



Regulation of For-Hire Passenger Transport

Portugal in International
Comparison



Case-Specific Policy Analysis

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The International Transport Forum

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International Transport Forum
2, rue André Pascal
F-75775 Paris Cedex 16
contact@itf-oecd.org
www.itf-oecd.org

Case-Specific Policy Analysis Reports

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Executive Summary

What we did

On the request of the Portuguese Institute for Mobility and Transport, the International Transport Forum (ITF) reviewed legislation and regulatory frameworks for taxi and for-hire transport services in several relevant countries. The sample centred on jurisdictions where there are currently tensions between incumbents and market entrants following the introduction of app-based, demand-responsive mobility services. The objective of the report is to provide input for discussions on a potential revision of existing regulation of for-hire passenger transport services in Portugal, which pre-dates the introduction of commercial transport apps (CTAs).

The report builds on an analysis of national cases collected by the ITF and the International Road Transport Union (IRU). It also draws extensively on work done in the context of an ITF Corporate Partnership Board (CPB) project, specifically on the results of a workshop on “Principles for the regulation of for-hire road passenger transport services” held in November 2015, and on the ensuing report *App-based Ride and Taxi Services: Principles for Regulation* (May 2016). Relevant sections are common to both reports; these sections are shown as indented text.

What we found

The arrival of new technology-enabled for-hire mobility services has blurred the lines between the formerly distinct markets for street-hail and dispatch services. Dedicated smartphone apps allow a better matching of supply and demand for mobility services. They also provide a high degree of transparency, predictability and ease of use for passengers. For drivers they provide the opportunity of highly flexible work arrangements and increased security (no anonymous passengers).

The popularity of app-based services has eroded the market share of traditional operators, hence leading to lost income for taxi operators and a decline in the value of taxi licences where these are tradable, as is the case (indirectly) in Portugal. The entry of new service providers into well-established, highly regulated markets has thus caused significant friction and generated calls to exclude such services. Notably the claim by app-based platforms that they merely serve as middlemen who put potential passengers and independent drivers into contact via their smartphone app is contested. Critics argue that these new operators ultimately exert employer-like control over drivers. Court cases or administrative proceedings regarding this dispute are pending in several jurisdictions in both the United States and in Europe. Public debate on how to regulate CTAs has been emotional and sometimes resulted in physical violence.

The benefits of booking a ride via an app accrue to passengers whether the app connects to a new mobility service platform or to a traditional taxi service. But the asymmetry between highly regulated local operators (taxis) and lightly regulated international firms (CTAs) creates an uneven playing field: for instance app-based platforms with access to a flexible car and labour pool and none of the fare regulation that is typical for many taxi markets can provide extra capacity through variable (“surge”) pricing during demand peaks in a way that taxis cannot.

Whether regulation of CTAs should be expanded or regulations of taxis scaled back will ultimately depend on how authorities judge public policy objectives are best achieved – with more, less or different forms of regulation for both CTAs and taxis.

What we recommend

Steer policy development towards mobility services that allow efficient achievement of public policy objectives regarding the needs of consumers and society

Regulations should enable the development of innovative services to contribute towards public policy objectives such as equitably improving mobility, safety, consumer welfare and sustainability. This will likely entail lightening entry controls for the for-hire transport market and fares regulation for dispatched taxi services and require continued oversight for services obtained via street hail/rank, which are marked by lack of effective consumer choice. New types of regulation for non-taxi hire vehicles compared to those currently in force in most markets will be needed.

Encourage innovative and more flexible regulation of for-hire transport services

To the extent that new technology or other alternative approaches can deliver on public policy objectives, including consumer protection, in the place of currently required rules, regulations should be adapted, streamlined, replaced or removed.

Embrace data-led regulation to improve societal outcomes

Regulators should leverage data-led regulation as a way of providing a lighter and more flexible approach to achieving public policy objectives. Operators able and prepared to provide regulators with data relevant for the delivery of public policy outcomes should be allowed to operate under a “data rich, regulation light” framework.

Keep the regulatory framework of for-hire passenger transport services as simple and uniform as possible

Regulators should avoid creating different categories of for-hire transport providers. If differentiations are required, these should be made explicit, substantiated and frequently reviewed. Regulators should seek to adapt frameworks to better deliver on policy objectives in innovative ways and not simply preserve the regulatory status quo. But it is recognised that in Portugal for the short term two regulatory frameworks make sense: one traditional “data poor, regulation heavy”, and another “data rich, regulation light”, with easy transfer from the former to the latter for the taxi operators who are able and willing to abide by the corresponding rules.

Introduction

Portugal has requested the International Transport Forum (ITF) to carry out a Case Specific Policy Analysis Project, entitled “Review of the Legislation and Regulatory Framework for Taxi and for-hire transport services”. This study provides input for the ongoing policy-making process to possibly revise regulations that were developed before the arrival of new app-enabled demand-responsive mobility services and platforms.

The topic of this study is the source of significant tension in many countries around the world at this time, largely as a result of the commercially successful introduction in the market of new types of demand-responsive mobility related services. These tensions are particularly acute since these new entrants provide similar services as incumbent taxi operations but under different modalities than those envisaged in the current set of governing regulations. Caught between the discontent of incumbents regarding what they view as unfair competition and new entrants who argue that their services are materially and qualitatively different to those offered by incumbents, and in light of public support for the new services, authorities are under pressure to act. They have in some cases been able to adjust or adapt current regulations to provide a legal framework for the operation of new services, in other cases have limited these operations, and in some instances have rendered these new services outright illegal. Judiciary dispute has been launched in many, possibly most, situations, across multiple continents.

In a more strategic sense, the current disruption of taxi markets by app-enabled platform services is only one of many possible disruptions that cities will experience in coming years in the offer of transport and mobility services. Work undertaken by the ITF on the impacts of shared mobility systems shows that when accompanied by adequate and purposeful regulations, shared vehicle fleets can deliver many access and mobility benefits with less congestion and far fewer vehicles (ITF, 2015). The arrival of highly automated vehicles will also change transport options available for citizens, especially when combined with optimised ride-matching across the entire urban area. Resolving current regulatory challenges linked to the operation of taxis and new market entrants should therefore not be seen as a stand-alone exercise but rather as part of a continuum of regulatory reforms necessary to address an uncertain and evolving urban transport market.

The objectives of this study are to produce a review of the current situation regarding the legislation and regulatory framework for taxis and for-hire passenger services in several relevant countries (mostly within, but not limited to, the EU), and to suggest possible innovative solutions that allow the public to benefit from service improvements all the while allowing for authorities to deliver on their mandate for delivering beneficial public policy outcomes with regard to consumer protection, high-quality access, reducing negative externalities from traffic, equity considerations and efficient market operation. This report builds on an analysis of national cases collected concurrently by the ITF and the International Road Union (IRU). It also builds on the ITF’s policy scan in this field and incorporates key parts of the discussions held in the context of the ITF’s Corporate Partnership Board (CPB) at the workshop on “ITF/OECD Principles for the regulation of for-hire road passenger transport services” held in November 2015.

Policy analysis

How to regulate taxis and commercial transport apps?

Individually-hired private transport first made its apparition on the streets of London and Paris in the first half of the 17th century. At the time, it represented a liberating innovation in the field of transport allowing those who could afford it the freedom to move relatively rapidly in those cities without having to bear the onerous cost of upkeep for horses and carriages. These “hackney” services spread rapidly and naturally split into two distinct markets: the street hail market and the dispatch market. The former comprises taxi services that are hailed by passengers from the street-side or those services concentrated at taxi stands where potential passengers walk up to obtain a ride. The dispatch market comprises all services that are booked on a pre-arranged basis including those that are dispatched by a central dispatching unit. Though there are often common regulatory objectives for both of these services (including public safety, security, driver qualifications, insurance, etc. – described in the following section) the regulation of these two markets differs in some fundamental ways as each presents potential failures that require specific remedies.

The arrival of new technology-enabled for-hire mobility services has blurred the lines between these formerly distinct, and distinctly regulated, markets. These services have leveraged newly available and increasingly widespread and inexpensive technologies based on ubiquitous connectivity, precise geo-localisation, secure payment services, sophisticated dispatching and load-balancing algorithms, and the broad penetration of smart phones and other personal computing devices.

These services are known by several names – e.g. ride-sourcing companies, on-demand information technology based transportation aggregators (India), commercial transport intermediaries (International Road Transport Union), transportation network companies (TNC) – a term coined by a regulatory finding of the California Public Utilities Commission (CPUC) in 2014 (CPUC, 2016). According to the CPUC, a TNC is “an organisation, including, but not limited to, a corporation, limited liability company, partnership, sole proprietor, or any other entity ... that provides prearranged transportation services for compensation using an online-enabled application or platform to connect passengers with drivers using a personal vehicle” (CPUC, 2014). Many jurisdictions in the United States and some elsewhere employ the CPUC framework but it is not universal.

The difficulty in finding a single term for these services underscores the way in which these services also challenge regulation and regulators. For this report, we make the distinction between relatively new for-hire market entrants like Uber, Lyft, etc. that provide services based on a software application platform supporting a two-sided marketplace connecting drivers and passengers on a commercial basis and incumbent taxi and other for-hire services. This paper will refer to the former as commercial transport apps (CTAs) and the platforms they operate as CTA-platforms. Taxi rides can also be facilitated via app-based platforms – which we refer to as taxi app-based platforms. In the latter case, the taxi app-based platform arranges rides between passengers and regulated taxis. Just to underscore the state of flux in this field, some CTAs provide multiple levels of services – individual or shared rides, peer-to-peer or

professionally-chauffeured services and some even incorporate taxis (Uber in some markets - e.g. Sydney, Berlin - and Didi Chuxing – formerly Didi Kuadi in China). (ITF, 2016; p.8)

Platform-based CTAs (and taxi services when they adopt these technologies) allow for better matching of supply and demand and for passengers to visualise the current offer of rides in their vicinity (or city-wide). They provide a high level of predictability on pick-up and travel times, allow for cashless transactions (though in some cash-reliant markets, CTAs are experimenting with cash payment systems as well). CTAs remove anonymity for both passengers and drivers, offer the possibility for immediate feedback on both drivers and passengers and generally provide higher response rates and higher quality trips than those provided by many, but not all, incumbent taxi operators.

CTAs publish fares, though these are usually set independently of regulators (as in many dispatch markets). Some CTAs apply demand-driven pricing in order to entice additional drivers to take service and or stimulate clients to look for service at other times. CTAs typically do not set requirements in terms of availability of drivers or minimum shift length. This means that many CTAs use part-time drivers that enter and leave the service at their convenience. The fractional working arrangements, lack of centralised control over working hours and reliance on drivers who supply their own vehicles (and cover the costs of operating these) leads CTAs to claim that they are simply middlemen putting potential passengers and drivers into contact with each other via the online technology platform. This view of CTAs is contested by some who uphold that TNCs exert control analogous to that of an employer. As a result, there are pending court cases or administrative proceedings examining this question in both the United States and in Europe.

For consumers, there is little difference in the transport service provided by taxis and CTAs, as long as the trip is carried out satisfactorily and in a timely manner. Though how to book a ride matters a lot too many consumers, and app-based services provide greater transparency, certainty and accountability than traditional modes of access such as street hailing or radio-dispatched taxis.

CTAs either self-select or are assigned to regulatory regimes that may entail lower costs than those faced by incumbent taxi operators. Because they often provide better perceived service and often equal if not lower cost than taxis, CTAs have proven to be highly popular and have seen a dramatic increase in use in many cities – oftentimes at the expense of street-hail and dispatch taxi services.

In the next section, we “unpack” the generic economic rationale and regulatory frameworks surrounding both taxi markets and CTAs.

Analysis of economic and regulatory frameworks surrounding for-hire passenger services

The arrival of CTAs in well-established, highly regulated and fairly rigid markets has caused significant friction and has generated calls to regulators to either exclude or accommodate the new shared mobility related services and platforms. In most instances, the stakes are high – particularly for incumbents who have become accustomed to the current situation and who may have made investment or other decisions on the expectation that this situation would not change. As such, debates on if and how to regulate CTAs have been highly emotional and have sometimes resulted in physical violence between parties. We seek to objectively analyse the question of how and whether or not to regulate CTAs by going back to first principles that should guide regulation in this field.

Our analysis starts by identifying the set of public policy objectives that may justify the regulation of on-demand for-hire urban transport services (traditional services as well as CTAs). We discuss the

various regulatory instruments that have traditionally been used – and are still in use - to address those objectives. We also discuss the adequacy of these to deliver on public policy objectives for both incumbents and new entrants such as CTAs. We then survey country practices for six countries to identify regulatory instruments being used on a country level and to review the critical tensions that have emerged with the arrival of CTAs. Finally, we discuss a set of principles and recommendations that can serve to guide action.

Overview of policy objectives and regulatory instruments

While it is clear that there is public value in the existence of motorised individual or shared transport available in quick response to demand, the corresponding service has been regulated in most countries based on the recognition that various public policy objectives must be addressed in such provision. Although those objectives are largely common to all areas with regular taxi and for-hire services, differences exist in the way they are expressed and some are not made explicit in all cases. In the following list we inventory a broad range of public policy objectives that are applicable to the regulation of for-hire passenger services.

Box 1. Public policy objectives relating to for-hire passenger services

Consumer protection

- ensure a high quality of service by delivering safe, comfortable, courteous and effective for-hire transport services
- minimise the risk for criminal or illegal actions by drivers and passengers
- avoid abusive prices (rate or artificial detours), especially for those unfamiliar with applicable rules or from outside the area
- Provide clear and easy access to information (on fares, on services available)
- ensure ease of access to services (via taxi stands, dispatch centres, web-apps)
- avoid excessive time waiting for service

Social Inclusion

- availability of service across all relevant territory
- availability of service for clients with special needs e.g. disabled and elderly

City-wide objectives

- decrease travel time and congestion levels
- decrease pollution and noise levels
- improve city reputation and quality of life

Healthy performance of the sector and the economy

- ensure conditions of fair competition among service providers
- provide an economic environment that stimulates innovation for higher efficiency and for better services
- avoid situations in which regulation (or lack thereof) could lead to insufficient or excessive supply
- facilitate inter-modality, particularly in relation to long-distance transport modes

While in many countries licences for the operation of taxis are issued by municipalities, in some countries, municipalities also issue licences for other for-hire services. Licences are typically conditioned with a set of specific regulations that are applicable to licence holders. In medium to large metropolitan areas, multiple jurisdictions may issue licences and promulgate regulations that are often aligned with those of neighbouring districts. In some cases, specific regulatory regimes may be in place to govern access to airports and other high-volume trip generators.

In many instances, and especially in Europe where it is the norm, there is some national legislative framework governing for-hire transport and taxis in particular. This means that while taxis are typically locally owned and operated, and are largely dependent on rules promulgated in local jurisdictions, they may in fact be subject to numerous regulatory frameworks as they ply their trade across urban regions. These rules may impose limits on where they can pick up passengers and applicable fares for their transport. CTAs, on the other hand, have no such limitations and though CTA drivers may be local, the platform itself is often part of a major national or multinational firm. This asymmetry in scale and jurisdiction exacerbates the uneven playing field that exists between highly regulated local actors and lightly regulated international firms.

Multiple types of regulatory instruments have been adopted in different countries. Each type of instrument has been implemented differently in countries (and sometimes even in the same country at different times), and that will be visible in the analysis by country, presented in the next chapter, where a more detailed description of the instruments adopted in each particular country is presented.

