



Lippu project report on contractual practices for travel chains defined in the Act on Transport Services (*codes of practice for travel chains*)

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Abstract		
<p>A key starting point of the Act on Transport Services is to enable new services. Its goal is that customers are able to acquire the services of different service providers from a single place, i.e. to acquire their travel chain from a single point of sale. This goal will be reached by obligating mobility service providers to open up their sales interface for integrated mobility services that offer travel chains. In addition, parties that maintain user accounts of customers are obligated to open up an application programming interface (API) in order to enable acting on someone else's behalf.</p> <p>This report describes factors that service providers should take into account and that they should agree upon in order to offer travel chains and provide travellers with as good service experiences as possible, even in the case of incidents.</p> <p>This report and these recommendations were prepared by the authorities in 2017 in the Lippu project established by the Ministry of Transport and Communications. The project parties are the Finnish Communications Regulatory Authority (FICORA), the Finnish Transport Safety Agency (Trafi) and the Finnish Transport Agency. Other authorities were also heard in the preparation phase. The preparation phase was carried out together with service providers at network meetings and personal meetings, and by requesting written comments on the prepared reports.</p> <p>In terms of their legal application, the codes of practice for agreements and cooperation between service providers comprise official guidance and recommendations. Recommendations are not legally binding; rather, legal obligations are defined in acts, decrees and regulations. This report is not an agreement template, but this report helps parties to prepare agreements.</p> <p>Several background reports were prepared to support the codes of practice. Their results were taken into consideration when preparing the codes of practice. Legal and technical background reports have been published separately for use by different parties.</p>		
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1 General

1.1 Scope of the codes of practice

This report concerns contractual matters related to opening up a sales interface for tickets/travel authorisations and to acting on someone else's behalf as set out in the Act on Transport Services between transport services, transport service providers and new integrated mobility services (MaaS operators).

The purpose of regulations and agreements is to provide travellers with travel chains consisting of services from more than one service provider.

1.2 Preparation of the codes of practice

The codes of practice were prepared by the authorities working in close cooperation with service providers.

The codes of practice will be published as a report in FICORA's publication series.

This report and these recommendations were prepared by the authorities in 2017–2018 in the Lippu project established by the Ministry of Transport and Communications. The purpose of the Lippu project is to enable the provision of uninterrupted travel chains in accordance with the Act on Transport Services. The project parties are the Finnish Communications Regulatory Authority, the Finnish Transport Safety Agency and the Finnish Transport Agency.

The preparation phase was carried out in cooperation with service providers.

1.3 The purpose and binding nature of the codes of practice

Codes of practice for travel chains:

- comprise official guidance and recommendations
- *are not* legally binding; rather, legal obligations are defined in acts, decrees and regulations
- *do not* constitute an agreement template
- *This report is a checklist of matters that providers of mobility services need to take into account or that should be taken into account when preparing agreements.*

The codes of practice include recommendations for good practices in agreements and cooperation between service providers.

Before providing any services, contracting parties must understand their roles and positions in the travel chain. In addition, these must be communicated clearly to passengers so that they know with whom they are in a contractual relationship. The contracting parties must clearly inform passengers of the content of their services.

1.4 Official guidance and monitoring

The matters discussed in the codes of practice for travel chains are within the power of different authorities. The authorities provide guidance on matters within their power.

During the preparation phase, the Finnish Competition and Consumer Authority (consumer protection and competition), the Data Protection Ombudsman (processing personal data) and the Financial Supervisory Authority (regulation on payment services) were heard.

- [The Financial Supervisory Authority](#) supervises payment services and offers guidance on when the Payment Services Act concerns operations and when, for example, the matter concerns a limited network to which regulations on payment services do not apply.
- [The Finnish Competition and Consumer Authority \(FCCA\)](#) and the Data Protection Ombudsman offer guidance and supervision in matters related to the consumer protection legislation and regulations on package tours. Supervision also covers the fulfilment of EU regulations issued to protect passengers, in cooperation with Traficom (e.g. regulation on rail passengers' rights and obligations and regulation on the rights of passengers in bus and coach transport). Furthermore, the FCCA supervises compliance with the Competition Act.
- [The Finnish Transport Agency](#) (Finnish Transport Infrastructure Agency starting from 1 January 2019) carries out certain tasks defined in the Act on Transport Services. It monitors the supply of and demand for mobility services, and coordinates their development and the interoperability of services together with networks operating in the sector. In addition, it has an obligation to develop and maintain technical solutions and services that support data obligations related to mobility services, such as the National Access Point (NAP) service catalogue for operator data (www.finap.fi).
- [The Finnish Transport Safety Agency \(Trafi\)](#) is the supervisory authority of the Act on Transport Services. Trafi offered guidance on the obligation to open up sales interfaces and the application of roles defined in the act.
- [The Office of the Data Protection Ombudsman](#) supervises the lawfulness of the processing of personal data and the fulfilment of people's data protection rights. In addition, it improves awareness of risks, rules, protection measures, rights and obligations related to the processing of personal data.
- [FICORA](#) leads the Lippu project as assigned by the Ministry of Transport and Communications.
- [The Finnish Transport and Communications Agency \(Traficom\)](#). Starting from the beginning of 2019, Trafi, FICORA and certain functions of the Finnish Transport Infrastructure Agency will be merged into a single agency, Traficom, which carries out official tasks related to transport and electronic communications. The tasks of the aforementioned agencies will be transferred to Traficom.

2 Definitions and roles in the light of regulations

2.1 Key concepts related to the application of the Act on Transport Services

Concept	Source and explanation	Notes
<i>Comprehensive service provider</i>	<p>A concept defined for this report.</p> <p>An integrated mobility service, or a MaaS operator, that, on the basis of an agreement, is responsible towards passengers for ensuring that transport in the travel chain or replacement transport is carried out.</p> <p>See intermediary.</p>	<p>The service promises arrival, even if there are incidents in transport services within the travel chain.</p> <p>This definition is related to responsibilities towards consumer passengers in situations where the travel chain fails for reasons attributable to transport services.</p>
<i>Transport service</i>	<p>A concept defined in the Act on Transport Services.</p> <p><i>In the Act on Transport Services, "transport service" means the commercial transportation of passengers or goods.</i></p> <p><i>In the Act on Transport Services, "commercial transport of passengers or goods on the road" means the transport of passengers or goods on the road with the purpose of receiving an income against compensation.</i></p>	<p>The definition of the act applies to the transport of passengers and goods, while the codes of practice for travel chains only apply to companies that offer passenger transport services.</p> <p>Therefore, in these codes of practice, the concept of "transport service" means passenger transport services.</p> <p>Typically, operations involve requirements for transport licences and professional competence.</p> <p>Car rental does not comprise a passenger transport service.</p> <p>Examples of passenger transport services: taxi company, bus transport company, railway company.</p>
<i>Transport service provider</i>	<p>A concept defined in the Act on Transport Services.</p> <p><i>In the Act on Transport Services, "transport service" means any public or private transport-related service or combination of services that is offered for public or private use.</i></p>	<p>The definition of the act is broad.</p> <p>Passenger transport service is a subcategory of transport services. Other forms of transport services include vehicle rental and driver hire. Transport services also</p>

		<p>include non-professional services.</p> <p>A transport service can be a scheduled or charter service.</p> <p>Examples of transport services: Helsinki Regional Transport Authority (HSL), car rental companies, carsharing providers, including authorities that offer traffic services</p>
Mobility service provider	<p>A concept defined in the Act on Transport Services.</p> <p><i>In the Act on Transport Services, "mobility service" means transport services and directly related support services, such as brokering and dispatch, information and parking services.</i></p>	<p>A general definition of the act, broadly including other definitions of the act and supporting services related to transport services.</p> <p>Examples of mobility services: Matkahuolto, taxi centre, google.com/transit, Q-park, reittiGPS, Whim, KYYTI, Traffic Situation service of the Finnish Transport Infrastructure Agency</p>
Party responsible for a ticket and payment system	<p>A concept defined for this report.</p> <p>Transport operators that have their own ticket and payment system.</p>	
Travel chain	<p>A concept defined for this report.</p> <p>A journey acquired from an integrated mobility service with a single purchase to access the destination from the point of departure using different modes of transport.</p>	<p>The concept of a travel chain is used as a broader concept in the transport sector. It includes the coordination of transit connections and timetables of physical transport; however, the key perspective of this report is the sale of a travel authorisation at a single time.</p>
Provider of brokering and dispatch services	<p>A concept defined in the Act on Transport Services.</p> <p><i>In the Act on Transport Services, "brokering and dispatch services" means the brokering and dispatch of transport services against</i></p>	<p>A provider of brokering and dispatch services also brokers and dispatches passenger transport services from other companies. In addition, it can broker and dispatch its own passenger</p>

