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European Legal
Implementation Roadmap

Recent research and demonstrations have shown that driverless vehicles can operate safely in the majority of common road scenarios worldwide. These developments have encouraged further investment from industry and public administrations to increase the availability of automated driving technologies. Public transportation stands to benefit significantly from the introduction of intelligent vehicles, which can improve safety in urban areas, reduce the cost of last–mile transportation, decrease congestion, and improve global service for the user. Once automated buses are legally standardised and commercially available, they will be able to operate in locations that are currently only served by privately owned vehicles. However, most relevant issues have not yet been fully resolved. The many unanswered questions hinder public administrations from planning for and successfully integrating automated buses into the transportation system.

Sohjoa Baltic research promotes and pilots automated driverless electric minibuses as part of the public transport chain, especially for first-/last-mile connectivity. The project develops the knowledge and competences required to organise environmentally friendly and smart automated public transport. It also provides guidelines on the legal and organisational frameworks needed to operate a service of this kind in an efficient way. The Sohjoa Baltic (10/2017-09/2020) project budget is  $3.8\,\mathrm{M}\odot$ , of which  $2.8\,\mathrm{M}\odot$  is funded by the Interreg-Baltic Sea Region programme.

This European Legal Implementation Roadmap provides an overview of the legal challenges that arise when implementing automated buses as part of public transport. It was prepared with the input of project partners from the Vejle Municipality of Denmark, the City of Gdańsk (Poland), the Metropolia University of Applied Sciences, Kancelaria Adwokacka adw. Lech Kaniszewski (Poland), the City of Tallinn (Estonia), Tallinn University of Technology (Estonia), Chalmers University of Technology (Sweden), Front Law Firm (Sweden), TRAFI (Finland), and IKEM (Germany). Before testing automated buses in six cities from the Baltic Sea Region (BSR), legal questions from different areas of law must be answered to provide a service that runs on a sound legal basis in every participating country. Therefore, the roadmap summarises the current legal situation relevant to the implementation of automated buses in Germany, Denmark, Poland, Finland, Sweden, Estonia, and Latvia. If EU regulations apply to all countries, no individual analysis is carried out. If it is indicated, the authors also give policy recommendations. At the end of the roadmap, the test of selfdriving vehicles Act and the regualtion for test of selfdriving vehicles from Norway is described as an example showing how a possible specific regulation for testing automated vehicles can be designed. All testing of self-driving vehicles in Norway is governed by this law and regulation.

The roadmap is intended to provide relevant legal information for persons or organisations interested in integrating automated driving into the public transport system. It identifies the main implementation bottlenecks and gives practical insight into the requirements that must be fulfilled in every participating country before an automated vehicle can be operated on public roads. Because the European legal framework continues to evolve, the roadmap will be developed further over the course of the SOHJOA Baltic project; publication of an updated second edition is planned for the year 2020.

In the context of this roadmap, the **vehicle operator** (also known as the 'steward' or 'safety driver') is a physical person who is present onboard the automated vehicle to guarantee safe operation, even in situations where the automated driving system fails to perform as intended. In such situations, the vehicle operator can override the automated driving functions and assume control of the vehicle.

**Automated vehicles** are vehicles that rely on an automated driving system rather than a manual system. This means that they can operate without human intervention (SAE level 3 and higher).

The areas of law examined in this roadmap are car registration law (section I, page 3), passenger transportation law (section II, page 12), personal legal requirements for the vehicle operator (section III, page 18), data protection law (section IV, page 24), liability law (section V, page 26), and criminal law (section VI, page 30). The annex (page 41) provides a legal inventory of all relevant regulations in BSR countries. The legal inventory includes the acronyms and abbreviations of laws and regulations used on the following pages.

# Vehicle registration law

# I

# Necessity and legal basis for the vehicle registration

In all participating countries, motorised vehicles must be registered before they can be used on public roads. The registration procedures differ slightly but are based on similar legal standards.

In Germany, vehicles must be registered only if they are tested on public roads. The vehicle registration requires:

**GERMANY** 

- · an official application from the vehicle keeper,
- · motor vehicle liability insurance coverage, and
- · an operating licence.

The legal basis for the vehicle registration is either § 21 StVZO or § 13 EG-FGV. The applicable procedure determines which government agency is competent for issuing the operating licence:

- § 13 EG-FGV is to be applied with priority.
- § 21 StVZO is applicable under the following exceptional circumstances:
- The maximum speed of the vehicle is 25 km/h or less.
- The vehicle is a prototype that was constructed especially for the test operation (§ 3 par. 2 no. 4 EG-FGV).

In Denmark, vehicles – including buses – must be registered before they can be driven in areas under the Traffic Road Act (cf. KRL § 2).

**DENMARK** 

The vehicle does not need to be registered if it is operated mostly outside public roads (cf. KRL§3, sec. 4). Any exception to the registration requires a permit, which can be provided for a maximum period of six months. A permit requires an overview of the geographical area for the vehicle route. The car registration requires:

- $\cdot\,$  an official application by the vehicle owner (cf. RL § 39),
- · motor vehicle liability insurance (cf. RL § 48), and
- payment of the registration charge (cf. RL  $\S$  49) (Operation,  $\S$  3 par. 2 no. 4 EG-FGV).

The applicable procedure determines which government agency is **competent for issuing the operating license**.

Vehicle Act 8 § FINLAND

A motorised vehicle and its trailer must be registered and appropriately inspected. If these conditions are not met, neither the vehicle nor its trailer can be used in traffic ('prohibition of use').

# FINLAND (continued)

### Vehicle Act 66 §

The general requirements for first registration are as follows:

- The vehicle must have been approved in a registration inspection.
- The vehicle must fulfil the requirements that apply in Finland.
- The vehicle cannot be a certified scrap vehicle.
- Proof of payment of vehicle tax, ownership of vehicle, and mandatory traffic insurance must be presented.
- If the vehicle owner is not a natural person, a person responsible for the use of the vehicle must be identified.

### **ESTONIA**

### Traffic Act 76 § section 1:

A vehicle used in traffic must be registered within five working days after being put into use in Estonia. The vehicle is registered after the pre-registration technical compliance inspection (Road Administration) has been carried out and the vehicle meets the requirements. It is registered in the name of a natural person with Estonian citizenship, a natural person with a permit or right of residence in Estonia, or a legal person registered in the Estonian Business Register or in a branch of a foreign company.

General requirements for registration (based on traffic Act 76 § section 13 and 14 § and Minister of Economic Affairs and Communications Vehicle Registration Decree):

- · documents proving legal acquisition of the vehicle,
- in the case of a new vehicle, a certificate of conformity (EC-Certificate of Conformity (CoC)) issued by the manufacturer, and
- other documents required in accordance with applicable legislation.

A state fee shall be paid for vehicle registration. The Road Administration has the right to verify the accuracy of submitted data before making the register entry, that includes the right to verify data regarding a registration certificate issued by a foreign institution.

### **POLAND**

Traffic approval under **the u.p.r.d.** generally refers to public roads, but also includes certain internal roads, e.g. residential and traffic zones (Article 1 section 1 item 1 and 2 of the u.p.r.d.). Cars, buses and other vehicles Vehicles and buses may be traffic-approved, provided that they have been registered or temporarily registered and conform to the technical conditions stipulated in Article 66 of the u.p.r.d. (Article 71 section 1 and 2 u.p.r.d.). Registration is not required for certain vehicles, including low-speed vehicle (i.e. vehicles whose structure limits their speed to 25 km/h).

The registration of a vehicle is handled by the head of a given district at the request of the vehicle owner. The request must be submitted with the following: a vehicle ownership confirmation or document entrusting the vehicle to a Polish entity by a foreign natural person or a legal person; a vehicle licence; and an EC conformity certificate/individual vehicle approval/decision on acknowledgement of the individual vehicle approval/EC individual vehicle approval if required (Article 72 section 1 of the u.p.r.d.). The registration authority also verifies that motor vehicle owners have entered into civil liability insurance contracts.

The scope of requirements regarding certification or individual approval of a vehicle is established in the ordinances r.h.t.p.s. and r.d.j.p., which refer to, among others, Directive 2007/46/EC, Regulation (EC) No 661/2009, and particular UNECE rules. In the presence of innovative constructions or technologies (Article 70i u.p.r.d.), it is possible to obtain special consent from the European Commission to issue the EC type-approval certificate. Homologation or individual approval is provided by a national authority, i.e. the Head of Transport Technical Supervision Office.

POLAND (continued)

All vehicles, including buses, must be registered in the Swedish Road Traffic Registry (Sw. Vägtrafikregistret), governed by the Swedish Transport Agency (Sw. Transportstyrelsen) and used in accordance with LVTR § 12. The vehicle does not need a car registration under certain conditions, e.g. if it is used exclusively within a contained area (LVTR § 13 p.1).

**SWEDEN** 

For a vehicle to be registered, it must first be appropriately inspected and approved (FordL chap.  $2 \S 1$ ). A vehicle can receive, for example, a type-approval in accordance with EU regulations, UN regulations (UNECE), or national law (FordL chap.  $2 \S 2$ ). General requirements for registration include:

- An application must be submitted, usually by the vehicle owner (FVTR chap. 6 §§ 2–5).
- A road traffic registry fee must be paid (ORTrF chap. 2 §§ 5–6 and FVTR chap. 6 § 17).
- The vehicle must fulfil the requirements that are in force in Sweden (FordL chap. 2 §§ 1 and 6, FordF chap. 1 § 1 and chap. 2 § 1).
- Identity of the vehicle can be verified (FVTR chap. 6 §§ 5–7 b).

Additional requirements to use the vehicle include:

- · traffic liability insurance (Sw. trafikförsäkring) (TSL § 2),
- · payment of vehicle tax (VtrSL chap. 2 § 1), and
- · vehicle registration as 'in use' (sw. ställa på).

Vehicles involved in road traffic on public roads in the territory of Latvia must be registered and insured; fulfil all applicable technical and construction standards and regulations; and have permission to participate in road traffic. Registering a previously unregistered vehicle in Latvia requires the submission of a Certificate of Conformity or certificate issued in accordance with Cabinet of Ministers Regulation 1494; the vehicle manufacturer must also certify compliance with road traffic laws and regulations, including the 1958 UN/EEC Agreement, and the conditions for mutual recognition of conformity assessment certificates issued in accordance with these prescriptions. The Attestation of Conformity is not required if the vehicle has been subject to a conformity assessment in accordance with harmonised requirements of the EU or in certain other cases.

Vehicles registered abroad that are owned by a foreign entity and do not participate in Latvian road traffic for more than three months do not need to be registered in Latvia and can participate in road traffic with a valid licence issued by a foreign country. The use of a foreign-registered M1- or N1-grade vehicle in road traffic the vehicle operation tax law charges a fee for the period of use of the car.

LATVIA

# Non-compliance with the applicable regulations

In all participating countries, the operation of automated driverless vehicles is contrary to European, international, and national law. As a result, car registration cannot be obtained. Some, but not all, legal problems can be resolved by placing a vehicle operator inside the test vehicle. In some countries (e.g. Denmark, Finland, and Sweden) the vehicle operator can also be positioned outside the vehicle.

### ALL EU COUNTRIES

An automated driverless vehicle cannot obtain car registration because it does not comply with European law (e.g. UNECE rules) and international law:

- At the international level, UNECE rules require automated vehicles to be designed such that the driver may, at any time and by deliberate action, override the automated driving function (UNECE Regulation No. 79, 5.1.6).
- The Vienna Convention on Road Traffic (Art. 8), which has been ratified by all participating countries, requires every moving vehicle to have a driver.

### **GERMANY**

In addition to the international norms, other regulations may restrict the use of automated functions in vehicles:

- The automatic functions of the automated car must comply with regulations on the driver's behaviour.
- Technical regulations requiring cars to have seat belts, a steering wheel, mechanical breaks, and automobile mirrors may present additional hurdles.

The presence of an onboard 'vehicle operator' may resolve some legal problems. Even with a vehicle operator, however, UNECE Regulation No. 79 prohibits automated vehicles from exceeding a speed limit of 12 km/h.

### **DENMARK**

Under national law, every vehicle must have a responsible driver, but when testing automated vehicles, the driver can either be inside or outside the vehicle (cf. FL§ 92g). In Denmark, a driverless vehicle is any vehicle that has been equipped with technology enabling it to operate autonomously.

### **SWEDEN**

Even though automated driverless vehicles do not satisfy international regulations, the Swedish Transport Agency can issue a special permit and then register the vehicle. Registration is required for the vehicle to be used (LVTR § 12) but can include exemptions from the standard requirements (SjälvKörF § 1).