The following types of regulatory instruments have been identified in the process of seeking the best response of the market to the policy objectives. As with the objectives, not all types of instruments have been adopted by all countries, but the option was to be comprehensive in this general description, so that the merits and problems associated with each of these types of instruments can be analysed. The approach below presents a generic list of instruments available to authorities, organised by categories (see Box 2).

Box 2. Generic regulatory instruments

Economic

- Access to market and profession
 - quantitative - by establishing a fixed total number of licensed operators
 - qualitative - by setting criteria for qualification
 - in many cases licences have a municipal basis
- Prices and fares
 - full specification of fares
 - define (max) taxi tariff limits
 - operators set their tariffs but are obliged to clearly display them
 - tariff regime when the taxi is moving empty to pick up a client
 - tariff regulation of for-hire services is normally less rigid
 - special fixed fares for airport services
- Labour regulations
 - working/driving hour regulations
 - contract rules

Social

- vehicle standards
- special insurance
- staff qualification and training
- mechanisms for signaling poor quality service

Administrative

- Three forms of service initiation are commonly adopted: clients hailing taxis while they are roaming on the street, clients getting a taxi while it waits in a stand, and remote request and allocation via phone or computer/smartphone.
 - territorial limitations for accepting clients
 - traffic regulations
 - taxi stands
 - privileged access to specific parts of the road network

The economic framework for the regulation of for-hire passenger transport

Taxi services, CTAs and other transport services contribute to a range of economic impacts, some quantified and well-known, others more qualitative and less well-captured through standard cost-benefit exercises. These impacts can be relatively small or relatively large and may be either localised or spread more broadly.

The first of these impacts is an increase in the mobility of users. This increase in mobility facilitates access to opportunities throughout the urban area. It delivers access to people, employment, workers, services and social opportunities. These benefits accrue to travellers and businesses by lowering the time, cost or uncertainty related to access (TRB, 2016). Increased mobility can also deliver benefits more broadly to society by increasing productivity and employment.

Increases in travel also have the potential to impose external costs – those linked to congestion, crashes, noise, air pollution, greenhouse gas emissions and loss of urban competitiveness due to the combination of all of the former. Further, these benefits and disadvantages can have significant distributional effects on society and amongst firms.

The arrival of new technologies and services often has disruptive effects on incumbent actors and the for-hire passenger market is no exception. CTAs have offered substantial new and attractive services that consumers have enthusiastically adopted, not only because of attractive prices in some cases, but also because their services were unmatched by existing market actors. The ensuing shift and in many cases increase in mobility has been accompanied by the expansion of income and often part-time employment opportunities for a broad range of drivers that could not be delivered by incumbent taxi services. But at the same time, the popularity of CTA services has sometimes eroded incumbent's market share leading to a loss of income for taxi drivers or operators and, for those markets with tradable certificates or medallions, a loss in value of these. Further, if these losses were to force incumbent taxi operators out of the market, cities and urban regions could experience an erosion of social service provision since current regulations often impose social service obligations on taxis and not on CTAs. These economic and social impacts are not trivial and should be explicitly accounted for when navigating the regulation of CTAs and taxis.

Further, the economic rationale for regulating for-hire services varies with the type of service considered. As noted previously, taxi markets have evolved into the street hail market and the dispatch market. The street hail market is often the more regulated of the two because historically this market has very low entry barriers and has been characterised by concurrent problems of information asymmetry between operators and passengers regarding fares and taxi availability as well as geographic and temporal supply-demand imbalances. These challenges led to the relatively early deployment of market entry restrictions and economic (fare) regulation.

Market entry restrictions and controls

Market entry restrictions were typically motivated by the oversupply of relatively unskilled workers to the taxi industry, especially in times of economic duress. This led to a number of problems in the hail/rank market that included too many taxis plying for passengers in popular locations in the city, violent altercations as a result of efforts to secure rides or to eliminate competitors, and an undersupply of significant dispatch service so the probability of getting a fare for the driver was low.

There are four broad types of regulatory regimes controlling market access for taxis (Schaller in TRB, 2016). In the first regime, authorities issue a set number of permits

(or medallions) as determined through regulation or by law. Only permit holders are allowed to operate street hail services and in some cases, dispatch services. When these permits are tradeable, their value is in line with available supply for a given demand. In growing cities with rigid permit allocations, this value can be considerable and represents an investment by permit holders who have expectations on the long-term rate of return on these. For individual permit holders, the value of the permit may serve as a pension account whereas for operators, these medallions represent high-yield investments.

In the second regime, certificate systems, companies receive operating authority to provide taxi services, typically conditioned to a specific number of vehicles that are authorised to operate. Companies may petition authorities for a change in the number of authorised vehicles and these are approved or rejected based on specific criteria. Certificates cannot be traded amongst companies but taxi companies can be bought and sold opening the door to creating a secondary market for certificate-holding companies.

In franchise systems, under a competitive bidding process, a franchise is granted for a set time period allowing the holder to operate taxi services in a specific geographic area. Franchises include specifications regarding how many taxis are allowed to operate and when their term expires, they are put to re-bid. Franchise regimes prevent pickups from other taxi operators in the franchise zone but allow drop-offs which lead to unbalanced trips for those entering the zone from the exterior.

With open entry regimes, the fourth regime, no limit is placed on the number of taxis operating in the jurisdiction. Individual drivers and/or operators meeting requirements (e.g. insurance, training, security checks, and vehicle inspection) can enter and leave the market freely.

Other market-entry models exist as well. One of the most well-known is that of London where there are no quantitative market entry restrictions for Black Cabs but where the entry is conditional on passing the gruelling “Knowledge” test covering the minutiae of London street networks and routes. This test, requiring many years to study for, has naturally limited market entry for taxi services.

The first three market entry frameworks above sought to address and limit the negative impacts of market over-supply and "destructive" competition which is documented for the hail/rank market. In many cases they were implemented with the express goal of protecting the rent of licence owners. In those cases, drivers' income is maintained only when the driver owns the personal vehicle medallion. In many cases they have been maintained or strengthened expressly to limit competition from new entrants or to maintain high returns to incumbents. (ITF, 2016; pp. 22-23)

Geographic restrictions

In traditional open taxi markets, drivers congregate where they know there is a high likelihood of finding remunerative rides. This typically leads to concentration and over-supply of taxis at major ride-generating points in the city including central business districts, airports, rail stations and hotel-dense zones. Conversely, other parts of the city may be under-served by drivers who would wish to avoid short trips, trips in and to less desirable neighbourhoods or to provide trips for which there is little

likelihood of getting a return fare. For all of these reasons, and in order to ensure an adequate level of service coverage in licence-issuing jurisdictions, permissions to operate taxi services are typically conditioned by rules on the geographic scope of pick-ups and on service obligations within the licence issuing jurisdiction. This ensures adequate coverage in many cases and a certain expectation that service quality in terms of availability is roughly maintained. The expectation is that highly remunerative trips would cross-subsidise low remuneration trips while delivering coverage that in the absence of geographic restrictions would either decline or disappear in low density areas and in off-peak hours (TRB, 2015).

Fare regulation

Fare regulation was motivated by the desire to prevent price gouging by operators in the street hail market due to the natural asymmetry of information regarding the availability supply and uncertainty regarding potential competitors' fares. Fare regulations also provide certainty to passengers on what they will be charged.

One major difference between many regulated taxi markets and CTAs is the latter's use of yield management tools to balance supply and demand. In many other markets characterised by uneven demand and relatively fixed supply, changes in prices are used to modulate demand for the service. This is the case for instance with airlines, some rail services and electricity. Many CTAs incorporate this approach in their business model (e.g. Uber's "Surge" or Lyft's "Prime time" pricing models) so as to ensure demand fits available supply, but also to ensure that supply is incentivised to come online when it is most needed.

This supply responsiveness is made possible by the flexibility of CTA labour pools – because many drivers are part-time and set their own hours, supply is fractional and can flexibly meet demand when peak pricing entices drivers to turn on their app. Some have countered that surges in prices can be excessive (as in the case of emergencies and exceptional events) and that these pricing models allow CTAs to extract quasi-monopolistic rents. This is a contestable assertion since other services (public transport, own vehicle, etc.) are often also available and that, over the long run, the app platform market is not a closed one with the only real barrier to entry being achieving sufficient scale to disrupt incumbent CTAs. (ITF, 2016; p.26)

Some jurisdictions have nonetheless sought to limit variable pricing in cases of natural or man-made emergencies. For example, in response to surge pricing during Hurricane Sandy, Uber has reached an agreement with the New York Attorney General to cap price increases at 3.5 times the base fare for UberX and 2.5 times the base price for Uber Black when a state of emergency has been declared. This cap policy, according to Uber, is now operative throughout the United States. Outside of emergencies, surge pricing can lead to very high multipliers (historically up to approximately 10 times the base fare)¹ and is now used a competitive differentiator amongst CTAs. In the United States, Uber caps its Surge

¹ See <http://bgr.com/2016/01/04/new-years-eve-uber-surge-pricing-reactions/> and <https://hbr.org/2015/12/everyone-hates-ubers-surge-pricing-heres-how-to-fix-it>.

multiplier at eight times the base fare and Lyft caps its Prime Time multiplier at three times the base fare².

Impacts of traditional taxi regulation on service quality

Together, market entry restrictions, geographic limitations and fare regulation have characterised street hail markets and have proven not only to be durable but highly immutable parts of the for-hire regulatory package for taxi operations. Market entry restrictions have proven to be especially difficult to change and many cities (e.g. Paris, New York, Boston Chicago, London) have gone decades without adapting the volume of taxis allowed to operate (or the market entry tests imposed – e.g. in the case of London) despite significant growth of resident population and visitors. Cities such as New York and Chicago, however, have substantially increased their cab fleets in recent years.

All of these measures were put into place in order to address real and vexatious problems faced by municipalities seeking to ensure a stable offer of for-hire transport services. However, these types of interventions have also introduced inefficiencies and rigidities into the markets they seek to regulate leading to several unwanted outcomes. The first of these is that rigid supply, especially in areas experiencing population growth, leads to shortages and unmet demand. Even passengers willing to pay for a ride cannot get one because vehicles are simply not available and/or drivers are prevented from charging fares that would make provision of that service worthwhile to them (TRB, 2015). Other rigidities include restrictions on the type of service allowed – for instance, many jurisdictions prevent taxis from providing simultaneous services to multiple passengers – e.g. ride-sharing – under the belief that this would lead to a loss of trips for other drivers. Even in jurisdictions where universal service requirements exist, there is consistent evidence in some markets that drivers simply by-pass these and underserve certain areas of the city or population groups (TRB, 2015).

Shortages and other market inefficiencies lead to higher rents than would otherwise exist and these are captured by incumbents – to be clear, consumers are paying artificially inflated prices with regressive effects. Because of this, there is considerable pressure by incumbents in many markets to maintain market entry restrictions and other measures that allow them to profit from a lasting and contrived supply-demand imbalance. It is in this economic and regulatory context that CTAs have taken hold and have experienced extremely high growth rates indicating a great unmet demand for travel of the quality and price that platform-based operators provide.

² See <https://medium.com/@loukerner/a-look-at-the-data-uber-is-losing-share-to-lyft-across-the-u-s-and-via-in-nyc-703703f3fbc6#.ahbqd1lql>

Implications for dispatch, pre-reserved and TNC operators

The dispatch market and other pre-booked ride markets have typically been treated separately from the street-hail market and thus faced less burdensome regulation. This is because the information asymmetries are lower for this market and fares can be negotiated ahead of time by both parties, either of which can seek alternative suppliers or riders. However, the dispatch market is characterised by higher barriers to entry. These include investments in centralised dispatch services and the concomitant investment in the fleet of vehicles to be dispatched since dispatch markets, unlike street hail markets, are often serviced by operator-owned fleets.

Against the backdrop of a relatively stable market that in many areas delivered high rents to incumbent operators and relatively low levels of overall passenger service (as described above), the arrival of app-enabled demand-responsive mobility services and platforms has disrupted the taxi industry and regulators. One of the reasons for the success of CTAs is that they have been able to reduce the inherent tension between information costs and entry barriers that have proven to be persistent in taxi markets. At the same time, they have deployed business models that have fundamentally changed the way in which for-hire services are offered.

By combining the virtual immediacy of the app-based dispatch with access to a wide range of drivers nearby, CTAs are able to provide transparency in vehicle locations and much shorter waits for a vehicle than is typically true with taxicabs. They have rapidly scaled up, and offered lower fares than cabs, via a business model that removes or shifts many of the upfront costs away from the platform-based CTA operator. For example, the costs associated with staffing and operating a centralised dispatching centre are eliminated and replaced by lines of code in the algorithms that put passengers and drivers in direct contact with each other. The up-front capital costs of acquiring and maintaining a fleet of vehicles is shifted to the drivers/"contractors" who bear sole responsibility for these. This last feature is not unique to CTAs nor is it novel, having been common to independent owner-operators in for-hire transportation for a long time. In return, CTA drivers pay only a fixed percentage of the fare to the platform and face no fixed platform access costs unlike non-owner taxi drivers who face high fixed costs associated with dispatch centre affiliation and vehicle costs.

App-based platforms also diminish information costs and uncertainty between passengers, drivers and operators. Verified and tractable information on the identity and reputation of both drivers and passengers ensures a high level of transactional trust and also ensures robust recourse in case of dispute resolution amongst the parties to the transaction. It also increases the security of both the driver and the passenger by eliminating anonymity. When customers open the apps, they have a transparent view of current market supply. They see how many drivers are nearby and, once a driver has been booked, customers are provided with regular updates as to the time to pick-up and then, once on board, the estimated time to drop-off. Many apps also provide estimated fares based on real-time traffic conditions. All of these benefits accrue to passengers irrespective of whether the app connects to a CTA platform or to a taxi-based platform. But CTAs and taxis face different requirements and the former typically benefit from lower levels of regulation much like most pre-reserved dispatch services. In particular CTAs are almost never subject to the price and quantity controls described above, unlike street hail taxis and some dispatch services. In some cases,

however, like in many US cities, they do face analogous geographic coverage requirements.

This discrepancy raises an important question for regulators – should CTA regulations be hardened and extended or, rather, should certain taxi regulations be scaled back or removed? The answer to that question lies largely in the trust that authorities have regarding whether public policy objectives can be delivered with more, less or different forms of regulation for both CTAs and taxis.

Other service and quality requirements

As outlined in Box 2 [ITF, 2016], jurisdictions impose numerous other conditions on the provision of for-hire services. These include provisions regarding driver training and qualifications, driver background checks, insurance coverage and vehicle safety inspections. These are required because they deliver clear public and social benefits. However, some of these rules were put into place in a very different time and context and may no longer deliver the benefits they once did, especially as technology has progressed. When these rules are not re-assessed, or unnecessarily restrictive rules are imposed, they in essence become indirect barriers to entry. This may be seen as the case with the requirement that drivers undergo unnecessarily extensive and onerous training (up to 250 hours in France, or retaining the gruelling London "Knowledge" test in the face of GPS navigation).

CTAs have argued that overly complex and burdensome requirements that are neither aligned with public policy objectives nor with the real risks posed by for-hire operation unfairly impact their ability to compete. This is especially true since many of the drivers affiliated with their platforms only provide services on a part-time basis and may be dissuaded from joining the platform if complying with rules requires a significant investment in time and effort. Another issue is that the way in which these rules are crafted and the way in which compliance with them is ensured by authorities remains very top-down, prescriptive and rarely leverages new compliance pathways – particularly those that make use of new technologies.

