**Act Amending the Road Traffic Law and the**

**Compulsory Insurance Law - Autonomous Driving Law1**

dated 12 July 2021

The Lower House of the German Parliament has, with the consent of the Upper House of the German Parliament, passed the following act:

**Article 1**

The Road Traffic Law in the version of the notification dated 5 March 2003 (Federal Law Gazette (Bundesgesetzblatt, BGBl. for its acronym in German) I, p. 301, 919) which was last amended by Article 2 of the law dated 12 July 2021 (BGBl. I p. 3091) is amended as follows:

1. After Section 1c, the following Sections 1d to 1l are inserted:

“Section 1d

Motor vehicles with autonomous  
driving function in specified operating areas

(1) A motor vehicle with autonomous driving function according to this law is a vehicle that

1. can perform the driving task independently without a driver within a defined operating area, and

2. has technical equipment according to Section 1e (2).

(2) For the purposes of this Act, a defined operating area shall mean the locally and spatially defined public road space in which a vehicle with an autonomous driving function may be operated, provided that the conditions set forth in Section 1e (1) are met.

(3) Technical supervisor of a motor vehicle with autonomous driving function within the meaning of this Act is the natural person who can deactivate this vehicle during operation according to Section 1e (2), Number 8 and can release this vehicle for driving manoeuvres according to Section 1e, Paragraph 2, Number 4 and Paragraph 3.

(4) For the purposes of this Act, a minimum-risk condition is a condition in which the motor vehicle with autonomous driving function

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1Notified in accordance with Directive (EU 2015/1535 of the European Parliament and the Council dated 9 September 2015 regarding an information procedure in the field of technical regulations and rules for information society services (OJ L241 dated 17 September 2015, p. 1).

stops on its own or at the instigation of the technical supervisor at the safest-possible place and activates the hazard warning lights to ensure maximum traffic safety for the vehicle occupants, other road users and third parties.

Section 1e

Operation of motor vehicles with autonomous  
driving function; objection and action for  
annulment

(1) The operation of a motor vehicle with autonomous driving function is permissible, if

1. the vehicle meets the technical requirements according to Paragraph 2,

2 the motor vehicle has been provided with an operating licence according to Paragraph 4,

3. the motor vehicle is used in an operating area that is approved and defined by the authority competent according to federal or state law or, on federal trunk roads as far as they are administrated by the Federal Government, by the company under private law according to the Infrastructure Company Establishment Act (Infrastrukturgesellschaftserrichtungsgesetz) and

4. the motor vehicle is licensed to participate in public road traffic according to Section 1(1).

Operation of a motor vehicle pursuant to Section 1h and the general approval according to Section 1 (1) remain unaffected by this.

(2) Motor vehicles with autonomous driving function must have technical equipment that is capable of,

1. performing the driving task independently within the defined operating area, without a driver interacting with the controls and without permanent monitoring of the drive of the motor vehicle by the technical supervisor,

2. independently complying with the traffic regulations intended for the vehicle driver and have a system for accident prevention that

a) is designed for damage prevention and damage reduction,

b) in the event of unavoidable alternative damage to different legal goods, considers the importance of the legal goods giving the highest priority to the protection of human life, and

c) does not provide any further weighing based on personal characteristics in case of an unavoidable, alternative risk for human life.

3. bringing the vehicle independently to a minimum-risk state when the continuation of the drive is only possible by violating road traffic rules.

4. providing the technical supervisor in case of Number 3 with

a) possible driving manoeuvres for the continuation of the drive, and

b) data for the assessment of the situation, so that the technical supervisor can decide on the release of the driving manoeuvre suggested,

5. checking a driving manoeuvre specified by the technical supervisor and not performing it, but bringing the motor vehicle independently to a minimum-risk state, when the vehicle manoeuvre would put traffic participants or third parties at risk,

6. indicating any impairment of its functionality immediately to the technical supervisor,

7. recognising its system limits and independently bringing the motor vehicle to a minimum-risk state when the system limits are reached, when a technical fault occurs, when the performance of the autonomous driving function is impaired or when the limits of the defined operating area are reached.