	<p><i>compensation, apart from services in which only a service provider's own transport services are brokered and dispatched.</i></p>	<p>transport services. Brokering and dispatching a service provider's own transport services (own transport services, own vehicles or services for own needs) is not regarded as a brokering and dispatch service. Example: a taxi company that only offers journeys from its own drivers.</p> <p>Brokering and dispatch services only apply to the brokering and dispatch of transport services using transport services of a single passenger transport service provider per journey; otherwise, they apply to integrated mobility services.</p> <p>The definition of the act applies to the brokering and dispatch of passenger and goods transport services, whereas the codes of practice for travel chains only apply to the brokering and dispatch of passenger transport services.</p> <p>A provider of brokering and dispatch services charges compensation for brokering and dispatch from the passenger or transport service provider. For example, advertisement-funded brokering and dispatch is also regarded as a service offered against compensation.</p> <p>Examples: taxi centre, Uber, Matkahuolto</p>
<p><i>Intermediary, or broker-like integrated mobility service</i></p>	<p>A concept defined for this report.</p> <p>An integrated mobility service, or a MaaS operator, that offers travel chains to passengers so that it only brokers and dispatches</p>	<p>This definition is related to responsibilities towards consumer passengers in situations where the travel chain fails for reasons attributable to transport services.</p> <p>In this case, the integrated mobility</p>

	<p>agreements without guaranteeing the completion of transport services.</p> <p>See comprehensive service provider.</p>	<p>service is responsible for its own service and, in this respect, enters into an agreement with the passenger.</p>
<p>Provider of integrated mobility services</p>	<p>A concept defined in the Act on Transport Services.</p> <p><i>In the Act on Transport Services, "integrated mobility service" means the generation of travel chains against compensation by combining mobility services of different service providers.</i></p> <p>In this report, an integrated mobility service is also referred to as a <i>MaaS operator</i>.</p>	<p>A provider of integrated mobility services offers a service to generate travel chains against compensation by combining tickets or taxi reservations from different companies.</p> <p>A provider of integrated mobility services can also collect a charge from the passenger or receive compensation through other means. Advertisement-funded operations are also considered to take place against compensation.</p> <p>Examples: KYYTI, Whim and services from rail or bus companies that offer ticket combinations or travel chains of different modes of transport.</p>

2.2 Tasks of parties to the travel chain

Task/role	Customer	Party acting on someone else's behalf (e.g. integrated mobility service)	Party opening up its API (e.g. transport service)	External data controller
Authorisation to use user accounts	X			
Verification of authorisation		X	X	X
Information about products related to a travel chain		X	X	
Service accessibility			X	
Opening up APIs		X	X	(X)
Production of travel identifiers		X	X	
(Payment)	X			

2.3 Distinction between package travel and mobility services in the light of regulations

Regulations on travel service combinations and their providers have changed. The new legislation supersedes the Package Travel Act and the act on package travel companies. The changes entered into force on 1 July 2018.

Starting from 1 July 2018, the Act on Transport Services excludes package travel from the scope of the Act on Transport Services:

- “*Brokering and dispatch service* means the brokering and dispatch of transport for compensation, excluding services in which only the service provider’s own transport services are brokered and dispatched, as well as package travel or combined travel arrangements within the scope of application of the Act on Travel Service Combinations (901/2017).
- “*Integrated mobility service* means the generation of travel chains and other service packages for compensation by combining mobility services from different service providers, excluding services offering package travel or combined travel arrangements within the scope of application of the Act on Travel Service Combinations.”

Providers of travel chains should identify whether the legislation on travel service combinations applies to the services provided. In this case, service providers need to address the obligations set out in the aforementioned regulations, for example, in terms of collateral securities.

The FCCA supervises the legislation on travel service combinations.

3 Contractual obligations in the mobility service network

3.1 Key obligations to open up APIs under the Act on Transport Services

The Act on Transport Services sets out three obligations to open up APIs.

Firstly, providers of mobility services are obligated to open up essential data about their services in open APIs. What data is essential depends on the service type. Essential data can mean data about routes, stops, timetables, prices and the availability and accessibility of services. This obligation applies to all providers of mobility services, regardless of the mode of transport. Essential data must be opened in the Finnish Transport Infrastructure Service’s NAP service at www.finap.fi.

In addition, the Act on Transport Services defines two obligations to open up an API to a ticket and payment system.

The first of these obligations applies to providers of road and rail passenger transport services, providers of brokering and dispatch services, or parties responsible for the ticket and payment system on their behalf.

- A party must provide providers of mobility services or integrated mobility services with open access to the sales interface of their ticket, reservation or payment system. Through the sales interface, it must be possible to purchase at least a ticket product at a basic price

that entitles the passenger to a single journey or to reserve a single journey or transport, the exact price of which is not known when the service begins or which for some other reason will be paid after the service has been provided.

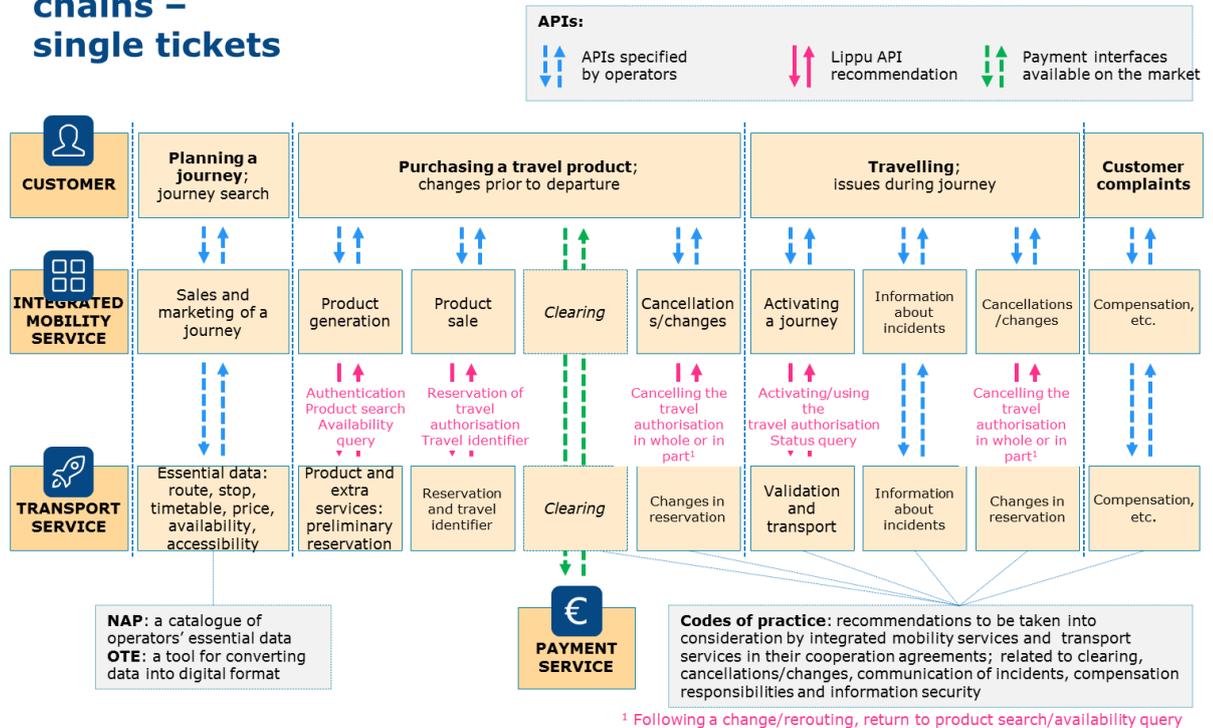
The second obligation applies to all providers of mobility services and integrated mobility services, as well as parties responsible for the ticket and payment system on their behalf, if these service providers have user or customer accounts as defined in the Act on Transport Services.

