

**Ordinance
regulating the operation of motor vehicles with automated
and autonomous driving functions and amending road traffic legislation***

of 24 June 2022

The Federal Ministry for Digital and Transport hereby makes the following regulations, in all cases in conjunction with section 1 (2) of the Adaptation of Responsibilities Act of 16 August 2002 (Federal Law Gazette I, p. 3165) and the Organizational Decree of 8 December 2021 (Federal Law Gazette I, p. 5176), on the basis of

- section 1j (1) nos. 1 to 7 of the Road Traffic Act, inserted by Article 1 (1) of the Act of 12 July 2021 (Federal Law Gazette I, p. 3108);
- section 6 (1) sentence 1 nos. 1, 2, 5 to 7 and 9 (a) and (c) and 10, 11 and 17 and section 6 (3) nos. 1 to 3, 5 and 6 of the Road Traffic Act, which was recast by Article 1 no. 6 of the Act of 12 July 2021 (Federal Law Gazette I, p. 3091);
- section 6a (2) in conjunction with sections 6a (1) no. 1 (a), including in conjunction with section 6a (3) and (4), of the Road Traffic Act, of which section 6a (1) nos. 1 and (2) were last amended by Article 1 no.7 (a) of the Act of 12 July 2021 (Federal Law Gazette I, p. 3091) and section 6a (3) sentence 1 was recast by Article 2 (144) no. 2 of the Act of 7 August 2013 (Federal Law Gazette I, p. 3154);
- section 47 nos. 1 and 3 of the Road Traffic Act, last amended by Article 1 no. 36 of the Act of 12 July 2021 (Federal Law Gazette I, p. 3091); and
- section 7 (2) of the Compulsory Insurance Act, last amended by Article 493 (2) of the Ordinance of 31 August 2015 (Federal Law Gazette I, p. 1474) in consultation with the Federal Ministry of Justice and the Federal Ministry for Economic Affairs and Climate Action:

Article 1

Ordinance

on the approval and operation of motor vehicles with autonomous driving functions in defined operational areas (Autonome-Fahrzeuge-Genehmigungs- und-Betriebs-Verordnung - AFGBV)

Section 1

**Scope of application;
subject matter and definitions**

(1) This Ordinance must be applied to

1. the operation of motor vehicles with autonomous driving functions within the meaning of sections 1d to 1h and with automated or autonomous driving functions within the meaning of section 1h of the Road Traffic Act;
2. the approval in accordance with no. 1 for the operation of motor vehicles in the public road environment; and
3. the trialling of automated or autonomous driving functions in accordance with section 1j of the Road Traffic Act.

(2) This Ordinance regulates

1. the issuance of type-approvals for motor vehicles with autonomous driving functions as well as the approval of automated or autonomous driving functions that may be activated subsequently;
2. the approval of defined operational areas;
3. the approval for the operation on public roads of motor vehicles with autonomous driving functions;
4. the market surveillance of motor vehicles with autonomous driving functions, with type-approvals issued or to be issued on the basis of this Ordinance, as well as of automated or autonomous driving functions activated subsequently and vehicle parts; and
5. requirements to be met by and obligations of the manufacturer, the keeper and the technical oversight of motor vehicles with autonomous driving functions in defined operational areas and of motor vehicles with automated or autonomous driving functions in accordance with section 1f of the Road Traffic Act.

(3) Unless it is expressly stipulated in this Ordinance that the Federal Motor Transport Authority is responsible, the authority responsible within the meaning of this Ordinance is the authority responsible under federal state law, on federal trunk roads administered by the Federal Government, this is the company under private law within the meaning of the Infrastructure Company Establishment Act.

(4) Provisions in Regulation (EU) 2018/858 of the European Parliament and of the Council of 30 May 2018 on the approval and market surveillance of motor vehicles and their trailers, and of systems, components and separate technical units intended for such vehicles, amending Regulations (EC) No 715/2007 and (EC) No 595/2009 and repealing Directive 2007/46/EC (OJ L 151, 14.6.2018, p. 1), as amended by Delegated Regulation (EU) 2021/1445 (OJ L 313, 6.9.2021, p. 4) remain unaffected.

(5) Section 1k of the Road Traffic Act remains unaffected.

Section 2

**Operating permit;
approval of the subsequent activation
of automated and autonomous driving functions**

(1) The operation of a motor vehicle with autonomous driving functions in the public road environment in defined operational areas requires an operating permit issued by the Federal Motor Transport Authority in accordance with section 4 (1).

(2) Section 20 (1), (3) and (3a) of the Road Vehicles Registration and Licensing Regulations applies accordingly to the issuance of a general operating permit for mass-produced motor vehicles with autonomous driving functions.

* Notified in accordance with Directive (EU) 2015/1535 of the European Parliament and of the Council of 9 September 2015 laying down a procedure for the provision of information in the field of technical regulations and of rules on Information Society services (OJ L 241, 17.09.2015, p. 1).

(3) Approvals in accordance with section 1h (2) of the Road Traffic Act for the subsequent activation of automated and autonomous driving functions are issued subject to the conditions set out in section 4 (5) and (6).

