

***Draft for Internet consultation***

**Amendment of the Road Traffic Act 1994 in connection with the enabling of experiments with automated systems in vehicles**

We Willem-Alexander, by the grace of God, King of the Netherlands, Prince of Orange-Nassau, etc. etc. etc.

To all who shall see this or hear it read, greetings! be it known:

Whereas We have considered that it is desirable to make rules whereby for conducting experiments with automated systems in vehicles and gaining experience with them in traffic it is possible to derogate from certain legal provisions through exemption;

Thus it is, that We, by the advice of the Council of State, and with the consent of the States General, have assented and understood as We hereby assent and understand:

**Article I (amendment of Road Traffic Act 1994)**

The Road Traffic Act 1994 shall be amended as follows:

A

After renumbering subsections three to six to read subsections five to eight, two subsections shall be added to Article 149a, reading:

3. To the extent necessary to conduct experiments with automated systems in vehicles, the exemption referred to in Article 149a, subsection two, may be accompanied by exemption from:

- a. This Act,
- b. Other Acts insofar as it concerns provisions relating to the driver or registration number owner of the vehicle,
- c. Provisions based on the Acts referred to in a and b.
4. Subsection three shall not apply to provisions regarding supervision, enforcement and criminal law facilities.

B

After Article 149a, an article shall be inserted, reading:

**Article 149aa**

1. The exemption for experiments within the meaning of Article 149a shall in any event stipulate:

- a. The purpose of the experiment,
- b. The roads or road sections on which the experiment will be carried out,
- c. The period of time for which the exemption shall apply,
- d. The rules referred to in Article 149a, subsection three, from which there may be derogation and, to the extent relevant, the conditions on which derogations shall be allowed,
- e. The safety measures that shall be taken in order to conduct the experiment with a view to the interests referred to in Article 2, subsection one,
- f. How the experiment shall be monitored and evaluated by the Netherlands Vehicle Authority (RDW),
- g. That use of the exemption shall be terminated if safety is jeopardised as a result or partly as a result of the experiment.

2. An exemption within the meaning of Article 149a, subsection two, for experiments that are allowed under subsection three of that article shall require the permission of Our Minister with primary responsibility.

3. Our Minister may decide to revoke the exemption if, in the Minister's opinion, road safety is in jeopardy as a result or partly as a result of the experiment.

4. The Netherlands Vehicle Authority shall produce a report of the evaluation referred to in subsection one (f), and shall send the report to Our Minister.

5. If the report of the evaluation occasions amendment of regulations, Our Minister may decide by order, for a term not exceeding five years, with a view to the amendment of the regulations, to grant dispensation to the provisions referred to in subsection one (d), under the relevant conditions.

C.

A subsection shall be added to Article 150, reading:

3. Rules may be laid down by ministerial order for the data and documents to be provided by the applicant when applying for an exemption or dispensation.

#### **Article II (transitional law)**

PM

#### **Article III (entry into force)**

This Act shall enter into force at a time to be determined by Royal Decree.

Require and command that this shall be placed in the Official Bulletin of Acts and Decrees and that all ministries, authorities, governmental institutions and civil servants whom it concerns shall diligently implement it.

THE MINISTER OF INFRASTRUCTURE AND THE ENVIRONMENT

## **Explanatory Memorandum**

### *General section*

#### **1. Introduction**

As a result of the latest technological developments, more and more automated systems are being built into vehicles. These systems can support the driver while driving. The systems can also take over specific – or even all – driving tasks fully or partly, either temporarily or permanently.

The share of automated systems in the operation of vehicles is expected to continue increasing in the future. Automated systems will increasingly take over tasks from the driver. This development will need to be examined in relation to the safety of persons travelling in the vehicle, but also in relation to the other road users. Experiments with automated systems in vehicles are necessary to obtain an insight into this matter. Some of these experiments are already possible under Article 149a, subsection two, of the Road Traffic Act 1994 (WVW, “the Act”) in conjunction with Article 2a of the Exceptional Load Transport Operations Exemption Permits Decree (*Besluit ontheffingverlening exceptionele transporten*, “the Decree”). However, certain experiments, especially those whereby the driver is not present in the vehicle, are not possible under the present legal regime.