Authorities may also wish to ensure that for-hire services are available to the broadest representation of society, including those that have mobility or other impairments. This is especially the case since these impairments may prevent people from driving a car and limit their ability to use public transport. In many instances, taxis provide essential transport services for these people. For this reason, many jurisdictions either require service or incentivise service provision for those with impairments (e.g. through minimum fleet requirements for accessible vehicles, training requirements for drivers and incentives or subsidies for the carriage of mobility or otherwise impaired passengers). CTAs at present rarely face such constraints and have typically argued that since they are not fleet operators, they should not be required to ensure fleet-based accessibility quotas.

However, insofar as CTAs successfully put pressure on taxi fleets that do face such requirements; the net effect may be a decrease in accessible taxi services and an erosion of service quality for the population requiring such services. Some cities provide alternative adapted para-transit services and support for these through social service or social security payments. But where this isn't the case, mobility options for

the impaired may indeed decline. A fundamental question here for regulators is whether these services should be required of CTAs as they are of many taxis or if alternative delivery methods, such as contracted dedicated fleets, make economic and social sense. In the former case, authorities could require that CTAs enrol a certain number of accessible vehicles or, alternatively, CTAs could seek to attract sufficient numbers of these vehicles to the app platform by adjusting remuneration rates for those drivers. In that case, it remains to be seen who bears the cost of the additional fare increment; the CTA, the rider or the public authorities? (ITF, 2016; pp. 26-27)

Box 3. ECMT-IRU Study on improving access for taxis

Access to taxis remains a particular challenge, largely due to the structure of the trade and its operations, as well as the design of the taxi vehicle itself. In 2005-2006, the European Conference of Ministers of Transport (ECMT), ITF's predecessor organisation, and the IRU set out to explore together how better taxi vehicle design over the long term could benefit users and the taxi industry as a whole.

The ECMT-IRU recommendations for taxi vehicle accessibility are based on two design levels:

- Type-one: Wheelchair Accessible Taxis encompass accessible vehicles capable of carrying the majority, but not all, passengers who travel in their wheelchair as well as people with other disabilities.
- Type-two: Standard Accessible Taxis include vehicles with features designed to make use by disabled people easier, but which would only be able to carry a wheelchair user who can transfer to a taxi seat.

The report recommends that fleets of taxis used for regular services should be composed of a combination of these two types of vehicle. The proportion of each type within the taxi park is likely to vary from place to place, both within and between countries. This is a matter for decision by national and local governments.

If the recommendations were applied progressively to the taxi park, they should result in much improved travel opportunities for disabled people. A mainstream taxi park composed of Type-one and Type-two vehicles would meet the requirements of the great majority of disabled people, including a substantial proportion of wheelchair users.

Finally, taxis, CTAs and other for-hire service providers must typically provide adequate levels of insurance such that costs related to crashes and other mishaps are not borne by the public. Taxis and traditional forms of for-hire transport providers typically subscribe to commercial policies that take into account the higher exposure in terms of kilometres driven, and potentially lower per-kilometre risk of having professional drivers at the wheel. These insurance policies are crafted specifically for the industry and can be onerous when compared to personal liability and crash insurance policies.

There is a move towards graduated insurance schemes for CTA services that default to personal policies when the vehicle is used for personal travel. When a CTA driver logs on to the platform and while waiting for a ride, commercial insurance kicks in. Once the ride is booked and is being carried out, a higher level of coverage is provided. These graduated insurance schemes are made possible because of the extensive data collected by CTAs. The workshop discussions revealed no consensus on who should contract coverage for insuring working hours but this question may be moot as several of the largest CTAs have started offering commercial insurance coverage for drivers using their platforms and in some markets, in the United States in particular, the issue is settled with legislation requiring the CTA to provide coverage if the driver doesn't buy a CTA specific policy. In markets where uniform coverage levels do not exist the question of disparities in coverage between platforms that could come into play when drivers multi-home.

Portuguese regulatory frameworks of for-hire passenger services

Overview of legal instruments

In terms of the current legislative and regulatory framework covering taxi services in Portugal, bylaw 251/98 as amended in several steps³ establishes rules concerning access to the market, its organisation as well as enforcement mechanisms and penalty regime. Law 6/2013 lays down rules on driver's access to the activity. Taking into account the local scope of taxi services, bylaw 251/98 transfers relevant powers to municipalities. These include market organisation and licensing of vehicles, while access to the activity is still dealt with at national level. Competencies over “taxis” are thus divided between national and local authorities.

While access to the activity (licensing of operators) is dealt with at national level, access to the market (licensing of vehicles) and market organisation fall under the competency of municipalities. As referred to above, municipalities also have the responsibility to act as organising authorities. They establish, within their territorial jurisdictions, quotas for taxi services, parking regimes, special regimes, and enforcement bodies. Under bylaw 251/98, the activity is thus regulated in its most relevant aspects, namely in what concerns: quotas, parking regimes, fares and vehicle types, age and roadworthiness inspections

Further specifications, such as standards for identification, vehicle type, on-taxi advertising and roadworthiness inspections addressing equipment functioning and safety, maintenance and comfort, are established by an order issued by the member of the Government responsible for transport.

Licensing framework

The key policy objectives addressed by the licensing regime relate to consumer protection, mobility and road safety. Taxi transport services can only be performed by licensed entities/providers (either commercial societies, cooperatives, individual limited companies or individual entrepreneurs) that fulfil the requirement of financial standing. Earlier requirements on personal reputation as well as on technical and professional capacity of the managers have been withdrawn in a recent (2013) revision. Also drivers engaged in the provision of taxi transport services have to fulfil the requirements foreseen in law 6/2013, which approves the legal regime of access to and exercise of the profession of taxi driver.

Whereas access to the activity (licensing of operators) has no quantitative restrictions, there exists a quota for vehicles allowed to operate within a given municipality (access to the market). This quota is established by the City Council for a number of parishes or for each parish and takes into account global needs as regards taxi transport in a given municipal area. An operator may only be granted a single licence (access to the activity). However a licensed operator may license several vehicles (access to the market).

Taxi operators (commercial societies, cooperatives, individual limited companies or individual entrepreneurs) have to fulfil the requirement of financial standing. By the end of December 2015 the total

³ Bylaw no. 251/98, August 11, amended bylaw no. 159/99, September 19, bylaw no. 106/2001, August 31, by Bylaw no. 41/2003, March 11, by Bylaw no. 4/2004, January 6 and bylaw no. 5/2013, January 22.

number of licensed taxi operators amounted to 10 068. Taxi operators' licences are valid for a period not exceeding five years, renewable as long as the requirements for access continue to be fulfilled. Although these licences are not transferable, the current practice of selling the company holding the licence easily circumvents this constraint. Vehicle licences (access to the market) are tradeable under market conditions (i.e. prices vary according to its geographical coverage/territorial areas, demand, etc.).

Fare setting and financial aspects

There is a minimum fare (flag drop) at all times, but no maximum fare (at the end of the journey, the passenger has to pay the fare displayed on the metre). Taxi fares vary according to a multitude of factors. Within urban areas, rates depend on:

- distances travelled (per km)
- number of passengers (extra charge for passengers carried in excess of four)
- daytime or night service (the latter also applicable all day long on weekends and public holidays).

Services can only start in the municipality in which the vehicle is licenced. For any service taking the vehicle outside of municipal limits, the distance outside is charged a double tariff to cover the empty return.

Furthermore, incentives have been given to providers/operators of services for people with reduced mobility through attribution of taxi licences in favourable conditions for vehicles accessible by people with reduced mobility (PRM). Incentives have also been given for operation of specific services (with mini-bus, mini-van, taxi and other vehicles) to the use of PRM, the elderly or students.

Influence of new mobility services

As in many other European and non-European countries, Portugal has also witnessed the emergence of innovative mobility services based on electronic platforms and mobile applications, like Uber (in Portugal since July 2014). The ease of use of such technologies and the comparatively lower fares generated considerable sympathy among users. It gave rise, however, to strong opposition from taxi service providers (associations, operators and drivers). Again, as in other countries, an action against Uber was filed by one of the largest and most representative taxi associations (ANTRAL), obtaining a court ruling which prevented Uber from operating nationwide in April 2015.

For-hire transport services attached to the Uber platform are operating under a legislative framework relating to the “rent-a-car” activity (bylaw no. 181/2012, of 6 August 2012). Pursuant to Article 13 of the referred to by-law, it is possible that clients rent a car with a driver, provided the following:

- A contract relating to the renting of a vehicle without a driver is entered into between the client and the rent a car undertaking.
- Another (additional) contract is entered into, the exclusive object of which is the driving of the vehicle that was rented.
- The driving of the vehicle is made by the person contracted by the locating entity.

Regular taxi operators have been protesting against what they consider unfair competition based on the different requirements for access to the market (no quotas anywhere in the country), for accreditation

as driver (no training needed) and also for the much lower costs associated with the licensing. Although not a part of the formal complaints, it is clear from their public statements that they are also upset with the loss of market value of their vehicle licences. The situation has been getting considerable attention from the authorities, prompting them to carry out internal consultations with relevant stakeholders and to request ITF to develop this study.

Tensions

Taxi drivers and industry associations argue that Uber does not comply with the national legislation governing transport activity in taxi, and therefore, is illegal. In addition they claim that vehicles used by Uber are not equipped, identified or licensed for the activity they perform. They state that drivers do not have a certificate of professional competence. Furthermore, they say that providers do not pay taxes or social security and are not insured as provided for by the legislation governing passenger transport activities.

In turn, Uber defends itself, saying that it is not a taxi service, but rather a technology platform that connects users and drivers through an application for smartphone. They add that all partners connected to the Uber platform in Portugal have licences for the commercial transport of passengers with private drivers.

The platform that serves as intermediary between private drivers and users - Uber - was prevented from operating in April 2015 following an action filed by ANTRAL (04/22/2015). The action was accepted by the Lisbon Appeals Court (Tribunal da Relação de Lisboa), but the company remained active, arguing that the measure was directed to the wrong legal entity (the notification was addressed to Uber Technologies in the US, when the Portuguese delegation responds to the Uber N.V., based in Holland).

In practice, the situation of Uber in Portugal remains unchanged since the court ruling in April 2015. The company's website was blocked by telecom operators but the mobile application that establishes a connection between the user and the driver of the vehicle private remains operational, as well as the possibility to pay for the service.

In February 2016, taxi drivers protested again at the Lisbon airport. In March 2016, taxi drivers were received by the Minister of Environment João Matos Fernandes. A package of 10 measures aiming at the modernisation of the taxi sector, representing an overall investment of EUR 17 million, was then presented by the Minister. More recently, a medium-term Reform Plan approved by the Government in April 2016 to modernise the economy includes an investment of EUR 6 million to "decarbonise" the engines of a thousand taxis. However, public action by taxi operators goes on, claiming the illegality of Uber and calling for its immediate suspension.

Survey of six country practices

Following the generic overview of public policy objectives and related regulatory tools, the specific practices found in four jurisdictions (three countries plus the city of London, which has different rules from the rest of the UK) have been reviewed in terms of the implementation of regulations. In some countries taxis and private for-hire vehicles are being regulated separately, in these cases there has also been a separate analysis. The countries/cities reviewed are: London (taxi and private for-hire vehicle separately), Ireland, The Netherlands, France, Germany and Bulgaria.

United Kingdom, London

Taxis in London

The term “taxi” first appears in legislation in the Transport Act 1980. Under this Act, a taxi is defined in the same terms as a “hackney carriage”. Most of the legislation and case law still refers to taxis as “hackney carriages”. The wording of the relevant definition in London is the following: “Hackney carriage” shall mean any carriage for the conveyance of passengers which plies for hire within the limits of this Act, and is neither a stage carriage nor a tramcar.

The expression “London cab” is also found in the legislation. It is always defined by reference to the definition of a hackney carriage, and is therefore no different in legal terms. The term expressly includes any such vehicle, whether drawn or propelled by an animal or mechanical power. Only hackney carriages have the right to ply for hire. The right to ply for hire only extends to a hackney carriage’s area of licence but they can undertake pre-booked work outside of their licensing area (on the same basis as private-hire vehicles). It is an offence for the proprietor, or driver, of an unlicensed taxi to allow it to ply for hire.

There is no statutory definition of plying or standing for hire. Whether or not a vehicle is plying for hire is a question of fact and degree. Although there is a great deal of case law on plying for hire, none of it is of particularly strong authority since the question has to be decided on the merits in each case. Although the definition of “plying for hire” as developed by case law is workable, it leaves considerable grey areas particularly in the interface with licensed private-hire vehicles.

Unlike the rest of England and Wales, in London, the definition of a hackney carriage and the requirement to hold a licence for plying for hire is not linked to a street. Therefore, a vehicle can be a hackney carriage even where it plies for hire on private land, e.g. an airport. In London, advertisements including the words “taxi” or “cab”, or words with such close resemblance that they are likely to be mistaken for them, are prohibited on vehicles other than London cabs. The word “minicab” is, however, permitted. Advertising is an important source of revenue for taxi providers. Advertisements can only be carried on taxis with the permission of Transport for London.

The Department for Transport has responsibility for legislation in England and Wales in relation to taxis and private-hire vehicles. Day-to-day responsibility for taxi and private hire licensing lies with local authorities. London has unique governance arrangements. The licensing authority is Transport for London and the licensing functions are devolved to London Taxi and Private Hire, which is part of Transport for London. Transport for London has the power to issue London Cab Orders to regulate

drivers and proprietors of vehicles, the placing of plates, the fixing of taxi fares and the way in which lost property is dealt with.

A key restriction on the provision of taxi services is that a licensed driver may only ply for hire in the area in which their licence is held. London is in effect divided into zones as drivers must either have an “All London” or a “Suburban” licence. The All London licence allows drivers to work anywhere in London, including Heathrow Airport. The Suburban area is divided into nine sectors and drivers may only work in the sector in which they are licensed. They can, however, be licensed to work in more than one sector.

Transport for London regulates fares by cab orders. An annual tariff revision takes place on the first weekend of April, pursuant to a fare consultation process overseen by the Transport for London Board. Tariffs set by Transport for London represent the maximum which can be charged. Taxi proprietors may charge less, perhaps for competitive purposes. Typically, the maximum fare payable depends on the time of day and consists of an initial hiring charge plus the applicable rate. The rate is usually based on the distance travelled or on time for any part of the journey where the speed drops below a threshold amount.

In London, fare increases are calculated using a formula based on an index reflecting operating costs. The index includes the costs of the vehicle, parts, insurance, servicing and the “Knowledge”. Changes, such as making vehicles wheelchair accessible or bringing them up to required Euro emissions standards, can have significant cost implications. Such one-off increases are accommodated outside of the general cost index formula. Fuel costs, which are difficult to predict, are also a key factor impacting fares. Ultimately, costs are passed on to the consumer. Taxis are allowed to agree on a fixed price for journeys but this can be no higher than the metred fare. Transport for London has considered relaxing this requirement to allow taxi radio circuits more flexibility in charging fixed fares.

Taximetres are widely recognised as a distinctive feature of taxis. In London, taxis must be fitted with taximetres which are subject to European regulation in order to ensure harmonised standards and consumer protection. Both the vehicle and the driver must be licensed and the vehicle must carry plates displaying the vehicle licence number. “Plying for hire” involves picking up passengers from the street or from ranks, and it is the exclusive domain of licensed taxis. Plying for hire without a licence is a criminal offence. Taxis standing at a rank or stationary in a public place, and which are not already hired, are under an obligation to accept a fare unless they have a reasonable excuse. This is also referred to as “compellability”.