Section 3

Application by the manufacturer for issuance of the operating permit

(1) The manufacturer must submit an application for issuance of the operating permit for motor vehicles with autonomous driving functions to the Federal Motor Transport Authority.

(2) The manufacturer's application must include:

1. declaration by the manufacturer stating
 - a) that the motor vehicle with autonomous driving functions meets the functional requirements set out in Annex 1 as well as the conditions set out in section 3 (8), while this must also be ensured when relevant system components are subject to ageing or wear and tear; and
 - b) that the safety of the autonomous driving functions in accordance with the functional safety concept in accordance with section 12 (1) no. 2 and Annex 1 no. 7.2 has been assessed;
2. submission of
 - a) the operating manual of the motor vehicle with autonomous driving functions in accordance with section 1f (3) no. 4 of the Road Traffic Act and Annex 1 no. 7.1, Annex 3 no. 2;
 - b) the functional safety concept in accordance with section 12 (1) no. 2 and Annex 1 no. 7.2 and Annex 3 no. 3;
 - c) the information technology security concept in accordance with section 12 (1) no. 3 and Annex 1 no. 15 and Annex 3 no. 4;
 - d) the functional description of the motor vehicle with autonomous driving functions in accordance with section 12 (1) no. 5 and Annex 3 no. 1;
 - e) the catalogue of test scenarios in accordance with section 12 (1) no. 6 and Annex 1 no. 10; and
 - f) proof in accordance with Annex 1 no. 12 that ambient conditions that can occur in the determined operational area, but which cannot be replicated in tests, are handled competently.

(3) If this information is necessary to conduct the approval procedure, the Federal Motor Transport Authority may demand that the manufacturer provides further information in addition to the documents referred to in section 3 (2).

(4) The Federal Motor Transport Authority assesses

1. compliance with the technical requirements to be met by the autonomous driving functions in accordance with the requirements set out in this Ordinance including Annex 1;
2. the operating manual in accordance with the requirements set out in Annex 1 no. 7.1 and Annex 3 no. 2;
3. the functional safety concept in accordance with the requirements set out in Annex 1 no. 7.2 and Annex 3 no. 3; and
4. the functional description in accordance with the

requirements set out in Annex 3 no. 1.

(5) The Federal Motor Transport Authority assesses the information technology security concept in accordance with the requirements set out in Annex 1 no. 15 and Annex 3 no. 4. The Federal Motor Transport Authority involves the Federal Office for Information Security in the assessment in accordance with section 3 (5) sentence 1. The data protection supervisory authority responsible for the relevant manufacturer of the motor vehicle with autonomous driving functions is responsible for the verification of compliance with the requirements set out in Articles 24, 25 and 32 of Regulation (EU) 2016/679 of the European Parliament and 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, p. 1; L 314, 22.11.2016, p. 72; L 127, 23.5.2018, p. 2; L 74, 4.3.2021, p. 35) as well as with other data protection requirements and the substantive assessment of the data protection impact assessment.

(6) The Federal Motor Transport Authority assesses whether the manufacturer has implemented the information technology security measures documented by the manufacturer using a vehicle provided by the manufacturer free of charge. This may be done by means of random checks. The result of the assessment must be documented.

(7) The Federal Motor Transport Authority may entrust an officially approved expert for motor vehicle traffic or a technical service designated for testing whole vehicles of the relevant vehicle categories or another entity with the assessments in accordance with section 3 (4) to (6) and use the findings derived from these assessments within the framework of granting the operating permit.

(8) With due regard being paid to the requirements set out in Annex 1, a state-of-the-art motor vehicle with autonomous driving functions must, to avoid a collision:

1. detect other road users, uninvolved third parties, animals or objects in the environment of the motor vehicle with autonomous driving functions;
2. based on detection in accordance with section 3 (8) no. 1, conduct a risk assessment with regard to all legal assets affected, and evaluate the behaviour of the other road users detected, uninvolved third parties, animals or the movement of objects, with due regard being paid to the requirements set out in section 1e (2) no. 2 of the Road Traffic Act, and, on the basis of this evaluation, predict the subsequent behaviour or movements based on the assumption that moving vehicles can slow down at a maximum of ten metres per second squared; and
3. conduct a suitable driving manoeuvre, in particular braking or evasive manoeuvres, in accordance with the result of the risk assessment set out in section 3 (8) no. 2 and the requirements set out in section 1e (2) no. 2 of the Road Traffic Act.

Section 4

Issuance of the operating permit; issuance of the approval of the subsequent activation of automated and autonomous driving functions

(1) The operating permit for motor vehicles with autonomous driving functions is issued by the Federal Motor Transport Authority provided that

1. the declarations by the manufacturer that are required in accordance with section 3 (2) no. 1 have been submitted if these were requested in accordance with section 3 (3);
2. the documents that are required in accordance with section 3 (2) no. 2 have been submitted and they comply with the relevant requirements set out in Annex 1 and 3;
3. the requirements set out in section 3 (8) as well as the conditions set out in Annex 1 are complied with; and
4. the operation of the motor vehicle with autonomous driving functions does not adversely affect the safety and ease of road traffic nor endanger life and limb of persons.