This Bill also makes it possible to derogate from certain existing acts and associated regulations for the purpose of experiments for testing automated systems in vehicles. The Bill thus enlarges the scope of the current exemption powers of the Netherlands Vehicle Authority (RDW). By conducting experiments, manufacturers can perform their own research into the way their system functions. After the experiment, RDW will send a report of the evaluation to the Minister of Infrastructure and the Environment, so the Minister will be able to obtain an insight into the extent to which the outcomes of the experiment necessitate amending regulations so as to allow permanent use of these systems, and the conditions on which such use may be allowed.

#### **2. Broad lines of the Bill**

##### **2.1 Background**

The government wants to facilitate (large-scale) experiments with vehicles whereby systems temporarily or permanently take over the driving task from a person. As these systems are still very much under development, however, and it is not yet known what a self-driving car will look like in the future, the systems will first have to be allowed onto the public highway by means of experiments. This will enable manufacturers to study how their systems work on public roads, also in relation to other road users. Based on the results of the experiments, the Minister of Infrastructure and the Environment can additionally examine whether a need exists to amend regulations in order to approve the systems permanently.

##### **2.2 Problem**

The Vienna Convention on Road Traffic allows experiments. These are not only experiments with a driver in the vehicle but also with a driver outside the vehicle, provided that there is always a driver who is able to exert influence on the driving behaviour of the vehicle. In respect of this matter, refer to the section-by-section explanatory notes under Article 1, part B, concerning Article 149aa, subsection one (d), of the Act.

The Decree came into force on 1 July 2015, and provides a possibility to conduct experiments on the public highway with vehicles that contain automated systems. Under the Decree, it is possible to grant exemption from technical requirements for the testing of automated functions. It is also possible to grant exemption from the Traffic Rules and Signs Regulations (RVV) 1990. At the present time, however, it is not possible to grant exemption from the Act or from other laws. The Act imposes tasks or requirements on the driver that cannot be

fulfilled if the driver is not physically present in the vehicle. Examples are Article 7 (prohibiting the leaving of the place of an accident), Article 160 (stopping and examining papers), and Article 164 (surrendering a driving licence). It was always assumed in the past that (a) the driver would always be a person, and that (b) the vehicle could be driven only from within the vehicle. In accordance with the regime set out by the Vienna Convention on Road Traffic and the ambition of the Netherlands to be a frontrunner in developing self-driving cars (Parliamentary papers II 2014/15, 31305, No. 212), the current possibility for exemption is therefore being widened. After all, new technologies make it possible for the system to take over certain driving tasks from a driver, or for a driver to be located outside the vehicle. In the extreme, there does not need to be any driver at all with these new technologies. Insofar as provisions concerning supervision, enforcement and criminal law facilities are concerned (such as the aforementioned Articles 160 and 164 of the Act), together with the regulator it will be examined – insofar as a discretionary power exists – of how to exercise this power in the case of experiments.

Experiments on the public highway are necessary to see how these vehicles influence the behaviour of people in and near the vehicles, and to be able to observe how the vehicles influence their setting. For commercial reasons, the automotive industry needs to conduct tests to be able to properly identify the effects of these systems. For the government, it is important to develop knowledge in this field so as to determine the desirability of amending regulations to allow use of these systems. Self-driving cars can make a contribution to safety, mobility and sustainability objectives.

### **2.3 Approach to problem and reason for choice of instruments**

The Act contains provisions that currently preclude the conducting of experiments in the Netherlands with a driver outside the vehicle. Under current legislation, RDW may grant exemption for experiments under Article 149a, subsection two, of the Act in conjunction with Article 2a of the Decree. However, this exemption in particular concerns vehicle requirements, and it has been found to be too limited. Therefore, this Bill will also make it possible to derogate from certain legal requirements. To be able to grant an exemption derogating from legal requirements, permission is required of the Minister with primary responsibility. To allow experiments with a driver outside the vehicle, it is necessary to derogate from the Act, for example, and the Minister responsible for this is the Minister of Infrastructure and the Environment. With such an exemption, it is also possible to derogate from other laws (i.e. other than the Act) with the permission of the relevant Minister with primary responsibility. However, it is not possible to derogate from legal requirements that concern provisions relating to supervision, enforcement or criminal law facilities. The submitting of legal documents or the driver's cooperation on request of the regulator are usually discretionary powers of the regulator. In consultation with the regulator, it will be examined how to deal with this situation in the case of experiments with automated systems in vehicles. For further information, please refer to the section-by-section part of this explanatory memorandum.