8. being deactivated at any time by the technical supervisor or the vehicle passengers and autonomously bringing the motor vehicle to a minimum-risk state in the event of a deactivation of the motor vehicle,

9. informing the technical supervisor of the need to release an alternative driving manoeuvre or its deactivation in good time and using optical, acoustic or otherwise perceivable signals to indicate its own functional status, and

10.ensuring at any time sufficiently stable radio connections that are protected against unauthorised interference, particularly to the technical supervisor, and autonomously bringing the motor vehicle to a minimum-risk state when the radio connection breaks down or is accessed in an unauthorised manner. (3) In order to meet the requirements according to Paragraphs 2, Numbers 1 to 4 in the event of other impairments that result in the technical equipment not being able to handle the driving task independently, it is also sufficient when

1. the technical equipment is able to ensure that alternative driving manoeuvres can be specified by the technical supervisor,

2. the alternative driving manoeuvres according to Number 1 can independently be performed by the technical equipment, and

3. the technical equipment is capable of prompting the technical supervisor in good time with an optical, acoustic or otherwise perceivable signal to specify a driving manoeuvre.

(4) If the technical requirements in accordance with Paragraph 2 are met and the declaration of the manufacturer according to Section 1f (3), Number 4 is available, the Federal Motor Transport Authority will grant an operating permit for a vehicle with autonomous driving function on request of the manufacturer. Pending approval procedures that logically belong to Sections 1d to 1g and for which an application for granting an operating permit including an exceptional approval have already been submitted, remain unaffected.

(5) Objection and action for rescission of revocation or withdrawal of an operating permit for a motor vehicle with autonomous driving function have not suspensive effect.

(6) Objection and action for annulment of the revocation or withdrawal of an operating permit for a specified operating area have no suspensive effect.

Section 1f

Obligations of participants when operating  
motor vehicles with autonomous driving function.

(1) The owner of a motor vehicle with autonomous driving function is obliged to maintain the traffic safety and environmental compatibility of the motor vehicle and to take the steps required to ensure this. He must

1. ensure regular maintenance of the systems required for the autonomous driving function.

2. make provisions to ensure the other traffic regulations that are not addressing the vehicle driver are also adhered to.

3. ensure that the tasks of the technical supervisor are fulfilled.

(2) Technical supervisor of a vehicle with autonomous driving function is obliged to

1. evaluate an alternative driving manoeuvre according to Section 1e Paragraph 2, Number 4 and Paragraph 3 and to release the motor vehicle for this purpose as soon as this is indicated by the vehicle system with an optical, acoustic or otherwise perceptible signal, the data provided by the vehicle system allow an assessment of the situation and the implementation of the alternative driving manoeuvre does not compromise traffic safety.

2. immediately deactivate the autonomous driving function as soon as this is indicated by an optical, acoustic or otherwise perceivable signal by the vehicle system.

3. evaluate signals of the technical equipment regarding its own functional status and initiate steps to ensure traffic safety where this is necessary, and

4. immediately establish contact with the passengers of the motor vehicle and initiate the steps required to ensure traffic safety when the motor vehicle is switched to the minimum-risk state.

(3) The manufacturer of a motor vehicle with autonomous driving function must

1. prove to the Federal Motor Transport Authority and the competent authority during the whole development and operating period of the motor vehicle that the electronic and electrical architecture of the vehicle and the electronic and electrical architecture connected with the motor vehicle is protected against attacks.

2. perform a risk assessment for the motor vehicle and prove to the Federal Motor Transport Authority and the competent authority how the risk assessment was performed and that the critical elements of the vehicle are protected against risks that were detected within the framework of the risk assessment,

3. prove a radio connection that is sufficiently secure for autonomous driving,

4. provide a system description for each motor vehicle, compile an operating manual and declare to the Federal Motor Transport Authority and in the operating instructions that the vehicle fulfils the requirements according to Section 1e (2), also in connection with Paragraph 3).

