Legislation and Regulatory Authority
Road Transport

06.08.2026

Statens vegvesen

Experience Report

The Act on Testing of Self-Driving Vehicles

STATENS VEGVESENS RAPPORTER Nr. 1151

Red Ant / NPRA

Tittel
Experience Report

Undertittel
The Act on Testing of Self-Driving Vehicles

Forfatter
Sofie Solbakken

Avdeling
Road Transport

Seksjon

Prosjektnummer

Rapportnummer
1151

Prosjektleder

Godkjent av
Gry Horne Johansen

Emneord
automated transport, operations, Act onTesting Self-Driving Vehicles, passenger transport, applications, testing

Sammendrag
This report provides a consolidated overview of the testing of self-driving vehicles in Norway in the years 2018-2025, after the Act on Testing of Self-Driving Vehicles came into force in 2018. The report summarises testing cases processed by the Norwegian Public Roads Administration and also highlights some general observations, for example related to vehicle types, testing environments, and the regulatory scope of the current testing framework. This describes the situation regarding the testing of self-driving vehicles in Norway. The report can be used as a knowledge base for further work on testing and regulation.

Title

Subtitle

Author
Sofie Solbakken

Department

Section

Project number

Report number
1151

Project manager

Approved by
Gry Horne Johansen

Key words

Summary

Table of contents

Purpose 2

Scope 2

Sources of information 2

The Act on Testing of Self-Driving Vehicles 2

Application for testing 3

The application process 4

Experience from testing 8

- Summary of factual findings 8
- Key observations 9

Conclusion 11

References 12

Purpose

The Act on Testing of Self-Driving Vehicles[1] has been in force in Norway since 2018. After eight years of testing activities, there is a need to compile available information and identify key trends in the development of testing initiatives in Norway. This report brings together and systematises information on completed and ongoing testing of self-driving vehicles in Norway and establishes a knowledge base to support regulatory work and future testing. The report also highlights a number of general observations that characterise the development of testing projects in Norway during the period from 2018 to 2025.

Scope

This report summarises and provides an overview of the testing activities involving self-driving vehicles that have been carried out in Norway following the introduction of the Act on Testing of Self-Driving Vehicles in 2018. The report presents factual information on testing projects, together with related comments and assessments. The information covers the period up to and including the end of 2025.

Sources of information

The information in this report is based on internally stored data, as well as documents retrieved from the Norwegian Public Roads Administration's internal case archive for the period 2018–2025.[2] In addition, information has been obtained from relevant personnel within the Norwegian Public Roads Administration (NPRA) with experience in processing applications for testing.

The Act on Testing of Self-Driving Vehicles

There is currently no regulatory framework that allows the ordinary use of self-driving vehicles in Norway. The Act on Testing of Self-Driving Vehicles entered into force in 2018. This Act, together with the Regulation on Testing of Self-Driving Motor Vehicles[3], provides a regulatory framework for the testing of self-driving vehicles.[4] The purpose of the regulatory framework is to facilitate testing under conditions that ensure road traffic safety, traffic flow, data security and the protection of personal data. Testing is carried out gradually, in line with the maturity of the technology.[3]

The current framework is based on exemptions being granted from the Road Traffic Act[5] and the Professional Transport Act[6], cf. section 3 of the Act on Testing of Self-Driving Vehicles and section 4 of the Regulations on Testing of Self-Driving Motor Vehicles.

Since the Act on Testing of Self-Driving Vehicles entered into force, there has been international development in this field. An international technical regulatory framework for the approval of self-driving vehicles has been established, and EU Regulations 2022/1426 and 2019/2144 have been implemented in the Regulations relating to the Approval of Vehicles and their Trailers.[7]

Any person or organisation wishing to test self-driving vehicles in Norway must obtain permission from the Directorate of Public Roads. This applies to testing on both public and private roads. Applications submitted to the Norwegian Directorate of Public Roads are free of charge.