(2) The operating permit for motor vehicles with autonomous driving functions may at any time be supplemented by or attached to ancillary provisions to guarantee the safe operation of the vehicle and compliance with statutory provisions and this Regulation.

(3) An operating permit for the operation of a motor vehicle with autonomous driving functions issued by a responsible authority of another Member State of the European Union or a Member State of the Agreement on the European Economic Area has the same status as an operating permit issued in accordance with section 4 (1) provided that it is based on equivalent evaluation and assessment standards with regard to the technical and safety/security-relevant requirements in accordance with sections 1d to 1g of the Road Traffic Act and the requirements in accordance with section 3 (8) as well as Annex 1 of this Ordinance and that it indicates the abstract operational area where the motor vehicle with autonomous driving functions can autonomously perform the driving task. Upon request by the manufacturer, the Federal Motor Transport Authority determines the equivalence of the operating permit.

(4) The Federal Motor Transport Authority may at any time verify or have verified by the bodies referred to in section 3 (7) whether the manufacturer complies with the requirements to be met for obtaining the operating permit for a vehicle with autonomous driving functions and the obligations associated with the operating permit. The results of the assessments must be documented. Section 20 (6) of the German Road Vehicles and Licensing Regulations remains unaffected.

(5) Modifications to a motor vehicle with autonomous driving functions that are implemented after the issuance of the operating permit are subject to the approval of the Federal Motor Transport Authority before the vehicles are operated.

(6) The national operating permit for the subsequent activation of automated or autonomous driving functions is issued by the Federal Motor Transport Authority provided that the technical requirements laid down by the Federal Motor Transport Authority are met.

Section 5

Market surveillance

(1) The Federal Motor Transport Authority performs the market surveillance tasks concerning motor vehicles with autonomous driving functions and vehicle parts approved and to be approved in accordance with this Ordinance.

(2) The Federal Motor Transport Authority performs regular checks to assess

1. whether motor vehicles with autonomous driving

functions and vehicle parts placed on the market or already on the road comply with the requirements of this Ordinance; and

2. whether motor vehicles with autonomous driving functions and vehicle parts placed on the market or already on the road pose a risk to health, safety, the environment or other legal assets to be protected in the public interest.

(3) The Federal Motor Transport Authority involves the Federal Office for Information Security in the evaluation of the IT security of vehicles and vehicle parts.

(4) The Federal Motor Transport Authority takes the necessary measures to guarantee road safety, in particular preparations for a revocation in accordance with section 6 if the Federal Motor Transport Authority has reasonable grounds to believe that a vehicle or vehicle part that falls under the scope of application of this Ordinance does not sufficiently meet its requirements.

(5) The manufacturers and keepers of motor vehicles with autonomous driving functions are obliged to

1. support the Federal Motor Transport Authority in performing its market surveillance activities; and to
2. submit the necessary documents, information and other technical specifications free of charge to the Federal Motor Transport Authority upon request, while manufacturers must also grant access to software and algorithms upon request.

Section 6

Revocation and suspension of the operating permit; revocation and suspension of the approval of the subsequent activation of automated and autonomous driving functions

(1) The Federal Motor Transport Authority must revoke an operating permit issued in accordance with section 4 (1) if

1. the motor vehicle with autonomous driving functions has been modified without approval and, as a consequence, no longer complies with the requirements of the operating permit;
2. the manufacturer no longer meets the requirements to be met for the issuance of the operating permit;
3. the declarations in accordance with section 3 (2) submitted by the manufacturer are inaccurate or incomplete, the manufacturer falsifies the results of assessments or withholds data or technical specifications that are essential for the decision taken by the Federal Motor Transport Authority on the issuance of an operating permit;
4. vehicles with autonomous driving functions or vehicle parts no longer comply with the requirements set out in section 1e (2), also in conjunction with this Ordinance or section 1e (3) of the Road Traffic Act; or
5. the operation of the motor vehicle with autonomous driving functions could adversely affect the safety and ease of road traffic or if danger to the life or limb of persons cannot be ruled out.

The Federal Motor Transport Authority must revoke the approval issued in accordance with section 4 (6) if

1. the motor vehicle has been modified without approval and, as a consequence, no longer complies with the requirements of the approval of the subsequent activation of automated and autonomous driving functions; or
2. the activation of automated or autonomous driving functions could adversely affect the safety and ease of road traffic or danger to the life or limb of persons cannot be ruled out.

(2) If there are reasonable grounds for presuming that the conditions set out in section 6 (1) are met, the Federal Motor Transport Authority may, without prejudice to the authority in accordance with section 5 (4), impose appropriate measures that serve to further clarify the matter, in particular the submission of documents and/or the examination of the motor vehicle using autonomous driving functions by the Federal Motor Transport Authority or a technical service. The Federal Motor Transport Authority may impose a suspension of an operating permit issued in accordance with section 4 (1) or an approval issued in accordance with section 4 (6) until the matter has been clarified.

(3) This is without prejudice to sections 48 and 49 of the Administrative Procedures Act (Verwaltungsverfahrensgesetz).