- Obligated parties must provide other providers of mobility services or integrated mobility services with open access to the sales interface of their ticket and payment system or, if required, provide access to the system via another electronic service channel so that providers of mobility services or integrated mobility services entitled to access the system can acquire ticket products or other products entitling the holder to use mobility services on behalf of the service user at the service user's request, using the identification and user information existing in the user account of the user of the service.
- In addition, this obligation applies to ticket issuers that have tickets carrying a discount, compensation or other special condition related to mobility services that is based on the user's identification information located in the service. If the data controller of the register related to the grounds for determining the discount, compensation or special condition is a party other than the ticket issuer, the data controller and ticket issuer must together ensure that information related to the grounds is available to the extent necessary in order to allow acting on someone else's behalf.

3.2 Obligations to open up an API

3.2.1 Obligation to open up a sales interface for a single ticket or a reservation interface for transport

Flows of data in travel chains – single tickets



On the basis of the Act on Transport Services, the following are obligated to open up a sales interface for a single ticket or a reservation interface for transport and, therefore, to enter into an agreement:

- passenger transport service providers
- brokerage and dispatch services
- parties responsible for a ticket and payment system on behalf of the aforementioned
- other providers of mobility services
- providers of integrated mobility services

According to the Act on Transport Services, the obligation to open up an API does not apply to parties obligated to open up an API if it is not technically expedient or reasonable due to the small size or operating area of the company. In other words, criteria for purposefulness and reasonability must be met. However, this exemption does not apply to competent authorities.

In practice, a single service provider can have several roles defined in the Act on Transport Services. In this case, it may be necessary to assess who is bound by this obligation.

According to the Act of Transport Services, the following are entitled to access an API and data and, therefore, to enter into an agreement:

- mobility services
- integrated mobility services

The codes of practice for travel chains focus on contractual questions related integrated mobility services when their providers acquire tickets or transport service reservations through sales interfaces in order to generate travel chains for passengers.

On the basis of the obligation to open up a sales interface, as defined in the Act on Transport Services, a sales interface must be opened up, through which at least a basic-priced single ticket product can be acquired or a reservation can be made for a transport service.

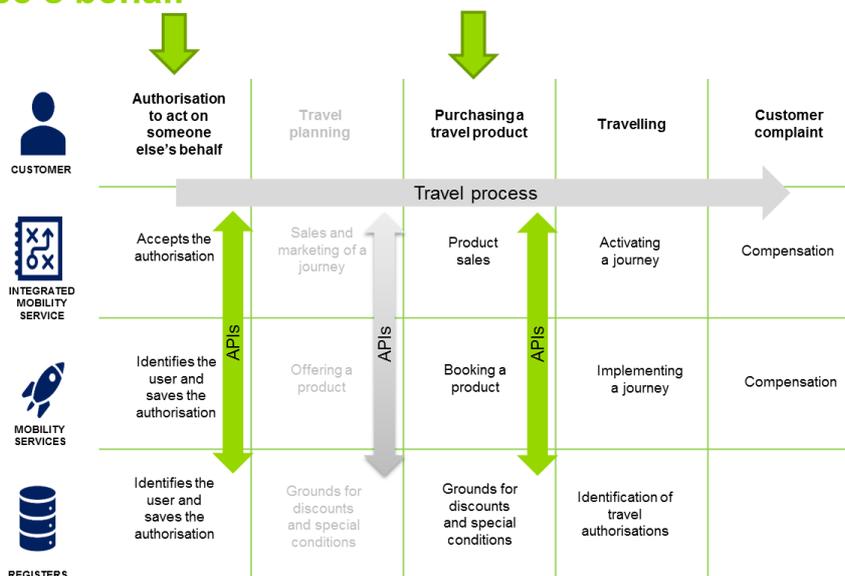
Basically, a service provider obligated to open up the sales interface of its ticket and payment system can independently define the basic-priced single ticket that can be acquired through the API.

The following factors must be taken into account:

- The ticket must be available to all, i.e. it cannot be directed at a single target group, such as pensioners or municipal residents.
- The starting point is that the service provider offers its current basic-priced ticket product through the API. The price of tickets sold through the API cannot be higher for an integrated mobility service than similar tickets sold through other channels to end users. Dynamic pricing of single tickets is permitted.
- The minimum obligation does not prevent parties from temporarily selling their basic-priced single tickets to their end users at lower prices than to an integrated mobility service, for example, using campaign-based discounts.

3.2.2 Obligation to open up an API when acting on someone else’s behalf

Flows of data flows in travel chains – acting on someone else’s behalf



According to the Act on Transport Services, APIs used when acting on someone else’s behalf must allow a provider of mobility services or

integrated mobility services entitled to access a user account in the mobility service to acquire ticket products carrying a discount, compensation or other special condition or other products that entitle their holder to use the service on the service user's behalf, using the identification and user information existing in the service user's account.

Acting on someone else's behalf can be regarded as management of customer relationships in mobility services via an external agent. In a legal sense, it mainly comprises authorisation. A party acting on someone else's behalf does not obtain any benefits that the customer does not obtain. Furthermore, the product price remains unchanged.

Therefore, acting on someone else's behalf applies to all forms of mobility services, including all modes of transport, and to integrated mobility services. In addition to mobility services and integrated mobility services, acting on someone else's behalf can apply to controllers of user data. Such a data controller, together with the ticket issuer, must ensure that data related to grounds for determining a discount or other special condition is available to the extent necessary to allow acting on someone else's behalf. Therefore, an external data controller does not need to open up an API for a party using a party acting on someone else's behalf, and data does not need to be reviewed in real time.

The Act on Transport Services does not define user or customer accounts. According to a Government proposal concerning this section in question, certain personal data must be added to a user account. In addition to natural persons, user accounts can be held by legal persons. The starting point of acting on someone else's behalf is that a person has existing customer or user accounts in a service subject to the open API obligation and in the service of the service provider entitled to open access to the API.

Acting on someone else's behalf covers all ticket products and other products entitling their holder to use mobility services. With regard to other mobility service products, the Government proposal mentions booking a seat and renting a vehicle. According to the definition of a mobility service, parking services and carsharing can be parts of acting on someone else's behalf. The definition of what is a support service directly related to a transport service under mobility services is subject to interpretation.

3.3 Obligation to enter into an agreement, negotiating obligation and refusing an agreement

Freedom of agreement is a ground rule in business. However, the provisions of the Act on Transport Services restrict the freedom of agreement of providers of transport services and integrated mobility services. The obligation to enter into an agreement only applies to the minimum obligations stipulated in the Act on Transport Services.

The obligation to enter into an agreement includes a provision on sincere negotiations. This means that contracting parties must respond to any requests for offer or queries within a reasonable time and take any relevant matters raised by the counterparty into account.

Agreement terms will be discussed later. However, it can be stated in general that, taking the obligation to open up an API into account as defined in the Act on Transport Services, there must be a well-justified reason for any refusal to negotiate or enter into an agreement or cooperation regarding products defined in the act. Such a reason may only be related to the following:

- A contracting party cannot be reliably identified (registered company/association, business ID); a contracting party has been filed bankrupt or has a business ban; or a contracting party is bound by statutory restrictions or restrictions included in international contractual obligations (such as sanctions imposed).
- The intended purpose of use of the API is not connected to activities of an integrated mobility service as defined in the act.
- A contracting party does not fulfil reasonable minimum requirements for information security and data protection. More detailed provisions have been defined regarding acting on someone else's behalf. The assessment of reliability when acting on someone else's behalf has been described in section 10.
- Factors related to capital adequacy.

If risks associated with a contracting party can be controlled by using agreement terms that are reasonable considering the risks, these should apply, instead of refusing from an agreement. These terms include collateral securities or any temporary interruption of the service.

3.4 Provisions on agreement terms in the Act on Transport Services

Agreement terms permitted in the minimum obligations of the Act on Transport Services can be divided into:

- Terms of use
- Other necessary terms

Any terms and conditions restricting the use of an API are not permitted.

With regard to the minimum obligations, the requirements for reasonableness, non-discrimination and fairness set out in the Act on Transport Services apply to terms of use of sales interfaces.

Service providers obligated to open up the aforementioned APIs must ensure that they can be opened up without endangering data protection or privacy protection in the service. Providers of mobility services or integrated mobility services entitled to access while acting on someone else's behalf must safeguard information security and data protection in their service, so that acting on someone else's behalf is possible without endangering these.