5. offer training for the persons involved in the operation of the motor vehicle that conveys information regarding the technical functions, particularly with regard to the driving functions and handling the tasks of the technical supervisor, and

6. in the event that manipulations of the motor vehicle or its electronic or electrical architecture or the electronic or electrical architecture connected with the vehicle are detected, particularly in the event of unauthorised access to the radio connection of the motor vehicle, the manufacturer must immediately inform the Federal Motor Transport Authority and the authority competent according to federal or state law or, on federal trunk roads as far as they are administrated by the Federal Government, the company under private law according to the Infrastructure Company Establishment Act (Infrastrukturgesellschaftserrichtungsgesetz) to initiate the appropriate steps.

Section 1g  
Data processing

(1) The owner of a motor vehicle with autonomous driving function is obliged to store the following data concerning the operation of the motor vehicle:

1. Vehicle identification number,

2. Position data,

3. Number and times of use as well as activation and deactivation of the autonomous driving function,

4. Number and times of release of alternative driving manoeuvres,

5. System monitoring data including data regarding the state of the software,

6. Environmental and weather conditions,

7. Networking parameters such as transmission latency and available bandwidth,

8. Name of the activated and deactivated passive and active safety systems, data regarding the state of these safety systems as well as the instance that has triggered the safety system,

9. Vehicle acceleration in longitudinal and cross direction,

10. Speed,

11. Status of the lighting systems,

12. Voltage supply of the motor vehicle with autonomous driving function,

13. Commands and information sent to the motor vehicle from external sources.

The owner is obliged to send data according to Sentence 1 to the Federal Motor Transport Authority and the authority responsible under federal or state law or, on federal trunk roads as far as they are administrated by the Federal Government, the company under private law according to the Infrastructure Company Establishment Act on request, as far as this is required

1. with regard to the Federal Motor Transport Authority for fulfilling their obligations according to Paragraphs 4 and 5, and

2. with regard to the authority competent according to federal or state law or, on federal trunk roads as far as they are administrated by the state, the company under private law according to the Infrastructure Company Establishment Act for fulfilling their tasks according to Paragraph 6

(2) The data according to Paragraph 1 must be stored for the following events:

1. during interventions by the technical supervisor,

2. during conflict scenarios, in particular accidents and near-accident scenarios,

3. during unplanned track changes or evasive manoeuvres,

4. during in the operating procedure.

(3) The manufacturer of a vehicle with autonomous driving function must equip the vehicle accordingly, so that the storage of the data according to Paragraph 1 and 2 is actually possible for the owner. The manufacturer must inform the owner in an accurate, clear and easy language regarding the settings options for privacy and processing of the data that are handled when the motor vehicle is in automated driving mode. The relevant software of the motor vehicle must have options regarding the way the data are stored and transmitted by the autonomous driving function and enable the owner to choose appropriate settings.

(4) The Federal Motor Transport Authority is entitled to collect the following data from the owner and to store and use them as far as this is necessary for the safe operation of the motor vehicle with autonomous driving function:

1. data according to Paragraph 1 and

2. first names and surnames of the persons used for technical supervision as well as proof of their specialist qualification.

If an owner uses his employees according to Section 26 of the Federal Data Protection Act as technical supervisors, Section 26 of the Federal Data Protection Act applies. The Federal Motor Transport Authority must immediately delete the data as soon as they are no longer required for the purposes according to Sentence 1, but at the latest after the expiry of three years after the cessation of operation of the motor vehicle concerned.

(5) As far as this does not concern a motor vehicle according to Section 1k, the Federal Motor Transport Authority is entitled according to Paragraph 4, Number 1 in connection with Paragraph 1 to make then non-personal data that were collected from the owner accessible for traffic-related public purposes, in particular for the purpose of scientific research in the field of digitalisation, automation and networking and for road accident research to the following organisations:

1. colleges and universities,

2. research institutions outside universities,

3. federal, state and communal authorities with research, development, traffic planning or city planning responsibilities.

The organisations mentioned in Sentence 1 may use the data exclusively for the purposes specified in Sentence 1. Paragraph 4, Sentence 2 applies accordingly. General transmission regulations remain unaffected.