Where a taxi at a taxi stand or in the street accepts a hiring, they are not under a duty to accept any passenger; but once they have accepted, they must take the passenger anywhere they might wish to go, within a prescribed distance. This is generally the whole licensing district, or in London a 12-mile radius from the point of pick up, or a journey of up to an hour.

A taxi which has its sign illuminated is not obliged to take a fare. Moreover, even when a hackney carriage is “standing”, its obligation to take a fare is not an absolute one. It does not apply if the taxi is already hired, or if the driver has a “reasonable excuse”. Reasonable excuse could cover situations where the prospective passenger was smoking, drunk, or carrying food, for example. By contrast, refusing to take a fare because the distance is too short is unlawful.

The vehicle and driver must each be licensed independently. The owner of the licensed vehicle may also drive it, so the same individual can (and often does) hold both licences. There are two key elements to being a driver. The first is the Driver and Vehicle Licensing Authority driving licence which everyone driving a motorised vehicle on the road is required to hold. The second is the special licence that is, by statute, needed to drive a taxi or private hire vehicle, issued by the relevant local licensing authority. It is

an offence to drive a taxi without first obtaining a licence from the local authority. Drivers must have held a full driving licence, issued by the Driver and Vehicle Licensing Authority, for at least a year.

The licensing body must be satisfied that taxi drivers are “fit and proper” persons. This is a statutory test but the expression is not defined in statute. Licensing authorities thus have broad discretion to spell out specific requirements for drivers through imposing local conditions. Such requirements include medical fitness, criminal records checks, minimum age, driver skills and knowledge, equality and disability awareness and topographical knowledge. Regarding topographical knowledge in particular, the London “Knowledge” is well-known; the All London taxi drivers’ knowledge can take up to four years to learn.

Applicants for a taxi licence must comply with the conditions of fitness issued by Transport for London. The London Conditions of Fitness require all taxis to be wheelchair accessible and have a taximeter. As part of the Mayor’s Air Quality Strategy, Transport for London has recently introduced age limits. In London, from 1 April 2012, Euro 5 emissions standards have applied to new taxis. Taxis are subject to annual testing by their licensing authority up to a maximum of three times a year.

Transport for London can refuse to grant a taxi vehicle licence if the owner of the vehicle does not satisfy certain conditions. These include that the applicant “is of good character”, is of good business repute, and “is, having regard to his general financial position, a fit and proper person to hold a cab licence”. Transport for London also has discretion to refuse a taxi vehicle licence if the applicant has been convicted of any indictable offence or if the applicant appears to Transport for London “to be unfit to hold a cab licence” by reason of certain convictions relating to road vehicle legislation. The convictions can relate directly to the applicant or to anyone in business with them.

Private for-hire vehicles in London

A “private for-hire vehicle” in London is defined as “a vehicle constructed or adapted to seat fewer than nine passengers which is made available with a driver for hire for the purpose of carrying passengers, other than a licensed taxi or a public service vehicle.” Vehicle here means a mechanically propelled vehicle (other than a tramcar) intended or adapted for use on roads. In London, a private hire vehicle must have four wheels, thus excluding motorbikes from the licensing regime.

The private-hire vehicles (London) Act 1998 empowers Transport for London to make regulations relating to private-hire vehicles. Before a licensing authority may grant a private hire vehicle licence, it must be satisfied that the vehicle is suitable in type, size and design for use as a private hire vehicle, not of such design and appearance as to mistake the vehicle is a hackney carriage, in a suitable mechanical condition, safe, and comfortable.

In addition, the vehicle must be properly insured. Vehicle licences are granted for a maximum of one year. In London, all private-hire vehicles must have Transport for London discs in the top nearside corner of the front and rear screens. An exemption from the requirement to display such discs can be granted if the licence authority considers that they would be inappropriate in respect of that service. Private-hire vehicles are expressly prevented from being fitted with taximeters. Age limits and emissions standards apply to new private-hire vehicles as part of the Mayor’s Air Quality Strategy. Moreover, private-hire vehicles are subject to annual testing by their licensing authority up to a maximum of three times a year. It is the proprietor of the vehicle who holds the licence and against whom any breaches will be enforced.

A private hire vehicle may only be driven by a licensed private hire vehicle driver. The vehicle and driver must each be licensed independently. The same conditions that apply to taxi drivers apply also to

private hire drivers. The only difference is that, unlike taxi drivers, private hire drivers must have held a full driving licence, issued by the Driver and Vehicle Licensing Authority, for at least three years. Moreover, the Department for Transport's guidance highlights that the topographical knowledge test should not be too burdensome, in particular for private hire drivers, as they have the possibility of checking the pre-booked route before the start of the journey.

By contrast with the taxi legislation, London private hire legislation does not single out the proprietor's fitness to hold a licence (i.e. "good character", "good business repute" and "fit and proper person") as an independent factor. The owner has certain obligations and is liable for breaches of the legislation. A private hire vehicle cannot undertake work except through a licensed operator. The requirement for the operator to be licensed separately from the driver is one of the distinctions between the private hire and taxi licensing regimes. As in the rest of England and Wales, private hire licences may not ply for hire and can only accept bookings made through a licensed operator.

Unlike taxi fares, local authorities do not have the power to regulate fares for the hiring of a private hire vehicle. Operators are free to negotiate the fare for the journey with the would-be passenger. However, many consumers are unaware that it is possible to negotiate a price. In London, where metres on private-hire vehicles are prohibited, an operator is obliged to quote a price if someone making a booking asks them to do so. An operator is defined as someone who is in the business of making provision to invite or accept bookings for private-hire vehicles. The legislation in both London and the rest of England and Wales makes it an offence to operate private-hire vehicles without a licence. This means that private hire drivers cannot accept pre-booked journeys directly but rather must take them through an operator licensed in their same area. There is nothing to prevent a driver obtaining an operator's licence. By contrast, taxi drivers are allowed to accept bookings directly.

The rationale for operator licensing lies in: the first-in-line enforcement; economies of scale, and combatting crime and intelligence gathering. Regarding enforcement, requirements such as the obligation for operators to ensure that drivers and vehicles are effectively insured and licensed can be extremely effective. The threat of loss of licence is a powerful incentive to make sure regulatory requirements are complied with. Regarding economies of scale, licensing officers are not in a position to control the potentially large numbers of drivers working in their area. Checking operators (whose premises are geographically fixed) is more manageable as a single operator may be responsible for tens, hundreds, or in a few cases, thousands of cars and drivers.

Regarding combating crime and intelligence gathering, the intelligence gathered in respect of operators is helpful to the police as it is a high-risk area for organised crime. Operators can be useful logistically and the cash-rich nature of the business is said to make it more susceptible to money laundering and other criminal activities. Operators are liable for breaches of regulatory requirements in respect of their vehicles and drivers. An operator can only be accountable in respect of secondary liability for "knowing" breaches, and in London operators have a due diligence defence. In England and Wales (but not London) a deemed contract exists between the operator who takes the booking and the passenger, meaning the passenger has recourse against the operator should something go wrong. The London legislation does not contain a similar legal fiction but it appears to assume that the hirer's contract is with the operator.

Record-keeping is among the main operators' obligations to licensing authorities. Records can have a useful function in deterring illegal plying for hire, as the absence of a record suggests that there was no pre-booking, and in maintaining the integrity of the distinction between taxis and private-hire vehicles. Safety of passengers can also be promoted by effective record-keeping, logging journeys and the

whereabouts of members of the public. Record-keeping also helps to ensure the basic requirements for the deemed contract between the operator and passenger are met.

London has regulations setting out detailed record-keeping requirements. Records must be kept in writing and set out particulars as to the bookings, vehicles and drivers. The London regulations also require records to be kept about complaints and lost property and how they were handled or resolved. In England and Wales (excluding London), operators cannot sub-contract work to operators outside of their licensing area. The operator's licensing area must be where the premises are located, bookings are made and from which vehicles are dispatched. By contrast, in London, sub-contracting out of area, to anywhere in England, Wales or Scotland, is expressly permitted, and operators can receive sub-contracted work from operators outside of London.

For operators of private-hire vehicles advertising is an important tool in promoting their services and encouraging recognition and the development of goodwill. On private-hire vehicles, only limited signage is permitted. Car sharing arrangements, also referred to as carpooling, are not dealt with in taxi or private hire legislation. By contrast, such arrangements are expressly exempt from public service vehicle licensing. In general, the fact that passengers pay separate fares would place a service outside the private hire regime. However, amendments to this section mean that some types of operation where separate fares are paid but which are exempt from the public service vehicle licensing regime are no longer exempt from the private hire licence requirements. These include arrangements for passengers to share a taxi or private hire vehicle, and pre-arranged trips or tours involving the hiring of a vehicle and driver.

Review of current tensions in London

In May 2014, the Law Commission published a report making recommendations for the reform of the law relating to taxis and private hire services in England and Wales, including London. The purpose of the reform is to achieve a single legal framework covering both taxis and private hire services, while maintaining important differences in the way they are regulated. The rationale for reform reveals a number of tensions that may be ascribed to the current legislative framework.

Notwithstanding the growth and evolution of the taxi industry since the first regulation of hackney carriages in the 1600s, the main legal framework governing taxi services has not undergone any significant reform for nearly 200 years. Private hire services legislation is more recent, dating from 1976 in most of England and Wales and 1998 in London. Nevertheless, even this comparatively modern legislation struggles to keep up with the radical changes which the internet has introduced in the way customers book private hire services. Although there are over 340 licensing areas across England and Wales and many taxi and private hire journeys cross their borders, licensing officers have no cross-border enforcement powers, nor are there any common national standards. Key matters, such as whether drivers have disability awareness training, or what types of criminal convictions should disqualify a person from working as a driver, are left purely to local decision-making, resulting in a very variable national picture.

The piecemeal evolution of the regulation of taxi and private hire services has, moreover, resulted in a complex and fragmented licensing system. The relationship between taxi and private hire services is not clearly defined. The balance struck between national and local rules lacks an overarching rationale, resulting in duplication, inconsistencies and considerable difficulties in cross-border enforcement.

Mobile phones and the internet have revolutionised both the taxi and private hire trades, yet regulation has failed to keep pace. The outdated legislative framework has become too extensive in some respects, imposing unnecessary burdens on business and artificially restricting the range of services available to consumers; and insufficiently comprehensive in other ways, undermining the fundamental goal of protecting the travelling public. (Law Commission, 2014)

The Law Commission’s principal recommendations are detailed below. They include: defining taxi and private hire services; cross-border working; common national standards for vehicles, drivers and dispatchers; criminal offences specific to the trades; taxi fare regulation; equality and accessibility; and enforcement. The current two tier system of regulation distinguishes between taxis, which can be hailed or can use taxi ranks, as well as undertake pre-booked journeys, and private-hire vehicles, which can only be engaged by way of a pre-booking, should be retained.

When defining taxi and private hire services, the current system relies heavily on the imprecise concept of “plying for hire”, which performs the function of defining what taxis alone are allowed to do in undertaking rank and hail work. However, the meaning of the concept is not set out in statute and has become the subject of a body of case-law that is not wholly consistent. Technological developments increasing the possibility of near-immediate bookings have made it even less practicable to apply. Internet bookings for example can be virtually immediate, suggesting taxi-like behaviour, and yet have all the characteristics of a pre-booking, making them compliant with private hire requirements. Furthermore, there is no statutory definition of a pre-booking. Our recommendation is that private hire services should continue to be available only on a pre-booked basis, dispatched by a licensed operator. A lawful private hire booking should be defined as one for which records meeting prescribed requirements are kept, and where advance price information is available on request. By contrast, customers would continue to be able to approach or hail a taxi for a journey beginning there and then with no need for any arrangements in advance.

Where cross-border working is concerned, there are two geographical restrictions on how private hire services can work. First, the driver, vehicle and operator must all be licensed in the same area; provided that this condition is satisfied, the journey can begin and/or end elsewhere. Second, the operator can only invite and accept bookings within that licensing area. This hampers the drivers from expanding their business to have offices in neighbouring areas, and is increasingly difficult to police given the rise in internet bookings. Our recommendation is that cross-border working for private hire services should be freed up. Local authorities should continue to administer licences applied for in their area, but they should do so on the basis of national standards, which they will have no discretion to vary. Once licensed, providers will be able to work across England and Wales and will be subject to enforcement action by officers of any licensing authority. Minimum standards for taxis, governing the most important aspects of driver and vehicle standards, should exist at the national level. In respect to those standards, taxis should be subject to the enforcement jurisdiction of enforcement officers anywhere. The new legislation should be applied throughout England and Wales, including London.

Currently, local authorities set common national standards for vehicles, drivers and dispatchers for taxis, private-hire vehicles, drivers and private hire operators. Local authorities are responsible for the administration of the licensing system. This leads to regional variation, even in such critical areas as the treatment of past criminal convictions and medical conditions. It can have a restrictive effect on business, by making it difficult to be licensed in more than one area as a means of expanding one’s business. Our recommendation is for licensing authorities to retain responsibility for issuing licences and for enforcement. However, national standards for taxi and private hire vehicle licensing should be introduced, promoting public safety, accessibility, enforcement of the legislation and environmental

protection. In respect of private hire services, national standards should entirely replace locally-set conditions. In respect of taxi services, national standards should be capable of being supplemented at local level.

In regards to criminal offences specific to the trades, a conviction for specified offences should be a breach of a licensing condition, or incompatible with eligibility to hold a licence. Specific licence conditions, a breach of which will amount to a criminal offence, should be designated.

The Law Commission recommends retaining the current system of leaving fares to the discretion of the local authority. Taxi drivers able to charge more than the metered fare where a journey begins inside the licensing area but ends beyond the compellable distance, provided the higher fare is agreed and recorded in advance. However, licensing authorities should not have power to regulate third-party booking fees which are agreed upon in advance, as these represent a genuinely competitive aspect of taxis working in the pre-booked market.

Local authorities currently have the power to limit the number of taxi vehicle licences issued in their area. In doing so, they must not leave significant unmet demand for taxis within the area. Our recommendation is that the current statutory criterion of “unmet demand” should be replaced by a test based on the public interest, combined with procedural requirements such as a review every three years and a duty to consult. There should be no changes to the transferability of licence plates in areas that currently have quantity restrictions. On the other hand, taxi licences in areas which first introduce quantity restrictions only after the suggested reforms should not be tradeable.

Although the general provisions of the Equality Act 2010 applicable to service providers apply to taxi and private hire services, disabled passengers suffer difficulties in obtaining and using these services. Furthermore, variable national standards in relation to driver training and vehicle specifications mean that passengers may have very different experiences from one area to another. Our recommendation is that private hire and taxi drivers should be required to undergo recognised disability awareness training. Licensing authorities should have the power to introduce a duty to stop when hailed, associated with compellability. Complaints procedures should be made more accessible.

Enforcement is carried out by licensing authorities, whose powers extend in principle to their own licencees. Our recommendation is that licensing officers should have the power to stop a licensed vehicle on a road, without the need for a police officer to be present; to impound vehicles for touting; and to issue a fixed penalty notice to a person whom they have reason to believe has breached any provision in national standards. Such powers should apply in respect of out-of-area vehicles. It should be made possible for licence conditions prescribed as part of national standards to be enforced by any licensing officer against any licencee.