(4) The Federal Motor Transport Authority informs the authority that is responsible for the approval of the defined operational area in accordance with section 7 (2) sentence 2, of the revocation of an operating permit, if an application for the approval of a defined operational area has been submitted for the relevant motor vehicle with autonomous driving functions in accordance with section 8, or if the responsible authority has approved a defined operational area in accordance with section 9 (1).

(5) The motor vehicle with autonomous driving functions may not be operated in the public road environment if an operating permit issued in accordance with section 4 (1)

1. has been revoked in accordance with section 6 (1) sentence 1; or
2. has been suspended based on an order in accordance with section 6 (2) sentence 2.

Section 7

Determination of an operational area by approval

(1) In accordance with section 1d (2) of the Road Traffic Act, motor vehicles with autonomous driving functions may be operated in the public road environment only in an operational area that has been defined and approved in accordance with section 7 (2).

(2) The keeper of a motor vehicle determines the operational area of a motor vehicle with autonomous driving functions. The operational area defined in accordance with section 7 (2) sentence 1 requires the approval of the responsible authority.

(3) The approval of the defined operational area may be issued jointly for several vehicles with identical designs if there is a relevant operating permit for each motor vehicle with autonomous driving functions in accordance with the aforementioned provisions.

(4) The approval is issued subject to the rights of

others. The approval does not establish an entitlement to the availability of the operational area or to an absence of changes in the requirements underlying the approval of the operational area.

Section 8

Application for approval by the keeper

(1) The application for approval of a defined operational area must include:

1. a depiction of the route network to become the defined operational area for the operation of motor vehicles with autonomous driving functions including a depiction of a cartographically defined area in a suitable digital format in accordance with the stipulations of the responsible authority as well as a specific description of the operational purpose and the associated operating conditions;
2. proof by the keeper that the deactivation of the autonomous driving functions of the motor vehicle with autonomous functions within the meaning of section 1e (2) no.4 to 9 of the Road Traffic Act and the option of accepting driving manoeuvres within the meaning of section 1e (3) of the Road Traffic Act are guaranteed at any time;
3. the declaration by the keeper that the staff and material conditions in accordance with sections 13 and 14 are met.

(2) The keeper must also submit the following with the application:

1. the operating permit for a motor vehicle with automated driving functions in accordance with section 4 (1) and, in addition, in the cases referred to in section 4 (1) in conjunction with section 4 (3), proof of the equivalence of the foreign operating permit issued by the Federal Motor Transport Authority, while section 23 of the Administrative Procedures Act also remains unaffected in these cases;
2. from each keeper or from the persons appointed by the keeper in accordance with section 13 (2) sentence 2 and the technical oversight
 - a) a certificate of good conduct to be submitted to an authority and
 - b) information from the driving licence register; and
3. in addition, information on entries in the driver fitness register from the technical oversight.

(3) The responsible authority may request further information from the keeper provided that this is necessary for the process of approving a defined operational area.

Section 9

Issuance of approval; checks

(1) The approval in accordance with section 7 (2) sentence 2 is issued if

1. there is an operating permit for a motor vehicle with autonomous driving functions in accordance with section 4 (1) as well as, in addition, in the cases referred to in section 4 (1) in conjunction with section 4 (3), proof of the equivalence of the foreign operating permit issued by the Federal Motor Transport Authority;
2. the defined operational area is suitable for the operation of the motor vehicle with autonomous driving functions in accordance with section 9 (2); and

3. the staff and material conditions in accordance with sections 13 and 14 are met.

(2) An operational area is deemed suitable if the responsible authority finds that

1. in accordance with the information provided in the operating permit for the motor vehicle with autonomous driving functions issued in accordance with section 4 (1), the motor vehicle with autonomous driving functions can autonomously perform the driving task within this defined operational area;
2. the road infrastructure along the relevant route complies with the technical requirements for the operation of the motor vehicle with autonomous driving functions as set out in the operating permit;
3. the operation of the motor vehicle with autonomous driving functions in this operational area does not adversely affect the safety and ease of road traffic or endanger life and limb of persons substantially more than the general risk of an endangerment caused by the normal local road traffic in the operational area, for which the application has been made; and
4. the approval in accordance with section 7 does not conflict with other public interests such as immission control.

The assessment of whether an operational area is deemed suitable in accordance with section 9 (2) sentence 1 does not take unforeseen situations, for example as a consequence of force majeure, into consideration.

(3) The responsible authority may entrust an officially approved expert for motor vehicle traffic, a technical service designated for testing whole vehicles of the relevant vehicle categories or another suitable entity with the assessment of suitability of the operational area within the meaning of section 9 (2), in particular the road infrastructure within the defined operational area, while also taking account of the performance derived from the operating permit for the motor vehicle with autonomous driving functions, to the extent that this is necessary for the assessment of the application. The responsible authority may also demand that the keeper submits, at their own cost, further expert reports from one of the entities referred to in section 9 (3) sentence 1 to confirm compliance with the requirements in accordance with section 9 (2) to be assessed within the scope of the approval while also taking account of the performance derived from the operating permit for the motor vehicle with autonomous driving functions, to the extent that this is necessary for the assessment of the application.