In order to provide services within the scope of the minimum obligations, reaching an agreement on necessary matters is within the scope of the cooperation obligation stipulated in the Act on Transport Services.

It must be possible to authenticate tickets or other travel identifiers sold by an integrated mobility service in a vehicle. Furthermore, it is necessary to

agree upon how different parties to the travel chain will fulfil their rights and obligations set out in the Act on Transport Services. In addition, mandatory requirements are set out, for example, in the legislation on consumer protection and personal data, and in special regulations set for each mode of transport. There are also other areas that need to be agreed upon in order to generate travel chains.

These necessary terms cannot exceed obligations set out in the legislation. Terms and conditions cannot be unreasonable so as to prevent APIs from being opened up in practice.

3.5 Terms and conditions outside the minimum obligations

These terms and conditions are not regulated in the Act on Transport Services. These terms and conditions include:

- With regard to the obligation to open up a sales interface for single tickets or a reservation interface for transport, season tickets and tickets carrying a discount are not within the scope of the minimum obligations.
- Sales on credit are not within the scope of the minimum obligations. Deliveries and payment times in accordance with regular payment and invoicing practices between companies cannot be regarded as sales on credit.
- Special wholesale-like terms and conditions are not within the scope of the minimum obligations.
- Agreements extending beyond the minimum obligations are subject to general principles of contract law and the general legislation.

4 Contractual questions

4.1 Confidentiality

The contracting parties agree upon the confidentiality of their agreements. Any non-disclosure agreements cannot supersede the rights of consumers to obtain information about to whom customer complaints can be filed.

Any non-disclosure agreements cannot supersede the regulatory obligation to submit information to the authorities or publish information.

4.2 Transfer of the agreement

The contracting parties must agree upon whether the agreement can be transferred to third parties and upon the preconditions and procedures of such transfers.

If the agreement can be transferred, it should be ensured that the party to which the agreement is transferred fulfils the legal requirements set for opening up or using an API.

4.3 Settlement of disputes

The contracting parties must agree upon the settlement of any disputes. Primarily, disputes should be settled in mutual negotiations. Any disputes

that cannot be settled in mutual negotiations, can be settled in a district court or in arbitration proceedings.

In some cases, the supervisory authority can decide on whether or not regulatory obligations have been fulfilled.

Regarding contractual negotiations over minimum products, Trafi, as the supervisory authority, can decide whether or not a clause is in accordance with compelling legal obligations.

4.4 End of an agreement

An agreement can only be valid for a fixed term or until further notice. An agreement ends when one of the parties submits a termination or cancellation notice or by a mutual agreement of the contracting parties.

An agreement on a minimum product cannot be terminated or cancelled unilaterally on the basis of a reason related to a contracting party that cannot be considered to be in accordance with requirements set for the obligation to open up a sales interface as defined in the Act on Transport Services.

Termination criteria for agreements other than those on minimum products are defined in accordance with general contractual principles.

If problems arise, the primary option should always be an amicable settlement and, in serious situations, a temporary suspension of the provision of the API.

When the agreement ends, any impact on other parties to the mobility service network must be taken into account.

4.5 Use of trademarks

Contracting parties must agree upon the presentation of trademarks.

It must be possible in the agreement chain that an integrated mobility service shows the trademarks of available transport services to its customers.

It must also be possible in the agreement chain that the trademark of a transport service is shown on a ticket or otherwise in the integrated mobility service's product or service environment (e.g. applications).

4.6 Obligations to provide information before entering into an agreement

Regulations on the obligation to provide information depends on the mode of transport and the roles of parties and passengers (consumer/business traveller).¹ The parties must be aware of their statutory obligations to provide information. In addition, it is recommended that the parties agree upon the following:

¹ Regulations on obligations to provide information are defined, for example, in the Consumer Protection Act, special regulations on different modes of transport, the Act on Transport Services and regulations on package travel.

- Will all obligations to provide information regarding the sale of a travel chain be assigned to a single party? If there are central obligations, how will costs be divided?
- Who will be responsible for the proper fulfilment of the obligations to provide information concerning marketing and sales situations, as set out in the Consumer Protection Act, and any overlapping obligations determined by the mode of transport?
- Transport service providers may be held liable on the basis of the MaaS operator's marketing activities. How can the parties ensure that marketing and sales information about the MaaS operator's services is appropriate and fulfils statutory requirements?
- How can the MaaS operator obtain information about any changes made in information provided for passengers before entering into an agreement?

4.7 Responsibilities between contracting parties

Responsibilities between contracting parties may remain unclear if they do not agree upon them.

With regard to agreements, it should be noted that agreements on the mutual distribution of responsibilities must not weaken the legal position of consumers. Such contractual clauses are not valid.

It is recommended that the parties agree upon the principles with which they are entitled to receive compensation from their contracting parties if they have paid compensation to a passenger regarding losses they have not caused.

It is recommended that responsibilities are distributed in a way that risks and responsibilities are held by the contracting party that has the best ability to prevent any losses. Furthermore, contractual practices regarding the distribution of responsibilities should not lead to any unreasonable outcome. Initially, each party is responsible for their own activities and any associated risks. It is recommended that the distribution of responsibilities be agreed upon so that even small parties to the travel chain are able to maintain their risk-bearing capacity, and they do not face any unreasonable risks from the activities of other parties to the chain on the basis of agreements.

4.8 Availability of the sales interface

The contracting parties should agree upon the availability and capacity of the sales interface (SLA).

The Act on Transport Services does not define any quality or availability requirements for the service or sales interface. However, it demands giving access and offering reasonable and non-discriminating terms of use. According to the act, contracting parties must cooperate in order to enable interoperability by means of practical arrangements.

With regard to authenticating the integrated mobility service and tickets of contracting parties, the availability of the sales interface and any interfaces

of a ticket and payment system separate from the sales interface is highly important.

The contracting parties should agree that, when planning and implementing any maintenance work and modifications, they take the impact on the other contracting party and, if required, other parties to the mobility service network into account. The contracting parties should also agree that they perform any maintenance work and modifications in such a way and at such a time that the service break is as short as possible and has a minimum impact.

5 Responsibilities towards service users

There are no specific regulations on the protection of passengers in travel chains. Regulations on the rights of passengers related to MaaS operators and transport service providers are fragmented and case-specific. As a result, it is recommended that parties agree upon their mutual responsibilities.

The MaaS operator and transport service provider can agree upon their responsibilities fairly freely. The rights of users defined in the Consumer Protection Act and in special regulations on each mode of transport cannot be agreed upon in a manner so as to weaken the position of passengers.

5.1 Clear understanding of the roles of contracting parties and services

The obligations of transport service providers in relation to passengers are largely defined on the basis of special regulations on each mode of transport. In addition to special regulations, the responsibilities of the MaaS operator depend significantly on the scope of the services it offers, the position of passengers and mutual contractual relationships.

Depending on the aforementioned factors, the MaaS operator can be in the role of a comprehensive service provider or intermediary. In addition, regulations on package travel impose significant obligations on the MaaS operator, where applicable.

5.2 Shared practices regarding incidents in the travel chain

Special regulations on each mode of transport set different notification, rerouting and assistance obligations for transport service providers in the case of changes and incidents. However, they do not pay any attention to specific questions related to travel chains. The obligations of the MaaS operator are mainly defined in accordance with general contractual principles.

To fulfil and protect the rights of passengers in unclear situations, it is recommended that the parties agree upon the following shared practices:

- How can the MaaS operator obtain information about any changes or incidents related to the travel chain?
- Who will notify passengers of how a delay in or the cancellation of a part of the travel chain affects the remaining parts of the travel chain?

- How can such notifications be coordinated with the statutory obligations of the MaaS operator and transport service provider to provide information?
- What rights does the MaaS operator have to cancel or change tickets it has acquired for a passenger if it needs to reroute the travel chain due to changes or incidents?
- How can it be ensured that a passenger's travel chain continues in situations where the travel identifier does not work? Who will passengers be advised to contact?
- During some incidents, the MaaS operator and transport service provider may have a partly overlapping rerouting obligation with a different scope. It is recommended that the parties agree upon how these obligations can be fitted together or centralised in order to protect the rights of passengers.
- How can different parties to the travel chain exchange information about any rerouting or refunds towards passengers?