The term driver (Sw. förare) does not have a legal definition in Swedish law. It is presumed that every vehicle must have a responsible driver. Regulations on the testing of automated vehicles stipulate that a physical driver can be either in or outside the vehicle (SjälvKörF § 7). In Sweden, a driverless vehicle is a vehicle with a fully or partly automated driving system (Själv–KörF § 1).

Under national law, every vehicle must have a responsible driver, but in tests of automated vehicles, the driver can be either inside or outside the vehicle (similar to the situation in Denmark and Sweden). The term driver does not have a legal definition in Finnish law.

FINLAND AND ESTONIA

Automated driverless vehicles are contrary to current Polish regulations as well as international norms. Although Polish law does not explicitly state that every vehicle must have a driver, it includes various provisions establishing obligations for the driver (who must be a physical person).

**POLAND** 

Apart from the legal impossibility of certifying and registering the vehicle, barriers to the use of automated vehicles can include regulations specifying the **obligations of the driver** and technical standards for the vehicles:

- In accordance with Polish regulations, a driver may not 'stop driving' and rely solely on the automated system. On the contrary, the driver must not take actions that could prevent him or her from personally driving the vehicle (and assuming control when necessary).
- Technical standards require vehicles to be equipped with a strong steering control system enabling the driver to quickly and unfailingly changing the direction in which the vehicle is moving. It must also be equipped with adjustable mirrors, seat belts (§ 11 section 1 of the r.w.t.p.), andbrakes enabling a driver to bring the vehicle to a stop (§ 14 section 1 of the r.w.t.p.).

It is necessary and, in the case of automated vehicle tests, explicitly required for a vehicle operator (steward) to be present and able to take control of the vehicle at any time or switch off the automated system. If one assumes that the operator is a driver and has all of the obligations of a driver, the operation of such a vehicle could be considered in alignment with Polish regulations. Nevertheless, a vehicle cannot be registered if it fails to satisfy the requirements of UNECE Regulation no. 79.

Neither the Road Traffic Law nor the road traffic regulations issued based on international regulations explicitly states that the vehicle must have a driver, but such a conclusion can be made through systematic comparison of laws and regulations, including the concept of 'driver' (vehicle is driven by a natural person).

**LATVIA** 

### Recommendations for national law:

- Promote road traffic law changes to permit the public use of completely autonomous vehicles in public transport.
- Introduce an adequate definition of the term driver if the term is not yet legally defined (as is the case in Sweden). The definition should specify whether a driver is a natural person or not, respectively in or outside the vehicle.
- Encourage the adaption of technical regulations to the new circumstances of automated driving.

## Recommendations for international law:

• Encourage modification of relevant regulations in the UNECE rules and the Vienna Convention on Road Traffic so that driverless vehicles are not prohibited under international law.

POLICY RECOMMEN-DATIONS

# Issuing a special permit

In all participating countries, it is possible by law to conduct test operations with automated vehicles. In most countries, such tests require a special permit. In Estonia and Finland, they require a test plate certificate. In all countries, these exemptions from otherwise conflicting norms can only be granted if the applicant takes sufficient compensatory measures, e.g. by complying with geographic limitations on the test route, providing a precise description of the planned operation (route, technical specifications of the vehicle, operating times), and securing adequate insurance coverage. The measures must guarantee traffic safety and avoid causing other major inconveniences in the area surrounding the test operation.

#### **GERMANY**

In special situations, a special permit can be granted to exempt the automated vehicle from existing regulations. Vehicles are eligible for such permits only if technical and organisational measures are adequate to guarantee the 'safe and smooth flow of traffic'.

The issuing agency can add obligations or other stipulations to the permit to ensure that such measures are in place, such as with regard to the following:

- · geographical limitations
- · time limits
- · provisions under which the licence can be invalidated
- the onboard vehicle operator
- · safety training for the vehicle operator
- · operational safety
- · consequences of an accident
- · transport of persons
- · logbook or other types of documentation
- a passenger safety briefing.

### **DENMARK**

Testing of automated vehicles (SAE levels 0–5) is possible with a special permit under FL § 92h. The Minister of Transport, Building and Housing issues a special permit after a hearing with the police and road authorities.

Applications for special permits must fulfil specific criteria in addition to the original registration requirements. For example, technical specifications of the test vehicles must be specified and a general description of the test plan must be provided with information on:

- · the test's SAE levels,
- · a specific map of the route along which the tests will be conducted,
- · traffic conditions,
- · weather conditions,
- · test organisation, and
- a plan for processing data collected through the test. An accepted assessment concerning road safety consequences from an approved safety advisor.

In Finland, testing of automated vehicles (SAE levels 0-5) is possible in road traffic using a test plate certificate.

**FINLAND** 

### Vehicle Act 66 f §

An enterprise, agency, or other organisation engaged in automated vehicle research and development may apply to Trafi for a test plate certificate. The certificate entitles the bearer to drive test vehicles, to a limited extent and on a temporary basis, both in road traffic and off-road. For testing in road traffic, Trafi will issue test plates.

A Trade Register extract from the company's country of incorporation not more than three months old must be appended to the application.

The applicant must also enclose a trial plan that includes:

- · a general description of the trials,
- · technical specifications of the test vehicles,
- information on the road area where the trials are to be conducted,
- · proof of insurance cover for third-party liability, and
- · a description of measures to ensure road safety.

Automated vehicle tests in traffic on public roads are permitted, provided that safety requirements are met and a special permit has been granted. The permit does not imply consent to permanently register such a vehicle; it is simply an agreement to conduct tests on a special basis. The following requirements apply (Article 65k–65n u.p.r.d.):

**POLAND** 

- An authority managing traffic on a road issues the permit at the written request of the test organiser.
- The test organiser's civil liability document, along with proof of insurance payment, must be attached to the permit application. The insurance is of a conditional nature, as it depends upon receipt of the permit.
- · A decision on the permit can be obtained only by certain entities (especially entrepreneurs dealing with tests of new vehicles and R&D units of manufacturers), and test drives can take place, provided that they only concern vehicles not registered previously in Poland or abroad.
- The permit is granted only with the consent of a road manager (managing entity/authority) and only if no objections are raised by the owners of real estate located along a planned test route. Compliance with additional statutory requirements is compulsory for the permit.

In Estonia, automated vehicles (SAE levels o-3) can be tested in road traffic using a test plate certificate.

**ESTONIA** 

- These vehicles must have a driver, either within the vehicle or acting remotely, who is responsible for the vehicle and takes control of it if necessary.
- Testing can take place on public roads or off-road.
- The Road Administration can issue a testing permit for six months with the possibility of an extension.

# ESTONIA (continued)

• The Road Administration requires manufacturers to follow the EU Directive 2007/46 at least in its most important parts, e.g. with regard to seat installation, safety windows, break acceleration, door closing-force, emergency lights, reflectors, light installation and use in car traffic, and bus 'kill switches'.

The applicant must also enclose a trial plan similar to the one required in Finland.

The automated vehicles expert group is continuing to discuss responsibilities, insurance, privacy, ethics, and other related topics in order to reach solutions enabling the on-street operation of high-autonomy vehicles (i.e. levels 4 and 5 of the SAE International Standard J3016).

### **SWEDEN**

Trials of automated vehicles (SAE levels o-5) are possible with a special permit for vehicles that are not approved in any other way for driving on the road (FordF chap.  $8\$ § 18 and Själv-KörF§ 1). The Swedish Transport Agency may issue a special permit, on a temporary basis, if the applicant shows that traffic safety can be ensured and that the test does not pose a major inconvenience to the surroundings (SjälvKörF§ 4). One or more natural persons must be responsible for ensuring that the test is conducted in accordance with the permit (SjälvKörF§ 6).

When the vehicle is driving, a vehicle operator (natural person) must be present in or outside the vehicle and other requirements may apply (SjälvKörF § 7 and § 11). Additional requirements (besides the registration requirements) may include:

- information on the technical specifications of the test vehicles and the automated functions to be tested
- · information on the geographical area in which the tests are to be conducted
- an accepted assessment concerning road safety and an assurance that the test does not pose a major inconvenience to the surroundings
- a general description of the test plan and organisation (including aim and scope) and how the trials will be assessed
- a description of the distribution of responsibility ty for the test, i.e. the parties bearing liability
- · an obligation to report accidents and incidents
- $\cdot\,$  a plan for processing data collected through the test
- an assessment of the effects of weather conditions, light conditions, road conditions, etc.

### **LATVIA**

Testing of automotive vehicle technology does not require special authorisation if vehicle control can be assumed at any time by a trained and licensed test driver or driver and operator. In accordance with the Guidelines for Test Vehicles, vehicles must be:

- suitable for participation in traffic, compliant with all vehicle requirements, and used in traffic
  in a manner that does not violate the requirements of regulatory enactments governing traffic;
- · equipped with a manual control mode;
- shown to have successfully performed testing on closed test routes or in test areas.

The legal entity responsible for automated vehicle testing must have adequate insurance coverage.

### National level:

Promote the establishment of a checklist that illustrates all possible legal problems related to the approval of an automated vehicle and adequate suggestions (guidelines) to overcome these problems with additional stipulations for a special permit or test plate certificate.

POLICY
RECOMMENDATIONS:

## **European level:**

- · Harmonise these checklists in a second step.
- Promote mutual recognition of national permits in different EU countries.

# $\mathbf{II}$

# Passenger transportation law

# Need for a passenger transportation permit

Commercial transportation of passengers requires a permit in every participating country. Many legal systems, e.g. in Finland and Estonia, distinguish between a general passenger transportation permit and a taxi permit. Exceptions that do not require a permit are the transport of employees by their employer (Denmark) or for purposes of tourism (Poland).

### **GERMANY**

Passenger transportation is regulated under the Passenger Transportation Act (PbefG). Automated buses require a passenger transport permit if:

- · persons are being transported and
- · a fee is charged, or
- · any other financial compensation is provided, or
- · transport takes place on a regular basis.

There are exceptions for passenger transport on private roads and work-related transport of employees on the premises of their employer (FrStllgV).

### **DENMARK**

In Denmark, passenger transportation is regulated under the RK and BKL. Normal or special route services require a permit, which is granted following an application process (cf. RK § 1). 'Normal route service' applies to every passenger. 'Special route service' applies only to certain categories of passengers (e.g. educators, employees, or senior citizens).

The application must contain a description of the route, a timetable, and information about fares and the route service (cf. RK§3). There are exemptions for passenger transport permissions if the route service only transports employees (employee labor) or educators to a school.

A commercial passenger conveyance permit is also required if the bus is used to transport more than nine persons, including the driver (cf. RK § 4 and BKL § 1).

### **FINLAND**

A permit is required for professional taxi transport or passenger or goods transport.

### **POLAND**

In Poland, passenger transport at the communal level is governed by several legal acts, including the k.c. (Articles 776–778 concerning regulations on passenger transport), u.p.p., u.t.d., u.p.t.z., and several others.

To transport passengers in Poland, one must first obtain a permit for hauliers (Article 5 section 1 of the u.t.d.) or a transport licence for a car or taxi (Article 5b section 1 of the

u.t.d). In addition to this professional permit, a contract with the organiser or a permit for regular carriage (see below) is required to operate a bus carrying passengers in the public transport system.

POLAND (continued)

Public transport services in accordance with the u.p.t.z. are categorised as:

- public utility transportation (generally organised by public authorities; organisers conclude contracts with the operators for particular routes);
- commercial transportation (performed by private entities with a special permitand under notification(since 2019)).

'Regular special carriage' (e.g. transport of students to schools/universities) is also a distinct category and requires the same permit. Transit that does not qualify as 'regular special carriage' (e.g. a shuttle travelling back and forth and occasional transit) requires a special permit only if the route goes outside the European Economic Area. Exemptions:

- · non-profit road passenger transport
- $\cdot$  carriage organised by persons who not acting commercially
- · carriage for medical rescue and sanitary transport services
- purposes of tourism (the u.p.t.z. does not apply).

Professional passenger transport require a permit under the following categories:

**ESTONIA** 

- · Taxi transport permit
- · Passenger transport permit
- · Drivers service permit.

In general, passenger transportation is regulated under YTL, YTF, TTL, KolltrL and (EC) No 1071/2009.

**SWEDEN** 

Commercial traffic requires the permission of the Swedish Transport Agency, which is granted through a commercial traffic permit (Sw. yrkestrafiktillstånd) (YTL chap. 1  $\S$  1–2 and 2  $\S$  1, and YTF chap. 1  $\S$  4).

