal might be difficult and the progress so far has been rather limited” because “there is a resistance from some transport operators to share their travel schedule and information⁵”. At the same time, the document states that “there are no indications that the main trends in transport identified in the 2011 White

¹ Directive 2010/40/EU of the European Parliament and of the Council of 7 July 2010 on the framework for the deployment of Intelligent Transport Systems in the field of road transport and for interfaces with other modes of transport, OJ L 207, 6.8.2010, p. 1–13.

² WHITE PAPER Roadmap to a Single European Transport Area – Towards a competitive and resource efficient transport system, COM (2011) 144 final. Accessible at: <https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:52011DC0144>.

³ COM (2011) 144 final of 28.3.2011, point 46, page 14.

⁴ SWD (2016) 226 final.

⁵ *Ibid.*, page 25.

Paper have substantially changed in recent years”⁶.

While at the current stage of public discussions much of the attention is focussed on sustainability and environmental issues, a practical and immediate market approach should address some of the legal issues that could quickly broaden transport possibilities for passengers and turnover for carriers.

Following the questions posed, the present study concerns only terrestrial road and/or railway transport. It does not concern air, fluvial and maritime transport. Furthermore, it is implied by the questions that the main focus is on passenger transport only, and particularly on ticketing issues. There are thus **two major analytical lines to be distinguished**: first, the relations between public transport carriers and private ones in the light of the forthcoming digital facilitation within the EU; and second, the financial issues related to ticketing and liabilities within such a scheme of public-private cooperation in cross-border passenger transport. The first line of examination is mainly a legally based analysis, while the second requires a substantial survey of financial, economic and statistical data to be assessed separately from the present preliminary study.

As an organisational step, the Mobility as a Service (MaaS) Alliance was established in 2015 as a public-private partnership with the goal of facilitating a single open market and the full deployment of MaaS services. This study was carried out in response to a request by the MaaS Alliance to provide an analysis to clarify the legal framework and roles of the MaaS operator and the Public Transport Authority/Operator and how they interact, as there have been many different local interpretations and uncertainties of the legal framework holding up the market access and the provision of MaaS services in European cities. The purpose of this study is to support the development of Mobility as a Service by facilitating a common understanding of the legal framework and by helping public and private partners in cities with their MaaS implementations.

⁶ Ibid., page 28.

2 Scope and methodology

2.1 Scope

This paper aims to provide a response to the following questions:

1. Are European Public Transport Authorities/Operators (PTs) permitted, under current EU legislation (public transportation related legislation, competition legislation, possible other applicable legislation), to extend their service offering to other transport services in a way that could compete with MaaS Operators? If the PTs are permitted in some situations to do so, what are the relevant limitations they must observe?
2. Is there any EU legislation that would restrict the European PTs from offering all their tickets (including subsidised tickets, if such are available) to end-users through MaaS Operators?
3. Are the European PTs required in accordance with EU legislation to make their tickets available to end-users through MaaS Operators? If the PTs are required to do so, which of the following general obligations apply:
 - a) the selection of tickets offered to MaaS Operators must include all tickets that the PTs offer (directly or indirectly) through their other distribution channels;
 - b) the price paid by MaaS Operators for PT tickets cannot be higher than the consumer price;
 - c) when defining the price paid by MaaS Operators for PT tickets, similar pricing principles that are applied with other distribution channel partners must be followed; and
 - d) all MaaS Operators must be treated with similar principles and also with similar principles that are applied to their distribution channel partners (equal treatment).
4. Are European PTs permitted, under current EU legislation, to limit their liability for damages towards travellers that purchase PT tickets from MaaS Operator (that way passing part of their normal liability for travellers' damages to the MaaS Operator) or must the PT liability for damages towards travellers remain the same, whether the ticket is purchased directly from the PT or indirectly through a MaaS Operator?

3 Overview of business models for a multi-stakeholder ecosystem

There seems to be no single or uniform definition of MaaS. The term is used by different stakeholders to describe different things and definitions range from being narrow to very broad. At the heart of the MaaS concept is the idea of connecting different available transport and mobility services in a one-stop-shop package, providing a tailor-made, efficient, sustainable and environmentally friendly alternative to the private use of cars. In its 2018 Communication *On the road to automated mobility: An EU strategy for mobility of the future*, the European Commission briefly refers to Mobility as a Service as “selling rides”.⁷

The MaaS Alliance offers the following definition: “Mobility as a Service is the integration of various forms of transport services into a single mobility service accessible on demand. To meet a customer’s request, a MaaS operator facilitates a diverse menu of transport services, be it public transport, ride-, car- or bike-sharing, taxi or car rental/lease, or a combination thereof. For the user, MaaS can offer added value through the use of a single application that provides access to mobility with a single payment channel instead of multiple ticketing and payment operations.”⁸ For the purpose of the study, we adhere to this definition.

Mobility as a Service promotes:

- the use of a single application to provide access to mobility, with a single payment channel instead of multiple ticketing and payment operations;
- the facilitation of a diverse menu of transport options – public transport, ride-, car- or bike-sharing, taxi, car rental or lease, or a combination thereof;
- the provision of an alternative to the private use of cars that may be as convenient, more sustainable and even cheaper;
- an integrated ticketing, payment, multi/inter-modal traveller’s information and routing;
- digitalisation as an aid to the effectiveness of the transport system; and
- different pricing models for different services and products.

MaaS has been developed at a conceptual and practice level in various EU Member States, with a range of business models focusing on multi- and intermodal transport in urban, suburban and rural areas with public and private participants. In some cases, it has proven to be difficult

⁷ COM (2018) 283 final, p.1.

⁸ See the MaaS Alliance website: <https://maas-alliance.eu/homepage/what-is-maas>.

to find a cooperative model that works both for the region/PT provider and the MaaS service operators⁹. In other cases, the established cooperation has continued on a regular basis with positive results¹⁰.

Two questions arise in relation to the **participation of the public sector** in transport-related initiatives: the legal framework and the involvement of the public operators in privately driven initiatives. There are some examples of the state of play in this regard.

As to the legal framework, Finland is considered to have made the most significant advancement in establishing a comprehensive legal basis with the adoption of the 2017 Act on Transport Service, which has as its objective the promotion of digitalisation of transport services and the more efficient use of data. This Act contains provisions on the opening of programming interfaces for ticketing and payment systems in passenger transport and aims at creating preconditions for easier use of mobility services; it focuses on the user of services and attempts to enable the creation of uniform door-to-door trip chains. The Act requires the opening of Application Programming Interfaces (API) of public and private passenger transport service providers for third parties such as MaaS operators.

Regarding the involvement of the public sector and private companies in the MaaS initiatives, there have been several pilot demonstrations of MaaS across Europe trying to investigate the role of public transport authorities in the MaaS ecosystem. According to Smith et al. (2018)¹¹, the development of MaaS demands a higher interaction between public transport authorities and transport service providers and creates two new roles in the value chain, connecting transport service providers to end-users: *MaaS integrators* and *MaaS operators*. A MaaS integrators' role is to assemble the offerings from different transport service providers (e.g. public transport, car sharing, bike sharing) while MaaS operators are responsible for packaging and delivering these transport offerings to end users. The present paper will focus on assessing the position of MaaS operators in the relevant market.