5.3 Customer complaints and compensation

On the basis of governing special regulations, transport service providers may be obligated to pay separately defined standard compensation or compensation for loss to passengers. Insofar as no special regulations apply, consumers may have the right to obtain a discount or refund on the basis of general principles under the consumer law.

If a passenger also incurs losses, general contractual principles may apply. Because the MaaS operator can act in different roles, it may be unclear to passengers who the actual responsible party is. For the sake of clarity, it is recommended that the contracting parties agree upon the following:

Complaint process and giving information about the process to passengers:

- To whom can a customer complaint be filed?
- Are the parties obligated to forward any complaints received to the actual responsible party?

Compensation practices:

- Will a specific party centrally handle all customer compensation cases? If there are central obligations, how will costs be divided?
- If the MaaS operator and transport service provider are responsible for passengers on the basis of different regulations, which one should passengers primarily turn to?
- What responsibilities does the transport service provider have for cancellations that have an impact on the MaaS operator's services?
- However, agreements cannot restrict the rights of consumers to claim compensation directly from the transport service provider.

5.4 Quality of the travel chain

Factors that have an impact on the functionality and reliability of the travel chain provided for passengers by the integrated mobility service need to be taken into account in agreements, where possible.

On the basis of information obtained from service providers during the preparation phase, there are not many factors of this type. However, it is recommended that they be offered in the API, *if there are any*.

These factors offer help, for example, in rerouting and other customer service in the case of incidents.

Factors related to travel chain planning and reliability include:

- information about the transit time or conditions or routes between transport services
- how quickly information about a ticket sold or a reservation or activation made is updated technically so that the ticket or identifier can be authenticated in the vehicle
- any travel-related modifications or incidents that can be transmitted, and the related transmission schedule

5.5 Accessibility of travel chains

It is recommended that the MaaS operator and transport service provider agree upon practices in order to transmit information about any assistance given to passengers and the rights of passengers with disabilities in the case of any incidents. In order to provide an accessible travel chain, it may be necessary to agree upon the transmission of information at a more detailed level than is required in the decree on essential data. Passengers with disabilities need to obtain information about accessible routes beforehand. Service providers should also be prepared for individual and reasonable requests regarding accommodations in accordance with section 15 of the Non-Discrimination Act.

Matters related to accessibility have been discussed in more detail in a separate report (see the end of this report).

6 APIs and transferred data

6.1 Data transferred via APIs

The Act on Transport Services requires that APIs must enable the purchase of basic-priced single tickets and the reservation of individual journeys and, through acting on someone else's behalf, also the purchase of different ticket products carrying discounts or other benefits.

Contracting parties should agree upon the technical implementation of APIs and the data to be transmitted so that the data is sufficient in order to reserve the ticket products required by customers and that the ticket products sent to passengers can be properly authenticated before and during the journey. However, any provisions on data protection must be taken into account when agreeing upon the data to be transmitted. These have been discussed in section 8 of the codes of practice.

6.1.1 Basic-priced single tickets and booking a single journey

The Act on Transport Services requires that it must be possible, via an opened sales interface, to acquire a basic-priced single ticket and reserve a single journey or transport, the exact price of which is not known at the beginning of the service.

Parties can also agree upon the provision of other products through the sales interface in question.

A recommendation for an API specification and an example implementation of a sales interface for single tickets was prepared in the Lippu project, defining technically mandatory and optional data to be transmitted via the API. However, the Lippu interface specification is not exhaustive. The use of the Lippu API specification is not mandatory but, if the implementation of the sales interface includes similar information, the API can be interpreted to fulfil legal requirements regarding data content.

The Lippu API specification is available at

<https://github.com/finnishtransportagency/lippu-api>

6.1.2 Acting on someone else's behalf

According to the Act on Transport Services, APIs used when acting on someone else's behalf must allow a provider of mobility services or integrated mobility services entitled to access a user account in the mobility service to acquire ticket products carrying a discount, compensation or other special condition or other products that entitle their holder to use the service on the service user's behalf, using the identification and user information existing in the service user's account.

Basic functions when acting on someone else's behalf include authorisation and the purchase of a ticket. A process description of one potential implementation, APIs and data transferred via APIs have been presented in the background document "*APIs when acting on someone else's behalf*".

The initial assumptions of the process description are:

- Authorisation must be made separately for each mobility service so that the party acting on someone else's behalf guides the customer to log in to their user account in the mobility service.
- Authorisation must primarily be made for a longer period so that a single authorisation allows the purchase of ticket products throughout its validity, without needing to repeat the authorisation process every time.
- Data about authorisation is held by the party acting on someone else's behalf and the mobility service provider.

Specifications also present alternative implementation methods for the functions required. These specifications are intended as supporting material for parties when they agree upon the technical implementation of an API, and they do not prevent them from agreeing upon a different implementation.

6.1.3 Data about grounds for discounts held by external data controllers

The Act on Transport Services also covers situations where data about grounds for a discount is maintained by a party other than the party acting on someone else's behalf or the mobility service provider, such as a municipality, the Population Register Centre or the Social Insurance Institution of Finland. The party maintaining grounds for determining discounts does not need to open up an API for a party entitled to acting on someone else's behalf. However, the provision obligates parties maintaining grounds for determining discounts and ticket issuers to ensure together that information about the grounds for determining discounts is available when using services.

These APIs and the data transmitted through them were not discussed in detail in the Lippu project. If required, the party acting on someone else's behalf and the mobility service provider must agree upon the use of these APIs and the data transmitted through them, with APIs provided by these service providers as the starting point.

7 Relationship between essential data and data in the sales interface

The purpose of an *API of essential data* about mobility services as referred to in the Act on Transport Services is to enable the production of passenger information, such as route guides. Mandatory and optional information offered in an open interface have been defined in Government Decree 643/2017. This API must be reported to the Finnish Transport Infrastructure Agency for publication in the NAP database.

The purpose of the *sales interface* for the interoperability of ticket and payment systems as referred to in the Act on Transport Services is to enable the productisation and sale of travel chains. Information about the sales interface must be sent to the Finnish Transport Infrastructure Agency for publication in the NAP database on the basis of the multimodal decree.

8 Processing of personal data (data protection)

8.1 Regulations and supervision

There are provisions on the protection of personal data in the European Union's General Data Protection Regulation (EU) 2016/679. The legislation on the protection of personal data applies whenever personal data is processed.

The Data Protection Ombudsman acts as the competent authority in terms of the supervision of the GDPR.

8.2 The concept of personal data, and personal data in the mobility service network

8.2.1 Definition of personal data

According to Article 4(1) of the GDPR, personal data means any data relating to an identified or identifiable natural person. An identifiable natural person is one who can be identified, directly or indirectly, in particular by reference to an identifier, such as a name, an identification

number, location data, an online identifier or to one or more factors specific to the physical, physiological, genetic, mental, economic, cultural or social identity of that natural person.

The definition of personal data is very broad. When travel chain services are offered to passengers, personal data is usually processed. Such data includes contact details and credit card data processed when a passenger places an order. Personal data also includes the information required to authenticate a travel authorisation.

As a result, the GDPR largely applies to the mobility service network.

8.2.2 Pseudonymisation and anonymisation

It should be noted that, even if data is pseudonymised, it is still regarded as personal data. Even if a single party to the travel chain cannot identify the identity of a passenger, it is regarded as sufficient if a party can identify a person by combining different pieces of information. Therefore, a travel identifier that does not include a passenger's name or any other distinctive personal data, but that a party can connect to a single passenger, is regarded as personal data.

Data is anonymous if personal data is irrevocably converted into a format so that the data subject cannot be identified by any party from the data, either directly or indirectly.

8.3 Positions of the data controller and processor

Different roles are involved in processing personal data.

- The data controller defines the purposes and methods of processing personal data, independently or together with others.
- The processor processes personal data in the name of the data controller. In this case, processing is commissioned or subject to subcontracting or a partnership.
- There can also be parallel data controllers, in which case each controller has an independent right to process personal data.

The data controller defines the purposes of data processing independently and uses data for its own purposes of use in accordance with its own data processing procedures. However, the processor does not process data for its own purposes. Instead, it processes it in accordance with instructions issued by the data controller and an agreement signed with the data controller, and only in the name of the data controller. Furthermore, the processor does not have any independent right to use data.