Automated buses require a passenger transport permit if:

- the motor vehicle is constructed to carry more than nine persons, including the driver, and
- intended for passenger transport services for the public or for specific categories of users in return for payment by the person transported or by the transport organiser ((EC) No 1071/2009 Art 2 and YTL chap. 2 § 1).

## YTL and YTF apply to:

- Line-based traffic (Sw. linjetrafik): commercial traffic for passenger transport which is bound to a timetable and for which remuneration is set for every passenger separately. The transportation cannot only be part of an event whose main purpose is not the transport itself. If line-based traffic is performed with a car, a taxi traffic permit (Sw. taxitrafiktillstånd) is required (TTL chap. 1 § 3 and 2 § 1).
- Ordered traffic (Sw. beställningstrafik): commercial traffic for passenger bus transport that is not line-based traffic (YTL chap. 1 § 5 and 2 § 1).

### **LATVIA**

Passenger carriage by bus (i.e. a vehicle intended for the transport of nine or more persons, not including a driver) may be carried out if the road transport manager has a certificate of professional competence in the relevant transport area and the carrier has received a special permit for carriage (international, national) or the republican city council issues a special permit for transportation within the city limits.

Passenger transportation is divided into the following categories:

- commercial transport (i.e. carriage of passengers for a fee as a professional activity), which requires a special permit (licence) and licence card issued by the competent authority, the Road Transport Directorate.
- self-transportation (i.e. transport performed free of charge with vehicles owned or leased by a merchant, state or local government institution, association, or foundation, with a self-employed person as the driver, to carry persons for their own purposes; self-transportation is an ancillary activity of the carrier). For self-transport, the self-employed person must obtain a vehicle-specific self-transportation certificate or valid licence card or copy of the European Community authorisation for carriage of the relevant type.

### Other classifications include:

- regular (i.e. according to travel schedules on a regular basis on a specified route for a predetermined fare, as well as when passengers are admitted or discharged in line construction); also regulated by the law on public transport services.
- · special regular (certain category).
- irregular (inappropriate definition of regular services, groups of passengers established on the initiative of the customer or carrier).

# Requirements for obtaining the permit

In all participating countries, basic requirements must be fulfilled to obtain the necessary passenger transportation permit. Among the most important requirements are the adequate competence of the provider in the field of passenger transport, as well as the financial and technical reliability of the service offered. In Germany, the approval regime is even stricter, with the issuing of permits generally limited to certain modes of transport such as line-based traffic.

For a vehicle to obtain a permit, it must satisfy the criteria for one of the following categories:

**GERMANY** 

- Line-based traffic is transport that connects a pre-determined starting and end point on a regular basis and allows passengers to board and disembark at certain stops. It does not require a timetable with specific departure and arrival times or intermediate stops.
- Occasional traffic is transport by taxi, rental car, or rental bus. 'Taxi transport' refers to the transportation of passengers to places of their own choosing in cars that are kept ready for service at officially designated spots. 'Transport by rental car or bus' refers to transportation in vehicles rented by passengers for this purpose. The route and destination are determined entirely by the passengers, and the rental service responds to transit requests at the corporate office or the owner's residence. The vehicle rental must include the services of a driver; taxis and rental cars cannot be driven by the passengers themselves.

If a mode of transit does not meet the criteria for one of the categories above, it may be eligible for another type of special permit:

- If a mode of transport does not fulfil all requirements for line-based or occasional traffic, authorisation can be granted under the terms of the permit for the mode of transport to which it is most similar.
- For tests of new modes of transport, a special permit can be issued for a maximum period of four years.
- Both types of special permits are granted only if operation of the authorised vehicle is not contrary to the public interest.

Additionally, the safety of the service must be ensured, and the provider must prove his or her financial and technical reliability.

To obtain any transport permit (i.e. for taxi, passenger, or goods transport), a natural or legal person must:

**FINLAND** 

- be of legal age, be competent, and have a decent reputation
- · be proficient in the field
- · have no record of bankruptcy
- have no outstanding tax debt or other payment errors
- · be allowed to do business
- · have duly taken care of all employee payments
- not be found to be untrustworthy.

### **POLAND**

The contract for provision of services within the public transport sets out obligations, including the requirements for means of transport, and demands the use of modern technical solutions.

However, provisions of the u.t.d. stipulate that regular carriage within domestic public transport can be carried out only by bus. Specific technical requirements apply for each transport type. Some such requirements are set out in the r.w.t.p.; others include: making a time schedule publicly available at stops and stations on the way, letting passengers in and out only at the stops set out in a time schedule, and making terms and conditions of carriage and a price list available on the bus. Furthermore, for the permit/notice of approval for commercial transportation, regulations require carriers to provide the transport organiser with information on the means of transport to be used for carriage (e.g. automated buses). It is also necessary to establish stops or stations along a suggested route.

For commercial transport services and in the framework of public utility transport services, an entrepreneur rendering passenger transport services must first obtain authorisation to carry out the business activity in this field (Article 4, section 1, item 8 and 11 u.t.d.). This means that the entrepreneur must receive a permit to work in the road transport profession, in accordance with Article 5 u.t.d. General requirements for permit acquisition are defined in Regulation (EC) No. 1071/2009.

### **SWEDEN**

To receive a commercial traffic permit (for taxi, passenger, or goods transport), a natural or legal person in Sweden must (YTF chap. 2 § 1):

- be deemed fit and proper (YTL chap. 2 §§ 2–5), with a clean criminal record, no outstanding tax debt or other payment errors, and no record of bankruptcy.
- have proficiency and adequate competence in the field (YTL chap. 2 § 6).
- have sufficient funds (i.e. be in good financial standing) (YTF chap. 2 § 1).
- be permanently established in a Member State (YTF chap. 2 § 1).
- act in accordance with traffic regulations (YTL chap. 3 § 6).

The following conditions also apply:

- A permit may require additional requirements (YTL chap. 2 § 7 and 3 § 7).
- A permit is issued for an indefinite period of time, but its validity can be restricted to a fixed term in certain cases (YTL chap 2 § 8).
- For permits issued to a legal person, a natural person with a genuine link to the legal person (e.g. an employee, director, owner, shareholder, or administrator) must be designated as Transport Manager to ensure the fulfilment of the same requirements ((EC) No 1071/2009 Art 4).

After receiving a permit for commercial traffic, the permit holder must notify the Swedish Transport Agency about the vehicle in writing before he or she can start using the vehicle (YTF chap. 4 §§ 2–3). The Swedish Transport Agency monitors vehicle compliance with all requirements and ensures that the vehicle is properly registered in the Swedish Road Traffic Registry (YTF chap. 4 § 4 and FVTR chap. 2 § 3 p. 3). The Agency also verifies that the vehicle is owned or properly leased by the permit holder.

In Latvia, a passenger transport licence must be obtained before services are provided. Exemptions:

**LATVIA** 

- A special permit is not required for passenger self–transportation by light vehicle.
- The requirements set out in Cabinet of Ministers Regulation 364 do not apply to tourist transport services if the tour services are provided within the same administrative territory through a pre-designed and self-governing route and offer information on tourist attractions.

The preconditions for a passenger transportation licence are as follows:

To receive a self-transportation certificate for the carriage of passengers by bus, the self-employed person submits an application and, if applicable, a copy of the lease agreement. Before a certificate for self-transportation vehicle can be obtained, the vehicle must be registered in the state register of vehicles and their drivers; in addition, the technical condition of the vehicle must be rated 'o' or '1', based on the results of the state technical inspection.

To receive a licence for commercial bus transportation, the carrier must submit an application to the Road Transport Directorate, or EU or EEC countries for a recognised professional competence certificate, a certificate of compliance with Regulation No. Article 6 (good repute requirements), Article 4 (requirements for transport managers), Article 7 (requirements for financial position), and Article 5 (conditions of place of business) of Regulation 1071/2009.

In order to receive a licence for commercial transportation with light vehicle, the carrier must submit an application to the Road Transport Directorate. The carrier must be registered in the Register of Enterprises with an active economic activity, may not be in insolvency or liquidation proceedings or owe taxes, duties, or other statutory debts. Neither the carrier nor the carrier's legal representatives can have unpaid administrative penalties listed in the penal register for road traffic or road transport violations. Additional registration is required for the driver.

### National level:

- Promote a more flexible legal framework, for example to allow for the establishment of on-demand services with automated vehicles without the need for special permits (Germany).
- · Simplify the permit process and balance licensing requirements with the 'on-demand' (on-request) needs of transport service providers and recipients

POLICY
RECOMMENDATIONS



# Personal legal requirements for the vehicle operator

# **Driving licence**

In all participating countries, drivers need a driving licence. The appropriate licence type is determined by the length and weight of the vehicle, as well as by the number of passengers. In most countries, the vehicle operator is considered to be the driver of the vehicle. In Swedish and Finnish law, the term driver is not legally defined; the vehicle operator is a 'road user'. Nevertheless, this does not exempt him or her from the obligation to obtain the proper driving licence for operating the automated vehicle.

### **GERMANY**

The vehicle operator is, by law, the driver of the vehicle. He or she must be in possession of a driving licence. The type of driving licence required depends on the vehicle weight and length and the number of passengers. For example, a vehicle operator must be in possession of a Category D1 driving licence when operating a vehicle that is 5 metres long, weighs 3.5 tonnes, and designed to transport 10 passengers, excluding the driver.

### **DENMARK**

The driver of the vehicle must have a driving licence. The type of driving licence required is determined by the weight of the vehicle as well as by the number of passengers.

For a vehicle that is eight metres long and constructed to transport 16 passengers (excluding the driver), a 'small bus' driving licence is required (cf. KL§ 15). To obtain a 'small bus' driving licence, the driver must have a standard car driving licence and be at least 21 years old (cf. KL§ 26).

### **FINLAND**

Finnish law does not specifically define the term driver: instead, it refers to the road user. A road user is a person who is on the road, in a vehicle on the road, or in a tram. Therefore, a person who is driving and/or operating a vehicle can be considered a road user.

A person driving a vehicle must have a valid driving licence. The licence type must correspond to the type of vehicle that the person is operating/driving.

### **POLAND**

A driver can be a person who holds a relevant document confirming his or her right to drive a vehicle – in most cases, the driving licence that corresponds to the relevant category. A D1 driving licence is required in order to drive a bus designed to transport up to 17 persons (including the driver) if the bus length does not exceed 8 metres (irrespective of weight).

### **ESTONIA**

As in Germany, the driver of a vehicle must have a driving licence. The type of driving licence is determined according to the vehicle weight and length, as well as by the number of passengers (there are no special requirements for automated vehicles).

Swedish law does not define the word driver (Sw. förare); as in Finnish law, the term road user (Sw. trafikant) is used. A road user is someone who travels or otherwise stay on a road or in a vehicle on road or in terrain (area that is not defined as road) and someone who is travelling in terrain (VägDefF § 2).

**SWEDEN** 

As in Finland, a person who drives and/or operates a vehicle qualifies as a road user. A bus may be driven only by someone with a valid driving licence for that type of vehicle (KörkL chap. 2 § 1). The type of driving licence required depends on the vehicle weight and length and the number of passengers (KörkL chap. 2 § 5).

- When driving a vehicle at length eight metres long and constructed for the transport of 16 passengers (excluding the driver), a driving licence (type D1) is required.
- For a D1 licence to be issued, the applicant must qualify for a driving licence and be at least 21 years old (KörkL chap. 3 § 1 e). (In certain cases, exceptions can be made (KörkL chap. 3 § 1 a)).

A vehicle owner is liable for ensuring that the vehicle is not used in violation of TF. When another party uses the vehicle, the owner's responsibility is reduced (TF chap. 1 § 5). Under Swedish law, the 'driver' or 'road user' is generally the responsible party when the vehicle is used.

The driver must be in possession of a valid driving licence for the relevant category, corresponding to the vehicle type.

**LATVIA** 

According to the Guidelines, the test driver and test vehicle operator must have at least five years of experience as a driver in the appropriate category. The driver and operator of the test vehicle must also submit information to the legal entity organising the test, and their driving history must indicate that they do not pose a particular risk to other road users.

# **Transport of passengers**

In some countries (e.g. Germany, Denmark, and Sweden), the driver must obtain a licence for passenger transportation, as well as a driving licence. In other participating countries, namely Estonia and Finland, this is not a legal requirement.