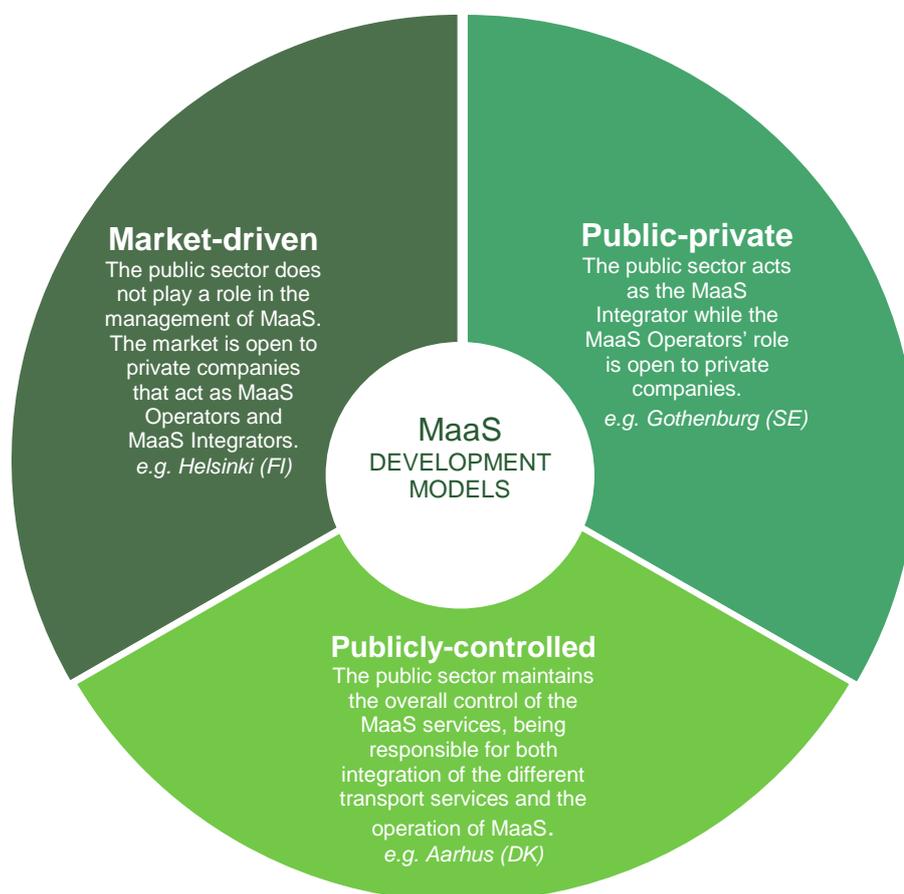
⁹ The case of UbiGo, Sweden (2013-2014) as reported in *Business models for MaaS*, 1st international conference on Mobility as a Service, 28-29 November 2017, Tampere, Finland, Tampere University of Technology, 2017, page 8.

¹⁰ Ibid. Such are the case of SMILE in Austria or Kyyti and MaaS Global in Finland.

¹¹ Göran Smith, Jana Sochor & I.C. Mari-Anne Karlsson (2018): Public-private innovation: barriers in the case of mobility as a service in West Sweden, *Public Management Review*, DOI: 10.1080/14719037.2018.1462399

Classification of different possible MaaS development ecosystems is presented in the figure below:

Figure 1 – MaaS development models¹²



Source: VVA elaboration on Smith et al. (2018a)

4 Current regulations and market access (Question 1)

Having traced the principle lines in recent developments, we could examine the first research question, which seeks to ascertain whether EU public transport authorities/operators are permitted to extend their (public) service offering to other commercial transport services in a way that could compete with MaaS Operators and the relevant limitations they must observe.

The issues will be analysed with regards to the relevant EU regulatory framework in force,

¹²Smith et al. (2018a), *Mobility as a Service: Development scenarios and implications for public transport*.

namely: 1) EU transport legislation; 2) competition law; 3) state aid law and public procurement; and 4) data protection legislation.

4.1 EU transport legislation

First, we must examine whether EU legislation allows the public transport sector in the Member States to make agreements with MaaS operators (supposedly private ones) and to participate in this way in new transport-related market patterns.

At the outset, it should be noted that **contractual freedom** is a fundamental principle of EU law and restrictions to it are acceptable only in limited specific cases. As a general principle of law, contractual freedom concerns all economic activities, including transport, and its wide application is enforced by the European Commission. Moreover, there are no provisions in the Founding Treaties to support restrictions to the freedom of contracts in the transport sector.

Other arguments in favour of contractual freedom can be sought in the common transport policy enshrined in Article 4(2)(g) and Title VI of the Treaty on the Functioning of the European Union (TFEU), and its building blocks: the common transport market, the establishment of freedom to provide services and the opening up of transport markets. The notion of contractual freedom is upheld also in the EU sectoral legislation governing public transport and in particular the Regulation (EC) No 1370/2007, where one of the basic principles is that local or national authorities have the choice of organising transport themselves or contracting an external provider under the condition that they ensure a level playing field.¹³

Before going into details of the special provisions, it should be mentioned that it is stated in the Treaties that the Union “promote[s] economic, social and **territorial cohesion**, and solidarity among Member States”¹⁴. In our opinion, this opens the door for legislative intervention in the public transport sector, which has not been fully made use of. Territorial cohesion should be at the very heart of all relevant initiatives that have the potential to speed up developments in this sector, which is lagging behind the latest technological breakthroughs. Thus, a new practical step towards Mobility as a Service should have as a priority the pursuit of legislative amendments that can create a regulatory basis for all future actions.

¹³ Regulation (EC) No 1370/2007 of the European Parliament and of the Council of 23 October 2007 on public passenger transport services by rail and by road and repealing Council Regulations (EEC) Nos 1191/69 and 1107/70, OJ L 315, 3.12.2007, p. 1–13, see Recital 18.

¹⁴ Art. 3 (3) of the Treaty on European Union (TEU).

4.2 Competition law issues

In principle, EU competition law does not prevent PTs from offering MaaS or MaaS-related services. There are, nevertheless, certain rules such operators must observe if they wish to engage in these activities.

First, PTs must be aware of Article 101 TFEU and its equivalent provisions under the national laws of Member States, which prohibit anti-competitive practices and agreements, as cooperation between PTs and MaaS systems' operators could, under certain circumstances, be in violation of these provisions. For example, this could be the case if a cooperation arrangement led to an exchange of commercially sensitive information between competitors (e.g. between different transport operators of the MaaS system, provided that they are competitors or potential competitors) if it entailed price fixing or market sharing, also between competitors or potential competitors, or if it led to the application – within the MaaS system – of different conditions to competing transport operators, thereby placing some of them at a competitive disadvantage.

Second, in view of the market power (or even monopolistic position) some PTs could hold in many cities and regions across Europe, if PTs decided to engage in the provision of MaaS services (while continuing to be active in traditional transportation services), then they should observe the limits imposed by competition law to dominant companies under Article 102 TFEU (and its equivalent provisions under the national laws of Member States).

In this sense, for example, if a dominant PT were to control a MaaS system in a city or Member State and it decided to apply discriminatory access conditions *vis à vis* other transport operators or if it refused to give access to its actual or potential competitors, this could amount to an abuse of dominance prohibited under Article 102 TFEU or its equivalent provisions under national competition laws.