The data controller must notify data subjects of any processing of personal data. This information must be provided in a clear and understandable format. The GDPR defines the content of information provided in more detail. This information includes the data controller's contact details, information about the purpose and principles of data processing, and information about the rights of data subjects. However, the parties can also agree upon their mutual responsibilities so that a contracting party is obligated to give information to data subjects.

When data is transferred from one data controller to another, the transferring party is responsible for ensuring that data is transferred in compliance with the legislation.

8.3.1 Roles in travel chains

In the mobility service network, the MaaS operator, being the comprehensive service provider, acts as the data controller regarding personal data collected from passengers.

The MaaS operator, being the intermediary, and transport service providers can act as data controllers and/or processors, depending on which data is being processed and what has been agreed regarding the tasks and roles of each party. However, roles must always be assessed on the basis of the actual processing function and case. It is not possible to deviate from any roles defined in the legislation.

8.3.2 Roles when acting on someone else's behalf

On the basis of a legal analysis, the parties' roles in the processing of personal data seem clear. According to the report, in the case of acting on behalf of a natural person's user account, the parties are, as a rule, independent data controllers. In such a case, each party bears the responsibility for the processing of personal data.

The GDPR does not specifically mention parallel controllers, but in practice, responsibilities can be assessed as a relationship between parallel controllers. Issues to be agreed by parallel controllers are discussed below.

An assessment of the roles in the processing of data in the user account of a *natural person*:

- User: data subject.
- Party acting on someone else's behalf (mobility service or integrated mobility service): independent data controller.
- Party granting access (mobility service or integrated mobility service): independent data controller.
- Party granting access (party responsible for a ticket and payment system on behalf of the mobility service or integrated mobility service): depends on the agreement between the mobility service or integrated mobility service and the party responsible for the ticket and payment system, i.e. whether the party responsible for the ticket and payment system is an independent data controller or a processor. When processing personal data, a processor acts in compliance with its agreement with the data controller (Article 28 of the GDPR), and decisions on any transfers to another data controller are made by the data controller, not by the processor.
- An external party that maintains data related to grounds for determining discounts, compensation or other special conditions: independent data controller.

An assessment of the roles in the processing of data in the user account of a *legal person*:

- From the perspective of the GDPR, the roles are different than in the case of a user account of a natural person.
- Employee, consultant, etc. of the legal person (user company): data subject.
- Legal person (user company): data controller.
- Party acting on someone else's behalf: may be a processor on behalf of the user company, but may also be a data controller.
- Valid grounds for processing must be assessed on the basis of the role

8.4 Principles of processing personal data and the purpose of use of personal data

Processing personal data is always subject to a legal processing principle. According to the GDPR, personal data can be processed

- (a) with the consent of the data subject;
- (b) in order to implement an agreement between the data subject and controller;
- (c) to fulfil a statutory obligation imposed on the controller;
- (d) to protect the vital interests of the data subject or another natural person;
- (e) for the performance of a task carried out in the public interest or in the exercise of official authority vested in the controller;
or
- (f) to protect the interests to which the controller or a third party is entitled.

The purpose of use of processing personal data has an impact on the selection and determination of the processing principle. Purposes of use must be planned and defined before any data is collected. In the mobility service network, data is mainly collected for providing services and managing customer accounts. The data controller must inform data subjects of the purposes of use before processing any data. It should also be noted that, primarily, data can only be used for predefined purposes of use.

8.4.1 Grounds for processing in the travel chain

In the mobility service network, personal data will mainly be processed on the basis of item b (implementation of an agreement) or f (protection of legal interests). In addition, a public party regarded as an authority taking part in the implementation of the travel chain (such as a joint municipal authority) can process personal data on the basis of legal interests, insofar as the processing does not concern the exercise of public power or the performance of other public administrative tasks. It is possible that a data controller has several parallel principles for processing personal data for different purposes.

If the data controller wants to process other personal data in addition to the data required to provide services, the data subject's consent (item a) may be required. With regard to consent, it is essential that it is clearly formulated so that the data subject understands to what they are giving their consent. The data subject must give their consent voluntarily by means of an active procedure.

8.4.2 Processing principles when acting on someone else's behalf

The existence of valid grounds for processing must be assessed on the basis of the specific data controller's position and the purpose of the data. The grounds for processing must be assessed in light of the GDPR, which limits the freedom of agreement.

Personal data may be disclosed to a data controller that has valid grounds for processing. A right to view data is also regarded as disclosure, even if the party viewing the data does not save any data.

Assessment of grounds for processing in compliance with the GDPR:

- Party acting on someone else's behalf: implementation of an agreement with the user.
- Party obligated to open up its API: a statutory obligation; alternatively, preparation of the implementation of an agreement with the data subject.
- External data controller: a statutory obligation has been specified in the Act on Transport Services, but it takes the form of a general cooperation obligation. However, processing may also be based on, at the very least, the legitimate interests of the party obligated to open up its API. The impact of special regulations in relation to the Act on Transport Services has not been assessed in the case of the Social Insurance Institution of Finland (Kela), for example.

Sensitive data requires express consent from the data subject, because the Act on Transport Services does not include any specific provisions to the contrary. From a technical viewpoint, express consent can be given through an electronic signature or two-factor authentication, for example.

Requesting the consent once is sufficient, as long as the request is carefully formulated to cover more continuous acting on someone else's behalf.

8.4.3 Personal data required for acting on someone else's behalf

The general requirement of only processing necessary personal data means that each data controller must assess which personal data it needs to process. It must be kept in mind that, on this necessity basis, the personal data may only be used for the purpose of acting on someone else's behalf; the data may not be used for marketing purposes, for example.

To assess necessity, the following issues must be considered:

- Minimisation: The data controller may only process the data that is necessary to complete the process of acting on someone else's behalf. The data controller must assess whether data is necessary and whether the service can be reasonably provided without a specific piece of personal data. Furthermore, when disclosing data, the data controller

must verify that the recipient actually needs the data. Any mass disclosure of data must be assessed with special care.

- **Relevance to the purpose:** Personal data may only be used for the purpose for which it was provided. Therefore, personal data provided for the purpose of acting on someone else's behalf may not be used for marketing purposes, for example.
- **Retention period:** The retention period of data must be specified and the data must be retained only for the period that is necessary to secure legitimate interests, such as to ensure the possibility to process complaints. When this period expires, the data must be deleted or anonymised.

8.5 Rights of data subjects

Data subjects, or users of services, have several rights related to the processing of personal data. Initially, each data controller is responsible for the fulfilment of rights regarding the data they have collected.

Parties to the mobility service network must take the fulfilment of data subjects' rights into account in their activities and in mutual agreements.

- In order to ensure that data is processed in a transparent way, the data controller must give information to data subjects before processing any data.
- If a data subject wants to obtain more information about the processing of their personal data, the data controller must respond to the data subject's requests without any undue delay.
- Data subjects have the right to check what personal data the data controller processes, to have data erased or rectified, or to have data processing restricted.
- In certain cases, data subjects also have the right to object to data processing.
- If data is processed in order to execute an agreement or with the data subject's consent, the data subject has the right to transfer their data from one system to another to another data controller. Furthermore, data subjects always have the right to withdraw any consent given to the processing of data.

9 Information security

9.1 Verifying a proper level of information security (information security requirements)

To take care of the information security of the API and service, good information security practices must be followed.

The codes of practice do not specify availability issues in any greater detail. The parties must agree on these issues, taking into account statutory requirements on fairness, reasonableness and non-discrimination.

Maintenance of information security refers to the technical and organisational activities that a party implements in order to ensure integrity and availability of networks and data systems, as well as confidentiality of information.

The verification of information security requires continuous management of information security as a whole and implementing the necessary information security actions to verify the security of data communication and data systems, operational security and physical security.

These actions must be based on recent technical development and the costs of the actions, and the actions must be proportional to the current threats and risks.

Procedures in proportion to risks

The starting point of the information security practices required from both parties is the use of threat modelling and risk evaluations. These are based, for example, on the amount of personal data and payment instrument data to be protected and financial risks, as well as financial losses or reputation risks if the service is not available due to a denial of service.

A contracting party may require that the other contracting party sets its technical and organisational procedures to maintain information security in correct proportion to the severity and likelihood of threats, costs arising from procedures and available technical abilities to prevent threats.