The Law Commission’s TNC services-specific recommendations are as follows: a new operator definition based on dispatch functions. Under current law, private hire operators are defined very widely: “operate” means “in the course of business to make provision for the invitation or acceptance of bookings for a private hire vehicle”. This is true throughout England and Wales, including London. The breadth of the current definition has created numerous grey areas. The justifications for operator licensing relate to their supply-side function of dispatching licensed drivers and vehicles. The operator has discretion over which vehicle and driver is used, and is responsible for ensuring the driver and vehicle are licensed and that there is a valid private hire pre-booking. By contrast, the fact of “accepting or inviting” the original booking, without actually dispatching the vehicle, does not appear to correlate with any meaningful control over the fleet.

It is over-burdensome to subject businesses only involved in accepting bookings to the same level of regulation as “dispatch” operators who have responsibilities in relation to exclusively using licensed vehicles and drivers. The operator definition should therefore be narrower than the current definition to identify more accurately the function which needs to be regulated. It will now relate solely to the act of dispatching a driver and vehicle to carry out the regulated activity, rather than the fact of merely “inviting or accepting” a booking.

“Dispatching” occurs where a person acting in the course of business requests a driver to fulfil a hire-vehicle booking; and the driver accepts. The revised definition of operators as “dispatchers” no longer covers the acceptance and invitation of bookings. Where the person that accepts the booking does not dispatch the driver, no dispatcher licence is required. However, if a person acting in the course of business accepts a hire vehicle booking, and the booking is fulfilled, a presumption will arise that the individual or company accepting the booking dispatched the driver. The presumption ensures that those who accept bookings are held accountable because, unless they can show that they passed on the booking to a licensed dispatcher or taxi driver, they will be presumed to be the “dispatcher” in respect of the relevant journey.

The licensing status of the providers of smartphone applications offering private hire services to the public would depend on how they work. If the application does no more than accept a booking, and then passes it on to a licensed dispatcher, no additional dispatcher licence is needed for the application providers. If instead, the application has responsibility for the dispatch of a driver and vehicle, the providers of the application would be required to hold a dispatcher licence.

Intermediaries such as smartphone applications which may accept hire vehicle bookings and pass them on to dispatchers will be subject to certain obligations. Any person accepting a booking in respect of a private hire journey will be under a duty to provide information to the hirer about who they passed the booking on to. This duty, alongside the presumption that persons accepting hire vehicle bookings also dispatched the driver, helps ensure that the dispatcher for any particular journey can be identified.

The summary of the recommendations is as follows: operator licensing should only cover dispatch functions, and no longer apply to the invitation or acceptance of bookings as such. However, if it is shown that an individual or company accepted a hire vehicle booking, a presumption should arise that that person also “dispatched” the driver. This ensures the continued accountability of those who, in the course of business, accept hire vehicle bookings from the public. Persons accepting a hire vehicle booking in the course of business should be under a duty to provide information to the hirer in respect of any person to whom they passed the booking.

Ireland

Taxis are part of the broader small public service vehicle (SPSV) sector, which refers to vehicles for public hire carrying up to eight passengers. The SPSV sector also includes wheelchair accessible taxis (WAT), hackneys, wheelchair accessible hackneys (WAH) and limousines. The key difference between taxis, hackneys and limousines is that taxis can ply for hire on the street or in taxi ranks, and be pre-booked for call out, whereas hackneys and limousines can only be privately booked and the fare is agreed upon in advance. Unlike hackneys, taxis are subject to maximum fare regulation. Taxis in Ireland account for the largest part of the SPSV market (78% in 2013), followed by hackneys (12% in 2013), limousines (which became a separate SPSV category in 2000) (6% in 2013) and WAT and WAH (4% in 2013).

During the period 1978 to 2000, entry to the taxi market in Ireland was restricted by way of a limit on the number of taxi licences issued. During this period, there was a small increase in the maximum number of licences. By the late 1990s the cost of purchasing a licence on the open market was as much as EUR 100 000. In 2000, this limit was repealed out of criticism of the effects of regulation on the consumer and entailed that any suitably qualified person could obtain a taxi licence. The removal of restrictions resulted in a dramatic increase in the number of taxi licences (which, between 2000 and 2008, rose by 541%) with existing licences being devalued.

The Commission for Taxi Regulation (CTR) was set up in 2004, assuming the functions of local authorities in terms of licensing and of setting maximum taxi fares. In 2006, the CTR created a single national taximetre area and set maximum fares for Ireland as a whole. The CTR became the National Transport Authority (NTA) in 2011. The NTA is responsible for licensing vehicles, while An Garda Síochána is the licensing authority for SPSV driver licences and sets out the SPSV driver licensing conditions. As part of the annual vehicle licensing process, vehicles are inspected for SPSV suitability, the National Car Test certification is checked and current tax clearance certificates are verified as mandatory requirements.

The onset of the recession in Ireland from 2008 onwards led to a reduction in demand for taxi services, fare discounting, reduced income among taxi drivers and a wedge between the demand and supply of taxis. The perception of oversupply of taxis and concerns that the market was not providing sufficient services to wheelchair customers resulted in a policy reform. In 2010, limits on licence issuance were reinstated, which meant that issuing new taxi and hackney (but not WAT, WAH or limousines) licences was prohibited indefinitely and subsequently. Since 2010, there has been a considerable decrease in the total number of taxis, with little or no change in the number of limousines. The total number of taxis (standard and wheelchair accessible taxis combined) declined by 14.8% between 2008 and 2013. In 2013, the trading of licences was prohibited.

Review of current tensions in Ireland

The government decision in 1978 to limit the number of licences by statutory instrument has been ascribed to pressure from incumbent licence holders, including street blockades. This led to: the licences acquiring a scarcity value and widespread dissatisfaction due to excessive waiting times.

The price of a taxi licence in Dublin rose from EUR 4 400 in 1980 to EUR 114 000 in 2000, indicating a rapid increase in the rent earned by incumbents because of the restrictions on new entry. A secondary market in taxi licences was developed as a result, described as “a vibrant market for individuals who rent plates and then act as an intermediary between the owner and the driver.” According to estimations, half the average fare revenue from taxi operation in Dublin in 1997 was required to rent a vehicle and taxi licence plate from a licence holder. The licence scarcity value resulted in the owners of the licences claiming that, by investing in the industry through the purchase of licences, they had acquired property rights. This argument was quashed by the Irish High Court in three different judgments, which found that taxi licences do not confer property rights and that the terms under which they are held may therefore be altered without compensation.

Despite the Court’s rulings, after liberalisation in 2000, the State created a Taxi Hardship Panel (2002) in charge of hardship payments to licence holders. Such payments have been criticised for both the economic logic and compliance with the Court’s verdicts. Restricting entry to the taxi business became policy in an era of rapid economic growth. The failure to increase taxi numbers in the fastest growing economy in the OECD member countries caused widespread dissatisfaction due to the shortage of taxis. Research found that in Dublin city centre some 9% of hourly observations resulted in average

waiting times in excess of 15 minutes. During the period 11 p.m. to 4 a.m. waiting times in excess of 90 minutes were “frequently observed”.

The first argument for the 2010 reform relates to the perception of oversupply of taxis/hackneys due to the decline in demand occasioned by the Great Recession. Independent economic analysis published in the Taxi Regulation Review report (2011) estimated national oversupply to be in the range of 13-22%. Policymakers were advised to ensure that there was no disincentive from exiting the market. It has been argued that, if oversupply is approximately 22% per annum, this should be eliminated by 2015-2017 and that there is no need for an indefinite prohibition on licence issuance.

The second argument relates to concerns that wheelchair customers are underserved. The Commission for Taxi Regulation’s Regulatory Impact Assessment of the sector in 2009 argued for a target for wheelchair accessible vehicles of 10% of the overall cab fleet. However, the legal instrument imposing the prohibition on issuing new taxi and hackney licences does not set any WAT/WAH targets or timetables. In 2013, WAT accounted for 5% of the total number of taxis and WAH for less than 1% of total hackneys. It has been argued that, given the higher costs of running a wheelchair accessible vehicle, increased entry into this segment of the market is unlikely. Entry may further be deterred by the uncertainty as to the duration of the 2010 prohibition.

The Taxi Regulation Act 2013 prohibited altogether the transferability of licences, taking the prohibition on issuing new licences a step further in that, as things stand, more efficient entrants cannot replace less efficient incumbents. Thus more resources are used than is necessary. This is in contrast with the period 1978-2000 when entry was still possible by purchasing an existing licence, albeit at an inflated price as the time progressed. Besides this, the very rationale of restricting the transferability of licences has been contested. According to the Taxi Regulation Review Group’s 2011 report, the rationale lies in the need to move away from a system whereby a licence will have value in itself; a licence should determine a person’s suitability to carry out a function. It has been argued that preventing trading of licences does not mean the licence does not have value, rather it means that there will not be an open transparent method of determining whether or not it has value. A licence will have value if there are binding quantitative or qualitative restrictions on entry. Finally, effort will be made to trade licences by circumventing the regulations if licences become valuable.

Uber launched in Dublin in January 2014 and its operation has not caused the tension experienced in other markets. This may be ascribed to two reasons. First, Uber generally signs up licensed private hire vehicle and limousine drivers. Lighter regulation on the cost of PHV and limousine services allows the company to employ a surge pricing model. In Ireland, however, most of hackney and limousine licences were cheaply swapped for full taxi licences after deregulation, thereby effectively restricting Uber’s supply of drivers for its Uber Black limousine service. As a result, Uber is signing up fully-licensed taxi drivers for UberX.

Second, unlike other jurisdictions (most notably London), where Uber’s use of its own metering technology has been challenged on the grounds that it equates to a taximetre, a device prohibited in PHVs, the Irish taxi regulator has ruled out similar concerns, stating that Irish law only forbids taxis charging more than the metered fare and that Uber’s own fare calculation service does not appear to do that.

Another reason may be due to the fact that, by the time Uber entered the Dublin market, Hailo, another smart phone taxi service, had established itself as the leading provider. Hailo launched in Dublin in 2012 and as of mid-2014, it was used by about half of Dublin’s registered drivers. Arguably, uptake upon drivers is dependent upon a pull effect, whereby not using the service would render them excluded

from a proportion of the passenger market (i.e. supply-and-demand-like positive feedback loop between the driver and passenger applications). Hailo restricts registration to licensed taxi drivers, uses existing taxi metres to calculate fares and charges a commission on every fare sourced through the application. Unless Uber charges lower fares than taxis and offers a lower commission to taxi drivers, it is unlikely that taxi drivers will switch from Hailo (giving up the prerogatives of their trade, namely, plying for hire, taxi ranks, pre-bookings and use of bus lanes) to Uber. It seems that for Uber to operate profitably, it would have to sign-up non-professional drivers, an option that is at the moment ruled out.

The Netherlands

The regime established by the 1988 Passenger Transport Act was more or less a continuation of the regime before 1988. Traditionally, transport market regulation in the Netherlands, for all modes, was aimed at avoiding “wasteful competition” and securing “reasonable earnings” for the licence holders. The main characteristics of this regime were the following:

- Decentralisation: the 12 provinces of the Netherlands were the authorities that delivered taxi licences. In some cases they had delegated this power to co-operations of municipalities, resulting in 27 regulating authorities.
- Capacity control: each of the regulating authorities had established the number of licences according to an estimate of the demand and the possibility for a profitable operation.
- Price control: each authority annually established the fares, consisting of a fixed starting fee, a kilometre fee, a waiting time fee and a speed at which the taximetre would switch between kilometre fee and waiting time fee or vice versa.
- Quality control: quality requirements existed for the taxi operators, the drivers and the vehicles.
- Market control: there were 27 taxi zones, corresponding to the perimeter of the authorities, and licences were delivered for one zone only.
- Enforcement: this was a combined task of the authority, the police, and the Inspectorate of the Ministry of Transport.

After an evaluation of the 1988 Passenger Transport Act, the government concluded that access to the taxi market remained difficult and that the Act offered too much protection to the existing operators, resulting in a mismatch between supply and demand. The market value of the operators’ licences was too high compared to the cost structure of the industry. The links between the local authorities and the taxi industry were considered to be too close. Last, the taxi’s role in the total mobility of persons was limited. As a result, after several years of consultations and parliamentary discussions, a new Passenger Transport Act was adopted in 2000. The Act regulated both segments of the Dutch taxi market, i.e. the contract market and the non-contract market. The non-contract market comprises the call or telephone taxi, reserved by calling a dispatching centre, and the street taxi, which is taken at a taxi rank or is hailed in the street. The main objective of the new Act was to strengthen the role of the taxi in the mobility of persons. Related objectives were to improve the integration of the taxi into the transport chain, to improve the market mechanism and to increase competition. The deregulation was to be implemented in phases, the last one to be completed by 1 January 2002.

The main characteristics of the new regime were the following:

- Deregulation of taxi capacity: the limit on the number of licences was abolished. To compensate drivers for the loss of the licence value, the government introduced some fiscal advantages, including a subsidy for the installation of on-board computers.
- Centralisation of licensing: the operator licences were issued by the transport inspectorate IVW (of the Ministry of Transport) in a nationally uniform way.
- Deregulation of fixed pricing: a nationally uniform maximum fare was established for the period 2000-2002, which was continued after that period, in response to rising fares. Like the former regulatory setting, the price regulations did not apply to the pre-contracted taxi sector.
- Regulation of quality of service: apart from the operator licence that each taxi entrepreneur had to have (delivered after proof of professional competence), each driver needed a driver's pass (delivered after a medical check to drivers without a criminal record). In addition, each taxi should be marked with special blue number plates.
- Abolition of transport zones: the demand test and the taxi zones disappeared on 1 January 2002.
- Regulation of taxi ranks: taxi rank lay-outs had to be changed into a herringbone pattern, so that the passenger could choose a taxi other than the first one in line.
- Consumer protection: local commissions were formed to deal with passenger complaints.

The deregulation of the taxi industry was evaluated in 2004 and found not to have delivered all anticipated consumer benefits. The main problems were focused on the street taxi market and were ascribed to the weak position of the consumer when hailing a taxi on the street or using a taxi rank. To guarantee a minimum quality of taxi services for consumers, an examination for taxi drivers was introduced in 2004. Street knowledge became a condition for licensing. To decrease the asymmetric information in the taxi market and increase transparency, a new simplified tariff structure was made mandatory in 2008, whereby the price became dependent on the distance only. This change was also aimed at making short trips more attractive for drivers.

To improve the quality and image of taxi services for consumers, a new Taxi Act came into force in October 2011. It introduced a number of amendments to the taxi regulations contained in the Passenger Transport Act of 2000. The new Taxi Act sets out requirements for taxi companies and drivers. Furthermore, it gives local municipalities the power to develop their own quality policy for street taxis, in addition to national rules, so that local problems with taxis can be dealt with more effectively. In particular, municipalities are now entitled to oblige taxi drivers to form a group as a requirement to access the local market. For example, based on the new Taxi Act, the city of Amsterdam established new Municipal Taxi Regulations regarding the Amsterdam “pick-up” taxi market. Every taxi driver who wants to pick up customers at the street or at a stand needs to join a registered taxi organisation, a so-called TTO (i.e. Toegelaten Taxi Organisatie). As of June 2013, only TTOs and drivers with an Amsterdam taxi dispensation are allowed to pick up customers at the taxi stands. Based on the new Taxi Act, municipalities can also impose an obligation on drivers to accept all rides from taxi ranks in order to prevent the refusal of short trips.