Finally, competition concerns could also arise as a result of the use made by a dominant PT of aid received from the state, the region or the municipality. By way of example, this could happen if the PT was to receive public funding for the provision of universal transport services and it were to use this aid to cross-subsidise MaaS services so as to apply predatory prices in this segment (i.e. prices that would not cover the real cost of the service and actual or potential competitors could not match without incurring losses). This is prohibited by state aid rules and Article 102 TFEU.

Some issues could also be triggered if public authorities were to provide state aid in violation of Article 107 TFEU for the provision of MaaS services to PTs. If this was the case, an analysis of all the circumstances of the measure should be carried out to ensure full compliance with EU state aid legislation.

Although, to the best knowledge of the author, there are no competition precedents dealing specifically with PTs and MaaS services, there are some cases concerning PTOs that can be useful to understand the framework within which PTs should act if they plan to engage in the provision of MaaS services.

4.2.1 Vertical agreements under Article 101 TFEU

Article 101 TFEU applies not only to horizontal agreements (i.e. between competitors) but also to vertical agreements (i.e. between companies operating at different levels of the distribution chain). However, as long as vertical agreements, such as distribution agreements, are concluded between competitors, the effects of these agreements on the relevant market and the potential competition issues can be similar to horizontal agreements¹⁵.

It is primarily the structure characteristics of the relevant market, the information exchanged as well as the market power of the parties to the agreement, which will determine whether a vertical agreement actually restricts competition. If the agreement is found to restrict competition, it could still be lawful as long as its benefits outweigh the anti-competitive effects of the agreement.

The exchange of commercially sensitive information can only be assessed under Article 101 TFEU if it establishes or is part of an agreement or a concerted practice between actual or potential competitors, or a decision by an association of undertakings. According to the *Commission staff working document on multimodal travel information, planning and ticketing services*, sharing commercially sensitive data between competitors on the multimodal transport market may adversely affect competition and infringe EU antitrust rules, and therefore it is necessary to take the appropriate safeguards¹⁶.

¹⁵ Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements (2011), point 12.

¹⁶ Commission staff working document: Towards a roadmap for delivering EU-wide multimodal travel information, planning and ticketing services (2014).

Data can either be shared directly between competitors, indirectly via a common agency or a third party or through the companies' suppliers or retailers. It must be emphasised that exchange of information to facilitate integrated ticketing schemes may be highly beneficial for consumers and market players. However, it is still necessary to tackle the existing uncertainties for companies as far as their cooperation agreements and potential violation of Article 101(1) TFEU are concerned.

In 2001, the French railway operator SNCF entered into a joint venture for the sale of tickets and other travel services online with the online travel agency Expedia. Based on their agreement, Expedia obtained privileged access to a website created by SNCF. In 2004, the parties established a joint subsidiary, Agence Voyages-sncf.com ("Agence VCS"). The French national competition authority found that the agreement between SNCF and Expedia aimed to restrict competition and was thus contrary to Article 101(1) TFEU¹⁷. As a result, both SNCF and Expedia were fined by the French consumer protection association ADC.

According to Article 23(2) of Regulation No. 1/2003, based on Article 103 TFEU, the European Commission may impose fines on companies for violation of Article 101 TFEU. Calculation of the fine is generally based on the gravity and the duration of the infringement. Therefore, besides imposing civil damages, PTs not complying with EU competition rules can be in certain cases sanctioned very heavily, including fines of up to 10% of annual turnover¹⁸.

Distribution agreements in the context of integrated ticketing may be able to escape the application of the Article 101(1) TFEU prohibition based on (i) the Vertical Block Exemption Regulation (VBER)¹⁹, as long as they meet the conditions set therein and their market share does not exceed certain thresholds, or (ii) an individual exemption, if the requirements of Article 101(3) TFEU are met.

The exemption provided under the VBER enables enterprises with market shares below 30% to enter the transport services market, even where vertical restraints are included in the agreements, provided that these restrictions do not qualify as hard core restrictions (i.e. very serious competition restrictions such as market sharing and certain territorial restrictions).

¹⁷ 09-D-06, Décision du 5 février 2009 relative à des pratiques mises en œuvre par la SNCF et Expedia Inc. dans le secteur de la vente de voyages en ligne.

¹⁸ European Commission, 'Fines for breaking EU Competition Law'. Accessible at: http://ec.europa.eu/competition/cartels/overview/factsheet_fines_en.pdf

¹⁹ Commission Regulation (EU) No 330/2010 of 20 April 2010 on the application of Article 101(3) of the Treaty on the Functioning of the European Union to categories of vertical agreements and concerted practices (2010).

MaaS operators, as specialised distributors, may also be able to provide services that are better tailored to end-users' needs²⁰ and therefore constitute an added value for end-users who would not otherwise be able to benefit from a similar service. Even if there are existing agreements between different transport operators, it must be first assessed whether they are actual or potential competitors in any market or whether they are merely engaging in an integrated ticketing scheme, and there is no appreciable effect on competition²¹.

All in all, MaaS operators must be able to access the same deals concerning tickets and services, such as mobile tickets and monthly tickets, as the ones offered to end-users by PTs.

4.2.2 Abuse of dominance under 102 TFEU

Article 102 TFEU prohibits the abuse by undertakings of their dominant position. In particular, Article 102 TFEU forbids the following types of abuse: (i) the imposition of unfair purchase or selling prices or trading conditions; (ii) the limitation of production, markets or technical development; (iii) the application of dissimilar conditions to equivalent transactions, and (iv) making the conclusion of a contract conditional on the acceptance of supplementary obligations with no connection with the subject of the contract. The content of article 102 TFEU has been mirrored in the domestic legal order of Member States.

If PTs are found to engage in any of these practices while holding a dominant position, then they could be found to be in breach of either Article 102 TFEU and/or its equivalent national provisions.

Although no competition precedents have been found regarding PTs and MaaS services as such, there are some decisions of the European Commission and the national competition authorities respectively dealing with abuses of PTs with regards to other services linked to transportation that help understand the limits dominant PTs must respect. Below are some examples of such cases.

²⁰ Communication from the Commission — Notice — Guidelines on the application of Article 81(3) of the Treaty (2004), point 72.

²¹ Communication from the Commission — Notice on agreements of minor importance which do not appreciably restrict competition under Article 101(1) of the Treaty on the Functioning of the European Union (De Minimis Notice) (2014); Case C-226/11, *Expedia Inc. v Autorité de la concurrence and Others*, ECLI:EU:C:2012:795.

a) Refusal to provide access to essential data/facilities

Refusal to provide access or the provision of discriminatory access to essential data/facilities by a dominant company is one of the conducts that can constitute abuse of dominance under Article 102 TFEU.

The first case in which the Commission expressly applied the essential facilities doctrine was in *B&I/Sealink*. According to this decision, the owner of the essential facility – Holyhead port used to provide transport services – was subject to a special duty²² of non-discrimination and therefore could not award its competitors with treatment less favourable than the one awarded to its own business activities²³.

Violation of Article 102 TFEU in these cases occurs where the requested data/facility is indispensable to operating the service²⁴, it prevents the emergence of a new product/service on the market for which there is a potential consumer demand²⁵, the refusal is not objectively justified, and the abusive behaviour is intended to reserve the secondary market to the incumbent operators²⁶.