### **2.4 Monitoring**

When issuing the exemption, a risk analysis will be performed in respect of such matters as the vehicle, infrastructure and behavioural aspects of the experiment, whereby a team of experts (the Dutch road authorities, consisting of the Dutch Roads for Self-Driving Vehicles Task Force (i.e. RWS, CROW, RDW, and Connekt, as well as the SWOV Institute for Road Safety Research for the behavioural road safety aspects) will, together with the applicant, define the preconditions for conducting the experiment. Formally, RDW will monitor and evaluate the experiments, but in practice, this will be done jointly by the expert team and the applicant, whereby the effects of the experiments on the setting will also be monitored. The exemption will explicitly stipulate that no further use may be made of the exemption – and that the experiment must therefore be stopped immediately – if road safety is in jeopardy as a result or partly as a result of the experiment. If this is the case, the party conducting the experiment will be required to take measures or to modify the experiment so as to continue it safely. Any instructions for the method of conducting the experiment will, if necessary, have to be set aside in the interests of road safety. If the experiment is nevertheless continued

without modification, RDW will have the possibility to amend or revoke the exemption. If having considered such to be necessary, the Minister may also revoke the exemption if road safety is jeopardised. The revoking of the exemption must be regarded as a remedy of last resort. If the experiment can be continued in a different way, with the Minister having obtained sufficient certainty that road safety is no longer at stake, it will be possible to refrain from revocation.

The possibility for the Minister to revoke the exemption if road safety is jeopardised will exist alongside the power of RDW to revoke the exemption. This stems from the policy responsibility of the Minister for road safety, which means the Minister must also have the possibility to stop the experiment at such time as road safety is in jeopardy.

The results of earlier experiments may obviously also be factored into the evaluation.

"Learning by doing" will be the point of departure for developing self-driving cars and any amendment of regulations.

## **2.5 What is the purpose?**

The purpose of amending the law is to be able to allow, by means of an exemption under certain conditions, experiments on the public highway with automated systems in vehicles, whereby the driver is outside the vehicle, while the system determines the behaviour of the vehicle. This will enable automated functions to be tested in traffic without a driver within the meaning of the Act always having to be present in the vehicle.

## **2.6 What justifies government intervention?**

Current legislation precludes certain experiments with automated vehicles. To be able to allow experiments, the law therefore needs to be amended. The prime consideration is that experiments on the public highway must be able to be carried out safely. In principle, the experiments may be conducted anywhere in the Netherlands. To be able to assure safety, it is important to have unambiguous rules.

If it is not possible to grant an exemption from certain articles of the Act and certain other laws, it will not be possible to conduct experiments with a driver who is outside the vehicle, or with vehicles without any driver at all.

## **3. Relationship with higher law**

The Convention on Road Traffic established at Vienna on 8 November 1968 (Treaty Series 1974, 35) ("the Vienna Convention") contains rules about road traffic law. Another relevant matter is the agreement established at Geneva on 20 March 1958 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 (Treaty Series, 1996, 151) ("the 1958 Agreement") on the basis of which regulations for vehicles have been laid down. Experiments will always have to be compatible with the frameworks of the Vienna Convention and the 1958 Agreement. The regulations knock on into Dutch law via Directive 2007/46/EC of the European Parliament and Council of 5 September 2007 establishing a framework for the approval of motor vehicles and their trailers, and of systems, components and separate technical units intended for such vehicles (OJ EU 2007, L 263) ("Directive 2007/46/EC"). Recently, it was decided during UNECE consultations on the Vienna Convention (Working Party on Road Traffic Safety) that the experiments referred to here do not breach the Convention provided that there is always a person who may be considered the driver, but who may nevertheless be outside the vehicle. At the present time, the Vienna Convention is being studied in more detail internationally with a view to the conducting of experiments whereby a vehicle can drive without any driver at all.