### **GERMANY**

In addition to the driving licence, German law demands an additional licence for passenger transport under certain conditions. The additional licence is needed if the mode of transport also requires a passenger transportation permit. The German Driving Licence Regulations (FeV) specify the exceptions to this rule (e.g. cases in which the driver has a Category D1 driving licence).

### **DENMARK**

Apart from the driving licence, the Danish legal system demands an additional driving licence for passenger transport. The additional licence requires the driver to be at least 21 years old and to have passed a driving test for commercial conveyance of passengers (cf. KL § 28).

## FINLAND AND ESTONIA

A driver does not need an additional licence: a combination of an appropriate driving licence and transport permit is sufficient.

### **SWEDEN**

In addition to a driving licence, the driver of a vehicle registered and used for commercial traffic generally must have a commercial traffic driver qualification certificate (Sw. yr-keskompetensbevis) (LYK chap. 3 §§ 1 and 5–7 and FYK chap. 2 § 1, 4 §§ 1–2 and chap. 6).

The commercial traffic driver qualification certificate can be issued to a person who has passed the qualifying test and is at least 18–23 years old, depending on the type of driving license as well as, for example, whether there are passengers on board or, in line-based traffic, provided that the distance does not exceed 50 kilometres (LYK chap. 3 § 1).

There are exceptions to the certificate requirements, e.g. for non-commercial passenger transport or for vehicles that use technical means to restrict the vehicle's maximum speed limit to 45 km/h (LYK chap.  $2 \S 4$ ).

### **POLAND**

For road transport – and passenger transport – by an entrepreneur or any other entity, a driver may be hired, provided that he or she meets the minimum age requirement (to drive a bus, 21 or 23 years old, depending on the company), holds proper authorisation to drive a vehicle (a relevant category of driving licence), demonstrates the proper level of physical and mental health to occupy the driver position, has the appropriate qualifications (verified by a professional qualification certificate), and has completed a periodic training (every 5 years, beginning from the date on which the qualification was acquired) (Article 39a section 1 u.t.d).

Requirements for age, qualification, and periodic training do not apply under certain circumstances, e.g. if a driver's vehicle is structurally limited to a speed of 45 km/h or if a vehicle subject to road tests for technical development needs to be conducted by manufacturers, R&D units, or institutions of higher education (Article 39a section 3 u.t.d).

POLAND (continued)

Passenger transport by bus may be carried out by drivers who have the appropriate professional knowledge, as evidenced by an entry on a driving licence or driver qualification card. This requirement does not apply to drivers whose vehicle reaches a maximum speed of only 45 km/h or is used for the non-commercial carriage of passengers.

**LATVIA** 

# Standards for the driving behaviour of the vehicle operator

In some countries (e.g. Germany, Denmark, Poland, and Latvia), there are specific legal standards for the behaviour of the 'driver' (vehicle operator) of an automated vehicle. The vehicle operator must remain attentive while driving and be able to regain control over the vehicle at any time. In Finland, Estonia, and Sweden only the common due-diligence rules for drivers and road users apply to the vehicle operator of an automated vehicle.

The vehicle operator must remain attentive while driving and regain control of the vehicle immediately if 1) the vehicle instructs him or her to do so or 2) he or she recognises or would have to recognise, based on obvious circumstances, that the automatic driving functions no longer operate as intended.

**GERMANY** 

Testing a driverless vehicle involves the attendance of a physical person who can regain control of the vehicle if the vehicle instructs him to do so or if he recognises it as necessary (cf. FL § 92g).

**DENMARK** 

The physical person must also observe national laws on drunk driving and driving under the influence of psychoactive substances. The physical person can participate as either the driver or the vehicle operator of the automated vehicle.

Road Act 3 § FINLAND

- A road user must adhere to traffic rules and act with care and caution, taking into account prevailing conditions, to avoid danger and damage.
- · A road user must not obstruct or disturb traffic without reason.

### **POLAND**

An automated vehicle operator (steward) must be present in the vehicle in a designated driver's position. He or she must be able to gain control of the vehicle at any time, particularly in response to hazards that threaten traffic safety (Article 65n, section 1, item 2 of the u.p.r.d).

The automated vehicle operator (steward) is obligated to follow all regulations referring to the driver's obligations (e.g. those related to 'staying alert' to road situations and remaining careful).

### **SWEDEN**

A road user must adhere to traffic rules. To avoid traffic accidents, he or she must act with the care and caution necessary under the prevailing conditions (TF chap. 2 § 1). A road user must not obstruct or disturb traffic without reason (TF chap. 2 § 1).

The vehicle may not be operated by someone who is unable to operate the vehicle in a safe manner due to sickness, fatigue, or the influence of alcohol or other substances (TF chap. 3 § 1).

### **ESTONIA**

There are no specific requirements for automated vehicles. A driver is legally responsible for following traffic rules and for ensuring that the vehicle's technical functions are maintained.

### **LATVIA**

Standards for the vehicle operator and vehicle driving: During the testing of automated vehicles on public roads, the vehicle must be monitored at all times by an appropriately trained and licensed test driver or test vehicle driver and test vehicle operator who can assume control of the vehicle as necessary.

# Special safety training

### **GERMANY**

The vehicle operator is advised, though not legally obligated, to complete a special safety training.

### **FINLAND**

When applying for a test plate certificate, the organisation operating automated vehicles must describe how it has trained or will train its safety operators.

### **DENMARK**

The driver/vehicle operator is not obliged to complete a special safety training. However, the Minister of Transport, Building and Housing can determine special duties for the person when taking control over the vehicle.

Polish law does not prescribe any training for automated vehicle operators other than that required for casual drivers.

**POLAND** 

There is no provision in SjälvKörF requiring the vehicle operator to complete a special safety training. However, when applying for a test permit, the applicant must describe how to ensure that people participating in the testing operations are competent to perform the task assigned to them.

**SWEDEN** 

When applying for a test plate certificate, the organisation operating automated vehicles must describe how it has trained or will train its stewards/safety drivers.

**ESTONIA** 

The guidelines set out a series of obligations regarding the competence of the test driver and test operator, including comprehensive knowledge of the technologies used in testing, as well as the capabilities and limitations of these technologies; knowledge of the test vehicle; and recognition of the situations in which it may be necessary to interfere in vehicle operation.

LATVIA

Under the guidelines, the legal entity organising the test must establish rules for the test driver and the behaviour of the operator of test vehicle and ensure that they are known by and understandable to test vehicle drivers and to the test vehicle operators; it must also ensure that the test driver and test vehicle operator are competent and have received proper training. The training of the test driver and the test vehicle operator should include practice in analysing potentially hazardous traffic situations and taking appropriate action to assume control of the vehicle. In the training process, particular attention should be paid to the transition from traditional manual to automatic control.

### National level:

Promote training standardisation for automated vehicle drivers and operators by providing requirements for training content.

POLICY RECOMMEN-DATIONS



# Data protection law

# Regulatory framework

The General Data Protection Regulation (GDPR) is the central EU regulation on data protection. It poses challenges for the implementation of automated driving.

### **DENMARK**

The GDPR makes it difficult to process personal data in a test for driverless vehicles.

The Danish Traffic Road Act refers only to the collection and processing of personal data, but does not address the rules of the GDPR. It is therefore the responsibility of the test licence holder to ensure that the rules of the GDPR are observed.

### **SWEDEN**

The processing of personal data in driverless vehicle tests may be a challenge due to the GDPR. For example, the LVTR (i.e. § 2) mentions only the collection and processing of personal data in accordance with the PUL, but not the rules in the GDPR. However, when the GDPR entered into force, it replaced the PUL, which was repealed (with some specific exceptions). According to Article 94 GDPR, references made to the repealed Directive are to be construed as references to the GDPR.

In Sweden, the LK-GDPR supplements the GDPR on a general level. In the application for a special testing permit for automated vehicles, the applicant must describe how the test operation will be conducted in compliance with the GDPR.

# Personal data and lawfulness of processing

The GDPR requires valid legal grounds for any processing of personal data. Such grounds can include the consent of the data subject or the necessity of processing for reasons of public interest. In the context of automated driving, the use of cameras for safe motion of the vehicle may pose major challenges for test operations.

### ALL EU COUNTRIES

In legal contexts, personal data refers to information relating to an identified or identifiable natural person. The processing of personal data is lawful if, for example, the data subject has consented to the processing, or if processing is necessary for a task to be carried out in the public interest.

Cameras used to facilitate the safe movement of the automated vehicle may capture faces of individual persons, either in or outside the vehicle. Such recordings should only store movement information that makes personal identification impossible.

If software applications are used, as in the booking system, passengers must consent to the processing of any personal data.

ALL EU
COUNTRIES
(continued)

Camera surveillance regulation in Sweden has been a major challenge for test operations of automated driving, because a permit has generally been a prerequisite. On 1 August 2018, a new Camera Surveillance Act (KamBL) entered into force. The most significant new provisions include:

**SWEDEN** 

- Fewer operators are covered by the permit requirement.
- Privacy will be protected by the GDPR, since someone performing camera surveillance must fulfil the GDPR requirements when performing surveillance (KamBL §§ 1–2 and 6).
- A permit is required for camera surveillance conducted in publicly accessible places by government agencies and certain other operators that perform public-interest activities, e.g. public transport (KamBL § 7), that may affect automated-vehicle test operations.

Permit requirements include (KamBL §§ 8 and 11):

- an assessment of whether the interest of such surveillance overrides the interest of a natural person not to be surveilled. This condition may be evaluated based on whether such surveillance would (KamBL § 8):
- · prevent or discover accidents or reduce the impact of accidents that do occur or
- · accommodate a similar purpose.
- · an assessment of the risk of unlawful processing of data.
- an assessment of the need for surveillance.

Notice that camera surveillance is being conducted must be provided (KamBL § 15).

The Swedish Data Protection Authority is the agency that supervises compliance with both the GDPR and KamBL. Cameras used to facilitate the safe movement of an automated vehicle may capture faces of individual persons, either in or outside the vehicle. Such recordings should only store movement information if makes personal identification impossible.

### Inference

The introduction of automated vehicle technologies may involve the processing of personal data. In accordance with the requirements of Article 35 of the General Data Protection Regulation, an assessment prior to implementation may be required to evaluate the impact of such processing on data protection.

### **Proposal**

The interested parties will develop a code of conduct in accordance with the requirements of Article 40 of the General Data Protection Regulation.



# Liability law

# Liability

Liability is a widely discussed topic in the context of automated driving. The participating countries have not enacted any specific rules on automated vehicles. The liability relies on product liability law and road traffic law. Possible defendants are the vehicle operator, the owner, or the manufacturer.

### **GERMANY**

There are no specific regulations for driverless vehicles. The use of automated vehicles has no negative effect on the legal liability protection of the injured party. The injured party has different options for claiming damages:

- § 7 StVG, defendant: vehicle holder
- · Product liability law, defendant: manufacturer

Liability under § 18 StVG is only possible if the vehicle has an operator. For vehicles without an operator, liability shifts to the producer.

### **DENMARK**

Directive 85/374 EEC on product liability was implemented in Denmark in PAL. Liability for damage caused by a driverless vehicle falls to the holder of the test licence.

In contrast to the common liability rules in the Danish Road Traffic Act, the owner or user cannot be responsible for damage if these persons are different from the holder of the test licence.

There are national regulations assigning liability without fault to the holder of the test licence.

### FINLAND AND ESTONIA

Directive 85/374/EEC on product liability has been implemented in Finland and Estonia in national law and is the legal basis for claims regarding damages caused by automated vehicles.

### **POLAND**

In Poland, there are currently no detailed regulations on damage caused by an automated driverless vehicle. The injured party can refer only to the general provisions of the Polish Civil Code, i.e. claim liability based on the general provisions of the Civil Code, not only against a vehicle owner, but also against the vehicle manufacturer.

Poland has implemented the provisions of the Directive 85/374/EEC on the approximation of regulatory, executive, and administrative provisions of Member States regarding liability for defective products.

Directive 85/374 EEG on product liability has been implemented in Sweden in PAL. As in Germany, the use of automated vehicles likely has no negative effect on the legal liability protection of the injured party. The injured party has different options for claiming damages:

**SWEDEN** 

- · TSL § 2, defendant: owner of the vehicle
- PAL § 6-8, defendant:
- manufacturer
- · importer (under certain circumstances)
- · marketeer
- provider

Thus far, there has been no specific regulation in Sweden regulating liability for damages caused by an automated vehicle. Under Swedish law, 'liability without fault' does not apply to the owner.