Given that PTs usually have dominance or even monopolistic power in cities and regions across the EU, they should be aware that if they refuse to provide access to data on the transportation services they supply (e.g. timetables, prices, etc.) or access to other essential facilities (such as their ticketing systems) to potential MaaS Operators seeking to be active in the city or region, such action may qualify as a prohibited abuse of dominance.

In 2014, the German competition authority opened proceedings against Deutsche Bahn, after its competitors complained about limited access to the Deutsche Bahn's sales channels that meant that they were not able to sell their tickets at railway stations. The case concerned a possible abuse of dominant position by Deutsche Bahn under Article 102 TFEU and Sect. 19 German Competition Act (GWB). In 2016, Deutsche Bahn submitted commitments to change the sale of

²² Applicable to a downstream market.

²³ *B&I/Sealink*, Decision (interim measures) of 11 June 1992.

²⁴ Case C-7/97, *Oscar Bronner GmbH & Co. KG v Mediaprint Zeitungs- und Zeitschriftenverlag GmbH & Co. KG, Mediaprint Zeitungsvertriebsgesellschaft mbH & Co. KG and Mediaprint Anzeigengesellschaft mbH & Co. KG*, ECLI:EU:C:1998:569, paras 44-45.

²⁵ Joined cases C-241/91 P and C-242/91 P, *Radio Telefis Eireann (RTE) and Independent Television Publications Ltd (ITP) v Commission of the European Communities*, ECLI:EU:C:1995:98, paras 54-56; Case C-418/01, *IMS Health GmbH & Co. OHG v NDC Health GmbH & Co. KG*, ECLI:EU:C:2004:257, para. 49.

²⁶ *Ibid.*

train tickets and to also allow its competitors to sell tickets at railway stations²⁷.

Another case, that concluded with a decision in 2014²⁸, concerned a complaint submitted to the French competition authority by AS Voyages concerning a potential abuse of dominance by the incumbent SNCF. The proceedings ended with SNCF agreeing to a series of commitments to deal with its subsidiary voyages-sncf.com and competing with travel agencies on an equal footing. The commitments simplified and clarified the train-ticket distribution system and enabled travel agencies to apply conditions equivalent to those of voyages-sncf.com, particularly in terms of billing, payment and access to information. This allowed agencies, *inter alia*, to offer innovative reservation websites and tickets combining all different types of transport.

In 2008, the Spanish Competition Authority (CNC at the time) found that the company that was granted with an exclusive concession to manage the public South Bus Station of Madrid, ESAM, had engaged in abuse of dominance, thereby breaching the homologue provision of Article 102 TFEU under the Spanish Competition Act. The investigation was opened as a result of a complaint filed by road transport operator ANIBAL claiming that ESAM had refused to grant the latter a counter at the station to sell its bus tickets without justification. ESAM was controlled by the passenger transport company Auto Res, a direct competitor of ANIBAL. ESAM had the exclusive right to assign access to the services of the station (counters, platforms, commercial premises, etc.). The companies willing to provide services of transport of passengers by road needed to access such services for the purpose of their activity. The CNC concluded that by preventing ANIBAL from having access to a counter at the station, ESAM had engaged in unjustified discrimination, harmed the competitive position of ANIBAL, and abused its dominant position²⁹.

These cases show that refusal to provide access to existing sales interfaces or channels may constitute a breach of EU competition law if the service provider has a dominant market position and where such an interface or channel is essential for the provision of the service. Extrapolating these cases to a scenario where a dominant PTO launched a MaaS system of its own, if such PTO was to deny the information on its trips to competing MaaS systems or refuse

²⁷ B9-136/13, Bundeskartellamt erklärt von der Deutsche Bahn AG angebotene Verpflichtungszusagen im Zusammenhang Vertrieb von Fahrkarten für den Schienenpersonenverkehr nach § 32b GWB für verbindlich.
24.5.2016.

²⁸ 2 14-D-11, Décision du 2 octobre 2014 relative à des pratiques mises en oeuvre dans le secteur de la distribution de billets de train.

²⁹ 627/07, Estación Sur de Autobuses, Decision of 31 March 2008.

to include a transport operator competing with the PTO in the MaaS system, then there would be grounds to claim that such PTO is engaging in an abuse of its dominance contrary to 102 TFEU or the national corresponding provisions.

Since all major PTs, including underground transport, city buses and trains, are generally in a dominant position on the public transport market operating on essential facilities, they are obliged to provide access to their tickets and services to their competitors, i.e. MaaS operators. This obligation comes directly from the EU competition law and hence cannot be overruled by any sector-specific legislation on national level.

b) Margin squeeze

Abuses of dominance by PTs may also occur by way of a margin or price squeeze. This happens where a dominant company charges prices on an upstream market that do not allow equally efficient competitors to trade profitably on a lasting basis.

In 2013, the Commission³⁰ informed German rail incumbent Deutsche Bahn of its concerns that its subsidiary DB Engie was applying discounts for traction current (an essential input to provide railway transport services) that only railway companies belonging to its group could obtain. In the Commission's view, this practice could have prevented railway companies not belonging to Deutsche Bahn's group from competing profitably on the rail freight and long-distance passenger transport markets, thereby resulting in margin squeeze for Deutsche Bahn's competitors. Deutsche Bahn offered commitments to the Commission, which were made legally binding, and committed to introducing a new pricing system for traction current that would apply on a non-discriminatory basis to all railway companies.

In 2017, the Spanish rail incumbent RENFE was fined by the Spanish Competition Authority³¹ (CNMC) for an abuse of dominance in the Spanish retail market of freight transport by rail and in the Spanish wholesale market of rail traction for freight transport by rail, in breach of Article 102 TFEU and its Spanish homologue. The CNMC found that RENFE had commercially discriminated third party rail operators with regards to the traction services it provided, as compared to the conditions RENFE applied to Deutsche Bahn, with which it had entered in a series of agreements.

³⁰ Case AT.39678/AT.39731 — Deutsche Bahn I/II, Decision of 18 December 2013.

³¹ S/DC/0511/14 RENFE OPERADORA, Decision of 28 February 2017.

Transposing these cases to PTs and MaaS systems: if a dominant PT that runs a MaaS system were to only apply discounts to the transport operators related to the PT, but not to others, so as to make it impossible for third party transport operators to provide their services profitably through the MaaS system, then there would be grounds to argue that the PT has engaged in abuse of its dominant position on the market, in breach of Article 102 TFEU or the equivalent national provision.

Consequently, to avoid violation of Article 102 TFEU by price squeeze, PTs have an obligation to price their tickets and services for MaaS operators lower than those for end-users, including a sufficient margin, in order to enable MaaS operators to conduct their business activities.

c) Predatory prices: Selling at a loss

In 2008, the UK Competition Authority³² (OFT) decided on a complaint filed in 2004 by the bus company 2 Travel against Cardiff Bus, the former incumbent bus operator, solely owned by Cardiff Council. 2 Travel had argued that after it entered into the bus market with a new no-frills/low-cost bus service, Cardiff Bus introduced its own no-frills/low-cost bus service. According to the complainant, buses of Cardiff Bus issued the same itineraries and at similar times as 2 Travel's no-frills services and were run at a loss until shortly after 2 Travel's exit, when Cardiff Bus withdrew them. The OFT concluded that Cardiff Bus had reacted to 2 Travel's entry by introducing its new service and offering it at predatory prices with the aim of expelling the new entrant from the market, rather than for making profits or fulfilling any other legitimate commercial strategy. The OFT's investigation confirmed the complainants' claims. Thus, the OFT established that the conduct (i) had contributed to maintaining and strengthening its dominance, (ii) was predatory and (iii) constituted an abuse of Cardiff Bus's dominant position.