## **4. Relationship with national regulations**

The granting of exemptions will be aligned with the procedure under the General Administrative Law Act (AWB). The decision-making time for granting an exemption for experiments for testing automated systems in vehicles will however be longer than the eight-week period stipulated in Article 4:13, subsection two, of the General Administrative Law Act on account of the time necessary to assess, among other things, whether the vehicle itself is safe, how the vehicle behaves on the road, and whether the road section proposed for conducting the experiment is suitable. The approval and registration of the vehicle will also affect the lead time.

Allowance will also need to be made for the permission required from the Minister with primary responsibility if the exemption necessitates derogation from certain laws. In principle, the period for granting the permission is thirteen weeks, and it may be deferred by thirteen weeks (under Article 10:31, subsections one and two, of the General Administrative Law Act). The decision-making time for the application can be determined under or pursuant to the General Administrative Order (AMvB) referred to in Article 149a, subsection two, of the Act. Preparation of the exemption is subject to the normal procedure. This means that after the exemption has been made known (i.e. granted), stakeholders may lodge an objection within six weeks, and thereafter will have a possibility to lodge an appeal or higher appeal. For the sake of completeness, it should be noted that for appeal purposes, the exemption or its refusal by RDW and the permission or its refusal by the road authority under Article 149b, subsection six, of the Act will be considered a single decision.

Furthermore, the Minister of Economic Affairs, also acting on behalf of the Minister of Security and Justice, has indicated that the Cabinet wants to work on the structural improvement of regulation (Parliamentary papers II 2014/15, 33009, No. 10) and regards experimental provisions as a possible instrument for responding to new developments. According to the Cabinet, the wider application of experimental provisions, among other things, can have positive effects on regulation. This development was initiated earlier through Article 23.3 of the Environment & Planning Act ("*Omgevingswet*"), for example. By means of this Bill, this development will be continued.

In this framework, it is considered desirable for experiments with automated systems to be able to derogate from the Act and from other laws if it is necessary to do so in order to conduct experiments with automated systems in vehicles. However, it is undesirable to be able to derogate from provisions that concern supervision, enforcement or criminal law facilities. Insofar as discretionary powers are concerned, it will be examined in consultation with the regulator how these provisions will be addressed in the case of experiments with automated systems in vehicles whereby the driver is outside the vehicle.

After every experiment, RDW will draw up a report on the evaluation of the experiment. The report will be sent to the Minister of Infrastructure and the Environment. If the report gives rise to the amendment of regulations, the Minister may allow dispensation from the provisions for which exemption was granted earlier. The dispensation will then be granted under the same conditions as those under which the exemption was granted.

## **5. Consequences**

In principle, having regard to the conditions under which an exemption may be granted, there will not be any adverse effects for members of the public or the environment. After all, this matter concerns experiments with vehicles that not everybody may use. Although experiments (perhaps large-scale) will be made possible, the number of experiments will not be such that significant environmental effects may occur.

For companies and authorities, it will be possible to allow (large-scale) experiments with vehicles whereby systems (temporarily) take over the driving task, and tests can be conducted with and without a driver in the vehicle. The results of these experiments will contribute to the further development of self-driving cars.

When granting exemptions, the possible hazards for other road users will be explicitly examined. Other road users must not suddenly be confronted by experiments, or be startled by experiments being conducted. The risks for other road users will be assessed by the competent authority (the Netherlands Vehicle Authority) prior to the exemption, and the

safety measures must be organised accordingly. Moreover, it must be made clear to road users that at certain places or times experiments may be conducted. As this concerns experiments, the immediate societal impact of this specific amendment to the law will be very limited.

## **6. Performance**

In principle, when granting an exemption, it may be possible to seek the advice of the SWOV Institute for Road Safety Research and CROW, as is presently the case when granting exemptions under the Decree. To comply with the Personal Data Protection Act (WBP), any experiments whereby privacy plays a role will be conducted only with the consent of the person concerned.

*[PM: check results]*

## **7. Supervision and enforcement**

RDW will be responsible for carrying out this amendment, whereby permission from the road authority will be required and – insofar as there is derogation from legal requirements – also the permission of the Minister with primary responsibility. Recommendations made by road safety experts will also be taken into account. Under Article 149a, subsection six of the Act, the regulatory authorities and road authorities will be informed about the exemption for the purpose of performance of their duties. It should be noted that normal traffic laws will remain in force.