Application for testing

The Regulations on Testing of Self-Driving Motor Vehicles requires applicants to provide the following information when applying to the Directorate of Public Roads for permission to test self-driving vehicles:

a. the name of the applicant and the name of the person appointed as safety representative

b. the purpose of the testing

c. the motor vehicles that will be included in the testing

d. the names of the operators, where applicable, cf. section 11

e. the automated driving system to be used

f. a plan for the testing

g. the time frame for the testing

h. any need for special traffic regulations

i. where the testing will take place, including the specific road sections or areas that will be used

j. a description of any need for exemptions from the provisions of the Road Traffic Act, the Professional Transport Act and subordinate regulations

k. insurance during the testing period that provides at least the same level of protection for injured parties as ordinary motor vehicle liability insurance under the Automobile Liability Act

l. documentation that the requirements in sections 7 to 11 are met

The Directorate of Public Roads may require additional information relevant for the processing of the application.

The Regulations also require applicants to provide information on a number of aspects of the testing. Section 10 of the Regulations sets out requirements relating to the assessment of risks associated with the testing. This requires the applicant to carry out a risk assessment and describe risk mitigation measures for each identified risk. The Directorate of Public Roads reviews the risk assessment and may request additional information from the applicant. The Regulations also allow the Directorate of Public Roads to have the applicant's risk assessment reviewed by an independent third party.

The application process

The application process for testing of self-driving vehicles is illustrated in Figure 1 and described below.

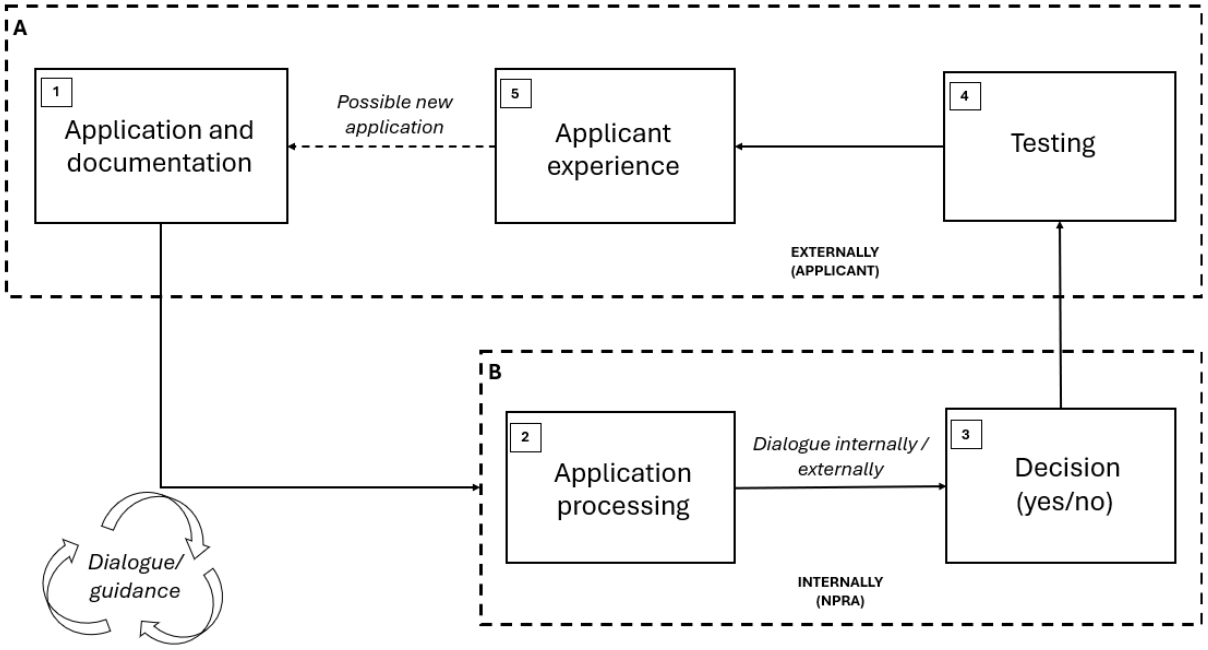

Figure 1: Application process for testing of self-driving vehicles at the Directorate of Public Roads.

Box A: Activities carried out by the applicant as part of the application process.

Box B: Activities carried out by the Directorate of Public Roads as part of the application process.