There is no specific regulation for compensation for damage caused by automotive vehicles. In the event of damage caused by automated vehicles, the injured party may seek compensation from:

**LATVIA** 

- the actual possessor of the increased source of danger (owner, keeper, user). The legal entity is directly liable for damage caused by the source of the high risk of its possession, i.e. a car operated by its employee or authorised person (this does not exclude the right to claim damages from the employee or authorised person on a recourse basis).
- · the owner of the vehicle.
- in the case of the vehicle holder, if the damage has been caused by a violation of road traffic law or other road safety regulations, the vehicle has been transferred to the holder, and the holder and owner have not agreed on other procedure for loss compensation.
- the manufacturer of an automotive vehicle if damage to the life, health, or personal property of a person causes a shortage of goods.

### National law:

Promote a change to road traffic law so that liability for driverless vehicles is clearly regulated; it is advisable to clarify the division of responsibility and the regulation of producer liability in the Civil Law and the Road Traffic Law.

POLICY RECOMMEN-DATIONS

### **International Law:**

Promote international rules on liability; the rules on product liability are a good practice example.

### Insurance law

In all participating countries, the use of automated vehicles requires regular traffic liability insurance. The liability insurer has a direct claim against the manufacturer if the damage is based on the failure of the automated driving system.

### **GERMANY**

The use of automated vehicles within public road traffic raises no special insurance requirements. The holder of a vehicle which is used on public roads is required to have liability insurance.

The liability insurer has a direct claim against the manufacturer if the damage is based on a failure of the automated driving system.

### DENMARK, ESTONIA AND FINLAND

Danish, Finnish, and Estonian automated vehicle testing requires the normal mandatory traffic liability insurance. The liability insurer can make a direct claim against the manufacturer for the damage if it is based on a failure of the automated driving system or the vehicle.

### **POLAND**

Poland has regulations requiring civil liability insurance for every motor vehicle on the road. The vehicle owner driving on public roads must have his or her own civil liability insurance.

Poland does not have any specific regulations on permitting automated vehicles to participate in traffic, covering an obligatory insurance within this field. However, Poland has implemented an obligation to apply for adequate insurance for research on automated cars. The obligatory civil liability insurance applies to automated testing of the vehicle.

### **SWEDEN**

The insurer of the traffic liability insurance can make a claim against the vehicle manufacturer if the damage is also covered by PAL, i.e. if the damage is based on a failure of the automated driving system or the vehicle (TSL § 20).

In Sweden, it is mandatory for the vehicle owner to have traffic liability insurance for the vehicle if it is registered and used in traffic (TSL § 2). The traffic liability insurance covers damage to a third party or third-party property. If the owner does not insure the vehicle, a penalty will be imposed on him or her, increasing daily per uninsured day.

### **LATVIA**

Specific rules for the testing or operation of automated vehicles are not included in the Law on Compulsory Third-party Liability Insurance or the Road Traffic Law. The current Law on Compulsory Third-party Liability Insurance does not provide for compensation for damage caused by a vehicle without a driver. Compulsory motor vehicle third-par-

ty liability insurance applies to automated vehicle testing on public roads. According to article 17 of the Law on Compulsory Third-party Liability Insurance, the insurer may not refuse to enter into a compulsory motor vehicle third-party liability insurance contract. For a vehicle registered in a country that is not a member of the European Economic Area, a border insurance contract must be entered into on site.

LATVIA (continued)

The guidelines stipulate that any legal entity that tests automated vehicles or their technology on public roads must have adequate insurance coverage but does not define 'adequate insurance'.

- · Promote a sufficient insurance particularly for driverless vehicles
- · Implementation of an additional compulsory insurance for the owner and the producer

POLICY RECOMMEN-DATIONS



# Criminal law

Most participating countries lack specific criminal legislation for automated driving. Only in Denmark does a special procedure apply. In most countries, criminal liability may be ascribed to the vehicle owner; the manufacturer and its employees; the provider of the necessary data infrastructure; officials at the competent authority for vehicle permits; or the vehicle operator. Estonia is the only country in which criminal liability can be ascribed only to the vehicle operator (i.e. vehicle safety driver).

### GERMANY AND FINLAND

Criminal liability in case of accidents may be ascribed to the:

- · vehicle owner.
- · manufacturer and its employees.
- · provider of the necessary data infrastructure.
- · officials at the competent authority for vehicle permits.
- vehicle operator (if a third party outside the vehicle is harmed).

Claims are most likely to allege negligent behaviour (e.g. negligent homicide, negligent physical injury) rather than intentional conduct. Most allegations are linked to:

- · deficiencies in the vehicle's technology (soft- or hardware).
- · insufficient maintenance.
- insufficient safety briefing of the vehicle operator.

### **DENMARK**

In the event that a driver or the driverless vehicle causes damage during a test, the Minister of Transport, Building and Housing can decide who will be held criminally liable for violating the Traffic Road Act.

Criminal liability in case of accidents for driverless vehicles may be ascribed to the:

- · vehicle operator.
- · manufacturer and its employees.
- provider of the necessary data infrastructure.
- · driver.
- · holder of the test licence.

With the minister's authorisation, the vehicle operator (i.e. the physical person in the driverless vehicle) or the holder of the test licence can be charged for acts or omissions that are normally not punishable under the national Traffic Road Act.

Under certain circumstances, the holder of the test licence can also be criminally liable without fault. Intent and negligence are prerequisites for criminal liability.

### **ESTONIA**

Criminal liability in Estonia applies only to the driver (KarS § 422, KarS § 423; KarS § 424), not to the manufacturer or any legal entity.

In accordance with the Polish Criminal Code (k.k.), the potential addressee of criminal responsibility in case of a non-automated vehicle accident can be the vehicle manufacturer, the entity servicing the vehicle (repairing the vehicle), the vehicle owner or the vehicle driver.

**POLAND** 

Relevant accusations are based largely on negligence, not on purposeful action.

The Polish criminal system lacks specialised regulations in the field of criminal responsibility for an accident brought about by an automated vehicle. Under criminal provisions on causing hazard to road traffic, causing an immediate danger in road traffic, and the dispatcher liability for allowing an unfit vehicle to drive, we can identify only a potential range of people responsible.

In the event of accidents involving a driverless vehicle, criminal liability may be ascribed to the:

**SWEDEN** 

- · vehicle operator/driver.
- the manufacturer (provided that the automated driving system is an integrated part of the vehicle).
- the provider of the necessary data infrastructure.
- · the vehicle owner.

Intent and negligence are prerequisites for criminal liability.

In Sweden, there is thus far no specific legislation regulating criminal liability for tests with automated driving. However, the Swedish government has recently appointed a committee to investigate and submit a constitutional proposal with the aim of creating a better legal framework for the introduction of automated driving of vehicles on public roads (Statens Offentliga Utredningar 2018:16, Vägen till självförande fordon – introduktion). The committee has also considered the specific situation regarding criminal liability for automated driving. The committee's proposals have been submitted to other relevant authorities and organisations for comment. Committee proposals have already received some criticism.

**LATVIA** 

There are possible offences in road traffic. Chapter XXI of the criminal law of Latvia includes criminal offences in road traffic, traffic offences, infrastructure, violations of traffic regulations, etc. Criminal liability for a criminal offence in road traffic may be ascribed to:

- · the vehicle driver.
- · the vehicle owner.
- · the vehicle manufacturer.
- $\cdot \ \ \text{vehicle technical support}.$

Under the current regulatory framework, SAE 3 has a criminal liability automation levels in vehicles caused by road traffic accidents, if is happening the Article 260 of the criminal law then implemented, is a driver.

Clarify the subjects of criminal responsibility by separating the responsible persons for the technical maintenance of the vehicles from the responsible persons for the vehicle software.

POLICY RECOMMEN-DATIONS

Special regulations for testing automated vehicles based on the example of Norway

2

As Norway is one of the largest markets for electric vehicles, the Norwegian government passed a law to permit testing of self-driving vehicles on Norwegian roads.

This part of the document presents:

- Lov om utprøving av selvkjørende kjøretøy, LOV-2017-12-15-112, Act on the testing of self-driving vehicles
- Forskrift om utprøving av selvkjørende motorvogn, FOR-2017-12-19-2240, Regulation for test of self-driving vehicles (in blue)

These laws were implemented on 01.01.2018. All testing of self-driving vehicles in Norway is governed by this law and regulation.

## Lov om utprøving av selvkjørende kjøretøy

This Act came into force on 1 January 2018.

§ 1–§ 19 in this section an extract from the Act on the testing of self-driving vehicles.

### PART 1 INTRODUCTORY PROVISIONS

## § 1 Purpose

The purpose of the Act is to facilitate the testing of self-driving vehicles within the frameworks that specifically protect traffic safety and privacy. The testing will be performed gradually, in accordance with the maturity of the technology, and with the aim of identifying the implications of self-driving vehicles for traffic safety, efficiency in traffic development, mobility, and the environment.

### § 2 Scope

The Act applies to the testing of self-driving vehicles without a responsible driver and self-driving vehicles with a responsible driver that are not in a traditional driver's seat.

A 'self-driving vehicle' is a vehicle equipped with a technical system that automatically controls the vehicle and the driving. Self-driving vehicles include vehicles in which a driver can hand over the driving to the technical system that automatically drives the vehicle and vehicles which are designed to operate without a driver.

§ 2 The regulations include testing of self-propelled motor vehicles either on- or off-road.

### PART 2 TESTING OF SELF-DRIVING VEHICLES

## § 4. Permit

A natural or legal person may, upon application, be granted permission to test self-driving vehicles. Such permission shall apply for a limited period of time with the possibility of extension.

Permission is dependent on acceptance of the vehicle, the functionality of the vehicle, the risk analysis of the pilot project, and the skills and certification of the responsible operator.

## § 4 If the conditions for the test are changed, the NPRA shall be informed.

### § 5. Terms

Permission to test self-driving vehicles is granted under specific conditions. In certain situations, permit conditions may change or new conditions may be established after the permit has been granted.

## § 5 Requirements for application

The application must contain information about:

- a Name of applicant and name of person designated as responsible for safety
- b Purpose of the test
- c The vehicles to be included in the test
- d Name of operators where applicable, § 11
- e Automation system to be used
- f Plan for testing
- g Time period for the test
- h Any need for separate traffic regulations
- i Where testing should take place, including specific roads or areas to be used
- j Description of the need for exemptions from the current provisions of the Road Traffic Act and the Professional Transport Act with regulations
- k Insurance during the trial which ensures at least the injured party as well as general liability insurance under the Motor Liability Act, and
- l Documentation that requirements § 7–§ 11 are met.

## § 6 Requirements for motor vehicles that are included in the test

Motor vehicles to be included in the test shall, unless exemptions have been agreed, comply with the requirements of the car regulations [6], the vehicle regulations [7], the motorcycle regulations, [8] or the tractor regulations [9], etc.

The Road Directorate may specify additional technical requirements in the interest of the safety and environmental concerns.

### § 7 Requirements for vehicle registration

Vehicles included in the test must be registered in accordance with the Road Traffic Act [1] with regulations.

The Road Administration may waive the registration requirement in certain situations. The vehicles must nevertheless be insured or covered by self-insurance.

The Road Administration may set as a condition for the test that vehicle must be identified with a separate designation indicating that the vehicle has self-driving properties.

## § 8 Requirements for the automated system

Documentation shall be provided for the following conditions regarding the automatic system used during the test:

- a. Functional description
- b. System description
- c. Technology description
- d. Maturity of technology
- e. A statement on the measures implemented to ensure privacy and security
- f. account of the risk of the automation functions, cf. letter a, as well as information security and consequences for privacy (PIA), and
- g. An explanation of the system's electromagnetic compatibility (EMC).

## § 9 Requirements for road or test area

Road testing open to normal traffic can only be done on the road that is suitable for testing the actual self-driving vehicles.

The applicant shall document that the engine's technical systems can handle the available infrastructure, including road design, road equipment, signage, markings, signals, and any level crossings.

Vehicle testing with heavy vehicles shall take place within the permitted weights and dimensions of the vehicle type for the relevant road section. Testing of several heavy vehicles coupled ('platooning') on stretches with bridges can only happen where it is considered that the bridges can withstand the load.

Notice of any testing on roads open to normal traffic must be provided to the police at the relevant operating centres in advance, unless otherwise stated in the permit.

When testing in a closed area, the applicant is responsible for: finding a suitable area that is closed to other traffic; documenting that the test is to be conducted in a safe manner; and ensuring that unauthorised persons have no access.

