

Disabling and identification function

Takashi NAONO
MLIT, Japan

Purpose of this document

Japan is considering to propose requirements for disabling and identifying the system.

However, we admit there are some matters to discuss these ideas because these are brand new ideas.

Therefore, this document intends to explain our ideas and background.

Taking into account of reaction and opinions from members of FRAV, Japan will continue to discuss these matters.

[Background]

Although the ADS will be thoroughly assessed before market introduction, it is still expected that ADS has some defects.

In particular, it is expected that ADS can cause fatal accidents if the defect is kept unrecovered.

ADS tends to have an OTA (over-the-air, remote software update) functionality and this technology should also be used to respond quickly to avoid fatal accidents.

[Idea of requirement]

When ADS safety is not ensured, the ADS should not be activated.

The ADS should have a function which makes the system inactivate* remotely, if the system has OTA functionality, in case ADS safety is not ensured.

* disable to start functioning ADS, not to require sudden stop of ADS

Notwithstanding this requirement, the countermeasure is required to be carried out in accordance with the procedures established in each country as usual. In addition, how to use this disabling function should be decided by the authorities or the manufacturers (procedures of each country should be respected). In addition, re-activation of ADS can be permitted at the decision of the authority or manufacturers (procedures of each country should be respected).

It can be considered that the manufacturers should inform the purchaser of the vehicle that the ADS functionality might be made disabled for the safety reason.

[Background]

There is a need from various stakeholders to identify whether the vehicle has ADS or not when the vehicle is stopped.

(For example, the police may have to know because different regulations may be applied to vehicles with ADS and without ADS. The mechanic may have to change the maintenance method or what to check depending on whether it is ADS or not.)

Especially, it is difficult to confirm if OTA changes the vehicle from “without ADS” to “with ADS”.



[Idea of requirement]

The status of ADS should be readable for the User and authorized persons.

The ADS should have functionality to display ADS level of the vehicle and executable DDT function information.

ADS level (or the fact that the vehicle has ADS functionality) should be displayed in an enhanced visible way.