(4) The responsible authority takes a decision in agreement with the regional or local body concerned unless this body is the responsible authority in accordance with section 7 (2) sentence 2. If an operational area extends across a federal state border, the authorities responsible under federal state law take a decision within the framework of their local or regional responsibilities after mutual consultation. If an operational area covers not only roads under federal state law and roads under the delegation of administrative powers but also federal motorways and federal highways under federal administration, the authorities responsible under federal state law as well as the company under private law within the meaning of the Infrastructure Company Establishment Act take a decision within the framework of their responsibilities after mutual consultation.

(5) The approval may at any time be supplemented by ancillary provisions if this is necessary to ensure compliance with the requirements referred to in section 9 (1). In particular, the approval may be linked to an initial, temporary prohibition of the transport of passengers and goods.

(6) The responsible authority may at any time verify or have verified by the entities referred to in section 9 (3) that the keeper complies with the requirements of the approval and with the obligations associated with the approval.

(7) The responsible authority must be informed of subsequent modifications concerning the requirements in accordance with section 8 without delay. In particular, the subsequent employment of further persons or the change of persons employed must be notified without delay; section 8 (2) and (3) applies accordingly.

(8) The responsible authority informs the Federal Motor Transport Authority of any approval of a defined operational area obtained with regard to the relevant motor vehicle with autonomous driving functions.

Section 10

Revocation and suspension of the approval of a defined operational area

(1) The responsible authority must revoke the approval issued in accordance with section 9 if the responsible authority learns that

1. ancillary provisions in accordance with section 9 (5) are not complied with and this may endanger the safety and ease of traffic or the life or limb of persons;
2. the autonomous driving functions of a motor vehicle with autonomous functions are used outside the defined operational area;
3. it is no longer guaranteed that driving manoeuvres can be deactivated or accepted during the operation of the motor vehicle with autonomous driving functions in its defined operational area;
4. staff and material conditions in accordance with sections 13 and 14 are no longer met;
5. the operating permit issued in accordance with section 4 (1) for a motor vehicle with autonomous driving functions expires, is withdrawn, revoked or has become ineffective in any other way; or
6. the requirements set out in section 9 (2) sentence 1 no. 1, 2 or 3 are no longer met and safe operation of the motor vehicle with autonomous driving functions is no longer guaranteed under these conditions.

(2) This is without prejudice to sections 48 and 49 of the Administrative Procedures Act (Verwaltungsverfahrensgesetz).

(3) The responsible authority informs the Federal Motor Transport Authority of the revocation of an approval issued in accordance with section 9.

(4) The responsible authority may impose a suspension of an approval issued in accordance with section 9 (1) if the requirements set out in section 9 (2) sentence 1 no. 2 are no longer met and the holder of the approval does not prove that safe operation of the motor vehicle with autonomous driving functions continues to be guaranteed also under the altered road infrastructure conditions along the relevant route.

(5) The motor vehicle with autonomous driving functions may not be operated in the public road environment if the approval of the defined operational area issued in accordance with section 9 (1)

1. has been revoked in accordance with section 10 (1); or
2. has been suspended based on an order in accordance with section 10 (4).

Section 11

Requirements concerning the application of the Vehicle Registration and Licensing Regulations

(1) The Vehicle Registration and Licensing Regulations must be applied to the licensing of motor vehicles with autonomous driving functions for road traffic in defined operational areas subject to the following paragraphs.

(2) The following is required for licensing in accordance with section 3 (1) sentence 2 of the Vehicle Registration and Licensing Regulations:

1. a valid operating permit for a motor vehicle with autonomous driving functions in accordance with section 4;
2. a valid approval of a defined operational area in accordance with section 9; and
3. third party motor insurance cover in accordance with the Compulsory Insurance Act.

The operating permit of a motor vehicle with autonomous driving functions in accordance with section 4 (1) as well as the approval of a defined operational area in accordance with section 9 must be submitted together with the application in accordance with section 6 of the Vehicle Registration and Licensing Regulations. Section 3 (2) and (3) of the Vehicle Registration and Licensing Regulations is not applicable.

(3) The use of the autonomous driving functions in road traffic must be restricted to the approved defined operational area. This restriction must be entered in part I of the registration certificate in accordance with section 11 of the Vehicle Registration and Licensing Regulations by indicating the approval, issuing authority and date of issuance. The operating permit in accordance with section 4 (1) with the date of issuance by the Federal Motor Transport Authority as well as further information on the equipment with autonomous driving and additional functions must also be entered in the registration certificate (part 1). By derogation from section 11(6) of the Vehicle Registration and Licensing Regulations, it suffices if the registration certificate (part 1) is retained and presented to authorized persons for inspection upon request.

(4) In order to transfer a vehicle to another keeper in accordance with section 13 (4) sentence 3 of the Vehicle Registration and Licensing Regulations or in order to re-register in accordance with section 14 (2) of the Vehicle Registration and Licensing Regulations, the keeper must additionally submit the approval of a defined operational area in accordance with section 9.

(5) The procedures in accordance with section 2a (3) of the Vehicle Registration and Licensing Regulations are not applicable.

(6) The vehicle registration authority must inform the authority that issued the approval of the defined

operational area without delay of any registration, re-registration, deregistration and transfer of a relevant motor vehicle to another keeper.

