Regulating automated driving in Switzerland

Submitted by the expert of Switzerland – Armin Jost

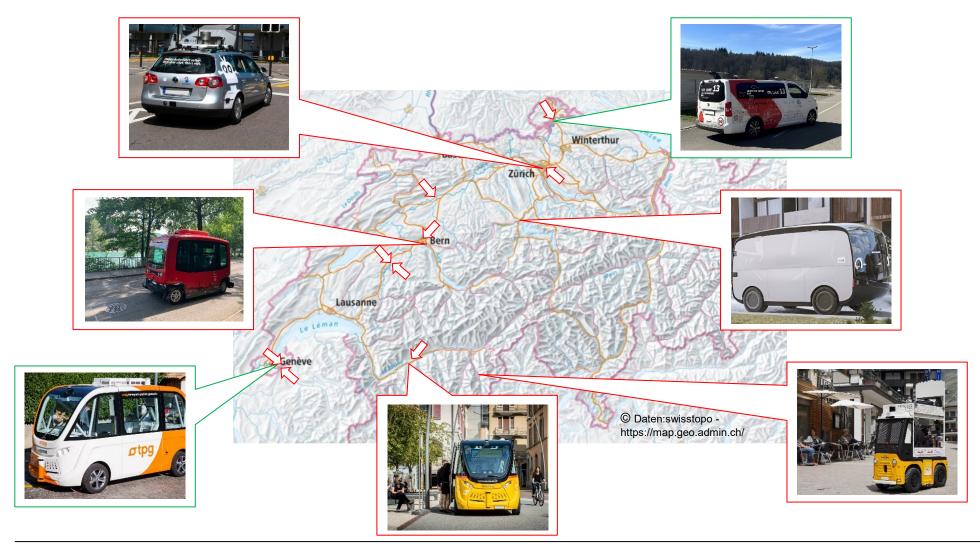


Current options for automated driving

- It is currently possible to obtain an authorization on exceptional basis for automated driving from the Swiss Federal Department of the Environment, Transport, Energy and Communications DETEC.
- The authorizations are issued for pilot trials with a safety driver who is present.
- Further information can be found on the FEDRO <u>Intelligent Mobility</u> website
 - → Fact sheet for conducting pilot tests in Switzerland (PDF download)



Authorized trials with automated vehicles since 2015



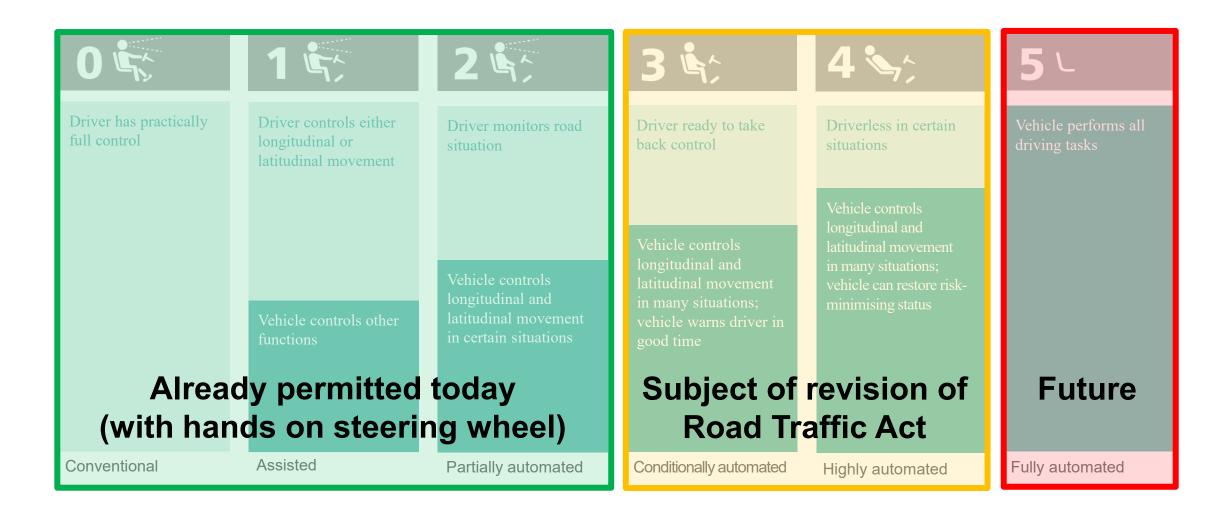


Options for automated driving from 2025

- On 17 March 2023, as part of a revision of the federal road traffic act, Parliament granted the Federal Council the power to regulate automated driving.
- The government is currently preparing regulations on automated driving.
- Public consultation is ongoing until February 2nd → see last slide for links.
- The regulations are expected to enter into force in early 2025.
- In addition, Parliament has granted the Federal Roads Office FEDRO the power to authorize pilot trials.