(6) The authorities responsible for the approval of defined operating areas according to federal or state law or, on federal trunk roads as far as they are administrated by the Federal Government, the company under private law according to the Infrastructure Company Establishment Act, are entitled to collect the following data from the owner, to store them and use them as far as they are required for checking and monitoring as to whether the defined operating area for the operation of the motor vehicle with autonomous driving function is suitable, in particular for checking and monitoring as to whether the requirements for the respective approval are met and whether the associated conditions are adhered to:

1. data according to Paragraph 1 and

2. first name and surname of the person used for technical supervision as well as evidence of their professional qualification.

The authorities responsible for the approval of defined operating areas according to federal or state law or, on federal trunk roads as far as they are administrated by the Federal State, the company under private law according to the Infrastructure Company Establishment Act, must immediately delete these data, as soon as they are no longer required for the purposes according to Sentence 1, but at the latest after the expiry of three years after the cessation of the operation of the respective motor vehicle.

(7) Irrespective of Paragraphs 1 to 6, third parties may obtain information from the owner regarding the data stored according to Paragraph 1 and 2, as far as these are required to enforce, satisfy or defend against claims in connection with an event regulated in Section 7 (1) and the respective motor vehicle with autonomous driving function was involved in this event. The third parties must immediately delete these data as soon as they are no longer required to enforce legal claims, but at the latest after the expiry of the period of limitation of the claims for the enforcement of, satisfaction of or defence against which the data had been collected. Use of these data by third parties is only permitted for the purposes mentioned in Sentence 1.

Section 1h

Subsequent activation of automated and autonomous driving functions

(1) If a motor vehicle has an automated or autonomous vehicle function is installed, which is not described in the international regulations to be applied within the scope of jurisdiction of this law, provision of approval for the operation of this motor vehicle is only permitted according to the relevant approval regulations while omitting the automated or autonomous driving function, when it can be excluded that the automated or autonomous driving functions in their deactivated state can have an influence on the driving functions of the approved systems.

(2) The activation of one automated or autonomous driving function according to Paragraph 1 in a vehicle licensed for the operation of these functions in public road transport within the validity of the law may only be permitted on the basis of a special approval provided by the Federal Motor Transport Authority. This approval may only be provided as far as the driving function is approvable according to Sections 1a (3), Section 1e (2) or another relevant approval regulation. The Federal Motor Transport Authority will publish the technical requirements to be adhered to in this context.

Section 1i

Testing of automatic

and autonomous driving functions

(1) Motor vehicles used for testing of development stages for the development of automated or autonomous driving functions may only be operated on public roads when

1. the vehicle has been provided with test approval by the Federal Motor Transport Authority according to Paragraph 2,

2. the motor vehicle is licensed according to Section 1 (1),

3. the motor vehicle is exclusively used for testing purposes and

4. the motor vehicle is permanently monitored during the operation as follows:

a) during automatic driving operation, the supervision is performed by a vehicle driver, who is reliable with regard to the technical developments concerning motor vehicle traffic,

b) during autonomous driving operation, the supervision is performed by a locally present technical supervisor, who is reliable with regard to the technical developments concerning motor vehicle traffic.

(2) A test approval according to Paragraph 1, Number 1 is provided by the Federal Motor Transport Authority on request of the owner. The Federal Motor Transport Authority may make the test approval at any time subject to incidental provisions that ensure safe operation of the vehicle. The state authority responsible according to state law in the locally affected state must be heard with regard to incidental provisions that restrict the operation to a specific operating area. The company under private law according to the Infrastructure Company Establishment Act must be heard, as far the operating area includes the federal highway or federal roads under administration by the federal state or when this is planned.

(3) The Federal Motor Transport Authority involves the Federal Agency for Safety in Information Technology in questions regarding the safety of information technology for the creation, implementation and further development and evaluation of technical requirements.

(4) Up to six month after the entry into force of the regulations in the Ordinance based on Section 1j (1), Number 7, the road traffic regulations valid so far also apply to automated or autonomous driving function without change, as far as the regulations in the Ordinance based on Section 1j (1), Number 7 are not already applied.