1. Application and documentation: The process begins when the Directorate of Public Roads receives an application for testing of self-driving vehicles. The application process is then initiated.
2. Dialogue, guidance and review of the application: Throughout the application and review process, there may be a need for dialogue and exchange of information. The Directorate of Public Roads is available for guidance meetings at any stage of the process. Such guidance may be initiated if either the applicant or the Directorate of Public Roads has questions or requires clarification regarding the planned testing activity. Additional documentation may also be required beyond what was initially submitted by the applicant. In such cases, the Directorate of Public Roads will request the necessary information. As a result, the application process is iterative, characterised by dialogue and exchange of information.
3. Decision: Once all relevant documentation has been received and any questions have been clarified, the Directorate of Public Roads either grants or rejects permission for the testing.
4. Testing: If permission is granted, the applicant may begin testing.
5. Operational experience and possible new application: The applicant operates the self-driving vehicles and may, after a period of testing, apply for an extension of the testing period and/or changes to the route.

The Directorate of Public Roads has received positive feedback from applicants regarding the application process, particularly in relation to open dialogue, prompt responses and constructive feedback.

Processed applications for testing

The Directorate of Public Roads issued 121 decisions granting permission for the testing of self-driving vehicles during the period 2018–2025 (table 1 and figure 2). During the same period, one application was rejected.

Table 1: Overview of the total number of decisions issued by the Directorate of Public Roads during the period 2018–2025.

Year	Number of permits	Number of rejected applications
2018	13	0
2019	20	0
2020	21	0
2021	22	0
2022	16	1
2023	8	0
2024	8	0
2025	13	0
Total	**121**	**1**

The 121 permits relate to:

- decisions granting permission for testing activities (initial applications)
- decisions approving extensions of the testing period (subsequent applications)
- decisions approving extensions or modifications of the testing area (subsequent applications)

These 121 permits do not represent 121 unique operations or vehicle types. The majority of the decisions relate to applicants seeking to extend the duration of their testing activities and/or modify the geographical areas where the testing is conducted.

During the period 2018–2025, the Directorate of Public Roads granted permits for 20 unique testing projects. In this report, activities involving the same applicant and the same overall purpose are considered a single project, regardless of the number of permits granted over time. As noted above, many of the 121 permits relate to the same project. Permits are usually granted for up to one year at a time, which often results in applications for extensions, as projects typically run over several years. New applications relating to an existing project may also involve changes to the geographical area in which the vehicle(s) will operate.

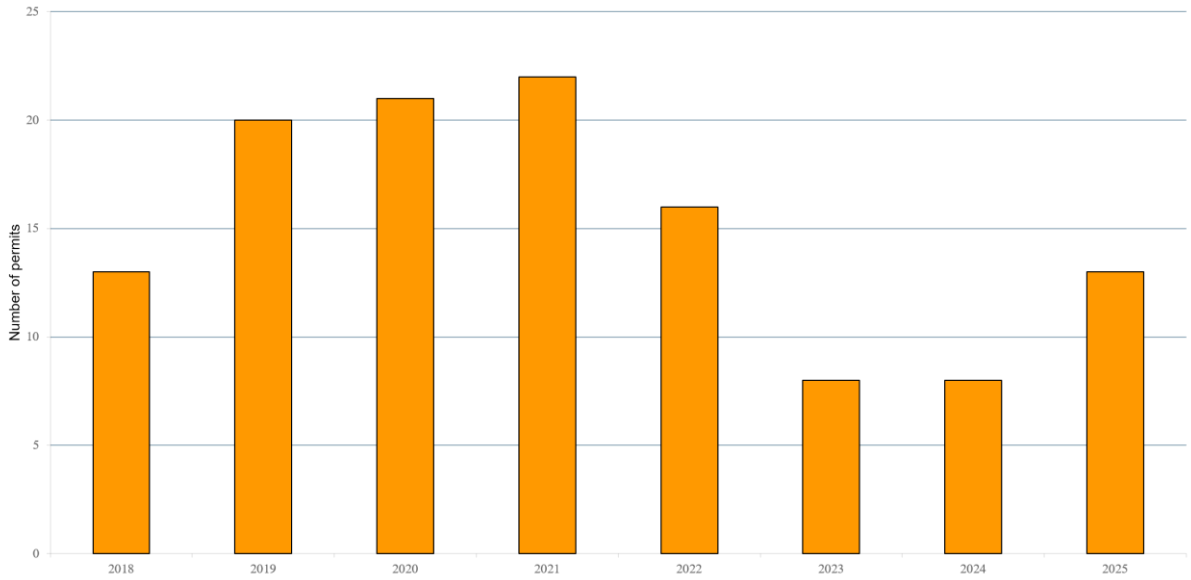

Figure 2: Overview of the number of permissions granted for testing of self-driving vehicles per year during the period 2018–2025.