9.2 Reliability of identification

9.2.1 Need for identification in travel chains and when acting on someone else's behalf

The contracting parties must assess whether passengers need to be identified so that their identity is verified and tied to the travel chain at some point during the travel chain.

The contracting parties in acting on someone else's behalf must assess, on the basis of the need to protect the personal data processed and the need to maintain the reliability of the user account, whether identification and linking of user accounts will suffice or whether there is a need to verify the identity of the user.

The contracting parties must agree which procedures they will use to identify the users, to verify their identity and to link the authorisations given by the users to the user accounts.

The leading principle is that no personal data should be unnecessarily processed. This also applies to the identification of passengers.

9.2.2 Reliability of identification in electronic services

A variety of methods to identify users can be used in electronic services. The reliability of these methods varies.

According to the Act on Transport Services, the verification of identity must be done with care or with special care. However, the justification for the act

states that the act does not require the use of strong electronic identification in the case of acting on someone else's behalf. Other application legislation may set out stricter requirements.

In the case of the online service of a mobility service or an integrated mobility service and the establishment of a user account, the provider of mobility services or integrated mobility services must assess, based on their own starting point, the need to verify their customer's identity and the reliability requirements for the identification to be used in the service. When it is necessary to link the user accounts of two parties sufficiently reliably to each other when acting on someone else's behalf, the party obligated to open up its API and the party acting on someone else's behalf must agree upon what method and what personal data are sufficient to allow acting on someone else's behalf.

If the contracting parties do not use, or one of the contracting parties does not use, strong electronic identification, the contracting parties can agree upon what personal data (name, address, email address, telephone number, date of birth, etc.) will be compared when linking authorisation to a user account. This procedure may also include one-time or recurring confirmation using text messages or email.

In addition to the identification of user accounts and users, the contracting parties must agree, at a more technical level, upon what data will be used when acting on someone else's behalf (e.g. user account number or other pseudonymised data).

9.3 Information security and data protection requirements when opening up a sales interface

A party obligated to open up its API means the mobility service or integrated mobility service or the service provider that provides a ticket and payment system on behalf of the mobility service or integrated mobility service, which must, by law, offer access to the single ticket sales interface.

Contracting parties mean the party obligated to open up its API and the mobility service that acquires products through the sales interface.

- The party obligated to open up its API must ensure that the API can be opened without compromising the service's information security or privacy protection.
- A contracting party may require that the other party applies good information security practices in proportion to the risks to data connections related to the sales interface of the ticket and payment system and to its own systems that have an impact on the data connections of the sales interface or the information security of data obtained through it.

9.4 Information security and data protection requirements when acting on someone else's behalf

The list below includes a general description of the information security and personal data protection requirements when acting on someone else's behalf.

- The party acting on someone else's behalf can access the user account using the API or credentials of the user/the party acting on someone else's behalf that the party obligated to open up its API provides for them as the party maintaining the user account and on which an agreement is made when establishing the connection.
- A transaction carried out on someone else's behalf is initiated by the customer.
- The party acting on someone else's behalf and the party obligated to open up its API must both do the following:
 - Follow good information security practices proportional to the risks when processing data in their data systems.
 - Follow good information security practices proportional to the risks when transferring data.
 - Ensure that the user's personal data is processed in a secure manner.
 - Ensure that only the personal data needed to complete the transaction carried out on someone else's behalf is processed.
 - Ensure that the contracting parties' business secrets, cryptographic secrets or any other data required to open the user account when acting on someone else's behalf are processed in a secure manner and are only used for the agreed purpose.
 - Save the data required to authenticate the transaction carried out on someone else's behalf and retain it for the period needed to investigate any disturbances or complete any similar actions.
- The party acting on someone else's behalf must do the following:
 - Identify itself to the party obligated to open up its API that maintains the user account in the manner agreed upon when establishing the connection.
 - Ensure that the user's credentials and other personal data are only made available to the user and the party obligated to open up its API.

9.5 Information security issues to be agreed upon

The parties must agree at least upon the following information security matters:

- Information security in the storage of data
- Information security in the transfer of data
- Procedures regarding changes in systems, APIs and requirements
- Handling of incidents and threats related to the API or system
- Confidentiality of incident, modification and transaction data
- Procedures to ensure information security/reliability of the contracting parties

10 Verifying the information security of the contracting parties

A contracting party can require from the other party that they agree upon a procedure, with which they can verify that their information security levels are maintained sufficiently.

A recommended and reasonable procedure is to define thorough requirements in the agreement and carry out a technical test for APIs that are open towards the internet.

Simply for the sake of opening up the sales interface, it is not reasonable to demand an independent audit or certification of the entire system. If a contracting party conducts an audit, the protection of trade and professional secrets and personal data needs to be taken into account. Procedures heavier than these can be used if they are otherwise used by the parties for business reasons.

Predetermined criteria and conditions of the party obligated to open up its API

The party obligated to open up its API must prepare assessment criteria and conditions for the party acting on someone else's behalf.

The party obligated to open up its API should publish the assessment criteria and conditions on its website, for example. If the party obligated to open up its API does not publish the information, it must deliver the information without delay after the party acting on someone else's behalf has requested access.

By law, the assessment criteria and conditions must be fair, reasonable and non-discriminatory, and they may not include any conditions that limit use.

In the light of the statutory fairness, reasonableness and non-discrimination requirement, the party obligated to open up its API must address its own corresponding evidence on reliability in the criteria. However, these may not comprise minimum requirements. Similarly, requirements for the identification of users by the party requesting access must be fairly proportioned to the identification ability and practices of the party obligated to open up its API and the necessity to verify the identity of users.

11 Other mandatory legislation

In addition to the Act on Transport Services, other mandatory legislation, such as provisions on competition and the transmission of payments, should be taken into account in agreements between companies.

11.1 Competition legislation

The general competition legislation must also be taken into account. The Competition Act (948/2011) sets general conditions for the freedom of agreement.

According to section 5 of the Competition Act, all agreements between undertakings, decisions by associations of undertakings, and concerted practices by undertakings that have as their object the significant

prevention, restriction or distortion of competition or which result in a significant prevention, restriction or distortion of competition are prohibited.

If a company has a dominant market position, unfoundedly discriminatory procedures are also prohibited. For example, any refusal to provide an interface may be against the Competition Act if the service provider has a dominant market position. In the case of the Act on Transport Services, it should be noted that special provisions already obligate service providers to open up their sales interface in some respects.

Considering the Competition Act, attention should be paid to any impact of contractual cooperation between integrated mobility services and transport services on the markets of integrated mobility services.

11.2 Payments and payment services

As assessed during the Lippu project, it is not necessary to define any specific payment interface for transport services. In the markets of payment services, there are globally used services available, and these do not prevent the transport markets from developing. There is no reason why service providers should adopt a specific, nationally defined payment interface.

The easiest, and often the most practical, way for travel chain operators is to acquire payment transfer services from existing service providers.

Contracting parties must agree upon who will charge passengers for travel chain tickets and reservations and how this will be done, as well as how payments will be transferred or cleared between service providers. The contracting parties should also agree upon who will take care of crediting arrangements with the provider(s) of payment services and how this will be done, and also clarify any arrangements regarding compensation and payments in arrears between each other.

* Will integrated mobility services become a payment service subject to a licence?

If parties to the mobility service network transfer payments independently to some extent, they must identify whether this activity is within the scope of the Payment Services Act. Payment services are defined in the Payment Services Act, which is supervised by the Financial Supervisory Authority.

In some situations, integrated mobility services must understand that their operations regarding payment transfers may become subject to a licence in accordance with the Payment Services Act.

12 eReceipt

Mobility services generate a substantial number of receipt transactions per year (more than 50 million transactions in taxi services, 76 million transactions in rail transport, 2.5 million transactions in domestic air traffic). In the transport sector, the automated processing of receipt data may produce savings at various levels, for example, in the use of travel report systems and in the use of structural receipt data. The transmission of receipt data is associated with payments for travel authorisations, but

not directly with the transmission of travel authorisations. However, it would be practical if mobility service providers took requirements set for the generation and transmission of structured receipt data into account when building their own systems for the transmission of travel authorisations.