(7) If no defined operational area has been approved for a registered motor vehicle with autonomous driving functions in accordance with section 9, the keeper must have the vehicle registered as off the road without delay in accordance with section 14 (1) of the Vehicle Registration and Licensing Regulations, also in conjunction with section 15g of the Vehicle Registration and Licensing Regulations.

Section 12

Requirements to be met by the manufacturer

(1) The manufacturer of a motor vehicle with autonomous driving functions must

1. draw up repair and maintenance information for the motor vehicle in accordance with Annex 3 nos. 2.3 and 2.6 of this Ordinance;
2. draw up a functional safety concept in accordance with Annex 1 no. 7.2; and, as part of this process
 - a) perform a hazard analysis based on this safety concept in accordance with Annex 1 no. 7.2.1;
 - b) document the safety concept in accordance with Annex 3 no. 3;
 - c) Assess the safety of the autonomous driving functions in accordance with this safety concept and prove the safety to the Federal Motor Transport Authority in accordance with the requirements set out in Annex 1 no. 10;
3. draw up an information technology security concept in accordance with Annex 1 no. 15 and document it in accordance with Annex 3 no. 4;
4. ensure the feasibility of the periodic vehicle inspection in accordance with Annex 1 no. 7.3 of this Ordinance;
5. draw up a functional description of the motor vehicle with autonomous driving functions in accordance with Annex 3 no. 1;
6. draw up a catalogue of test scenarios in accordance with Annex 1 no. 10; and
7. draw up a security concept in accordance with requirements to be met by the digital data storage set out in Annex 1 no. 13 that complies with the stipulations set out in Articles 24, 25 and 32 of Regulation (EU) 2016/679 and contains a data protection impact assessment in accordance with Article 35 of Regulation (EU) 2016/679.

(2) When handing over the motor vehicle with autonomous driving functions, the manufacturer must provide to the keeper the documents in accordance with section 12 (1) no. 2 (b) and no. 3 as well as the operating manual in accordance with Annex 1 no. 7.1 and Annex 3 no. 2.

(3) The manufacturer of a motor vehicle with autonomous driving functions may not place on the market or sell a vehicle without a valid operating permit in accordance with section 2 (1).

Section 13

Requirements to be met by the keeper

- (1) To fulfil the obligations in accordance with section

1f (1) of the Road Traffic Act, during the operation of the motor vehicle with autonomous driving functions, the keeper must ensure that

1. the vehicle systems for the active and passive safety of the motor vehicle with autonomous driving functions are regularly inspected on the basis of the repair and maintenance information provided by the manufacturer;
2. an extended pre-departure check in accordance with section 13 (7) is performed every day before the start of operations;
3. from the date of licensing for road traffic, an overall inspection of the motor vehicle with autonomous driving functions in accordance with the requirements set out in the operating manual is performed every 90 days on the basis of the repair and maintenance information provided by the manufacturer;
4. the findings of the overall inspections in accordance with section 13 (1) no. 3, including a description of all non-conformities detected as well as repairs carried out, are documented in a report and, upon request, transmitted without delay to the Federal Motor Transport Authority as well as to the responsible authority, if this is necessary
 - a) for the discharge of functions by the Federal Motor Transport Authority as referred to section 2 (1) and section 6 (1); and
 - b) for the discharge of functions by the responsible authority as referred to in section 7 (2) sentence 2 and section 10 (1).

(2) The keeper must ensure that every person involved in the implementation of measures in accordance with section 13 (1) is suited within the meaning of section 13 (2) sentence 2. Persons responsible for the implementation of technical and organizational measures are deemed suited if they

1. have successfully passed a master craftsperson's examination (Meisterprüfung) in the automotive mechanic trade (Kraftfahrzeugmechaniker-Handwerk); this qualification is deemed equivalent to degrees in engineering (Diplom-Ingenieur, Diplom-Ingenieur [FH], Ingenieur [graduiert]), a B.A. degree, M.A. degree or state-certified technical engineer degree (staatlich geprüfte Techniker) in the fields of mechanical engineering, automotive engineering, electrical engineering or aerospace engineering/aircraft engineering, provided the relevant person is verifiably working in the field of motor vehicles and can prove at least three years' work experience;
2. have successfully completed a training course for this motor vehicle with autonomous driving functions provided by the manufacturer of this vehicle; and
3. are of good repute with regard to the performance of the tasks entrusted to them; in order to assess their good repute, a certificate of good conduct is to be submitted to an authority and, if they are entrusted with driving a vehicle in manual driving mode, information from the driving licence register must be presented within the context of the procedure in accordance with section 7 and section 8 (2); section 8 (3) applies accordingly.

If the keeper entrusts responsible persons with driving a vehicle in manual driving mode, these persons must hold a valid driving licence. The category of the driving licence must be suitable for the motor vehicle with autonomous

driving functions.

(3) The keeper must ensure that there are instructions for proper maintenance works, overall inspections, further examinations and operations in manual driving mode and that these instructions are followed. The instructions must be documented.

(4) The keeper or responsible person must without delay draw up reports in written or electronic form on the performance of maintenance works, overall inspections and further examinations. The reports must be signed. The reports must be documented and the keeper or the person responsible for the technical oversight must retain them for a period of six months and erase them, using automated deletion in the case of electronic storage, immediately after the end of this period.