A new tariff system also came into force in October 2011. The most important change is that the duration of a taxi ride plays a role in calculating the price. This means that the price consists of a starting rate, a time rate and a distance rate. Moreover, the client will receive a mandatory receipt at the end of the trip. Lastly, a requirement was introduced that all taxis be equipped with an on-board computer,

automatically registering the driving times and rest periods of the driver, by the end of 2013. This measure aims to reduce paperwork and time consuming inspections and to eliminate the risk of fraud. Concerning contract hire taxis, a project was carried out during 2009-2011 to improve the quality of this type of transport. In cooperation with all parties involved, instruments were developed to improve the tendering and monitoring of contracts.

Review of current tensions in the Netherlands

A mismatch between supply and demand existed in the Netherlands under the Passenger Transport Act 1988 regulation. The tight ties between regional taxi regulators and incumbent operators had resulted in a situation where new entry in the street taxi market was difficult, supply being as a result rationed artificially. Operator licences became scarce and their market value was disproportionate to the taxi industry's cost structure. The taxi's role in the total mobility of persons was limited, despite a slightly growing use. The bad reputation of the taxi industry due to conflicts between taxi drivers themselves and with the authorities (known as the "taxi wars") affected demand, as well as new entry even outside the areas where they took place. However, the bad reputation of the sector did not do justice to the contract taxi market.

The expectation was that by making access to the market easier, competition would increase and this would lead to a better operator adaptation to customer preferences. Quality and price differentiation and innovative services would increase customer choice and more people would start using taxis (and diminish car use). According to Baanders and Canoy (2010), the taxi deregulation failed to take into account the hard logic of the taxi market, namely, the inability of taxi customers to negotiate prices and compare supply and the regional differences in demand. The former justifies price and quality control, while the latter makes decentralisation attractive; exactly the opposite of what happened.

Contrary to expectations, instead of going down, the fares of the street and call taxi went up much faster than the inflation rate. The price of an urban reference trip went up by 26% between 1999 and 2003, while inflation rose by 14% over the same period. The average price remained some 10% below the official maximum fare. In view of the fare increases, the maximum fare, which was designed as a temporary measure, became a permanent measure. Price increases were reflected in taxi use. The number of trips per taxi decreased and in the main cities there was even a decrease in passenger-kms. Vehicle occupancy per hour also decreased. At the same time, undisciplined driver behaviour damaged the profile of the sector. To be mentioned that drivers were not compensated for the losses incurred due to the abolition of the limit on the number of licences, which led to a lot upheaval. However, new entry was significant especially in the street and call segments. The total number of taxis increased by 50% in the period 1999 to 2003.

The herringbone lay-out of the taxi ranks failed in the main cities and the initial in-first out rule prevailed. Comparing prices at a rank proved impractical for passengers, while enforcement was mainly directed against the refusal of short trips. Regarding the call or telephone taxi segment, competition between "taxicentrale" dispatching centres was limited. This is because in many cities there were only one to three "taxicentrales". Most importantly, unlike in other jurisdictions, in the Netherlands, most "taxicentrales" cannot quote prices as a matter of Dutch competition law. If a "taxicentrale" is an association of owner-drivers and small firms (as is the case in the main cities), the latter are considered as independent entrepreneurs and are prohibited from fixing prices. Only where "taxicentrales" are companies which employ the drivers can they determine and advertise the tariffs for all their taxis. Therefore, most "taxicentrales" cannot quote a price. Price competition in the call taxi segment is therefore in principle ruled out. Lastly, the objective of innovation was hardly achieved since the few initiatives that were taken met with resistance from the taxi drivers.

In 2014, an evaluation took place of the 2011 reform. In the course of this evaluation, Uber’s introduction in the taxi market emerged as an increasingly important issue. It is in this context that the Directorate General Accessibility (DGB) commissioned the KiM Netherlands Institute for Transport Policy Analysis to conduct an international comparison of taxi market regulations and the ways in which various countries have dealt with the advent of Uber, and particularly UberPOP. KiM delivered its study on 6 May 2015.

Regarding taxi regulation in the Netherlands, KiM found that “the international comparison of taxi regulations revealed a number of characteristic features specific to the Netherlands as compared to most foreign countries.

- Certain aspects, such as maximum fares and (the absence of) capacity regulations, are regulated on the national level in the Netherlands.
- In various foreign countries there is a much stricter distinction made between the individual market segments (taxi and hired cars with drivers) than there is in the Netherlands.
- Taxis are also much more routinely ordered by telephone in the Netherlands than in other countries, where a significant proportion of trips occur after taxis are ‘hailed in the street’. In various other countries the ordering of taxis by telephone falls under the segment “hired car with driver”. Moreover, the use of a central taxi dispatcher system, which is used in the Netherlands’ major cities as an intermediary between taxi services and taxi customers, is not used in other countries. According to KiM, the rationale behind the first two points lies in the optimal use of cars and drivers, whereas the third point seems primarily to be the result of a historically developed culture.

Uber launched its UberPOP service as a pilot project (using private drivers and vehicles) in Amsterdam between July and September 2014. It was in violation of Dutch law, which requires that taxi drivers be officially certified. The Dutch government banned UberPOP in September 2014 and the latter appealed the decision before the Trade and Industry Appeals Tribunal, arguing that it was offering a “car-sharing service”. In October 2014, several drivers were arrested in Amsterdam and fined EUR 1 500 for operating without a licence. In December 2014, the Appeals Tribunal ordered Uber to stop its UberPOP service, pointing out that Uber receives a 20% commission for each trip. In the event of violation of the Tribunal’s order, Uber could be fined up to EUR 100 000 and drivers could face fines ranging from EUR 10 000 to a maximum of EUR 40 000 for continuing to work. Uber appealed the ruling.

In March 2015, prosecutors from the Dutch Human Environment and Transport Inspectorate raided Uber’s Amsterdam office and initiated a preliminary investigation to collect evidence that Uber is providing illegal transportation on a commercial basis. The raids came after the police in Amsterdam had fined numerous drivers EUR 1 500 for operating without a licence. In April 2015, Uber stated that, to meet the government’s concerns regarding the safety, reliability and quality of UberPOP, it would require that UberPOP drivers have a taxi licence. However, the Human Environment and Transport Inspectorate stated that to become legal, UberPOP vehicles would also need to undergo an inspection, carry blue licence plates and be equipped with special devices, including a taxi metre.

In May 2015, the Dutch Transport Minister announced plans to amend taxi regulation in the Netherlands. In September 2015, Uber’s Amsterdam office was raided for a second time as part of the ongoing investigation into UberPOP. Regarding Uber, KiM found that “the Uber app is in line with the traditional Dutch way of ordering taxis via intermediary central taxi dispatches (previously primarily done by telephone), and in this respect Uber is less of a revolutionary innovation than it is in some other

countries. What is new however is that Uber uses just one portal (the app) to cover the entire country, and even internationally” (KiM, 2015).

Regarding UberPOP in particular, KiM found that in the Netherlands, the frictions arise from the use of non-qualified drivers and cars and not from the app or Uber itself as a provider of unauthorised services. This is because the Dutch taxi legislation does not contain provisions pertaining to organisations intermediating between taxi supply and demand, such as the central taxi dispatchers operating in the Netherlands’ major cities or Uber. KiM (2015) concluded that “as with all innovations, it is important to analyse whether the current regulations remain optimal”.

France

The French regulation of Taxis and TNCs is the end result of a decades-long fight between the Ministry of the Interior (the Police) in charge of the taxis and the now nearly extinct *voiture de remise* on the one hand, and the Ministry of Finance, in charge of the economic policies on the other hand.

Compared to all European countries, France is singular in that it benefits from five legally distinct types of private for-hire transportation services: (i) the taxis, (ii) the passenger cars with driver or VTC, (iii) the nearly extinct *voitures de petite remise*, (iv) the “occasional” transport with fewer than nine seats but compelled to carry at least two passengers and nicknamed LOTI, (v) and the light medical vehicles or VSL that share with the taxis the monopoly of carrying seated patients. Each of these five sectors is corseted in an over-regulation primarily intended to fragment the market for protecting economic rents.

In 1955, a decree reactivated an old distinction between *voitures de petite remise* and *voitures de grande remise*. According to the decree, the latter were “luxury cars, driven by the owner or his agent, according to the conditions set in advance between the parties. They must be of a recent model and offer passengers conditions of comfort and interior amenities, horse power and speed demanded by international customers.” Unlike *voitures de petite remise* that, just like the taxis, are controlled by the Ministry of the Interior, the *voitures de grande remise* fell under the Ministry of Public Works, Transport and Tourism. A decree of 1990 specified the characteristics of the vehicles to be used for *grande remise* services: “four doors and five seating capacity minimum, fiscal power of at least nine HP for gasoline engines and six HP at least for diesel engines, a minimum overall length of 4.50 metres and a minimum overall width of 1.70 metres.” To our knowledge, few jurisdictions in the world specify in such details, to private contractors, the tastes and expectations of their international clientele.

The coexistence of these three specific types of for-hire passenger transport, i.e.: the taxi, the *voitures de petite remise* and the *voitures de grande remise*, has not been an issue until the early 1970s when households’ access to the telephone became widespread. With the phone, it was no longer necessary to go and fetch these cars in their garages; a phone call was enough to book a ride. Everywhere in the world taxis have seen the danger of this new competition, and protested against the rapid development of the PHVs, but in France they were particularly well heard.

Indeed, for over 30 years, successive ministers of the Interior strived to make the *petite remise* virtually disappear, ordering their prefects not to grant any new licences. In 1993, a circular from the Minister of Interior ordered the prefects, in an understated manner, “not to extend excessively the number of *petite remise* operators as to maintain the fragile balance with taxi operators.” Because, unlike the taxis’, these licences are non-tradable and non-transferable. The latter administrative act not only definitively froze the expansion of *petite remise*, it also guaranteed their eventual disappearance. The taxis got what they asked for. In Paris the *petite remise* totally disappeared and there are very few left in

the rest of the country. Meanwhile the owners of taxi licences managed to prevent most local governments from issuing more taxi licences as a way to enhance the market value of their property.

The 1982 law on inland transport gave an opportunity to some entrepreneurs to fill part of this void by subverting a section of the law originally devoted to regulate occasional collective transportation in small buses. They realised that “collective” starts with two passengers. Of course there were other constraints but the “occasional transport” thrived in several niches like airport trips where they competed directly with the taxis. In another sector, the paucity of transport supply for seated patients led the legislature to create the Light Sanitary Vehicle (VSL) to share the monopoly the taxis enjoyed in this market.

Several economists have since recommended to release the *petite remise*. It was, for example, the “Decision 210” of the Attali report commissioned by Nicolas Sarkozy in 2008. But after three days of taxi protests in several cities in France, the government quickly buried this proposal of the Attali report.

In May 2007 a decree concerning the composition of the first Fillon government created the Ministry of Ecology-Sustainable-Development-Transport-and-Housing. By this decree, the Tourism Directorate previously attached to the Ministry of Transport-Infrastructure-Tourism-and-the-Sea was entrusted to the Ministry of Economy-Industry-and-Employment, which was itself attached to the Ministry of Finance. Two years later, by changing a few paragraphs in the thick Tourism Code, the *voitures de grande remise* regulations were “modernised” by taking the new name “passenger car with driver or VTC”. This reform entered into force on 1 January 2010 in accordance with a December 2009 decree implementing the law of development and modernisation of tourism services.

Review of current tensions in France

The texts described in the preceding section have largely altered the for-hire passenger transport sector in France by simplifying access to the profession. Companies are no longer compelled to own the vehicle licences themselves, nor are they subject to quantitative limits related to the number of cars that could be operated by the contractor. But above all, the requirements on the vehicles have been revised downwards: the minimum number of seats was reduced from five to four, the minimum length from 4.5 m to 4.4 m and vehicle power requirements have been removed. Although very discreet, this reform has not gone unnoticed, and the sector has been expanding rapidly.

Thus, in essence, legislators have resurrected a form of *petite remise*, but a *petite remise* out of reach of the Minister of the Interior, and a *petite remise* rid of the obstacles which, in 1977, had been put to its activity as the ban on displaying distinctive signs on the car body or the obligation to return to its base (*remise*) after each trip. This encroachment of the Ministry of Finance in the reserved area of the Ministry of the Interior probably did not happen inadvertently. Indeed, in 2008, economists from the Directorate General of the Treasury had measured the correlation between the taxi shortage in provincial towns and the market value of the licences. For this study, it is worth noting that the researchers did not have access to internal taxi statistics of the Ministry of the Interior, and they had to be content with published statistics, already several years old.

In August 2010, in his written question to the Secretary of State for Trade, member of parliament (MP) Philippe Vigier noted that since the entry into force of the law, 267 companies had already registered under this new regime. This emphasised the fear of the National Federation of Artisans du Taxi, the major French taxi union at that time, “that access to that profession constraints are insufficient to guarantee professionalism and safety and that the field of activity of these companies includes transport traditionally provided by taxis and is not limited solely to tourism” (Darbéra, 2015). A year later, the number of VTC operators approached 2 000 according to the Register of VTC, half of them in

the Paris region. But this figure probably underestimated the sector's importance largely because it does not give the number of vehicles, given that some operators have several dozen vehicles.

According to the original decree, any person or company wishing to exercise this activity must be recorded in a register. Registration is granted by a licence committee. The operator of VTC must attach to his application for registration an estimate of the number of drivers and the number of passenger cars envisioned for the exercise of its activity. But once the licence is granted, it is not necessary to declare the actual fleet, nor the actual number of drivers. There are therefore no statistics on the existing VTC fleet. The authorisation must be renewed every three years.

Drivers must hold a professional certificate. To obtain it, they must show evidence of a professional training, including a theoretical part (transport regulations and the highway code, customer relations, general education concepts, foreign language) and a practical part (driving courses and, where appropriate, first aid training). The principle of this course, claimed by taxicab unions, was finally accepted by the Tourism Directorate and by the prime minister who initially had not felt it necessary.

In medium-sized cities, the competition provided by the VTC presented a real danger for the taxis. And their reaction was very strong, as evidenced the case of Easy Take in Avignon. This entrepreneur, who put into circulation thirty Renault Kangoo's, offered “unbeatable and no surprises” fixed prices: EUR 7 up to 7 km, EUR 15 up to 15 km etc., day and night, seven days a week without extra for luggage. The start was thundering: vehicles with bright colours, aggressive advertising campaign (Le Monde, 19.05.2011). The taxi union of Vaucluse, supported by the bailiff's findings, seized justice to summon Easy Take to cease its trade, accusing it of unfair competition. Several hundred taxis protested in the southern cities of France where Easy Take was starting to expand its business.

It seems that once again the taxis were heard. Indeed, each year, on the anniversary of the first decree which fixed vehicle characteristics, a new decree situates these characteristics closer to those imposed on the *voitures de grande remise*, first by returning to the length of 4.5 m, then by requiring a minimum output of 88 kilowatts or 120 horsepower. This was incompatible with the too-short Kangoo's and so Easy Take went bankrupt.

The advent of app-based booking platforms gave the VTCs a new impetus. With taxi demonstrations turning violent, in December 2013 the government tried to stymie e-hailing by imposing a 15 minute delay between accepting a booking and picking up the passenger (the taxi unions had asked for two hours) overriding a negative advice the *Autorité de la Concurrence* (Competition oversight body) had given to the government's project a couple weeks before. A few months later, the Conseil d'État suspended the decree and eventually cancelled it by the end of 2014.