Sector-specific instructions for the application of the structured eReceipt system have been defined in the eReceipt project from Technology Industries of Finland. Mobility services comprise one of the sectors included in the project. Considering mobility services, key aspects include the definition of significant receipt data (certain sales interface data) and operating models in the generation and transmission of receipts in travel chains (roles of providers of payment services and mobility services).

The eReceipt guidelines prepared during the eReceipt project are available at https://teknologiateollisuus.fi/sites/default/files/file_attachments/2018_ekuitti_eng_sisus_vedos_6.pdf.

13 Background reports

The following background reports have been prepared to support the codes of practice:

1. Dittmar & Indrenius Attorneys Ltd: Report on consumer protection, compensation for loss and data protection (2017)
2. Susanna Lehti ja kumppanit Oy: Report on special questions related to the accessibility of the mobility service network and services in accordance with the Act on Transport Services (2018)
3. HPP Attorneys Ltd: Report on coordination between regulations on air and maritime transport and acting on someone else's behalf defined in the Act on Transport Services
4. Dittmar & Indrenius Attorneys Ltd: Report on the fulfilment of data protection regulations when acting on someone else's behalf in accordance with the Act on Transport Services (2018)
5. Citrus Oy: APIs when acting on someone else's behalf (2018)
6. Lippu project: Data protection, information security and verifying the reliability of contracting parties (2018)

The purpose of these background reports is to increase the awareness of companies that provide mobility services in Finland regarding requirements that are based on other legislation and significantly related to mobility services and regarding how they can be taken into account in APIs and agreements between companies. The background reports will be published as attachments to the report prepared during the Lippu project. Companies that provide mobility services can use them as supporting material in their activities and agreements.

Appendix 1 Provisions of the Act on Transport Services

Act on Transport Services, part III, chapter 2

Section 2

Interoperability of ticket and payment systems

Providers of passenger transport services in road or rail traffic, providers of brokering and dispatch services, or parties responsible for the ticket and payment system on their behalf must provide providers of mobility services and integrated mobility services with access to the sales interface of their ticket and payment system, through which it is possible, without any terms and conditions limiting its use: (19 December 2017/1056)

1) to acquire at least a basic-priced ticket product entitling the ticketholder to take a single journey, and it must be possible to easily authenticate the travel authorisation based on the ticket product using a universal technology; or

2) to reserve a single journey or transport, the exact price of which is unknown when the service begins or which for some other reason will be paid by mutual agreement after the service has been provided.

A transport service provider that only offers passenger transport services other than those of a competent authority as referred to in part IV, chapter 1, sections 4 and 5 of the Act on Public Procurement and Concession Contracts (1397/2016) or the legislation on public procurement and concession contracts by units operating in water and energy supply, transport and postal services (1398/2016) can deviate from the requirement set out in subsection 1 if its fulfilment is not technically practical or reasonable due to the small size or operating area of the company.

Service providers obligated to open up their ticket and payment system API in accordance with subsection 1 and providers of mobility services or integrated mobility services using the API must work together to enable the practical arrangements required.

Section 2a (4 May 2018/301)

Acting on someone else's behalf

Providers of mobility services or integrated mobility services, or parties responsible for a ticket and payment system acting on their behalf, must provide other providers of mobility services or integrated mobility services with open access to the sales interface of their ticket and payment system or, if required, provide access to the system via another electronic service channel and allow providers of mobility services or integrated mobility services entitled to access the system to acquire ticket products or other products entitling the holder to use mobility services on behalf of the service user at the service user's request, using the identification and user information existing in the user account of the user of the service.

Issuers of tickets that include a discount, compensation or a special condition related to mobility services must provide providers of mobility services or integrated mobility services with access to the system via an API or another electronic service channel and, in this way, enable providers of mobility services or integrated mobility services entitled to access to acquire tickets that entitle the holder to the use of the discount, compensation or the special condition or other products entitling the holder to use the service, using the service user's identification and user information existing in the service. If the data controller of the register related to the grounds for determining the discount, compensation or special condition is a party other than the ticket issuer, the data controller and ticket issuer must together ensure that information related to the grounds is available to the extent necessary in order to allow acting on someone else's behalf.

In conjunction with the transactions on someone else's behalf referred to in subsections 1 and 2 above, personal data can only be processed to the extent necessary to verify the

identity and to carry out the transaction on someone else's behalf. In addition to what is stipulated elsewhere in this act, it must be possible to verify the identity in a particularly reliable way when a relationship with a party acting on someone else's behalf is established or substantially changed. It must also be possible to verify the identity in conjunction with a transaction on someone else's behalf.

The access to the API or system referred to in subsection 1 and 2 above must be provided without any conditions limiting their use. However, the provider of mobility services or integrated mobility services referred to in subsection 1 above and the party in charge of a ticket and payment system acting on their behalf and the issuer of a ticket that carries a discount, compensation or a special condition related to mobility services as referred to in subsection 2 have the right to assess the reliability of the provider of mobility services or integrated mobility services entitled to access in accordance with pre-defined assessment criteria and conditions. Access to data cannot be refused if the party requiring access has permission, approval, auditing or certification granted by an authority or a third party authorised by an authority for the specific purpose, or its operations have otherwise been shown to correspond with generally used standards or generally accepted conditions in the field. If access is refused, the reasons for the refusal must be properly explained to the party requiring access.

A provider of mobility services or integrated mobility services referred to in subsection 1 above and a party responsible for a ticket and payment system on their behalf, as well as an issuer of a ticket carrying a discount, compensation or other special condition related to the mobility service as referred to in subsection 2, that only offers passenger transport services other than those of a competent authority as referred to in part IV, chapter 1, sections 4 and 5, the Act on Public Procurement and Concession Contracts (1397/2016) or the legislation on public procurement and concession contracts by units operating in water and energy supply, transport and postal services, can deviate from the requirement set out in subsection 1 or 2 if its fulfilment is not technically practical or reasonable due to the small size or operating area of the company.

Service providers obligated to open up an API in accordance with subsections 1 and 2 and providers of mobility services or integrated mobility services using the API must work together to enable the practical arrangements required. Access must be sufficiently extensive so that providers of mobility services and integrated mobility services can offer their services accessibly and effectively.

Section 2a (301/2018) will enter into force on 1 January 2019.

Section 4

General requirements for opening up interfaces

Access to information and data systems through open APIs as referred to in sections 1, 2 and 2a above, and the support services, terms of use, software, licences and other services required for enabling access, must be offered using fair, reasonable and non-discriminatory terms and conditions.

Service providers obligated to open up the APIs referred to in sections 1, 2 and 2a above must ensure that they can be opened up without endangering data protection or privacy protection in the service. Providers of mobility services or integrated mobility services entitled to access while acting on someone else's behalf as referred to in section 2a above must safeguard information security and data protection in their service, so that acting on someone else's behalf is possible without endangering these.

Act on Transport Services, part III, chapter 2 – Interoperability of information and data systems

Section 1 Significant information about a mobility service

Regardless of the mode of transport, providers of passenger mobility services must ensure that significant current information about their mobility service is available via a connection established in a data system, being in a computer-readable and easily modifiable standard format and freely accessible (open application programming interface (API)). Significant information consists of at least information about routes, stops, timetables, prices and accessibility.

The URL(s) of the API referred to in subsection 1 above and any other data material required to use the API, as well as their updates, must be reported to the Finnish Transport Infrastructure Agency before the start of operations or, with regard to updates, immediately when a new URL is known.

The Finnish Transport Infrastructure Agency must offer a technical service with which the information referred to in subsection 1 can optionally be delivered.

More detailed provisions on the significant information referred to in subsection 1, their up-to-datedness requirements and technical interoperability can be set in a Government Decree.

Section 2

Interoperability of ticket and payment systems

Providers of passenger transport services in road or rail traffic, providers of brokering and dispatch services or parties responsible for the ticket and payment system on their behalf must provide providers of mobility services and integrated mobility services with access to the sales interface of their ticket and payment system, through which it is possible, without any terms and conditions limiting its use:

- 1) to acquire at least a basic-priced ticket product entitling the ticketholder to take a single journey, and it must be possible to easily authenticate the travel authorisation based on the ticket product using a universal technology; or*
- 2) to reserve a single journey or transport, the exact price of which is unknown when the service begins or which for some other reason will be paid by mutual agreement after the service has been provided.*

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