Section 1j

Authorisation to issue ordinances

(1) The Federal Ministry of Transport and Digital Infrastructure shall be authorised to enact by statutory ordinance with the consent of the Upper House of the German Parliament details of the operating permit and the operation of motor vehicles with autonomous driving function on public roads according to Sections 1d to 1i concerning

1. the technical requirements and the procedure for granting an operating permit according to Section 1e (2 to 4) by the Federal Motor Transport Authority, including

a) the technical requirements to be considered by the manufacturer regarding the construction, consistency and technical equipment of the motor vehicle, the requirements for the data storage that need to be considered by the manufacturer, the safety of the information technology used and the functional safety of the motor vehicle, the requirements for the declaration according to Section 1f (3), Number 4 that have to be considered by the manufacturer as well as the documentation requirements to be considered by the manufacturer,

b) the requirements regarding the inspection and validation of the motor vehicle by the Federal Motor Transport Authority,

c) the requirements for the operation of the motor vehicle,

d) the requirements for the inspection of the motor vehicle by the Federal Motor Traffic Authority,

e) the market monitoring including specifications for the participation of further authorities in the evaluation of the information technology safety of vehicles and vehicle parts as well as the regulation of cooperation duties for manufacturers and owners of motor vehicles with autonomous driving function and

f) the acknowledgement and evaluation of the equivalent effectiveness of permits and approvals for automated and autonomous motor vehicles that have been granted in another member state of the European Union based on the respective, valid national regulations,

2. the suitability of operating areas and the method for the evaluation and the approval of defined operating areas by the authorities competent according to federal or state law or, on federal trunk roads, as far as they are administrated by the Federal Government, the company under private law according to the Infrastructure Company Establishment Act,

3. special features of the approval procedure including the identification of the motor vehicles and vehicle parts to make their operating modes obvious and to ensure traffic safety,

4. requirements for and duties of the manufacturer, owner and technical supervisor for ensuring traffic safety and safe operation including

a) requirements for the release of driving manoeuvres and deactivation of a motor vehicle by the technical supervisor according to Section 1f (2), Numbers 1 and 2,

b) technical and organisational requirements for the owner and

c) requirements regarding the specialist qualification and reliability of the persons involved in the operation of a motor vehicle with autonomous driving function including the relevant certificates,

5. the technical details of the storage of the data generated by the autonomous driving function during the operation of the motor vehicle according to Section 1g (1), in particular regarding the accurate times of the data storage the parameters of the data categories and the data formats,

6. the method for the issuing of a permit for subsequent activation of automated and autonomous driving functions according to Section 1h, including the technical requirements for issuing an operating permit,

7. the requirements and the method for grating test approval according to Section 1i (2) by the Federal Motor Transport Authority, including further obligations of the owner, exceptions from requirements according to this act for test purposes as well as the authority of the Federal Motor Transport Authority to collect, store and process data in anonymised form for the creation a database intended for assessing the safety of road traffic and technical progress as well as for evidence-based development of regulations for the development steps of automated or autonomous driving functions,

8. deviations from Sections 1d to 1i with regard to vehicles of the German Federal Armed Forces, the Federal Police, the Federal Criminal Police Office, the Federal Intelligence Service, the German Customs Investigation Bureau, the Office for the Protection of the Constitution, the company under private law according to the Infrastructure Company Establishment Act, the State Police, the State Criminal Police Offices, the State Offices for the Protection of the Constitution, civil protection and disaster response units, fire brigades, rescue services and the road building authorities.

(2) The Federal Ministry of Transport and Digital Infrastructure is hereby empowered to issue by statutory decree and without approval of the Upper House of the German Parliament exceptions from the statutory decrees for testing new vehicle control devices previously issued on the basis of Paragraph 1. It is empowered to transfer this authorisation to the Federal Motor Transport Authority by statutory decree without approval of the Upper House of the German Parliament.