Similar to cases of margin squeeze discussed above, if a dominant PT were to provide MaaS services at a loss so as to exclude other MaaS providers from the market, there would be grounds to file a complaint for abuse of dominance against the PT.

4.3 State aid law and public procurement issues

In order to understand any possible implications concerning access to the market for MaaS operators, it is necessary to understand how public transport generally operates.

³² CA98/01/2008 Cardiff Bus, Decision of 18 November 2008.

Public transport is contractually organised by means of public procurement procedures, where the provision of public service is either vested in the public transport authority (relevant municipality in urban transport) or delegated to a private sector operator via an open tendering procedure. At the EU level, transport services are regulated under the Directive 2014/25/EU³³, which defines ‘special or exclusive rights’ allocated by the contracting authority to an undertaking as limiting the exercise of the market activities to one or more entities, thus substantially affecting the ability of other entities to enter the market³⁴. It is to be noted that the allocation of rights is a one-way process in so far as it is done by a decision of a competent authority in a Member State. The creation of innovative partnerships is therefore completely within the discretion of the contracting entity, i.e. the authorities or public undertakings.³⁵

The question of whether a PT, which benefits from state aid, can expand its services and become a MaaS aggregator must be replied affirmatively. Indeed, the fact that a PT is a state aid beneficiary does not, in principle, prevent it from engaging in other types of services.

Nevertheless, competition concerns may arise under certain circumstances involving state aid granted to a PT.

Although no specific precedent concerning state aid, PTs and MaaS services exists in this regard, some examples of the type of competition concerns that could arise in this scenario are provided below.

a) Cross-subsidisation and state aid

Engaging in cross-subsidisation is not illegal or anti-competitive *per se*³⁶. However, under certain circumstances, such practice can be found to breach Articles 102 TFEU and/or 107 TFEU.

By way of illustration, if a dominant PT were receiving (lawful) state aid for the provision of, for example, universal transport services and it started to use such aid to subsidise other services

³³ Directive 2014/25/EU of the European Parliament and of the Council of 26 February 2014 on procurement by entities operating in the water, energy, transport and postal services sectors and repealing Directive 2004/17/EC, Article 11.

³⁴ *Ibid* at Article 4.

³⁵ Art. 49 of the Directive 2014/25/EU.

³⁶ “Study on the implementation of Regulation (EC) N° 1370/2007 on public passenger transport services by rail and by road”.

(e.g. the operation of a MaaS system) in order to offer these services (the MaaS) at prices below cost so as to eliminate or prevent competition, then the PT could be engaging in cross-subsidising and abusing its dominant position in a related market to strengthen its position in another market.

Such cross-subsidisation from reserved services (e.g. universal transport services) to commercial services (e.g. MaaS services) can therefore entail a breach of Article 102 TFEU³⁷.

As the General Court of the EU explained: “*The proper application of EU law assumes a determination of whether the revenue from a lawfully subsidised activity does not serve to finance other activities carried out by the same undertaking [...] the Commission has a certain discretion in deciding on the most appropriate method for making sure that the competitive activities do not receive any cross-subsidy.*”³⁸

Hence, if a dominant PT is benefiting from state aid for the provision of transportation services and there are grounds to believe that it is using such aid to subsidise MaaS services, so as to apply prices below the cost of such services, there would be room to file a complaint for potential breach of Article 102 TFEU.

b) Services of General Economic Interest (SGEI)

If a PT were to receive state aid in the sense of Article 107 TFEU³⁹ to provide MaaS services, this would most likely require notification of the measure to the European Commission in order for the measure to be approved.

To avoid the notification requirement, authorities may argue that the public funding for the provision of MaaS services would amount to compensation for providing public services and as such would not constitute state aid in the sense of Article 107(1) TFEU. In other words, it may be claimed that MaaS would, as some transport services do, qualify as services of general economic interest (SGEI) or as ancillary to SGEI.

SGEIs are defined by the Commission as “*economic activities which deliver outcomes in the*

³⁷ Case T-175/99, *UPS Europe v. Commission*, ECLI:EU:T:2002:78, para.61.

³⁸ Case T-143/12, *Germany v Commission*, ECLI:EU:T:2016:406, para 75.

³⁹ For public aid to constitute state aid in the sense of article 107(1) TFEU, it is necessary that four conditions are cumulatively met: (i) transfer of state resources, (ii) provision of an advantage to the beneficiary, (iii) selectivity of the measure, and (iv) impact on the internal market.

*overall public good that would not be supplied (or would be supplied under different conditions in terms of objective quality, safety, affordability, equal treatment or universal access) by the market without public intervention*⁴⁰.

As a general rule, Member States can determine services that constitute a SGEI. Despite this, the Commission⁴¹ considers that where there are other undertakings operating under normal market conditions, not entrusted with an SGEI, which already provide or can provide a service satisfactorily and under conditions consistent with the public interest, then it would not be appropriate to attach a public service obligation to such a service.

For a measure to be considered as public service compensation, fall outside of the scope of Article 107(1) TFEU and qualify as SGEI, the four conditions set out by the Court of Justice of the EU in the *Altmark*⁴² case must be met:

1. the beneficiary must have public service obligations to discharge and these obligations must be clearly defined.
2. the criteria on the basis of which the compensation is calculated must be established in advance in an objective and transparent manner.
3. the compensation cannot exceed what is necessary to cover all or part of the costs incurred in the discharge of public service obligations.
4. where an SGEI mission is not entrusted to an undertaking pursuant to a public procurement procedure, the level of compensation must be determined on the basis of an analysis of the costs which a typical undertaking, well run and adequately provided with means to meet the necessary public service requirements, would have incurred in discharging those obligations, taking into account the relevant receipts and a reasonable profit for discharging the obligations.

In case a Member State decided to grant state aid to a PT for the provision of MaaS services, an analysis of the abovementioned rules would be necessary to ensure its compatibility with EU state aid rules.

⁴⁰ Guide to the application of the European Union rules on state aid, public procurement and the internal market to services of general economic interest, and in particular to social services of general interest, SWD(2013) 53 final/2, p.21.

⁴¹ Ibid, p.26.

⁴² Case C-280/00, *Altmark Trans GmbH and Regierungspräsidium Magdeburg v Nahverkehrsgesellschaft Altmark GmbH*, ECLI:EU:C:2003:415.

4.4 Data protection

Data security and protection issues have been raised and discussed already in 2008 with the adoption of the European Commission's *Action Plan for the Deployment of Intelligent Transport Systems in Europe*⁴³. Thus, Action Area 5 of the Action Plan was specifically dedicated to data security and protection and formulated a dilemma, which has not yet been completely resolved: "[...] handling of data (notably personal and financial data) in ITS applications raises a number of issues, as citizens' data protection rights are at stake. At the same time, data integrity, confidentiality and availability must be ensured for all parties involved, especially citizens."