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What does the new regulation cover?



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Options for automated driving from 2025

The new regulations are intended to cover the following types of vehicles equipped with an Automated Driving System (ADS):

- 'Vehicle with takeover request' Vehicles that still require a driver but can cover certain sections of a route in automated mode (e.g. UN-R157).
- 'Driverless vehicles' Vehicles without a driver that can cover certain routes which have been authorized in advance.
- 'Vehicles with an automated parking system' (Dual Mode) Vehicles that can park without a driver in parking spaces which have been authorized in advance.

The vehicles can be used commercially and they can be intended for the transportation of persons or goods.



Driverless vehicles with type approval

- Driverless vehicles must be type-approved (in principle).
- The type approval procedure is prescribed by <u>Regulation (EU) 2018/858</u>.
- As part of the type approval process for a driverless vehicle, it must be demonstrated that the specific requirements of <u>Regulation (EU) 2019/2144</u> and <u>Implementing Regulation (EU) 2022/1426</u> are met. Including CSMS (UN-R155), SUMS (UN-R156) and ISMR
- The legal structure is open to supplementation by future UN regulations for ADS.
- The type approval must be obtained from a member state of the EU (or from a CP of the 1958 Agreement) and must explicitly cover Switzerland as well.
- It is not possible to obtain a type approval in Switzerland in the foreseeable future.



Driverless vehicles with exceptional authorisation (without type approval)

- The Federal Roads Office FEDRO has the power to authorize ADS of driverless vehicles which are not type-approved.
- Applicants must prove on a case-by-case basis that a certain safety level is guaranteed and a detailed ODD description is present. The safety level must be equal to the one guaranteed by a type-approval procedure.
- With exceptional authorization for the ADS, the vehicle may finally be registered under the normal procedure and may be used commercially.



Operational area for driverless vehicles

- The operational area for driverless vehicles must be authorized in advance of the registration procedure. It can include highways, urban and non-urban areas.
- Driverless vehicles may only operate on specified routes, but the authorization does not have to be limited to a few streets. It can include a large number of routes or even all routes in a certain area.
- Applicants must assess and confirm that all routes applied for are within the ADS boundaries and the authorization requirements are met.
- Restrictions on the requested operational area may result from the ODD or the operating concept of the vehicle keeper.



Assessment of the operational area for driverless vehicles

Authorization requirements:

- Vehicles must be able to drive themselves autonomously in the operational area.
- Infrastructure for the relevant route must meet the technical requirements for the operation of driverless vehicles.
- Operating driverless vehicles shall not disrupt traffic or cause congestion.
- Road safety shall not be compromised.
- All duties of a regular driver must still be fulfilled.



Assessment of the operational area for driverless vehicles

Authorization requirements:

- Suitably qualified operators supervise the vehicle. They have access to the required data and information on how the vehicle is operating at all times and have suitably equipped workstations.
- An operator may supervise several vehicles at the same time and does not have to be near the vehicle. However, his or her place of work must be in Switzerland.
- Communication between operators and passengers in the vehicle is guaranteed at all times via audio-visual interface.
- If necessary, the authority may specify additional requirements due to local conditions (e.g. relatively slow vehicles may only operate outside the rush hour).

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Insurance

The same insurance regulations apply to driverless vehicles as to normal vehicles:

- In order to register a vehicle, the vehicle keeper must take out a third party liability insurance that covers any damage caused by the vehicle.
- Parties suffering damage have the right to file a claim directly against the insurance company under the contractual insurance cover.
- In certain circumstances, the insurance company has a right of recourse against the party who caused the damage.



Driverless vehicles with pilot trial authorization

The Federal Roads Office FEDRO may authorize pilot trials.

- Authorization for a pilot trial is required if a normal registration procedure is not possible.
- In the course of a trial, it is permitted to not comply with the legal requirements. However, road safety must be guaranteed at all times.
- Measures must be taken to limit the risks associated with a trial.
- There are strict reporting obligations toward the authorities.
- A successfully conducted trial can be a relevant element for granting an exceptional authorization for a registration under the normal procedure.







Press release from 18 October 2023 on the public consultation with related documents:

- Der Bundesrat will automatisiertes Fahren ermöglichen
- Le Conseil fédéral souhaite autoriser la conduite automatisée
- Il Consiglio federale intende consentire la guida automatizzata



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