## **8. Financial consequences**

This amendment to the law will not increase costs for the performance of experiments.

## **9. Advice and consultation**

*[PM]*

## **10. Entry into force / transitional law**

*[PM]*

## **Notes on each article**

### **Article I**

#### *Part A*

Under Article 149a, subsection two of the Act, the Netherlands Vehicle Authority (RDW) may grant exemptions. Among other things, an exemption may be granted for experiments within the meaning of Article 2a of the Decree. When granting exemptions, the regime of the General Administrative Law Act (AWB) will be adhered to as far as possible, and derogation from it will only occur where necessary.

Under the present legal regime, it is not possible to grant exemption from certain legal provisions. Therefore, a subsection will be added to Article 149a of the Act. The new subsection three only concerns experiments for testing automated systems in vehicles. Under the proposed subsection three, exemption may be granted from the Act and other laws. However, the derogations will be only allowed to the extent necessary for testing these systems.

Provisions from which there may be derogation under the exemption could include:

- Road Traffic Act (WVW) 1994: Article 7 stipulates that it is prohibited to leave the place of an accident. This requirement cannot be properly fulfilled if the driver is not present in the vehicle and there is nobody else in the vehicle.
- Passenger Transport Act (WP) 2000: Chapter V contains rules for transport by taxi. If experiments are conducted with taxis, it might be important to be able to grant exemption from the requirements contained in this Chapter. To avoid any misunderstanding, this concerns experiments and not regular taxi services.
- Road Haulage Act (WWG): Under Article 2.11, drivers of haulage trucks must be in the employ of the transport firm. For experiments, however, it is conceivable that it might be desirable for a transport firm to use external drivers, so as to avoid disrupting regular transport runs performed by drivers who are on the payroll.

For the sake of completeness, it should be noted that when granting exemptions, there cannot be any question of conflicts with international law, such as the Convention on Road Traffic established at Vienna on 8 November 1968 (Treaty Series 1974, 35) ("the Vienna Convention"). For further details, refer to the notes to Part B (Article 149aa, subsection one (d), of the Act).

Under subsection four, it is not possible to derogate from provisions that concern supervision, enforcement or criminal law facilities. In the case of the Act, this might include Article 160 (stopping a vehicle and requiring the driver to show papers such as a driving licence) and Article 164 (surrendering of a driving licence when being booked). But other laws also have similar provisions. However, these concern discretionary powers, and, in consultation with the regulator, it will be examined how to exercise such powers in respect of experiments with automated systems in a vehicle.

#### *Part B*

In the new Article 149aa of the Act, specific provisions have been laid down for an exemption for experiments.

Subsection one of Article 149aa of the Act sets out what must in any event be stipulated in the exemption. The exemption will contain the purpose of the experiment (Part A), the roads or road sections on which the experiment will take place (Part B), and the period of time for which the exemption will apply (Part C).

When granting an exemption for experiments under Article 149a, subsection three, of the Act, it will be possible to derogate from the rules contained therein (Part D). As this concerns experiments in a field in which developments are taking place rapidly – for self-driving cars, today's developments might be outdated tomorrow – this possibility to derogate is deemed acceptable. The derogations will obviously be only allowed if they are necessary to conduct the experiment and are considered permissible given the conditions to be laid down. Similarly, the



derogations may not breach the obligations under international law, such as the Vienna Convention or Directive 2007/46/EC of the European Parliament and Council of 5 September 2007 establishing a framework for the approval of motor vehicles and their trailers, and of systems, components and separate technical units intended for such vehicles (OJ EU 2007, L 263) ("Directive 2007/46/EC"). Under the Vienna Convention, for example, a vehicle must currently have a driver, who must always keep any activities other than driving to a minimum. However, the Vienna Convention says nothing about the place where the driver must be located. This may be inside or outside the vehicle, provided that there is always a driver who is capable of influencing the vehicle's driving behaviour. For further information, refer to items 16 and 18 of the report of the 72<sup>nd</sup> meeting of the UNECE Working Party on Road Traffic Safety (ECE/TRANS/WP.1/153 – Report of the 72<sup>nd</sup> session, 29 March - 1 April 2016). At the present time, the Vienna Convention is under international study with a view to conducting experiments without drivers.