The European Data Protection Supervisor (EDPS) expressed data protection concerns in relation to the adoption of the ITS Directive⁴⁴, emphasising that ITS are based on the collection, processing and exchange of a wide variety of data from public and private sources and therefore constitute a data intensive area.⁴⁵ The ITS Directive itself obliges the Member States to ensure that the processing of personal data in the context of the operation of ITS applications and services is carried out in accordance with the EU rules protecting fundamental rights and freedoms of individuals, in particular Directive 95/46/EC and Directive 2002/58/EC.⁴⁶

In its 2014 Progress Report and review of the ITS Action Plan⁴⁷, the Commission upheld and further promoted the **privacy-by-design** approach, proposed earlier by the EDPS, which means that the design of ITS applications and systems should be done in a way that duly takes into account privacy and data protection considerations. The Commission also proposed the preparation of instruments such as a **privacy impact assessment template** for ITS.

The entry into force of the General Data Protection Regulation (GDPR)⁴⁸ harmonised the data protection regime across the EU and introduced one of the highest personal data protection standards in the world: lawful, fair and transparent data processing; limitation of purpose, data and storage; data subject rights; data subject consent; personal data breaches register; privacy

⁴³ COM (2008) 886 final.

⁴⁴ Opinion of the European Data Protection Supervisor on the Communication from the Commission on an Action Plan for the Deployment of Intelligent Transport Systems in Europe and the accompanying proposal for a Directive of the European Parliament and of the Council laying down the framework for the deployment of Intelligent Transport Systems in the field of road transport and for interfaces with other transport modes, OJ C 47, 25.2.2010, p. 6.

⁴⁵ Ibid, Section 1.3. (8).

⁴⁶ Art. 10 of the ITS Directive.

⁴⁷ SWD(2014) 320 final.

⁴⁸ Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC rt. 10, the ITS Directive, OJ L 119, 4.5.2016, p. 1–88.

by design; data protection impact assessment; data transfers security; mandatory data protection officer in organisations with significant processing of personal data; awareness and training obligations. Since data, including personal data, is at the heart of any MaaS ecosystem, questions concerning compliance with the GDPR are inevitably on the table.

The MaaS Alliance has already identified a number of functionalities, for which a MaaS ecosystem will be in a situation of data processing, including processing of personal data, among which user account management; optimal routing, taking into account current traffic and transport conditions, disruptions, accessibility requirements; reservation and bookings; payment; digital ticketing, etc.⁴⁹

In a 2017 research paper Federico Costantini provided concrete, although debatable, examples of potential GDPR issues arising out of tracking users along their routes: “[...] a user’s destination could be a cult temple or the office of a syndicate, a political party or a civil organisation.”⁵⁰ He argues that data concerning such trips could fall into the prohibition of Article 9 (1) of the GDPR.

To meet the GDPR standards, MaaS ecosystems should have in place appropriate compliance measures. Those could take the form of measures already discussed and proposed⁵¹ and arguably, in a first step, a data protection impact assessment (DPIA) should be carried out in accordance with Article 34 of the GDPR. Other appropriate measures are issuing codes of conducts and developing data protection certification seals and marks in the field, introduced as per Article 40 of the GDPR.

In conclusion, while nothing in the EU data protection legislation prevents the launching and functioning of any type of MaaS operator models, compliance measures should be put in place in advance to prevent any potential breach of EU and/or national data protection legislation.

⁴⁹ MaaS Alliance, *Data makes MaaS happen - MaaS Alliance Vision Paper on Data* (November 2018). Accessible at: <https://maas-alliance.eu/wp-content/uploads/sites/7/2018/11/Data-MaaS-FINAL-after-plenary-1.pdf>

⁵⁰ Federico Costantini, *MaaS and GDPR: an overview*. Accessible at: <https://arxiv.org/ftp/arxiv/papers/1711/1711.02950.pdf>.

⁵¹ Including the measures identified in the 2018 MaaS Alliance vision paper *Data makes MaaS happen*.

4.5 Contractual law barriers and proprietary rights to data access

While it is widely expected that the public sector will support open data policies⁵², the private sector is generally more hesitant to enable data sharing. Many private-sector mobility providers see a competitive advantage in keeping data proprietary. Where interoperable and integrated systems already exist, the technology of these systems is proprietary and cannot be accessed by other service providers.

For any type of service, it is necessary to make a distinction between the sharing of data for information purposes on the one hand, and for distribution purposes on the other. For distribution, an agreement is necessary. The notion has also been taken into account by Regulation 1926/2017 that considers that only information data can be requested to be published by the National Access Points (NAPs).

Distribution agreements are also necessary due to the fact that for rail and air transport, prices are yielded, which means that the price changes based on demand, the date of departure, and various other factors. Such yielded prices are available only to distributors under specific distribution agreements.

Distribution of tickets requires an agreement with the service provider. Recently, the decision of the Paris Commercial Court prevented the online travel agent lastminute.com from selling Ryanair tickets without the consent of the airline and using information on its website for commercial purposes (screen scraping).⁵³

However, also concerning information, contractual arrangements adopted by one operator to prevent the use of its public data have been allowed by the EU Court of Justice (CJEU) under the recognition of contractual protection of databases.⁵⁴ Where data, including fares, are accessible, the owner of the data can lawfully impose contractual limitations to their commercial use. Database protection and *sui generis* rights, in general, are not applicable to databases such as those containing travel information. However, the CJEU has clarified that the lack of applicability of EU provisions does not preclude the author of such a database (in the case of Ryanair) from establishing contractual limitations on its use by third parties, without prejudice to

⁵² Transport operators in general are obliged to publish their timetable and fares but there is no obligation to grant third-party access.

⁵³ Paris Commercial Court, 6 April 2018.

⁵⁴ Judgement of 15 January 2015, C-30/18, Ryanair Ltd v. PR Aviation BV, EU:2015:10.

the applicable national law.⁵⁵ Therefore, transport service providers may exclude third parties from the use of their database to provide a journey planner or other travel service.

5 The key role of ticketing (Question 2)

The second research question, which needs to be answered, is whether there is any EU legislation that would restrict PTs from offering all of their tickets (including subsidised tickets, if such are available) to end-users through MaaS Operators and what are the conditions that apply in such a case.

The legal issues raised by this question concern mainly the powers of the PTs to organise public transport, including public transport mobility. This issue has already been addressed under section 4.1. above; hereinafter we address the multimodal interoperable ticketing and the public service obligations.

5.1 Multimodal interoperable ticketing

The Intelligent Transport Systems (ITS) Directive 2010/40/EU was adopted to accelerate the deployment and operational use of interoperable innovative transport technologies across Europe, while Member States are free to decide in which systems to invest. The Directive refers to multimodal interoperable ticketing, where public transport authorities in cooperation with private sector operators can develop their own ITS architecture for mobility at national, regional or local level⁵⁶. The Commission Delegated Regulation (EU) 2017/1926 further sets the conditions on accessibility of data and data sharing.

Since no sound legislative framework on multimodal integrated ticketing services exists at EU level, the European Parliament urged the European Commission to take the necessary legislative actions in support of the voluntary agreements already made by the competent authorities and other stakeholders, if there is no significant progress in creating integrated, interoperable multimodal, cross-border ticketing systems at Member States level by 2020⁵⁷.

⁵⁵ Ibid, Ryanair Ltd v PR Aviation BV, para. 45.