(5) The document management requirements to be met by the instructions in accordance with section 13 (2) and the reports in accordance with section 13 (4) must be state of the art. The state-of-the-art requirement is assumed to be given when the requirements of ISO 9001:2015 Quality management systems - Fundamentals and vocabulary are met. In addition, the document management must meet the requirements set out in Article 24, 25 and 32 of Regulation (EU) 2016/679.

(6) The keeper must be suited in accordance with the requirements set out in section 14 if they perform technical oversight tasks themselves. If they do not perform the technical oversight tasks themselves, they must appoint a natural person suited for this purpose in accordance with section 14. The keeper must put in place the necessary material conditions for fulfilling the obligations of technical oversight; this requires in particular making available and equipping facilities as well as information technology systems that are suitable for fulfilling the obligations of technical oversight in accordance with section 1f (2) of the Road Traffic Act.

(7) The extended pre-departure check within the meaning of section 13 (1) no. 2 starts with a test drive to activate the systems. After the test drive, the following areas are checked:

1. braking system;
2. steering system;
3. lighting system;
4. tyres/wheels;
5. chassis;
6. electronically controlled safety/security-relevant vehicle systems as well as sensor systems to capture external and internal parameters; and
7. mechanical vehicle systems for active and passive safety.

(8) In accordance with Annex VIII in conjunction with Annex VIIIa of the Road Vehicles Registration and Licensing Regulations, the keeper must arrange for a main inspection of the motor vehicle with autonomous driving functions. The deadline for the main inspection in accordance with section 29 of the Road Vehicles Registration and Licensing Regulations is six months from the date of licensing of the motor vehicle with autonomous driving functions.

(9) The keeper may not implement the subsequent activation of automated or autonomous driving functions without an approval in accordance with section 4 (6).

Section 14

**Requirements
to be met by the technical oversight**

(1) The natural person employed for the technical oversight must be suited for performing their tasks in accordance with section 1f (2) of the Road Traffic Act. The person is deemed suited if they

1. have graduated in one of the fields of mechanical engineering, automotive engineering, electrical engineering, aerospace engineering or aircraft engineering and
 - a) have obtained a degree in engineering (Diplom-Ingenieur, Diplom-Ingenieur [FH], Ingenieur [graduier]);
 - b) a B.A. degree, M.A. degree; or
 - c) state-certified technical engineer degree (staatlich geprüfter Techniker);
2. have successfully completed an appropriate training course for this motor vehicle with autonomous driving functions provided by the manufacturer of this vehicle;
3. hold a valid driving licence, the category of which must be appropriate for the motor vehicle with autonomous driving functions; and
4. are of good repute with regard to the performance of the tasks entrusted to them in accordance with section 1f (2) of the Road Traffic Act.

For each person, a certificate of good conduct for submission to an authority, information from the driving licence register as well as information on entries in the driver fitness register must be submitted within the framework of the process in accordance with sections 7 and 8 (2) for the evaluation of their good repute within the meaning of section 14 (1) sentence 2 no. 4. If they have more than three penalty points in the driving licence register, they are not deemed of good repute. Section 8 (3) applies accordingly regarding section 14 (1) sentence 3.

(2) To fulfil their obligations, the natural person employed for the technical oversight may employ other suited natural persons who have at least three years of professional experience in the field of transport and motor vehicles, subject to the consent of the keeper. The natural persons employed must regularly, at least once a year, receive training provided by the manufacturer on the operation of the motor vehicle as well as on substantial changes to the motor vehicle or the autonomous driving functions. The training must be completed by means of a practical test which includes the handling of simulated technical problems. The technical oversight must document that the natural persons employed have successfully completed the training. If the natural persons employed have to drive a vehicle in manual driving mode or accept driving manoeuvres, these persons must hold a valid driving licence. The category of the driving licence must be appropriate for the motor vehicle with autonomous driving functions.

(3) If the motor vehicle with autonomous driving functions is in the minimal risk condition within the meaning of section 1d (4) of the Road Traffic Act, the natural person employed for the technical oversight must analyse the cause and necessity for the minimal risk condition before they may have the minimal risk condition deactivated. The result of the analysis must be documented. If the minimal risk condition was triggered by a fault in the motor vehicle, the natural person employed

for the technical oversight must, in compliance with the requirements set out in Annex 1 no. 4, manually perform the driving task once the vehicle is placed in the minimal risk condition until the triggering fault has been remedied. If the minimal risk condition endangers the safety and ease of traffic, the motor vehicle with autonomous driving functions must be removed from the road environment without delay irrespective of section 14 (1) sentence 1 and 3. In these cases, the technical oversight performs the analysis based on stored driving data in accordance with section 14 (1) sentence 1 after the removal of the vehicle.

Section 15

Data storage

(1) Annex 2 to this Ordinance governs details concerning the exact points in time when data is stored, parameters for data categories as well as data formats for the operation of a motor vehicle with autonomous driving functions.