Meanwhile in February 2014, the government had entrusted the MP Thomas Thévenoud with the task to establish “sustainable conditions for balanced competition between individual modes of passenger transport.” The law that was enacted during the following summer exhibits striking characteristics.

The first articles open the way to decrees that will define the “conditions of professional competence” required from VTC drivers and “technical conditions and comfort” to be met by the vehicles under the expectation that the administration should decide the comfort expected by clients of the VTC. The following articles reconfirm the 4.50 m minimum length for vehicles and the 88 kilowatts minimum power, while other decrees have raised the level of training required for drivers to 250 hours. Since these training courses do not culminate in an examination, their purpose may be seen as simply creating a barrier to entry for the unemployed who cannot afford the EUR 5 000 price tag of these courses. There are no courses imposed upon taxi driver candidates, only an entrance examination.

Other articles seem to be designed to make the VTC less competitive by increasing their economic (and incidentally environmental) operating costs, by requiring, for example, that they return immediately after each fare to the operator's premises or inside an underground car park, where, incidentally, mobile phone coverage works only imperfectly.

Finally, there are elements of the law that ban the very essence of booking applications by prohibiting VTC “and the intermediaries that they use, informing a customer before booking...regardless of the means used, both of the location and of the availability, immediate or future of a vehicle...when this vehicle is on a public road”.

Several TNCs, including Uber, have operated in France technically under the Thévenoud rules though taxis have complained of lax (unrealisable?) enforcement of these – most recently with protests in January 2016. The UberPOP service that allowed non-professional drivers to offer ride-sharing services with their own personal vehicle was declared illegal in France.

Germany

Taxi services in Germany have traditionally been strictly regulated. Access to the market is limited through a concessionary systems and price/fare competition is prevented through the application of mandatory fare levels. A few exceptions exist, including the city states Hamburg and Berlin. Despite efforts being made elsewhere in the 1980s and 1990s to deregulate markets (including taxi services), policy makers and regulators decided to keep this systems in place largely unchanged. The main reasoning for this has been that taxis are seen as a vital part of the multi-modal public transport systems operating in urban areas and beyond, with taxis playing an important role in complementing (particularly in more rural areas) or replacing (particularly for persons with reduced mobility) other services on a non-scheduled transport service basis.

The legal basis for the operation of taxi services in Germany are mainly two laws, the law “*Personenbeförderungsgesetz (PBefG)*” specifying the regulatory situation for taxi-based passenger transport and the law “*Verordnung über den Betrieb von Kraftfahrunternehmen im Personenverkehr (BOKraft)*” specifying the regulatory situation for companies providing these services.

Provision of taxi services is subject to regulatory approval, with concessions being issued by the relevant authorities on regional and city levels. Underneath the umbrella of relevant federal legislation and regulation, specific local regimes can be implemented, including fare levels. Currently more than 800 separate zones exists for this. Concessions issued mainly apply to only these zones, with drivers being restricted to the pick-up of hailing passengers and use of taxi ranks in these zones only. Trips to destinations located outside these zones are not restricted, but pick-up of passengers outside the zone is not permitted. These restrictions do not apply to pre-booked journeys.

Concessions (or medallions) are in most cases valid for five years, with first time concessions initially being limited to two years. Unlike in many other countries, the trading of concessions is not possible, apart from the specific case where a whole taxi company is traded. In addition a lease model for third-party operation of an existing taxi company with its existing concession in place is also possible. Local and regional governments are responsible for any quotas relating to the number of licences issued. This differs by zone, with some setting limits to the maximum numbers of concessions being granted. Fees for this are relatively low, covering mainly administrative processes, but this also varies slightly within regions.

Taxi operators must meet certain financial requirements and demonstrate the expertise required to operate a company, with the applicant also being evaluated (e.g. with regards to reliability, etc.). Taxi drivers are not required to belong to a collective, but in practice the majority of them do. In order to receive a concession, the car must meet all the requirements as described in the relevant federal, regional, and local legislation. These requirements relate to the number of doors, the place where the licence was issued, the presence of a specific alarm system and taxi sign on top of the car. The colour (ivory white) is also prescribed nationally, although federal states may implement alternative arrangements.

The taxi company must have a licence, for which the company must acquire approvals issued by the German Chamber of Commerce, diplomas and references proving the ability to run a company. In addition, the driver must have a special taxi driver licence valid for five years, based on:

- age (>21) and driving experience (>two years)
- limited number of penalty points and must be demonstrably physically fit
- medical checks (including physical and mental fitness, vision test)
- passing a local knowledge test
- declaration acknowledging that they bear a special responsibility because they provide commercial passenger transport services

Within the licensed transport area, regulated fares apply via the taxi metre. The fares are set by the local or regional governments. The charged fare shall neither exceed nor fall below this set fare level. Fares for rides outside of the licensed area are unregulated and therefore negotiable. The precise tariff per trip consists of a base value and a variable per-kilometre rate.

Review of current tensions in Germany

Despite efforts being made to deregulate taxi services in the 1980s and 1990s in many other countries, policy makers and regulators in Germany decided to keep the traditional strictly regulated systems in place largely unchanged. There have also been earlier recommendations by the German Monopolies Commission to deregulate certain aspects of the operation and delivery of taxi services, ostensibly in order to improve competitiveness of the sector. These recommendations have so far not been implemented by policy makers. Renewed attempts by this authority were made in 2014/2015 to initiate change of this regime in response to the rising influence of transportation network companies. These recommendations relate to specific changes in the regulatory framework to allow transportation network companies to operate within the framework, rather than restricting their operations. Specific recommendations include less restrictive regulations for access to the market and at least partially competitive tariffs. But they also warn that the success of these deregulation efforts relies on the exact definition of the updated legal framework.

Uber initially entered the market in Germany, providing UberPOP and UberBLACK in the largest cities (i.e. Berlin, Hamburg, Munich) and then after proving successful with passengers rolling these out to more cities nationwide. Following strong resistance and protests from the traditional taxi sector, court rulings stopped these services. This began in Berlin, but soon led to a countrywide ban first of UberPOP and then also of UberBLACK, which operated for a few more months. Uber has reacted to these proceedings by offering new services, namely UberTaxi and UberX. For UberX licensed drivers provide transport services in private for-hire vehicles. UberTaxi provides only the platform for taxi booking and payment, using licensed taxis only. The service is offered in Berlin, Hamburg and Dusseldorf. For these systems the vehicles, drivers, and companies adhere to the local legal and regulatory requirements. This service has not faced any legal opposition and is still in operation.

Bulgaria

Bulgaria has deployed a number of regulatory instruments to oversee taxi services. At the national level, certificates of registration are issued by the Ministry of Transport for taxi operators and at the local level, city authorities issue additional permits for the operation of taxi services. For these permissions, taxi operators must provide assurances that they are proven to be reliable and professionally competent. Municipal councils can limit the number of taxis licences that are issued within the municipal area. Furthermore, a transfer of licence from one taxi operator to the other is not possible under these regulations. Taxi drivers traditionally are able to carry out transport services on behalf of a company without being employed by it.

There is a nationwide regulation of minimum and maximum fares, with an initial hiring charge and a distance-based price. The latter is calculated by a required certified taximetre in the vehicle. Moreover, the passenger should be transported on the shortest route or the route which has been specified by the passenger. A receipt must be provided by the driver. At taxi ranks passengers may choose a taxi irrespective of its place in the taxi rank. In case an operator or a driver does not adhere to the regulations, there is the possibility of revocation or suspension of certificates of registration and permissions – including the taxi driver certificate. In addition specific requirements both for the vehicle and the driver are in place.

Minimum vehicle standards have been defined, including the following:

- seven seats maximum in the vehicle (including the driver)
- periodical vehicle tests mandatory
- at least four doors
- steering wheel on the left
- illuminated taxi sign
- certified taximetre
- badge with the operator name and the prices in the interior of the vehicle
- equipped with safety belts
- white and black checked band on the doors
- yellow paint, or green paint in case the vehicle is hybrid or has an electric engine
- sign with operator's name with Cyrillic letters and phone number on the front doors
- label with the licence number and validity on front right mudguard and back of the vehicle

For the staff training and licensing regime of taxi drivers, the following criteria have been defined:

- ordinary driving licence
- certificate for taxi drivers as issued by the Ministry of Transport after successful exam
- criminal record checks
- psychological suitability
- topographical knowledge

Review of current tensions in Bulgaria

As part of the regulatory framework in use for taxi services in Bulgaria taxi drivers traditionally were able to carry out transport services on behalf of a company without being directly employed by this company, i.e. operating on a freelance basis. Thus typically taxi drivers did not enter into a labour contract but had to register their own company and in many cases then lease the vehicle, including the necessary equipment. Often the taxi operators and the vehicle leasing agency were combined into one financial entity. As with many other taxi markets around the world, the advent of transportation network companies brought with it market entry of companies and services challenging the status quo of the traditional taxi service delivery and regulation.

In this context, UberX launched its services in Bulgaria's capital Sofia in 2014. In response to this, and protests from the taxi industry, the Bulgarian Parliament proposed and adopted changes to automobile transportation law which now obligates all taxi drivers to have certificates proving they work under contracts of employment and not freelance. The amendments have been passed at both first and second readings in October 2015. Critics of the new regulations have called them "anti-Uber" changes and have pointed that they coincided with a ban on Uber's operations in Sofia upheld by the Sofia Administrative Court the previous week.

Thus, in addition to these changes the Bulgaria's Competition Protection Commission (CPC) has imposed four fines totaling about EUR 102 260 on two companies offering Uber taxi and car-sharing services on 6 July 2015. It targeted two Dutch-registered companies, Uber BV, which offers customers the Uber mobile app, and Rasier Operations BV, which selects drivers for the UberX car-sharing service. According to media reports, the CPC said on 15 April that it had opened a formal investigation into the operations of the taxi and car-sharing services firm Uber in the country's capital city Sofia, on suspicion that the company was using unfair trade practices.

The conflict was based on the fact that in Sofia, legitimate cabs carry the same base fare as Uber (BGN 0.70[Bulgarian lev]), but charge BGN 0.79/km during the day and BGN 0.9/km at night, compared to Uber's BGN 0.40/km fee. Following these fines, the two companies appealed the CPC's decision, citing that their business model is only to act as intermediaries between passengers and car drivers via an online application and that they are thus not a taxi company. But following a hearing, Bulgaria's Supreme Administrative Court upheld the decision of the CPC, ruling that they were in breach of competition rules by refusing to pay the licence fees required from a company that offers transport services to passengers, and that they had failed to cooperate with Bulgarian authorities by providing information requested by the CPC.

Comparative analysis

Using regulatory instruments

Multiple instrument combinations are being deployed to cover policy objectives, and it can also be seen that the regulatory solutions adopted by the countries studied here allocate different levels of importance to the various policy objectives.

While a few common features can be identified throughout the countries covered in this analysis (e.g. need for vehicle specifications, use of a taximetre, licence requirement for drivers/operators, maximum fare levels, etc.), it is apparent that the combinations of instruments deployed are highly variable and that taxi regulation is not a rigid and universal approach.

The regulatory frameworks analysed here have historic roots and often went through an evolutionary process of being updated to cater for changes and developments in the market, technology and demand structures. Before the advent of TNCs, other factors have had disrupting effects, with legislation being put in place as a reaction to this.

Another important difference relates to the varied approaches for issuing, setting caps on, pricing and allowing or banning trade of driver/operator licences. This issue, particularly where licences (medallions) are officially (or unofficially) being traded at often very high prices (e.g. as an informal “pension fund”), becomes very critical when TNCs enter the market; here managing the transition process will be an important task for policy makers.

Large differences also exist in view of regimes for plying for hire and street hailing, geographical and territorial limitations of operations, and the way private for-hire vehicles are addressed, either as part of a wider taxi regulatory approach, or separately.

Mapping current tensions

Multiple tensions exist with taxi and for-hire services around the world in connection with poor enforcement of existing regulations. Depending on the interlocutor, different areas of tension are mentioned: Two of the most often mentioned ones are relative to illegal (unlicensed) taxis and unqualified drivers, but it is also frequent to hear about 12-hour shifts being necessary to make ends meet. And of course, multiple events of fare abuse, especially when the client is not familiar with the city. In most of those areas, full and permanent digital connectivity of the vehicles (and access by the authorities to the relevant data flows) would vastly reduce the problems.

Taxes (on operators and on drivers) and labour charges are also a source of tension. In many countries there is already a differentiated treatment given to owner/operators and to employees; any adaptation to the new entrants must be preceded by a serious evaluation of how rigorous the enforcement of rules is with the incumbents.

Vehicle taxation can also be an area of tensions, since in many countries taxis enjoy a privileged status in terms of purchase tax. This is normally associated with a constraint that imposes exclusive use for that function.

In many cities, at least a significant part of the licences have been acquired by operators against payment, in the primary (authority) or secondary (other operators) market. With the economic rent associated with the limited supply being eroded by new entrants offering high quality services, strong feelings of loss and associated tensions emerge. This must be specifically addressed as a transition issue, which is especially serious in the cases where the authority was selling the licences or where trading was legally possible.

Since in many cases, municipal boundaries have little adjustment to functional urban areas, it would make sense for the population if licences were emitted by authorities at metropolitan level. This could also improve economic efficiency and reduce emissions. In the cases where licences are paid to municipalities, it could be possible to have an alternative revenue raising system, in which each vehicle would pay in relation to the kilometres driven in service within each of the municipalities of that metropolitan area.

In some countries, public transport operators complain about the insufficient availability of taxis in the peripheral areas of urban agglomerations for provision of “the last mile” services. Their argument is that this absence strongly reduces the attractiveness of their own services, and they often say that the

only solution would be that they provide such services themselves. Since they do not own taxi licences this is not legally possible, and the incumbent taxi operators so not see these intermittent services as economically interesting.

In most cities the shape of the mobility demand curve clearly suggests that service supply by vehicles/drivers working in shifts of eight hours produces serious inefficiencies in terms of clients' waiting time (supply dimensioned for the average demand) or drivers' and vehicles' idle time (supply dimensioned for the peak demand). It seems worth investigating regulatory possibilities for service provision in part made with vehicles and drivers at much less than full time, for instance in blocks of two hours or their multiples, whatever their status. Availability of resources (vehicles and drivers) does not seem to be a problem in many developed countries, and probably even less in developing countries. With the above mentioned requirements of full digital connectivity, these suppliers could easily be registered and monitored.

Specific differences relating to transport network company operations

Differences in terms of regulatory response and more general opinion forming also relates to the way in which transportation network companies (TNCs) are perceived, e.g. whether it is seen in a more positive way, as part of the wider sharing-economy, or in a more negative way as aggressive business practices disrupting the established transport services.

Also TNCs are offering a large variety of services which have to be addressed in different ways and which are felt as having varying levels of potential disruption.

The status and business segment of TNCs generally (or the perception of that by authorities and regulators) also varies, with it being seen e.g. as a transport service provider, an electronic “market place” for matching transport related supply and demand, an app, or as a device to electronically hail a cab (e-hail).

Innovative regulatory instruments

The emergence of digital connectivity and wireless communications has opened the way to the possibility of new types of instruments that could allow the operating companies a better control of the efficiency in the provision of their services. It could also give authorities a completely new way of pursuing their policy objectives.