⁵⁶ Directive 2010/40/EU of the European Parliament and of the Council of 7 July 2010 on the framework for the deployment of Intelligent Transport Systems in the field of road transport and for interfaces with other modes of transport, para. 23 of the preamble.

⁵⁷ European Parliament Report on delivering multimodal integrated ticketing in Europe (2014/2244(INI)), 12 June 2015.

In November 2017, after an open public consultation, the European Commission published an evaluation of the Directive 2010/40/EU. The results of the evaluation showed a need for simplification of ticketing for public transport and paratransit, the use of mobility services from different providers and across borders, and e-ticketing systems⁵⁸.

Since there are no obstacles at the level of EU law, which would prevent opening the market in multimodal integrated ticketing, it is likely that the European Commission will initiate a legislative proposal to complement the ongoing voluntary initiatives in the near future. This once again poses a burden on the institutional side with regard to the creation of a normative precondition for the facilitation of a new e-ticketing system.

5.2 Public service obligations (PSOs)

Since the public transport authority is responsible for the financial risks associated with operating public transport services, compensation awarded to the operators plays a crucial role. Compensation is granted directly or indirectly by a competent authority from public funds during the period of implementation of a public service obligation or in connection with that period. However, it has proved to be rather problematic to integrate state subsidised mobility services with commercial services. Due to subsidisation, non-PSO undertakings have very limited access to the ticketing market, as there is generally no separate commercial market for ticketing.

Companies providing services of general economic interest are subject to state aid rules in accordance with Article 106(2) TFEU, which apply to maritime and air transport sectors. State aid (subsidisation) provided for public service obligations (PSO) in land transport is covered by *lex specialis* under Article 93 TFEU, which renders any compensation for the discharge of public service obligations compatible with the internal market. Regulation (EC) No 1370/2007 on public passenger transport services by rail and by road complements the general rules on public procurement. This Regulation sets the conditions according to which competent authorities compensate public service operators for costs incurred and/or grant exclusive rights in return for the provision of public service. In any case, revenues from the sale of tickets or from the sale of refreshments must be deducted from the costs for which compensation is claimed.

Regulation (EU) 2016/2338 amending Regulation (EC) No 1370/2007 on the opening of the market for domestic passenger transport services by rail stipulates that operators shall provide

⁵⁸ European Commission – DG MOVE, Evaluation of the ITS Directive 2010/40/EU: Analysis of responses to the Open Public Consultation – 2nd Draft, 15 November 2017.

competent authorities with the necessary information for the award of public service contracts in tendering procedures, while ensuring the legitimate protection of confidential business information. By the same token, the authorities shall make available relevant information under a competitive tendering procedure, including information on passenger demand, fares, costs and revenues related to public passenger transport, and details of the infrastructure specifications to enable the operators to draft well-informed business plans.

It must be observed that subsidisation of urban public transport is deemed necessary to incentivise the provision of service, where the production costs may often exceed the price of the service. The role and the level of PSO are set in the contract between the public transport authority and the PSO service provider. Therefore, it is also up to the public transport authorities to establish appropriate pricing schemes including subsidisation in cooperation with MaaS operators.

6 Price discrimination under competition law (Question 3)

The third research question essentially elaborates on price discrimination and whether PTs are required, in accordance with EU legislation, to make their tickets available to end-users through MaaS Operators. It presents several possible scenarios imposing different obligations on the PTs:

- a) the selection of the tickets offered for MaaS Operators must include all tickets that the PTs offer (directly or indirectly) through their other distribution channels (e.g. refusal to supply products/services);
- b) the obligation of PTOs to open their technical interfaces, through API or otherwise, to MaaS Operators in order to integrate PT tickets in the MaaS offering and what are the legitimate and non-legitimate conditions imposed on the PTOs for this obligation (e.g. non-objective justifications not to supply some products/services);
- c) the price paid by the MaaS Operators for PT tickets cannot be higher than the consumer price, deducted by a reasonable margin (e.g. price squeeze);
- d) when defining the price paid by the MaaS Operators for the PT tickets, similar pricing principles that are applied to other distribution channel partners must be followed (e.g. obligation of non-discrimination);
- e) all MaaS Operators must be governed by similar principles and also by similar principles that are applied to their distribution channel partners (e.g. equal treatment obligation).

Price discrimination is covered by Article 102(c) TFEU, which refers to “applying dissimilar conditions to equivalent transactions with other trading parties, thereby placing them at a competitive disadvantage” or vice versa, the application of similar conditions to unequal transactions⁵⁹. Hence, certain forms of price discrimination can be considered as abuse of dominance. However, a case-by-case approach may be necessary to properly assess pricing measures designed to harm the competitors of the dominant PT⁶⁰.

Third parties acting as sales channels can enter into cooperation agreements with public transport operators. However, when it comes to PSO services, public transport authorities have the discretion to set the rules and define the ticket prices, which may differ significantly not only between Member States, but also between regions.

It must be noted that in some modes of transport, namely rail and air transport, ticket prices change based on a variety of factors, such as demand, the date of departure. Such prices are available only to distributors under distribution agreements.

As demonstrated by the decisions of the national competition authorities and the applicable CJEU case law (section 4.2. above), even where agreements for the execution of SGEI are covered by the Article 101(3) exemption, public transport operators are still expected to behave competitively in the pricing of their tickets. Public transport operators, which already have a dominant position on the market for public transport, may sometimes find themselves in a situation of likely abuse. To avoid the breach of Article 102 TFEU, public transport operators must open the market for ticket sales to interested third party intermediaries. Judicial proceedings may be brought before the courts, as the authorities in the Member States retain their broad autonomy in the provision, commissioning and organisation of services of general economic interest.⁶¹

EU competition rules ensure that public transport ticketing schemes do not exclude operators or form barriers that restrict the ability of new operators to enter the market. There is a general requirement that a ticketing scheme is open to all potential operators wishing to be active on the ticketing market. Operators can be excluded from participating on the market only on the basis of objective, transparent and non-discriminatory grounds for exclusion.

⁵⁹ ECJ, 17 July 1963, Italian Republic v Commission, 13-63, ECR-165 in the context of the ECSC Treaty.

⁶⁰ D. Geradin and N. Petit, Price Discrimination under EC Competition Law: The Need for a case-by-case Approach, The Global Competition Law Centre Working Papers Series GCLC (Working Paper 07/05,

⁶¹ Protocol No 26 on services of general interest, annexed to both the TEU and the TFEU.

When defining the price of public transport tickets paid by intermediaries, including MaaS operators, the public transport operators should apply similar pricing principles as the ones applied to their own distribution channels. This means that public transport operators must adhere to the principles of non-discrimination and equal treatment on the ticket selling market. Specific regulations on pricing are left to the Member States.

As a result, all MaaS operators must be treated in a non-discriminatory way. This means that differences in treatment of market players offering mobility services are not justified, unless based on objective grounds⁶², such as acceptance of cost-based volume discounts or refusal to sell the tickets where the MaaS operator has not paid its bills.

7 Liability concerns (Question 4)

The last research question addresses liability issues of PTs and whether they are permitted, under current EU legislation, to limit their liability for damages towards such travellers that have purchased public transport tickets from a MaaS Operator (that way passing part of their normal liability for traveller's damages to the MaaS Operator) or whether their liability for damages towards travellers must remain the same regardless of the ticket being purchased directly from the PT or indirectly through the MaaS Operator.