(2) Only the Federal Motor Transport Authority and the responsible authority may collect, save and use the stored data solely for the purpose of checking whether the requirements for the approval and the supervisory obligation associated with the approval have been complied with.

Section 16

Trialling approval

(1) Motor vehicles for trialling vehicle systems or vehicle parts and their developmental levels for the development of automated or autonomous driving functions may only be operated on public roads with approval for the trial from the Federal Motor Transport Authority for the relevant motor vehicle in accordance with section 1i of the Road Traffic Act. The trialling approval in accordance with section 16 (1) sentence 1 also covers the approval for trialling of all parts, systems or units of the motor vehicle. Section 19 (6) of the German Road Vehicles and Licensing Regulations is not applicable.

(2) The trialling approval must be limited and may not, in general, be valid for more than four years. It can be extended for another two years each time provided the requirements for the issuance of the approval continue to exist and unless the course of trialling to date prevents an extension. If third parties lodge appeals against the trialling approval or its extension, the period of validity of the trialling approval is automatically extended by the number of days of the appeal's suspensory effect.

(3) The issuance of a trialling approval is subject to the condition that

1. there is an individual approval or type-approval for the motor vehicle;
2. after the issuance of the individual approval or the type-approval subsequent modifications were made to the motor vehicle in order to equip it with automated or autonomous driving functions;
3. the keeper who initiates the development and trialling and the actors involved in the development and trialling possess adequate expertise and good repute with regard to technological developments in motor vehicle traffic;
4. the keeper submits a development concept
 - a) adequately describing the modifications already

made or still intended as well as the driving functions to be trialled;

b) setting forth compliance with the current state of the art

(aa) as regards automated driving functions, taking account of section 1a (2) of the Road Traffic Act; and

(bb) as regards autonomous driving functions, taking account of section 1e (2) of the Road Traffic Act; and

c) ensuring that the vehicle is permanently monitored during its operation;

(aa) in the case of automated driving functions, by a driver with expertise in the field of technological developments for motor vehicle traffic; and

(bb) in the case of autonomous driving functions, by a physically present technical oversight with expertise in the field of technological developments for motor vehicle traffic;

d) including provision of non-personal data and incidents in relation to the technological progress of the developmental levels to be trialled are made available; these include, in particular

(aa) the frequency and duration that the automated or autonomous driving functions were used, activated and deactivated;

(bb) the frequency and duration of accepted alternative driving manoeuvres as well as fault code memory (start and end) including software status;

(cc) the respective ambient and weather conditions;

(dd) name of the activated and reactivated passive and active safety systems, their status as well as the part that triggered the safety system;

(ee) vehicle acceleration in the longitudinal and transverse direction;

(ff) speed;

5. the automated or autonomous vehicle system can be deactivated at any time and be overridden by a driver.

(4) The Federal Motor Transport Authority is authorized to collect, store and use, exclusively as non-personal data, the data necessary for the evaluation of road safety and technological progress as well as for the evidence-based development of the regulation of developmental levels of automated or autonomous driving functions. The data must be deleted at the latest after completion of the evaluation in accordance with section 11 sentence 1 of the Road Traffic Act.

(5) The Federal Motor Transport Authority may grant exemptions for trialling vehicle systems or vehicle parts and their developmental levels for the development of automated or autonomous driving functions from

1. the provisions set out in sections 1a to 1e of the Road Traffic Act;

2. this Ordinance with the exception of sections 15 and 16 and the Road Vehicles Registration and Licensing Regulations.

(6) Drivers must carry the trialling approval with them and present it to authorized persons for inspection if requested to do so.

(7) A reference to the trialling approval must be entered

in the registration certificate (part 1), stating the date of issuance by the Federal Motor Transport Authority.

(8) The procedures in accordance with section 2a (3) of the Vehicle Registration and Licensing Regulations as well as section 11 is not applicable.

Section 17

Administrative offences

An administrative offence within the meaning of section 24 (1) of the Road Traffic Act is deemed to have been committed by anyone who, either intentionally or negligently

1. operates a motor vehicle with autonomous driving functions without a valid operating permit in accordance with section 2 (1);

2. in contravention of section 5 (5) no. 2, fails to provide a document or information, provides a document or information that is inaccurate or incomplete, or fails to provide a document or information in a timely manner;

3. in contravention of section 6 (5) no. 2, section 7 (1) or section 10 (5) no. 2, operates a motor vehicle with autonomous driving functions;

4. in contravention of section 12 (2), fails to provide a document mentioned therein or an operating manual, provides a document mentioned therein or an operating manual that is inaccurate or incomplete, or fails to provide a document mentioned therein or an operating manual in a timely manner; or

5. in contravention of section 13 (9), performs an activation.

Section 18

Transitional provisions

If the vehicle data to be submitted for approval and the reference to the trialling approval in accordance with section 16 (7) by the responsible approval authority cannot be stored in the vehicle registers or if the information in accordance with section 11 (3) and section 16 (7) cannot be entered in the registration certificate (part 1), within the framework of the approval procedure in accordance with section 11 in conjunction with section 6 (7) of the Vehicle Registration and Licensing Regulations and the issuance of a trialling approval in accordance with section 16, the storing and entering must be implemented within six calendar months after 1 July 2022.