Many taxi and other for-hire transport companies are collecting more and more data regarding trips, drivers and clients. However, this data is rarely exploited by authorities to deliver better and more targeted regulation that enables public policy objectives to be met with the lightest regulatory touch. Taxi and traditional for-hire regulation is still the domain of very blunt instruments such as market access and geographic restrictions that purport to deliver benefits, but whose immediate impact is rarely tested and long-term impacts rarely adjusted. However, it isn't immediately obvious that given the current state of affairs in many cities, this data can be used at present to better guide regulation. One reason is that in many cases, regulators lack the technical expertise or the time to exploit such data. Another of the reasons this data is not better exploited by authorities is that it is often housed in silos for each taxi or CTA operator and is often in incompatible formats that stymie broader exploitation by authorities.

A clear concern of app-based platforms is that their data is a core part of their value proposition. Releasing the data into the public domain, even if restricted to public authorities, raises real issues regarding commercially sensitive information and individual privacy. This concern is especially acute for businesses operating in countries where there are legal obligations to release publicly-held data to those who request it (e.g. in the United States under the “Freedom of Information Act”).

There are strategies to help ensure data protection while allowing the extraction of useful information that can be used by authorities to carry out innovative and real-time regulatory interventions. One example is the “Safe Answer” framework pioneered by the Massachusetts Institute of Technology (MIT) that would allow authorities to query operator data under a vetted and trusted framework. Authorities could then use the query results for regulatory purposes without ever releasing proprietary data. See ITF (2015) for a description of this approach.

Operators themselves may be reluctant to provide such data because it could putatively pose competition risks if the data were to become publicly available (as is mandated for publicly held data in some countries) or simply because it could be used to strip advantages that certain operators currently enjoy. Additionally, access by, or the inadvertent release of data by, authorities holds serious consumer privacy implications. However, it should be noted that no such effects have been claimed, nor documented, in New York City or Portland, Oregon, both of which published (and in New York's case, released) trip-level data.

App-based platforms are generally very data-intensive operations. The breadth and variety of data collected could potentially be used to deliver much more targeted outcomes with much fewer regulatory “losses” or inefficiencies. This is because app-based platform data is collected for the entire fleet irrespective of where and in which jurisdiction drivers operate. It also results from the granularity and completeness of the data collected that could be used to control very specific public policy outcomes – as in the case of variable insurance regimes outlined in the earlier in this report. In addition, many CTAs are entering or have recently entered mature markets.

All of the above suggests that it may be worth pursuing new, more flexible performance-based regulatory frameworks that are conditioned on access to data that provides regulators with certainty that public policy objectives are being met. Already several cities have put in place or are exploring data-led regulatory deals with CTAs (e.g. Boston, Sao Paulo). In Sao Paulo, the “data-deal” being considered calls for authorities to receive sufficient data from CTAs such that the former can charge per-kilometre fees based on time of day, location and whether there is a passenger on board (see Box A). These arrangements could be provided on a temporary and flexible basis. For example, under a regulatory exemption regime, operators seeking to avoid the current heavy taxi regulation could be exempt if they provide sufficient data to control the delivery of public policy objectives.

Box A. Proposed credit-based commercial transport app regulations for Sao Paulo

The Sao Paulo Municipal Government has proposed a draft decree regulating the use of public infrastructure that in so doing will incidentally regulate how commercial transport apps (CTAs) are allowed to operate (Prefeitura de São Paulo, 2015). These rules were up for public comment until the end of January 2016 and are not yet in their final form, but they already prefigure one of the most innovative data-led approaches for CTA regulation. Under the proposed decree, CTAs would be charged an ex-post payment calculated on the basis of an estimate of vehicle kilometres travelled during the period with excess travel being subject to a sur-charge. CTAs will pay (or compensate) a posteriori for kilometres travelled. No restrictions are to apply - companies will be free to buy as many kilometres as they wish subject to the price to be set by public authorities.

In essence, the proposed decree sets up a market for credits that could be priced dynamically by the city to better guide CTA operations in support of public policy objectives. Conceptually, the fee is a payment in exchange for commercial access and use of public road space but is set up in such a way as to allow the municipality to dynamically charge for this use according to the real-time impacts CTA operation may impose or for other public purposes.

For instance, the municipality could exempt ride-sharing services, which can be shown to reduce overall vehicle-kilometres travelled. The municipality could also design price incentives encourage co-ordination between CTAs and public transport and taxis in off-peak periods, in underserved areas and for traditionally underserved populations. Already, the draft decree calls for 15% of "service providers" or "driver-partners" to be reserved for women. In order to help incentivise the provision of vehicles equipped for those with mobility impairments, plans call for kilometres travelled by such vehicles to be charged a reduced per-kilometre fee.

In order to support the proposed system, the municipality would require CTAs to provide anonymised data on trip origins and destinations, times, travel routes and distances, price and service evaluation. This data would be processed by the city's data centre for urban mobility (MobiLab) and would serve as the basis for the dynamic pricing of CTA credits. This kind of data-led real-time regulation of CTA services prefigures the broader application of data-led regulation for all for-hire operators and, ultimately, all users of urban road space.

Flexibility in the face of uncertainty

Such a flexible, reversible and data-led approach has two principal advantages in dealing with uncertain impacts stemming from transport service innovation. The potentially reversible and temporary aspect allows authorities to buy time and experiment with new services and regulatory approaches that otherwise might be misguided or hard to reverse. Experimental policy-making in this context reduces the risk of getting policies wrong in the face of uncertainty. Of course, this approach requires a heavier, traditional policy to remain in place as a default guarantor of public policy outcomes.

The second aspect is that access to fine-scaled data or the insights it can provide allows regulators to avoid regulatory inefficiency by over-specifying measures. Real-time adjustable regulatory frameworks would allow regulators to deliver much more effectively on policy outcomes. For instance, automatic regulatory control

systems could modulate zone pricing or distance pricing for CTAs and other operators in areas and times where too many drivers are congregating, such as airports. Finer access to data decreases the risk of negative outcomes by controlling for these directly via data. However, it should be pointed out that applying such pricing measures to CTAs only will likely have adverse effects by pushing riders to other services or to use their private vehicles. Furthermore, it remains to be seen if such control exercised by authorities would be more effective at delivering on public policy objectives than dynamic pricing implemented by some CTAs.

The key concept in delivering these new regulatory approaches is traceability. It becomes possible to require that all vehicles licensed for these operations are permanently geo-located and connected to the web. In turn, it becomes technically possible to obtain statistical data about their performance and, in case of complaint by one client, to fully recover the footprint of that particular service. Additional elements of service rating (driver, vehicle, booking system, etc.) can also be considered as instrumental in the pursuit of the public policy objectives of consumer protection and social inclusion.

Much of this situation is new and not yet subject to real world experience. As such, it will require some dialogue among the stakeholders (authorities, operators, consumer associations, trade unions). Specifically, part of the traditional regulatory instruments based on initial screening of providers to reduce the risk of misconduct could be replaced by much lower initial screening effort. This could be followed by monitoring and much easier evaluation of actual behaviour in case of complaints. For instance, a driver's detailed knowledge of the street network could easily be replaced by the on-board availability of one of multiple GPS-based navigation systems. Similarly, some of the formal training and qualification requirements could be made significantly lighter and complemented by a system of systematic driver rating by the clients. In both cases, not only is the investment lower, but the actual capacity for delivery of good service is much improved on a permanent basis. (ITF, 2016; pp.32-35)

A range of possible innovative regulatory arrangements is reviewed below (see Box 4). For all the instruments mentioned, it is assumed that all vehicles in the taxi and for-hire service to which they would apply are fully and permanently "digitally connected", with geo-localising equipment and permanent monitoring and recording of their location. These are mostly standard in all cases in developed countries. In a few cases (explicitly noted) additional connected equipment (in the vehicle or in the client's smartphone) could be necessary.

Box 4. Innovative regulatory instruments

Economic

- Access to market and profession
 - If all services are provided with fully equipped vehicles, and some occupation statistics are regularly published by authorities, it would be easier for potential operators to decide to enter the market as well as for current operators to assess whether to stay.
 - Permanent pressure for service quality provided by client rating is most likely more effective than initial training and certification followed by a virtually unmonitored practice over many years.
- Prices and fares
 - Even if authorities wish to retain some control of price levels to ensure affordability, it is possible to allow a limited range of prices (via multipliers to the base tariffs) and thus some variation according to the balance between supply and demand.
 - Avoiding price fraud by route extension becomes very simple by allowing clients to request a price estimate for the stated destination before the service is started. Because of this possibility, special airport tariffs would no longer be required.
- Labour regulations
 - Regulations about working /driving time need not change because of ITS but enforcement is certainly easier since there would be a permanent record of when the vehicle is on active duty and who is driving it.
 - Similarly, no need to change contract rules.

Social

- No need to change vehicle standards regarding their mechanical functioning. But specific rules must be imposed (preferably after dialogue with the relevant stakeholders) about the connectivity requirements and the conditions for data to be supplied to the authorities, by default and in case of investigations.
- No need to change the special insurance regulatory requirements, but the permanent connectivity of the vehicle may lead to better assessment of exposure to risk and subsequent modification of the policy conditions.
- Staff qualification and training requirements could be significantly simplified as long as an adequate mechanism for client rating (and follow-up actions) is agreed and implemented.
- Mechanisms for claiming against poor quality service would be part of the client rating mechanism and follow-up actions. An app would conceivably be available for a real-time alarm issued by the client in case of grossly inadequate behaviour of the driver and vice-versa.

Administrative

- No need to change the forms of service initiation, but some of the possibilities offered by ITS (e.g. service rating) would only be available if the client's smartphone were linked to taxi or for-hire service.
- Perhaps no need to impose territorial limitations for accepting clients, as geographical imbalances could be automatically adjusted through incentive/dis-incentive systems such as variable zone or kilometre pricing.
- No need to change traffic regulations. The concept of the taxi stand becomes more important in terms of avoiding unnecessary (taxi roaming) service than as an instrument to facilitate location of taxis.

Conclusions and policy recommendations

Based on the previous sections and on the outcome of the ITF’s Corporate Partnership Board (CPB) workshop on "ITF/OECD Principles for the regulation of for-hire road passenger transport services" (2015), and on the analysis of the Portuguese situation, we have identified the following set of principles that can serve to usefully guide regulatory reform initiatives in light of better regulating taxi, TNC and other for-hire services.

Policy should allow or steer the development of innovative services towards public policy objectives to equitably improve mobility, safety, consumer welfare and sustainability. This principle will likely entail lightening the regulatory controls on entry and fares for dispatched taxi service (while controlling for public policy objectives for taxi services obtained via hail/rank, which are marked by information asymmetries and lack effective consumer choice) and introducing new types of regulation on CTAs than have currently been deployed in most markets.

Regulators and regulation should, as much as possible, not differentiate among different categories of service providers. If exemptions are required (e.g. correcting for specific failures inherent with some markets like the street hail taxi market) these should be explicitly substantiated and regularly and frequently reviewed.

To the extent that technology or other alternative approaches can deliver on public policy objectives, including consumer protection, in the place of traditional and currently required regulatory frameworks, regulations should be adapted, streamlined, replaced or removed based on an open, evidence-based analysis.

Regulators should increasingly seek to leverage data-led regulation as a way of providing a lighter and more flexible approach to achieving public policy objectives. (ITF, 2016; p. 36)

In the specific case of Portugal (and in multiple other countries) coexistence of two regulatory frameworks will probably be necessary for some time, even if both address the same public policy objectives: the traditional “data poor, regulation heavy” and the new “data rich, regulation light”, only the first one giving access to the market of street hail/rank.

The nature and requirements of the new framework must be made clear to all operators (taxis and CTAs), and to the public. All who wish to comply with those requirements should be able to operate under that lighter regulatory framework, but this includes the obligation to provide regulators with information that allows the authorities to ensure the delivery of public policy outcomes. It is expectable that this would lead to a transfer of some taxis from the old regulatory framework to the new, and the modalities for this transfer could likely be part of a discussion process with the traditional operators.

The control of achievement of public policy outcomes can be based on access to data, reception of data or access to vetted third-party data reporting systems that allow regulators to seek specific insight into the manner in which for-hire operations are impacting public policy objectives, e.g. preventing market power abuse or

disproportionately contributing to congestion, again, based on an open, evidence-based analysis.

Policy-makers, regulators and planners should identify the minimum data inputs from operators necessary to carry out the above and, in particular, to plan for and regulate mobility services in line with public policy objectives. Parsimony is recommended in the definition of the required set of data, as requesting too much may have little value for the authority and at the same time invade the domain of commercial sensitive information. The provision of these should be mandatory for operators applying for an exemption to the current regulatory regime

Drivers should have a unique and portable ID number from first registration at any platform or with any operator. This allows for the control of driver identity (and security vetting) as well as working hours across multiple platforms or services. Drivers should be vetted regarding their security profile and driving history. Vetting results should be portable and linked to the above ID number. Driver training should be mandatory for safety and knowledge of rules. Driver training or other alternative mechanisms should ensure the delivery of high levels of customer service. Driver training requirements should be regularly reviewed to ensure that they deliver on wanted outcomes or do not, alternatively, represent unreasonable or unsubstantiated barriers to entry. Vehicles should be safe, roadworthy and in standing with existing regulations regarding emissions.

Rapid, transparent and targeted feedback mechanisms should be in place to ensure continued customer and driver protection. These mechanisms should be put in place for app-based and traditional dispatch services.

Reputational data on passengers and drivers should serve to ensure a secure driving experience. In case of emergencies, easy-to-use mechanisms should allow for the transmission of this data directly to relevant security or public safety services.

Requirements for operators to carry out public service obligations should be flexible and performance-driven rather than prescriptive. But they should also be robust and include both incentives and penalties sufficient to deliver wanted outcomes. Compensation to operators for carrying out public service obligations may be necessary but these should be regularly evaluated against other options.

Policy should seek to integrate taxi, CTA and micro-transit services into the broader offer of mobility services including public transport, car- and bike-sharing, including through consolidation of modes in trip planning apps and unification of fare payment. (ITF, 2016; pp. 36-37)

Multiple and duplicative regulatory regimes should be eliminated or streamlined except where their retention can be explicitly substantiated. Empirical data should be used to assess the advantage and need of keeping street hail-based operations and with it the traditional “data poor, regulation heavy” framework.

Where permit or medallions represent retirement or pension investments by individuals, and where these lose value or are eliminated, alternative arrangements should allow for a similar or adequate level of social protection.

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Regulation of For-Hire Passenger Transport

Portugal in International Comparison

App-based for-hire transport services make mobility more efficient by better matching supply and demand. They offer passengers a high degree of predictability and ease of use, and drivers with highly flexible work opportunities. Yet the popularity of app-based services has eroded the market share of traditional taxi operators, causing significant friction that is manifesting itself in court cases and even physical violence. How to regulate these new services is therefore high on the agenda of governments around the world. This study, commissioned by the Portuguese Institute for Mobility and Transport, reviews legislation and regulatory frameworks for taxi and for-hire transport services in Portugal and six other countries in order to foster an evidence-based discussion of the issue.

This report is part of the International Transport Forum's Case-Specific Policy Analysis series. These are topical studies on specific issues carried out by the ITF in agreement with local institutions.

International Transport Forum

2 rue André Pascal
F-75775 Paris Cedex 16
T +33 (0)1 45 24 97 10
F +33 (0)1 45 24 13 22
Email: contact@itf-oecd.org
Web: www.itf-oecd.org