Based on the geographical locations of the projects (Figure 3 and Table 2), testing of self-driving vehicles has primarily taken place in Eastern Norway, particularly in and around Oslo.

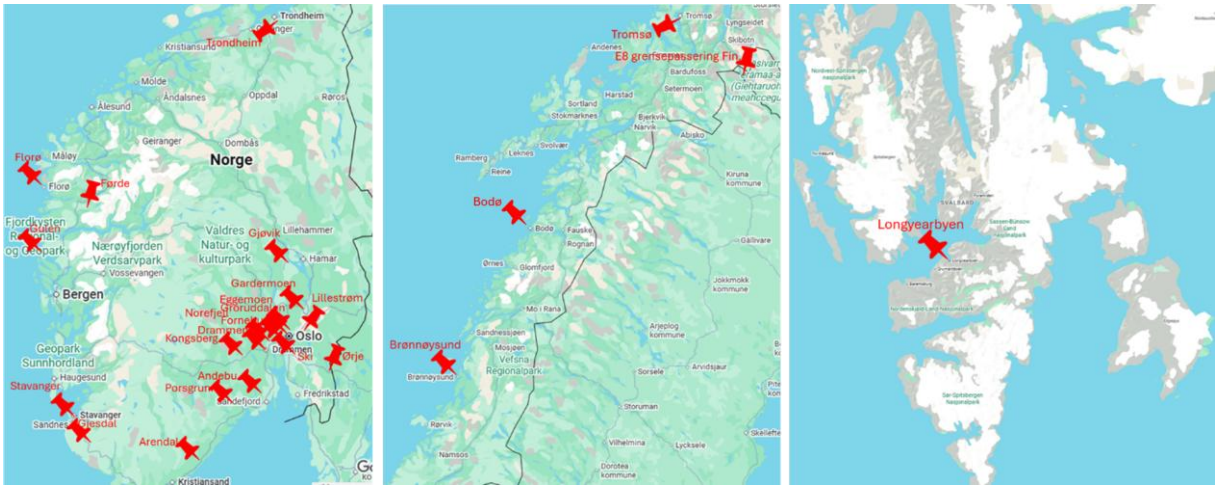

Figure 3: Map showing the areas where testing of self-driving vehicles has taken place in Norway.*

A total of seven vehicle types have been included in permits for testing since 2018, as shown in Table 2. The testing can be divided into two categories of use: operational services and passenger transport. Overall, a greater number of permits have been granted for passenger transport than for operational services.

Table 2: (Overview of) vehicle groups approved for testing during the period 2018–2025.*

Type of vehicle	Use case	Geographical location	Number of permits
Construction vehicle (road roller, dump truck)	Operational services	Florø, Gulen	10-15
Truck		Brønnøysund, Ørje	10-15
Snow removal machine		Gardermoen, Eggemoen	1-3
Delivery robot		Fornebu, Oslo, Kongsberg	5-10
Bus	Passenger transport	Stavanger	5-10
Minibus		Arendal, Gjesdal, Stavanger, Porsgrunn, Andebu, Kongsberg, Drammen, Lier, Fornebu, Lillestrøm, Gardermoen, Norefjell, Gjøvik, Førde, Trondheim, Tromsø, Bodø, Svalbard	50-60
Passenger car		Groruddalen, Ski	10-15

The following sections provide key information on testing and demonstration for each category of use.