Similar to data security and protection issues, liability issues have been raised with the first programming documents: The 2008 Action Plan for the Deployment of Intelligent Transport Systems in Europe⁶³ and its follow-up, the 2014 Progress Report and review of the ITS Action Plan. The Action Plan addresses liability issues pertaining to the use of ITS applications and notably in-vehicle safety systems as part of Action Area 5. The 2014 Progress Report concludes that specific attention should be given to multi-stakeholder's applications, such as cooperative systems and multimodal journey planning applications.⁶⁴

EU legislation on passenger rights covers travel by air, rail, ship, and bus and coach. However, different rules on passenger rights in case of cancellations, delays, missed connections and loss of baggage apply to different modes of transport. The highest level of protection is provided

⁶² Pinar Akman, 'To Abuse, or not to Abuse: Discrimination between Consumers' (ESRC Centre for Competition Policy and School of Law, University of East Anglia 2006).

⁶³ Action Plan for the Deployment of Intelligent Transport Systems in Europe, op. cit.

⁶⁴ Progress Report and review of the ITS action plan op. cit., p. 14.

in air transport⁶⁵, while local public transport offers only minimum protection to passengers under national law⁶⁶. This leads to legal uncertainties concerning the allocation of liability among carriers involved in an integrated multimodal journey, in particular when combining urban transport with long-distance travel.

Currently, there are no EU rules that allocate liability among different modes of transport for a multimodal journey. Under the existing legislation, liability for loss or damage generally rests upon the operating carrier unless it took all reasonable measures to avoid the loss or damage, or if such a loss or damage was unavoidable⁶⁷.

Contractual arrangements have already been introduced on rail-air integration. The French high-speed train company TGV offers a TGV Air package combining three services in one, namely train, plane and taxi. This means one single point of contact, one single booking, one single ticket and one single fare. Liabilities in case of a missed connection or a flight delay are shared between the transport providers Air France and SNCF⁶⁸.

In Germany, a city ticket covers long distance rail and public transport within 120 cities⁶⁹. However, it is not clear how liabilities are attributed in the case of a missed train connection caused by the delay of urban transport service and it is possible to take the next train, especially for trains where prior reservation is mandatory.

A possible obstacle of the MaaS model is the fact that various transport modes are covered by a single ticket. Consequently, it leads to legal uncertainty on the part of end-users, who do not

⁶⁵ Regulation (EC) No 261/2004 of the European Parliament and of the Council of 11 February 2004 establishing common rules on compensation and assistance to passengers in the event of denied boarding and of cancellation or long delay of flights, and repealing Regulation (EEC) No 295/91.

⁶⁶ e.g. London Transport Act 1982 and the London Cab Order 1934 specify the period of time for which the public transport authority in London can hold lost property, their right to charge and collect fees, and the information required from customers before releasing items.

⁶⁷ See: Regulation (EC) No 889/2002 of the European Parliament and of the Council of 13 May 2002 amending Council Regulation (EC) No 2027/97 on air carrier liability in the event of accidents; Regulation (EC) No 1371/2007 of the European Parliament and of the Council of 23 October 2007 on rail passengers' rights and obligations; Regulation (EU) No 1177/2010 of the European Parliament and of the Council of 24 November 2010 concerning the rights of passengers when travelling by sea and inland waterway and amending Regulation (EC) No 2006/2004; Regulation (EU) No 181/2011 of the European Parliament and of the Council of 16 February 2011 concerning the rights of passengers in bus and coach transport and amending Regulation (EC) No 2006/2004.

⁶⁸ AirFrance, 'Air&Rail Combined Trips':

https://www.airfrance.fr/FR/en/common/resainfovol/avion_train/reservation_avion_train_tgvair_airfrance.htm (last accessed on 8 March 2019).

⁶⁹ DeutscheBahn, 'City-Ticket and City mobil: Your local transport tickets for Germany':

<https://www.bahn.com/en/view/offers/germany/tickets-for-local-transport.shtml> (last accessed on 8 March 2019).

know which service contract applies to them and what passenger rights they can benefit from.

We agree with the opinion expressed in the 2017 White paper of the MaaS Alliance that the distribution of liabilities shall in principle remain unchanged within the MaaS system.⁷⁰ Upon agreement, the MaaS operator may be liable for the entire trip where liabilities result from the aggregation of transport services providers – e.g. one leg of the trip is cancelled and therefore the whole trip is cancelled. In addition, the MaaS operator can sign up for an insurance policy to cover end-users regardless of the mode of mobility used, while each transport service provider will need to maintain individual liability insurance⁷¹.

Nevertheless, there seems to be a need for new rules that would cover the distribution of risks and liabilities between different legs of an integrated journey, taking into account the existing regulations and other objective criteria.⁷² Alternatively, combined tickets facilitating a connected journey instead of a single could be considered. This would remove issues concerning the liability of various transport operators in the MaaS system.

⁷⁰ MaaS Alliance, 'White Paper: Guidelines & Recommendations to create the foundations for a thriving MaaS Ecosystem' (September 2017), p. 7.

⁷¹ *Ibid.*

⁷² Please see also: MaaS Alliance, *Passenger Rights in Multimodal Transport - MaaS Alliance Vision Paper* (September 2018). Accessible at: <https://maas-alliance.eu/wp-content/uploads/sites/7/2018/09/Vision-Paper-on-Multimodal-Passenger-rights-240918-FINAL.pdf>.

Annex

Methodology

The study has been conducted using the following set of methods: literature review; legal interpretation; and development of legal arguments. The literature review comprised a significant number of sources including:

- Primary sources: relevant legislative instruments, case law and authoritative interpretation;
- Secondary research (e.g. systematic reviews or non-systematic literature reviews that include types of primary study design specified above; decision-analytic models); and
- Tertiary research (e.g. overviews of systematic review or non-systematic literature reviews that include types of primary study design specified above).

We used the standard modus of legal interpretation and analysis, which include:

- Grammatical interpretation: when interpreting provisions of a legal instrument, a lawyer usually starts from the wording of the provision and even if the wording of a provision reveals its meaning clearly, it is then to be examined whether the result of the literal interpretation is confirmed by the meaning of the words in their context. It could well be that the wording only superficially has a clear meaning. At any rate, a literal interpretation must not contradict the purpose of the provision.
- Logical way of interpreting: it corresponds to the logical structure of the acts and employs the laws of formal logic. Here are some specific methods used:
 - *Argumentum a fortiori*. For example, if driving 10 km over the speed limit is punishable by a fine of 100 euros, it can be inferred *a fortiori* that driving 20 km over the speed limit is also punishable by a fine of at least 100 euros.
 - *Argumentum a contrario*, also known as appeal from the contrary. It denotes any proposition that is argued to be correct, because it is not disproven by a certain case.
 - The logical right to equality of two cases or legal interpretation by way of analogy. In practice, this is a method of inference or an argument from one particular to another particular.
- Systematic way of interpretation: in applying this method of interpretation, the meaning of the wording in question must be established in the context of the relevant provision

itself. In addition, the provision as such must be interpreted, taking into account its position and function within a coherent group of related legal norms.

- Teleological interpretation: the method entails the construction of the legislative provisions in the light of their purpose, values, and the legal, social and economic goals they aim to achieve.



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