The exemption will also have to state the safety measures that will be taken (Part E) for performance of the experiment with a view to the interests referred to Article 2, subsection one. Those interests are to assure road safety, to protect road users and passengers, to maintain the condition of the road and assure its usability, and to assure – to the fullest extent possible – the freedom of traffic. By taking certain safety measures, these interests can be sufficiently protected.

During the experiment, RDW will carry out monitoring, and on completion will evaluate the experiment with a view to its purpose. When granting the exemption, it will also have to be stipulated how often monitoring will occur and how the evaluation will take place (Part F). If it transpires that safety is jeopardised as a result or partly as a result of the experiment, the exemption may no longer be used, and it must be possible to stop the experiment immediately (Part G). If the experiment is not discontinued immediately by the party conducting it, RDW may amend or revoke the exemption under Article 149b, subsection five, of the Act.

Provisions like Articles 5 and 6 of the Act will remain in force during experiments. The purport of these articles is that nobody may behave in a way that gives rise or may give rise to danger or inconvenience on the road, and that nobody may cause a serious accident. If this happens nevertheless, the police and designated officials may take enforcement action under Chapter IX of the Act.

Besides the provisions made in the subsection one, it is also possible under Article 150, subsection one, of the Act to attach conditions and restrictions to the exemption. In the Explanatory Memorandum to the Decree of 15 June 2015 amending the Exceptional Load Transport Operations Exemption Permits Decree (development of self-driving cars) (Bulletin of Acts and Decrees 2015, 248, page 4), it has already been stated that a standard element of the procedure is that, before the granting of the exemption, the party applying for the exemption must demonstrate to be properly insured for any damage. In the test phase, present liability legislation will suffice (Parliamentary papers II, 2014/15, 31305, No. 212, page 3).

Under the proposed Article 149aa, subsection two, of the Act, the permission of the Minister with primary responsibility will be required if the exemption includes derogation from the legal requirements referred to in the new Article 149, subsection three, of the Act. Permission will be granted under a draft exemption, i.e. before the exemption is granted by RDW. Under Article 10:32, subsection one, of the General Administrative Law Act (AWB), the provisions concerning approval (Division 10.2.1) apply *mutatis mutandis* to the permission. Among other things, this means that permission may only be withheld on account of a breach of law, because no other legal grounds have been embedded in the Act under which permission may be withheld (Article 10:27 of the General Administrative Law Act). Breach of law may arise, for instance, if the exemption is contrary to international law, or concerns derogations from legal provisions that are not mentioned in the annex to the Act as being provisions from which derogation is allowed.

Insofar as interests within the meaning of Article 2, subsections one and two, of the Act are concerned (such as the assurance of road safety, the protection of passengers and road users,

etc.), Article 149b, subsection three, of the Act stipulates that the road authority may refuse permission for the exemption if this is justified with a view to those interests.

Independent of RDW, the Minister of Infrastructure and the Environment may, under Article 149aa, subsection three, of the Act, revoke the exemption if in his opinion the experiment will jeopardise road safety. The revoking of the exemption under this subsection is a power assigned to the Minister, and must be regarded as a remedy of last resort, because if the need arises, it will be preferable, after consultation with all concerned, to examine together with RDW whether an exemption should be revoked, after which RDW – as the granter of the exemption – may take action. However, a situation may occur (based on very up-to-date information about a hazardous situation, for example) where road safety is so in jeopardy that the Minister wants to revoke the exemption independently and immediately, and to be able to announce it publicly. The Minister may form his opinion based on information that he obtains from the road authority or RDW or in other ways (such as news bulletins or via social media).

Under subsection four, RDW will produce a report on the evaluation of the experiment and send it to the Minister of Infrastructure and the Environment. If the report necessitates amendment of regulations, the Minister may allow dispensation from provisions from which exemption was granted earlier (subsection five). The dispensation will then be granted under the same conditions. Under Article 150, subsection one, of the Act, dispensation may be granted subject to restrictions, and conditions may be attached to it.

#### *Part C*

Under the proposed subsection three of Article 150 of the Act, it will be possible to lay down, by ministerial order, rules for the requirements for submission of an application for an exemption or dispensation.

THE MINISTER OF INFRASTRUCTURE AND THE ENVIRONMENT