Section 1k

Exceptions

(1) For motor vehicles with autonomous driving function according to Section 1d (1), which are intended for military, intelligence or police purposes, for customs investigators, civil and disaster protection, firefighting, road building authorities or rescue services, decisions may be made by the Federal Ministry of Finance, the Federal Ministry of the Interior, Building and Community, the Federal Ministry of Defence, the Federal Ministry of Transport and Digital Infrastructure, the Office of the Federal Chancellor and the authorities competent according to state laws with offices in the respective areas of responsibility, the Federal Ministry of Defence, Offices of the Federal Armed Forces, which handle the tasks of the Federal Motor Transport Authority in its name in the respective area of responsibility.

(2) Motor vehicles with autonomous driving functions that are used by the Federal Armed Forces, the Federal Police, the Federal Criminal Police, the Federal Intelligence Services, the Federal Office for the Protection of the Constitution, the Customs Investigation Bureau, the company under private law according to the Infrastructure Company Establishment Act, the State Police, the State Criminal Police Offices, the State Offices for the Protection of the Constitution, the civil and disaster response units, the fire brigades, in the rescue services and the road building administrations, may deviate from the technical specifications and regulations for stipulating the operating areas and the operating regulations as well as the ordinances issued according to Section 1j (1), when the motor vehicles are intended for fulfilling sovereign tasks, are built or equipped for those purposes and when it is assured that the motor vehicles will be used with sufficient consideration of public safety. Technical requirements, regulations for the definition of operating areas and operating regulations must be used in a sensible manner, as far as the respective purpose according to Paragraph 1 permits this; deviations must be restricted to the absolute minimum.

Section 1l

Evaluation

The Federal Ministry of Transport and Digital Infrastructure will evaluate the application of the regulations of the law dated 12 July 2021 (BGBl. I p. 3108) after the end of the year 2023, particularly with regard to the effects of the development of autonomous driving, the compatibility with data protection regulations as well as the findings resulting from the test approvals according to Section 1i (2) on a scientific basis and in impersonal form and inform the Lower House of the German Parliament about the results of the evaluation. As far as required the Federal Ministry of Transport and Digital Infrastructure must repeat the evaluation at a time it may determine up to the year 2030.”

2. In Section 8(1), after the words “when the accident is caused by a motor vehicle that can drive not faster that 20 kilometres per hour on an even track”, the words “except when this concerns a motor vehicle with autonomous driving function according to Section 1d (1 and 2) that is in autonomous mode” are inserted.

3. In Section 12 (1), Sentence 1 Number 1 and 2 after the words “due to the use of a highly or fully automated driving function according to Section 1a” the words “or during operation in an autonomous driving function according to Section 1e” are inserted.

4. In Section 19 (1), Sentence 3, after the words “The Sentences 1 and 2 do not apply, when the accident was caused by a trailer that that was at the time of the accident connected to a motor vehicle that cannot drive faster than 20 kilometres per hours on an even track”, the words “except when this concerns a motor vehicle with autonomous driving function according to Section 1d (1 and 2) that is in autonomous operating mode” are inserted.

5. In Section 24 (1) after the words “a statutory decree according to” the works “Section 1j (1), Numbers 1, 2, 3, 4, 5 or 6,” are inserted.

**Article 2**

**Amendment of the**

**Mandatory Insurance Act**

The following sentence is added to Section 1 of the Mandatory Insurance Act dated 5 April 1965 (BGBl. I, p. 213), which was last amended by Article 1 of the ordinance dated 6 February 2017 (BGBl. I, p. 147):

“The owner of a motor vehicle with autonomous driving function according to Section 1d of the Road Traffic Act is obliged to conclude and maintain a third party accident insurance according to Sentence 1 also for a person performing the technical supervision.”

**Article 3**

**Coming into force**

This act comes into force on the day after its promulgation.

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The above law has thereby been drawn up.

It is to be promulgated in the Federal Law Gazette

Berlin, 12 July 2021

The Federal President

Steinmeier

The Federal Chancellor

Dr. Angela Merkel

The Federal Minister for

Transport and Digital Infrastructure

Andreas Scheuer