Operational services

- **Confined environments:** Most testing activities within the operational services category have taken place in confined and controlled environments. Examples include construction vehicles in Western Norway, trucks used in mining operations in Brønnøysund, and snow-removal machines at airports.
- **Operations with and without a driver:** Operational service vehicles are generally able to operate without a driver only in confined environments, where traffic conditions are controlled and relatively simple. For example, nine Volvo trucks are currently operating without drivers as part of mining operations in Brønnøysund.
- **Urban use:** Delivery robots can be described as a form of *micromobility*.[8] Among the operational service vehicles listed in Table 2, this vehicle type is particularly well suited for use in urban environments. Small delivery robots are also used to a greater extent for freight transport than other vehicles within this use case, as they are designed to transport goods.

Passenger transport

- **Testing and demonstrations:** Several of the permits listed in Table 1 and the locations shown in Figure 3 relate to demonstrations rather than long-term testing activities. This includes, for example, “EasyMile” minibuses. One such short-term demonstration took place in Longyearbyen (Figure 3) in 2019, where a permit was granted for a period of

* For Table 2 and Figure 3, inaccuracies may occur.

three days. Such demonstrations are included in this report in order to illustrate the range of locations where self-driving vehicles have been operated and to demonstrate that different parts of Norway can serve as test environments for self-driving vehicles.

Table 2 shows that minibuses/shuttle buses, particularly those supplied by EasyMile and Navya, account for the largest number of permits issued during the period 2019–2021. This contributes to the noticeable increase in the number of permits during the same period, as illustrated in Figure 2.

- **Large number of applications:** Table 2 shows that both the total number of applications and the number of testing locations are higher within the passenger transport category than for the operational services category. As noted earlier, this is partly explained by the fact that many applications are submitted by the same operators. Since testing permits are typically granted for a maximum of one year, applicants often seek extensions. New applications may also involve changes to the route or testing area.
- **Urban areas and shared mobility:** Testing within the passenger transport category has largely taken place in urban areas. Examples include projects in Stavanger and Groruddalen in Oslo, involving one large bus used for public transport and five passenger cars used in a shared-mobility service. Passenger transport testing has thus primarily focused on public transport and shared mobility, which was also the case for the previously tested minibuses.

Experience from testing

The following section summarises the factual information presented in this report. Based on this information, the NPRA's experience from the application process, and knowledge of developments in the field of self-driving vehicles, a number of key observations can be made. These observations reflect the experience gained by the NPRA during the first eight years of testing of self-driving vehicles in Norway.

Summary of factual findings

The key facts presented in this report are summarised below.

Key figures

- A total of 122 decisions were issued during the period 2018–2025, of which 121 were permits for testing
- 20 unique projects were conducted during the period 2018–2025

Locations

- Testing and demonstrations have been carried out in a wide range of locations across Norway
- Eastern Norway, particularly Oslo and the surrounding areas, has been the most frequently used region for testing
- Testing has taken place in both confined and open environments

Activities

- The testing can be divided into two main categories: operational services and passenger transport.
- Passenger transport accounts for the highest number of applications and permits.
- Most applications are submitted by the same applicants and relate to the same vehicles. They primarily concern renewals of existing permissions, such as extensions of the testing period or changes to the testing area.
- Ongoing testing (as of May 2026) within the passenger transport category is taking place in Stavanger and Groruddalen in Oslo, with a particular focus on public transport and shared mobility.
- The operational services category has progressed furthest in testing without an onboard driver.

Key observations

The following four observations summarise the experience and insight gained from testing activities and highlight key trends and developments in the testing of self-driving vehicles in Norway from 2018 to 2025.

Observation 1

Testing activities in Norway covers a wide range of vehicle types and use cases, supported by strong local actors that increasingly collaborate through international networks.

The current regulatory framework for testing of self-driving vehicles enables testing of a broad range of vehicle types and categories of use, and the testing activity in Norway reflects this diversity. Testing activities in Norway are largely centred around a core group of established and experienced actors that have built expertise over time through long-term testing activities and the development of new projects. In many cases, these established actors act as the formal applicants to the Directorate of Public Roads. However, testing activities are rarely carried out by a single actor alone. Projects typically form part of a broader ecosystem in which different roles and functions are performed by multiple actors, including suppliers of vehicles, self-driving technology and related services. With this broader context, testing activities in Norway are characterised by strong local environments that collaborate extensively, including international

collaborations.