## $\S$ 10 Requirements for the statement of risk

The applicant shall state in the application the risks associated with the test. The report must cover all material aspects of the test. Measures to reduce or eliminate risks must be described in the statement.

When tested on roads open to normal traffic, conditions other the normal situation shall be assessed for both the area and the surrounding area. This may include roadworks, weather, detours, accidents, and other conditions.

The NPRA may require that the statement be reviewed by an independent third party.

### § 6. Responsibility for the test

The application and the licence shall designate person who will be responsible for conducting the tests in accordance with the applicable regulations and under the stipulated conditions. The designated person shall also ensure that safety measures are in place when the test of self-driving vehicles is conducted without a responsible driver.

## § 11 Requirements for operators

The application shall, indicate an operator who will monitor the driving of the selfdriving vehicle and describe the role of the operator, including the relationship with the responsible driver, ref [2] § 17 and the person designated as responsible for safety, see section 5a. The operator can sit in the normal driver's seat, in another place in the vehicle or stay outside the vehicle.

The applicant shall document that the named operators to participate in the test have a valid driving licence for the relevant motor vehicle category, have undergone sufficient training and have the necessary knowledge of how the automatic system works.

Applicants shall ensure that operators provide adequate training and information about their role and responsibility during the trial. This is especially true for a driver's trial with a traditional driver's seat where the technical system will carry the motor vehicle during parts of the driving.

### § 7. Responsibility for the test

A permit may be revoked or suspended temporarily if the conditions for the permit are no longer met. The same applies in the event of a violation of the terms of the permit and in the event of a violation of provisions given in or pursuant to this Act [1]. In special cases, the revocation may be given immediate effect.

## PART 3 DISSEMINATION OF INFORMATION

## § 8. Confirmation and disclosure of information

If, during the trial, situations arise which give reason to believe that there may be police investigations or insurance claims due to the driving, information stored during the test may not be deleted before the situation has been clarified.

The person who has obtained the licence is obliged, upon request, to provide the company that insured the self-driving vehicles access to stored information required for an insurance case that arises from driving during testing. The person who has received the permission is also obliged, upon request, to grant the police and prosecution the authority to access stored information necessary for any investigation initiated in connection with driving during testing.

The person who has been granted the licence shall provide the information free of charge.

### § 9. Reporting

The person who has been granted the licence shall submit a report with a statement on the test to the authority that granted the permit.

In the event of an accident or traffic hazard, the person who has received the permit shall promptly investigate the accident or incident and report to the authority that granted the permit.

## § 12. Reporting

After the test is completed, the person who has been granted the permit shall prepare a final report setting out the implementation and results in relation to the purpose, framework, and terms of the permit. The report must be submitted to the NPRA not later than six months after the completion of the test unless otherwise stated in the permit. At the same time, a publishable version of the report must be submitted.

The Road Administration may require the submission of a continuous log describing the progress of the testing, upgrades or changes to technology, administrative changes, the purpose of the testing, etc. This includes documenting and describing unforeseen events arising in connection with the trial. The person who has been granted the permit must present this log at the request of the NPRA.

## PART 4 PROCESSING OF PERSONAL DATA IN CONNECTION WITH THE TESTING OF SELF-DRIVING VEHICLES

## § 10. Confidentiality

Anyone who, when testing self-driving vehicles, is given access to information about someone's personal circumstances, is obliged to prevent others from gaining access to or knowledge of this information, unless otherwise provided by law or regulations pursuant to law.

## § 11. Right to process personal information

The person who has been granted permission may process personal data when necessary for security reasons or for research and development purposes with the aim of identifying the effects of self-driving vehicles on road safety, efficient traffic flow, mobility, and the environment.

## § 12. Retrieval of personal data

Required personal data from areas outside the vehicle, and in vehicles where the public has access, can be obtained and stored without the consent of those whose information is reflected in the material, provided that this material is deleted or anonymised within seven days, unless otherwise provided by law or regulations pursuant to law.

Audio recording is not allowed during the test unless it is necessary for that purpose and written permission has been obtained in advance from anyone who can be heard on the audio recording.

In vehicles where the public has no access, personal information may be obtained if is necessary for that purpose, provided that the person or persons in the vehicle have provided written permission in writing.

#### § 13. Duty of notification

Notification of the collection and storage of information that may contain personal information must be provided through clear signage or in any other appropriate manner. Information must also be provided on the party that is collecting the information.

## § 14. Processing of personal data

Personal data obtained during the testing of self-driving vehicles may only be used for research and development related to the testing of self-driving vehicles.

Such data may only be disclosed in connection with the carrying out of supervision or research and development related to the testing of self-driving vehicles, or where the obligation to such extradition is provided for by law or regulations pursuant to law.

The data shall be deleted when they are no longer necessary for the purpose of processing the information.

## **PART 5 SUPERVISION**

#### § 15. Supervision

The supervisory authority shall verify that testing is carried out in accordance with applicable regulations and the permit.

The supervisory authority may order measures, including corrections, that are necessary to ensure that the testing is carried out in accordance with applicable regulations and the permit.

## § 16. Execution of supervision

The person who has received the permit for testing must give the supervisory authority access to areas, premises, and vehicles associated with the test. The person must also provide access to information necessary to carry out the audit, including personal information obtained during testing.

## § 13. Supervision authority

NPRA supervises the test.

Completed supervision must be documented in an inspection report

### **PART 6 OTHER REQUIREMENTS**

### § 17. Responsible driver

Person who is in a traditional driver's seat is considered the vehicle's responsible driver unless an exception is made in the permit. A person who is not in a traditional driver's seat shall be considered a responsible driver if it follows from the permit.

If a person affects driving when the vehicle is self-driving, the person will be considered the responsible driver.

### § 18. Punishment

If self-driving vehicles that fall within the scope of this Act are tested without permission, the punishment shall be the same as that imposed under § 31 of the Road Traffic Act.

Anyone who intentionally or negligently violates terms or rules given in or pursuant to this Act shall be fined or imprisoned for up to one year unless the act is affected by a stricter sentence.

## § 19. Regulatory authority

The Ministry may issue regulations that specify further provisions on the testing of self-driving vehicles, including:

- a) permission for testing, including who may grant such permission,
- b) conditions for testing,
- c) temporary suspension and revocation of a permit,
- d) requirements for the person responsible for the trial;
- e) processing of personal data,
- f) supervision, including the supervisory authority, and
- g) fees for processing an application for permission and supervision.

The ministry may furthermore provide regulations on the application of the Act to Svalbard, including setting special rules for local conditions.

## **Applications**

In the period 2017–2018, many transport operators sought to start testing self-driving vehicles.

NPRA received a number of applications and at the time accepted 4 numbers of applications for a test of small shuttlebuses as a part of public transport system. The applications are valid for a test period of 1 year, but all of the projects are applying for an additional test period.

During the process NPRA developed an application form that reflects the regulations stated in the Test of selfdriving vehicles Regulation.

Some special limitations were imposed on the operators (based the vehicle manufacturers risk assessment for the specific test site/road):

- The vehicle can drive at a maximum speed of 12 km/h.
- There can be no more than 6 passengers, including the operator.
- · An operator/driver must be on board with a driving licence of class minimum class D1
- The operator can assume control of the vehicle at all times.
- The vehicle will ask the operator to take control if any problems arise.

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# Annex - Legal inventory

## Relevant regulations in Germany

| Title (English)  | Title (German)  | Abbreviation         |
|--|---|----------------------|
| Civil Code   | Bürgerliches Gesetzbuch   | BGB                  |
| Federal Data Protection Act  | Bundesdatenschutzgesetz   | BDSG                 |
| DIRECTIVE 2007/46/ EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 5 September 2007 establishing a fra- mework for the approval of motor vehicles and their trailers, and of systems, components and separate technical units intended for such vehicles |   | Directive 2007/46/EC |
| Regulation on the EC approval of motor vehicles and their trailers, as well as systems, components and separate technical units for such vehicles  | Verordnung über die EG-Genehmigung für Kraftfahrzeuge und ihre Anhänger sowie für Systeme, Bauteile und selbstständige technische Einheiten für diese Fahr- zeuge (EG-Fahrzeugge- nehmigungsverordnung) | EG-FGV               |
| Driving Licence Regulations  | Verordnung über die Zu-<br>lassung von Personen zum<br>Straßenverkehr (Fahr-<br>erlaubnis-Verordnung)   | FeV                  |
| Ordinance on the exemption of specific forms of transport from the norms of the Passenger Transportation Act   | Verordnung über die<br>Befreiung bestimmter<br>Beförderungsfälle von den<br>Vorschriften des Personen-<br>beförderungsgesetzes  | FrStllgV             |
| Vehicle Admis-<br>sion Ordinance   | Verordnung über die<br>Zulassung von Fahrzeugen<br>zum Straßenverkehr   | FZV                  |

| Title (English)   | Title (German)                                  | Abbreviation        |
|---|---|---------------------|
| REGULATION (EU) 2016/679 OF THE EUROPEAN PAR- LIAMENT AND OF THE COUNCIL of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data (EU General Data Protection Regulation)                                   | Datenschutz-Grund-<br>verordnung                | GDPR                |
| Basic Law for the Federal<br>Republic of Germany<br>(German constitution)   | Grundgesetz                                     | GG                  |
| Passenger Trans-<br>portation Act   | Personenbeförde-<br>rungsgesetz                 | PBefG               |
| Compulsory Insurance Law  | Pflichtversicherungsgesetz                      | PflVG               |
| Product Liability Act   | Produkthaftungsgesetz                           | ProdHaftG           |
| Criminal Code   | Strafgesetzbuch                                 | StGB                |
| Road Traffic Act  | Straßenverkehrsgesetz                           | StVG                |
| Road Traffic Regulations  | Straßenverkehrsordnung                          | StVO                |
| Road Traffic Licen-<br>sing Regulation  | Straßenverkehrs-Zu-<br>lassungs-Ordnung         | StVZO               |
| Agreement concerning the adoption of uniform technical prescriptions for wheeled vehicles, equipment and parts which can be fitted and/or be used on wheeled vehicles and the conditions for reciprocal recognition of approvals granted on the basis of these prescriptions (1958 Agreement) |   | UN(ECE) Regulations |
| Vienna Convention<br>on Road Traffic  | Wiener Übereinkommen<br>über den Straßenverkehr |                     |
| Insurance Contract Act  | Versicherungsver-<br>tragsgesetz                | VVG                 |

## Relevant regulations in Denmark

| Title (English)  | Title (Danish)   | Abbreviation |
|--|--|--------------|
| Law no. 38 of 05.01.2017<br>on Road Traffic Act                  | Lovbekendtgørelse nr. 38 af<br>05.01.2017, Færdselsloven                   | FL           |
| Executive order no.<br>477 of 02.05.2017 on<br>Route Services    | Bekendtgørelse nr. 477 af<br>02.05.2017 om rutekørsel                      | RK           |
| Executive order no.<br>1498 of 13.12.2017 on<br>Car Registration | Bekendtgørelse nr. 1498<br>af 13.12.2017 om regis-<br>trering af køretøjer | RL           |
| Law no. 261 of 20.03.2017<br>on Product Liability                | Lovbekendtgørelse<br>nr. 261 af 20.03.2017<br>om produktansvar             | PAL          |
| Law no. 1050 of 12.11.2012<br>on Bus Driving                     | Lovbekendtgørelse nr. 1050<br>af 12.11.2012 om buskørsel                   | BL           |
| Law no. 720 of 30.05.2017<br>on Car Registration                 | Lovbekendtgørelse nr.<br>720 af 30.05.2017 om<br>registrering af køretøjer | KRL          |
| Executive no. 1372 of<br>26.11.2015 on Bus Driving               | Bekendtgørelse nr. 1372 af<br>26.11.2015 om buskørsel                      | ВКВ          |
| Executive order no.<br>815 of 21.06.2017 on<br>Driving Licences  | Bekendtgørelse nr. 815 af<br>21.06.2017 om kørekort                        | KL           |
| Law no. 266 of 21.03.2014<br>on Tort and Liability               | Lovbekendtgørelse<br>nr. 266 21.03.2014 om<br>erstatningsansvar            | EAL          |
| Law no. 977 of 09.08.2017<br>on Criminal Code                    | Lovbekendtgørelse nr. 977<br>af 09.08.2017, Straffeloven                   | SL           |

## Relevant regulations in Finland

| Title (English)  | Title (Finnish)  | Abbreviation         |
|--|--|----------------------|
| Civil Code   | Suomessa siviilioikeudella<br>tarkoitetaan yksity-<br>isoikeutta joka jaetaan<br>yleiseen ja erityiseen<br>yksityisoikeuteen. Yleinen<br>yksityisoikeus jakaantuu<br>henkilö-, varallisuus-,<br>perhe- ja jäämistöoikeuteen  |                      |
| Federal Data Pro-<br>tection Act   | Tietosuojalaki (uusi; täy-<br>dentää tietosuoja-asetusta)  | HE 9/2018            |
| DIRECTIVE 2007/46/ EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 5 September 2007 establishing a frame- work for the approval of motor vehicles and their trailers, and of systems, components and separate tech- nical units intended for such vehicles | Euroopan parlamentin ja neuvoston direktiivi 2007/46/EY, annettu 5 päivänä syyskuuta 2007, puitteiden luomisesta moottoriajoneuvojen ja niiden perävaunujen sekä tällaisiin ajoneuvoihin tarkoitettujen järjestelmien, osien ja erillisten teknisten yksiköiden hyväksymiselle (Puitedirektiivi) | Directive 2007/46/EC |
| Regulation on the EC approval of motor vehicles and their trailers, as well as systems, components and separate technical units for such vehicles.   | Asetus ajoneuvojen<br>hyväksynnästä  | 2002/1244            |
| Driving Licence Act  | Ajokorttilaki  | 2011/386             |
| Vehicle Admission<br>Ordinance   | Valtioneuvoston asetus ajo-<br>neuvojen rekisteröinnistä   | 2007/893             |

| Title (English)   | Title (Finnish)   | Abbreviation |
|---|---|--------------|
| REGULATION (EU) 2016/679 OF THE EUROPEAN PARLIA- MENT AND OF THE COUNCIL of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data | EUROOPAN PARLAMENTIN JA NEUVOSTON ASETUS (EU) 2016/679, annettu 27 päivänä huhtikuuta 2016, luonnollisten henkilöiden suojelusta henkilötietojen käsittelyssä sekä näiden tietojen vapaasta liikku- vuudesta ja direktiivin 95/46/EY kumoamisesta (yleinen tietosuoja-asetus) | GDPR         |
| Finnish Constitution  | Perustuslaki  | 1999/731     |
| Passenger Transport Act   | Laki liikenteen palveluista   | 2017/320     |
| Insurance Law   | Liikennevakuutuslaki  | 2016/460     |
| Product Liability Law   | Tuotevastuulaki   | 1990/694     |
| Criminal Code   | Rikoslaki   | 1889/39      |
| Road Traffic Act  | Tieliikennelaki   | 1981/267     |
| Vehicles Act  | Ajoneuvolaki  | 2002/1090    |
| Road Traffic Regis-<br>tration Regulation   | Asetus ajoneuvojen<br>rekisteröinnistä  | 2007/893     |
| Decree on the Use of<br>Vehicles on the Road  | Asetus ajoneuvojen<br>käytöstä tiellä   | 1992/1257    |
| Car Tax Act   | Autoverolaki  | 1994/1482    |
| Vehicle Tax Act   | Ajoneuvoverolaki  | 2003/1481    |
| UNECE - UN Vehicle<br>Regulations - 1958<br>Agreement   | _   | UNECE rules  |
| Vienna Convention<br>on Road Traffic  | -   | -            |
| Insurance Contract Act  | -   | -            |

## Relevant regulations in Poland

| Title (English)  | Title (Polish)  | Abbreviation         |
|--|---|----------------------|
| Council Directive<br>85/374/EEC of 25 July<br>1985 on the approxi-<br>mation of the laws,<br>regulations and ad-<br>ministrative provisions<br>of the Member States<br>concerning liability for<br>defective products  | Dyrektywa Rady 85/374/ EWG z dnia 25 lipca 1985 r. w<br>sprawie zbliżenia przepisów<br>ustawowych, wykonawczych<br>i administracyjnych państw<br>członkowskich dotyczących<br>odpowiedzialnoci za<br>produkty wadliwe   | Directive 85/374/EEC |
| Directive 2007/46/EC of<br>the European Parlia-<br>ment and of the Council<br>of 5 September 2007<br>establishing a frame-<br>work for the approval<br>of motor vehicles and<br>their trailers, and of<br>systems, components<br>and separate tech-<br>nical units intended<br>for such vehicles | Dyrektywa 2007/46/WE Parlamentu Europejskiego i Rady z dnia 5 wrzenia 2007 r. ustanawiająca ramy dla homologacji pojazdów silnikowych i ich przyczep oraz układów, częci i oddzielnych zespołów technicznych przeznac- zonych do tych pojazdów  | Directive 2007/46/EC |
| Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation)         | Rozporządzenie Parlamentu<br>Europejskiego i Rady (UE)<br>2016/679 z dnia 27 kwietnia<br>2016 r. w sprawie ochrony<br>osób fizycznych w związku<br>z przetwarzaniem danych<br>osobowych i w sprawie<br>swobodnego przepływu<br>takich danych oraz uchy-<br>lenia dyrektywy 95/46/WE<br>(ogólne rozporządzenie<br>o ochronie danych) | GDPR                 |
| Act of 23rd April<br>1964 - Civil Code   | Ustawa z dnia 23 kwietnia<br>1964 r Kodeks cywilny  | k.c.                 |
| Act of 6th June 1997<br>- Criminal Code  | Ustawa z dnia 6 czerwca<br>1997 r Kodeks karny  | k.k.                 |

| Title (English)  | Title (Polish)   | Abbreviation                    |
|--|--|---------------------------------|
| Ordinance of the<br>Minister of Transport,<br>Construction and Ma-<br>ritime Economy of 26th<br>March 2013 on indivi-<br>dual vehicle admission  | Rozporządzenie Ministra<br>Transportu, Budownictwa<br>i Gospodarki Morskiej z<br>dnia 26 marca 2013 r. w<br>sprawie dopuszczenia<br>jednostkowego pojazdu  | r.d.j.p.                        |
| Regulation (EC) No 1370/2007<br>of the European Parliament<br>and of the Council of 23<br>October 2007 on public<br>passenger transport services<br>by rail and by road and repeal-<br>ing Council Regulations (EEC)<br>Nos 1191/69 and 1107/70  | Rozporządzenie (WE)<br>nr 1370/2007 Parlamentu<br>Europejskiego i Rady z<br>dnia 23 padziernika 2007 r.<br>dotyczące usług publicznych<br>w zakresie kolejowego i dro-<br>gowego transportu pas-<br>ażerskiego oraz uchylające<br>rozporządzenia Rady (EWG)<br>nr 1191/69 i (EWG)<br>nr 1107/70  | Regulation (EC)<br>No 1370/2007 |
| Regulation (EC) No 661/2009 of the European Parliament and of the Council of 13 July 2009 concerning type-approval requirements for the general safety of motor vehicles, their trailers and systems, components and separate technical units intended therefor  | Rozporządzenie Parlamentu<br>Europejskiego i Rady (WE)<br>nr 661/2009 z dnia 13 lipca<br>2009 r. w sprawie wymagań<br>technicznych w zakresie<br>homologacji typu pojazdów<br>silnikowych dotyczących<br>ich bezpieczeństwa ogól-<br>nego, ich przyczep oraz<br>przeznaczonych dla nich<br>układów, częci i oddzielnych<br>zespołów technicznych | Regulation (EC)<br>No 661/2009  |
| Regulation (EC) No<br>1071/2009 of the<br>European Parliament<br>and of the Council<br>of 21 October 2009<br>establishing common<br>rules concerning the<br>requirements to be<br>complied with to pursue<br>the occupation of road<br>transport operator<br>and repealing Council<br>Directive 96/26/EC | Rozporządzenie Parla-<br>mentu Europejskiego i<br>Rady (WE) nr 1071/2009<br>z dnia 21 pażdziernika<br>2009 r. ustanawiające<br>wspólne zasady dotyczące<br>warunków wykonywania<br>zawodu przewonika<br>drogowego i uchylające<br>dyrektywę Rady 96/26/WE  | Regulation (EC)<br>No 1071/2009 |

| Title (English)   | Title (Polish)   | Abbreviation |
|---|--|--------------|
| Ordinance of the Minister of Transport, Construction and Maritime Economy of 25th March 2013 on type approval of motor vehicles, trailers and its equipment items or elements   | Rozporządzenie Ministra Transportu, Budownictwa i Gospodarki Morskiej z dnia 25 marca 2013 r. w sprawie homologacji typu pojazdów samochodowych i przyczep oraz ich przedmiotów wyposażenia lub częci  | r.h.t.p.s.   |
| Ordinance of the Minister of Infrastructure of 31st December 2002 on technical conditions of vehicles and range of its essential equipment  | Rozporządzenie Ministra<br>Infrastruktury z dnia 31<br>grudnia 2002 r.w sprawie<br>warunków technicznych<br>pojazdów oraz zakresu ich<br>niezbędnego wyposażenia   | r.w.t.p.     |
| Act of 5th January 2011<br>on vehicles' drivers   | Ustawa z dnia 5 stycznia<br>2011 r. o kierujących<br>pojazdami   | u.k.p.       |
| Regulations of UN-ECE - attachments to Agreement concerning the Adoption of Harmo- nized Technical United Nations Regulations for Wheeled Vehicles, Equipment and Parts which can be Fitted and/or be Used on Wheeled Vehicles and the Conditions for Reciprocal Recognition of Approvals Granted under these United Nations Regulations, done at Geneva on 20th March 1958 | Regulaminy EKG ONZ stanowiące załączniki do Porozumienia dotyczącego przyjęcia jednolitych wymagań technicznych dla pojazdów kołowych, wyposażenia i częci, które mogą by stosowane w tych pojazdach, oraz wzajemnego uznawania homologacji udzielonych na podstawie tych wymagań, sporządzonego w Genewie dnia 20 marca 1958 r. | UNECE rules  |
| Act of 20th June 1997<br>- Road Traffic Law   | Ustawa z dnia 20<br>czerwca 1997 r. – Prawo<br>o ruchu drogowym  | u.p.r.d.     |
| Act of 15th November<br>1984 - Transport Law  | Ustawa z dnia 15 listopada<br>1984 r. – Prawo przewozowe   | u.p.p.       |

| Title (English)   | Title (Polish)   | Abbreviation |
|---|--|--------------|
| Act of 16th December<br>2010 on public transport  | Ustawa z dnia 16 grudnia<br>2010 r. o publicznym<br>transporcie zbiorowym  | u.p.t.z.     |
| Act of 6th September<br>2001 on road transport  | Ustawa z dnia 6 wrzenia<br>2001 r. o transpor-<br>cie drogowym   | u.t.d.       |
| Act of 22nd May 2003 on<br>compulsory insurances,<br>the Insurance Guaran-<br>tee Fund and the Polish<br>Motor Insurers' Bureau | Ustawa z dnia 22 maja<br>2003 r. o ubezpieczeniach<br>obowiązkowych, Ubez-<br>pieczeniowym Funduszu<br>Gwarancyjnym i Polskim<br>Biurze Ubezpieczycieli<br>Komunikacyjnych | u.u.o.       |
| Convention on Road<br>Traffic done at Vienna<br>on 8th November 1968  | Konwencja o ruchu dro-<br>gowym, sporządzona w<br>Wiedniu 8 listopada 1968 r.  | -            |