Observation 2

Testing activities have evolved from smaller, fragmented projects to fewer and more ambitious deployments

Testing in earlier years was characterised by numerous small-scale and fragmented projects that were also geographically dispersed. In several cases, testing began in relatively complex environments, particularly within passenger transport. However, limitations in the maturity of the technology and the vehicles' ability to handle different traffic situations led to testing activities gradually being adapted to simpler traffic environments. In general, simpler traffic environments may enable more targeted testing aimed at gradually changing the role of the driver.

In recent years, there has been a shift towards fewer, more concentrated and more ambitious projects, with a stronger focus on implementation. The focus of testing has increasingly moved beyond technology testing alone to encompass a broader perspective on the role of vehicles and services within the transport system.

Observation 3

The current maturity of the technology allows driverless operations mainly in confined and controlled environments

The Act on Testing of Self-Driving Vehicles allows the driver to be removed from the vehicle, corresponding to SAE automation level 4.[9] Such operations require the applicant to demonstrate that an adequate level of safety has been achieved. Today, driverless operations are primarily limited to confined and controlled environments with simple or no traffic. This applies mainly to vehicles within the operational services category. As of 31 December 2025, no passenger transport project in Norway had been granted permission to operate without an onboard driver.[i]

Observation 4

The current regulatory framework for testing provides considerable flexibility for testing across vehicle types and categories of use

Based on the applications submitted to the Directorate of Public Roads and dialogue with applicants, the experience is that the Act on Testing of Self-Driving Vehicles provides substantial flexibility for conducting testing across a wide range of operational contexts and for different purposes. The flexibility the regulatory framework provides can be summarised as follows:

[**] Following an application to the Directorate of Public Roads, VY Buss AS and Applied Autonomy were granted permission in April 2026 to move the driver from the conventional driving position as part of the testing of a self-driving bus in Stavanger.

- The regulatory framework allows testing throughout Norway, in both open and confined environments
- The regulatory framework allows testing of a wide range of vehicle types
- No upper limit is specified for the number of vehicles that may be included in a testing activity
- The regulatory framework allows testing at several levels of automation, including the possibility of operating vehicles without a driver in the conventional driver position

Conclusion

This report compiles and systematises the NPRA's information on testing of self-driving vehicles in Norway during the period 2018–2025. The current Act on Testing of Self-Driving Vehicles has provided considerable flexibility for testing activities, regarding the type and number of vehicles, testing locations and levels of automation. At the same time, practical deployment of self-driving vehicles in open traffic environments remains dependent on the maturity of the technology. The experience gained during this period provides a solid foundation for future processing of applications, follow-up of testing projects, and continued work on the regulatory framework for testing of self-driving vehicles in Norway.

References

[1] *The Act on Testing of Self-Driving Vehicles* (2018). Lov om utprøving av selvkjørende kjøretøy. LOV-2017-12-15-112.

[2] NPRA. Internal data sources: database of decisions and documents in the internal case management system. Internal documentation.

[3] *The Regulations on Testing of Self-Driving Motor Vehicles* (2018). Forskrift om utprøving av selvkjørende motorvogn. FOR-2017-12-19-2240. An unofficial English translation can be found at EFTA Surveillance Authority.

[4] NPRA. *Testing of self-driving vehicles*. Utprøving av selvkjørende kjøretøy.

[5] *The Road Traffic Act* (1967). Lov om vegtrafikk (vegtrafikkloven). LOV-1965-06-18-4.

[6] *The Act on Professional Transport by Motor Vehicle and Vessel (The Professional Transport Act)* (2002). Lov om yrkestransport med motorvogn og fartøy (yrkestransportlova). LOV-2002-06-21-45.

[7] *The Regulations relating to the Approval of Vehicles and their Trailers* (2022). Forskrift om godkjenning av bil og tilhenger til bil (bilforskriften). FOR-2022-06-28-1233.

[8] NPRA. (2024). *Definitions used in the Norwegian road standard specifications*. Definisjonsliste vegnormaler.

[9] SAE Levels of Driving Automation. SAE Levels of Driving Automation™ - SAE International

Statens vegvesen
Pb. 1010 Nordre Ål
2605 Lillehammer

Tlf: (+47) 22 07 30 00

firmapost@vegvesen.no

ISSN: 1893-1162

vegvesen.no

Tryggere, enklere og grønnere reisehverdag