## Relevant regulations in Sweden

| Title (English)   | Title (Swedish)  | Abbreviation         |
|---|--|----------------------|
| Instrument of Go-<br>vernment (Swedish<br>constitution)   | Regeringsformen  | RF                   |
| Personal Data Act<br>(implemented di-<br>rective 95/46/EG)  | Personuppgiftslag 1998:204<br>(genomfört direk-<br>tiv 95/46/EG) | PUL                  |
| DIRECTIVE 2007/46/ EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 5 September 2007 establishing a frame- work for the approval of motor vehicles and their trailers, and of systems, components and separate tech- nical units intended for such vehicles  | -  | Directive 2007/46/EC |
| Regulation (EC) No 661/2009 of the European Parliament and of the Council of 13 July 2009 concerning type-approval requirements for the general safety of motor vehicles, their trailers and systems, components and separate technical units intended therefor | _  | (EC) No 661/2009     |
| The Road Traffic<br>Ordinance   | Trafikförordning<br>(1998:1276)                                  | TF                   |
| Vehicle Act   | Fordonslag (2002:574)  | FordL                |
| Vehicle Ordinance   | Fordonsförord-<br>ning (2009:211)                                | FordF                |

| Title (English)  | Title (Swedish)  | Abbreviation    |  |
|--|--|-----------------|--|
| Ordinance on Autono-<br>mous Vehicle Trials  | Förordning (2017:309) om<br>försöksverksamhet med<br>självkörande fordon                 | SjälvKörF       |  |
| REGULATION (EU) 2016/679 OF THE EUROPEAN PARLIA- MENT AND OF THE COUNCIL of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data (General Data Protection Regulation) | Dataskyddsförordningen   | GDPR<br>VägDefF |  |
| Act with Supplementing<br>Provisions to GDPR*  | Lag (2018:218) med<br>kompletterande be-<br>stämmelser till EU:s<br>dataskyddsförordning | LK-GDPR         |  |
| Product Liability Act  | Produktansvarslag (1992:18)  | PAL             |  |
| Product Safety Act   | Produktsäkerhet-<br>slag (2004:451)  | PSL             |  |
| Penal Code   | Brottsbalk (1962:700)  | BrB             |  |
| Road Traffic Of-<br>fences Act   | Trafikbrottslagen (1951:649)   | TBL             |  |
| Road Traffic Re-<br>gister Act   | Lag (2001:558) om<br>vägtrafikregister   | LVTR            |  |
| Road Traffic Regis-<br>ter Ordinance   | Förordning (2001:650)<br>om vägtrafikregister  | FVTR            |  |
| Motor Traffic Damage<br>Act (1975:1410)  | Trafikskadelag (1975:1410)   | TSL             |  |
| UNECE - UN Vehicle<br>Regulations - 1958<br>Agreement  | _  | UNECE rules     |  |
| Vienna Convention<br>on Road traffic   | -  | -               |  |

| Title (English)   | Title (Swedish)  | Abbreviation          |  |
|---|--|-----------------------|--|
| Insurance Contracts Act   | Försäkringsavtalslag<br>(2005:104)   | FörsAvtL              |  |
| Driving License Act   | Körkortslagen (1998:488)   | KörkL                 |  |
| Driving License<br>Ordinance  | Körkortsförord-<br>ning (1998:980)   | KörkF                 |  |
| Act on Road Traffic<br>Definitions  | Lag (2001:559) om<br>vägtrafikdefinitioner   | VägDefL               |  |
| Regulation on Road<br>Traffic Definitions   | Förordningen (2001:651)<br>om vägtrafikdefinitioner                                | VägDefF               |  |
| Road Signs Ordinance  | Vägmärkesförord-<br>ning (2007:90)   | VägMärkF              |  |
| Roads Act   | Väglag (1971:948)  | VL                    |  |
| European Parliament<br>and Council Directive<br>2006/126/EC of 20<br>December 2006, the<br>Third Directive on<br>Driving Licenses |  | Directive 2006/126/EC |  |
| Camera Surveillance Act   | Kamerabevakning-<br>slag (2018:1200)   | KamBL                 |  |
| Ordinance on elect-<br>ronic announcement<br>of certain road<br>traffic regulations   | Förordning (2007:231) om<br>elektroniskt kungörande<br>av vissa trafikföreskrifter | EKTF                  |  |
| Work Environment Act  | Arbetsmiljölagen<br>(1977:1160)  | AML                   |  |
| Tort Liability Act  | Skadeståndsla-<br>gen (1972:207)   | SkL                   |  |
| Road Traffic Tax Act  | Vägtrafikskatte-<br>lag (2006:227)   | VtrSL                 |  |
| Ordinance on fees in<br>the road traffic area   | Förordning (2001:652)<br>om avgifter inom<br>vägtrafikområdet                      | ORTrF                 |  |

| Title (English)  | Title (Swedish)   | Abbreviation      |
|--|---|-------------------|
| Regulation (EC) No<br>1071/2009 of the<br>European Parliament<br>and of the Council<br>of 21 October 2009<br>establishing common<br>rules concerning<br>the conditions to be<br>complied with to pursue<br>the occupation of road<br>transport operator<br>and repealing Council<br>Directive 96/26/EC |   | (EC) No 1071/2009 |
| Commercial<br>Transport Act  | Yrkestrafiklag (2012:210)   | YTL               |
| Commercial Trans-<br>port Ordinance  | Yrkestrafikförord-<br>ning (2012:237)   | YTF               |
| Taxi Traffic Act*  | Taxitrafiklag (2012:211)  | TTL               |
| Qualifications of<br>Professional Drivers Act  | Lag (2007:1157) om<br>yrkesförarkompetens   | LYK               |
| Qualifications of<br>Professional Dri-<br>vers Ordinance   | Förordning (2007:1470)<br>om yrkesförarkompetens  | FYK               |
| Public Trans-<br>portation Act   | Lag (2010:1065) om<br>kollektivtrafik   | KolltrL           |
| Act with special rules concerning street cleaning and signage  | Lag (1998:814) med särskil-<br>da bestämmelser om gatu-<br>renhållning och skyltning                              | -                 |
| Planning and<br>Building Act   | Plan- och bygglag<br>(2010:900) (2010:900)  | PBL               |
| Act on authorisation to<br>announce provisions on<br>road traffic, transport<br>and communications*  | Lag (1975:88) med bemyndi-<br>gande att meddela föres-<br>krifter om trafik, transpor-<br>ter och kommunikationer | -                 |

<sup>\*</sup> Unofficial translation by the authors.

## Relevant regulations in Estonia

| Title (English)  | Title (Estonian)  | Abbreviation         |
|--|---|----------------------|
| Traffic Act<br>§ 76 Car Registration   | Liiklusseadus<br>§ 76 Mootorsõiduki ja selle<br>haagise registreerimine   | Traffic Act          |
| Minister or Economic<br>Affairs and Communitations<br>Vechile Registration decree  | Mootorsõiduki ja selle<br>haagise registreerimise<br>tingimused ja kord   | Decree               |
| Directive 2007/46/EC of<br>the European Parliament<br>and of the Council of<br>5 September 2007 establis-<br>hing a framework for the<br>approval of motor vehicles<br>and their trailers, and of<br>systems, components and<br>separate technical units<br>intended for such vehicles                                       | Euroopa Parlamendi ja<br>nõukogu direktiiv 2007/46/<br>EÜ, 5. september 2007,<br>millega kehtestatakse<br>raamistik mootorsõidukite<br>ja nende haagiste ning<br>selliste sõidukite jaoks<br>mõeldud süsteemide, osade<br>ja eraldi seadmestike kinni-<br>tuse kohta (raamdirektiiv)<br>(EMPs kohaldatav tekst)                 | EU Directive 2007/46 |
| Society of Automotive<br>Engineers (SAE) Inter-<br>national Standard J3016   | SAE automatisee-<br>rituse tasemed  | SAE                  |
| Corrigendum to Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation) (OJ L 119, 4.5.2016) | Euroopa Parlamendi<br>ja nõukogu 27. aprilli<br>2016. aasta määruse (EL)<br>2016/679 (füüsiliste isikute<br>kaitse kohta isikuandmete<br>töötlemisel ja selliste<br>andmete vaba liikumise<br>ning direktiivi 95/46/EÜ<br>kehtetuks tunnistamise<br>kohta (isikuandmete kaitse<br>üldmäärus)) parandus<br>(ELT L 119, 4.5.2016) | GDPR                 |
| Council Directive 85/374/<br>EEC of 25 July 1985 on<br>the approximation of the<br>laws, regulations and<br>administrative provisions<br>of the Member States<br>concerning liability for<br>defective products  | Nõukogu direktiiv, 25. juuli<br>1985, liikmesriikide toote-<br>vastutust käsitlevate õigus-<br>ja haldusnormide ühtlusta-<br>mise kohta (85/374/EMÜ)  | Directive 85/374/EEC |

| Title (English)   | Title (Estonian)  | Abbreviation     |
|---|---|------------------|
| Penal Act § 422.  Violation of traffic requirements or vehicle operating rules by driver  (1) Violation of traffic requirements or vehicle operating rules by a driver of a motor vehicle, aircraft, water craft, tram or rail vehicle and thereby causing major damage to the health of a person or the death of a person through negligence is punishable by up to five years' imprisonment.  (2) The same act, if it causes the death of two or more people, is punishable by three to twelve years' imprisonment.   | Karistusseadustik § 422. Sõidukijuhi poolt liiklusnõuete ja sõiduki käitusnõuete rikkumine (1) Mootor-, õhu- või veesõiduki või trammi või raudteeveeremi juhi poolt liiklus- või käitusnõuete rikkumise eest, kui sellega on ettevaatamatusest tekitatud inimesele raske tervisekahjustus või põhjustatud inimese surm, – karistatakse kuni viieaastase vangistusega. (2) Sama teo eest, kui sellega on põhjustatud kahe või enama inimese surm, – karistatakse kolme- kuni kaheteistaas-tase vangistusega.                                    | KarS § 422       |
| Penal Act § 423.  Violation of traffic requirements or vehicle operating rules by driver through negligence (1) Violation of traffic requirements or vehicle operating rules by a driver of a motor vehicle, aircraft, water craft, tram or rail vehicle and thereby causing major damage to the health of a person or the death of a person through negligence is punishable by a pecuniary punishment or up to three years' imprisonment. (2) The same act, if it causes the death of two or more people, is punishable by one to five years' imprisonment. | Karistusseadustik § 423.  Sõidukijuhi poolt liiklusnõuete ja sõiduki käitusnõuete rikkumine ettevaatamatusest  (1) Mootor-, õhu- või veesõiduki või trammi või raudteeveeremi juhi poolt liiklus- või käitusnõuete rikkumise eest ettevaatamatusest, kui sellega on tekitatud inimesele raske tervisekahjustus või põhjustatud inimese surm, – karistatakse rahalise karistuse või kuni kolmeaastase vangistusega.  (2) Sama teo eest, kui sellega on põhjustatud kahe või enama inimese surm, – karistatakse ühekuni viieaastase vangistusega. | KarS § 423       |
| Penal Act § 424.  Systematic driving of vehicle by person without right to drive  Driving of power-driven vehicles, off-road vehicles or trams by persons without the right to drive power-driven vehicles or trams of the corresponding category, if committed systematically, is punishable by a pecuniary punishment or up to one year of imprisonment.  | Karistusseadustik § 424.  Mootorsõiduki, maastikusõiduki ja trammi juhtimine joobeseisundis  Mootorsõiduki, maastikusõiduki või trammi juhtimise eest joobeseisundis –  karistatakse rahalise karistuse või kuni kolmeaastase vangistusega.   | KarS § 424       |
| Taxi transport permit   | Taksoveoluba  | Taxi licence     |
| Passenger transport permit  | Sõitjateveo luba  | Transport permit |
| Drivers service permit  | Juhi teenindaja kaart   | Service permit   |

## Relevant regulations in Norway

| Title (English)                             | Title (Norwegian)                                | Abbreviation        |
|---|--|---------------------|
| Traffic Road Act                            | Lov om vegtrafikk                                | LOV-1965-06-18-4    |
| Test of Self-driving<br>Vehicles Act        | Lov om utprøving av<br>selvkjørende kjøretøy     | LOV-2017-12-15-112  |
| Test of Self-driving<br>Vehicles Regulation | Forskrift om utprøving av selvkjørende motorvogn | FOR-2017-12-19-2240 |
| Public Transport Act                        | Lov om yrkestransport<br>med motorvogn og fartøy | LOV-2002-06-21-45   |
| Personal Data Act                           | Personopplysningsloven                           | LOV-2018-06-15-38   |
| Car regulation                              | Bilforskrift                                     | FOR-2012-07-05-817  |
| Vehicle regulation                          | Kjøretøyforskrift                                | FOR-1994-10-04-918  |
| Motorcycle regulation                       | Motorsykkelforskrift                             | FOR-2016-06-01-560  |
| Tractor regulation                          | Traktorforskrift                                 | FOR-2016-06-01-561  |
| Automobile Liability Act                    | Bilansvarslov                                    | LOV-1961-02-03      |

The upcoming years are crucial to the development of automated driving in Europe. The technology has great potential to serve the public interest by improving the environmental sustainability of traffic and making transit safer and more enjoyable for everyone. At the same time, there is a risk that everyone will use his or her own private automated car, increasing the number of motorised vehicles on the road. The SOHJOA Baltic project researches, promotes, and pilots the use of driverless, electric minibuses in public transport to secure the benefits of automated driving for society as a whole. This European Legal Implementation Roadmap outlines the current legal status of automated driving in different European countries of the Baltic Sea Region and provides policy recommendations to establish a sound legal basis for its implementation as part of the public transport system.