

Comment from Anonymous

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It is expected that automated vehicle can benefit people with disabilities having difficulties to mobility access, and many others who are not able to drive in traditional manually driven vehicles. It is highly appreciated that the Administration is taking effort to promote the deployment of these new technologies which may provide mobility service for those in need. If properly used, it is no doubt that the technology has the potential to improve our life in many aspect.

Considering the difference of operation style and driver involvement in these automated vehicle, the traditional safety requirements on manually driven vehicles may not match to the operation characteristics of automated vehicles and therefore, exempting some of the existing FMVSS standards as requested by GM and/or Ford seems to be quite reasonable.

On the other hand, one needs to take into consideration that new technologies may require different type of care not observed or required in traditional manually driven vehicles. Failure to cope for emerging new risk may block the social acceptance of the new technology and prevent its wide use. Therefore, it is also extremely important that new consideration are taken into account to mitigate the negative impact it may cause.

One of the concerns observed and already largely reported is the abused use of the automated functions in public open road. Some of those abused use may occur because of the false sense of safety that automation may bring to the driver.

Some drivers get confident on the capability of their partial automated vehicle as they experience repeated successful drive without facing apparent risk. And they may get motivated to challenge the function beyond the limitation. Fundamentally, people avoid high risk but have a certain level of risk acceptance based of their experience. While driving asleep or texting is prohibited, there are known incidents in which police cars had to chase cars with driver asleep for miles until they could finally bring these vehicle to a full stop on the shoulder. This type of incidents occurs due to their risk acceptance and they are difficult to be prevented. However, this type of system abuse need to be prevented in public road where other users gets exposed to increased risk.

The introduction of Level 4 vehicle in the public makes the situation worse. It is far difficult to judge whether a vehicle is under the control of system automation operated at Level 4 automation or if a driver is neglecting the duties to manually driver.

Under today's operation scheme, how can a police in patrol judge a "Phantom drive" to be within its Operation Design Domain or driver just abusing? It would be a huge frustration spending miles chasing for "Phantom Drives". What happens if they find out that most of abuser just declare that system were enabling to use in Level 4 operation. The missing tool to check the historical interaction between system and driver will leave this alarming situation completely unregulated.

Should patrol car chase all the miles to bring such vehicle to stop and end-up with a driver declaring the system was operational in Level 4 just until seconds before driver decided to make the stop? There is tool provided to traffic officer to verify the possible interaction that may have occurred miles before.

To avoid the abused use of automation, means to check the system decision and interaction between the driver seems to be indispensable. It is not just checking for a drowsy driver but all interaction with the driver status and position within the vehicle that matters.

A patrol officer may possibly stop a car after miles of risky chasing. But probably those are the lucky ones as they come to stop safely as they are escorted all the way to successfully stop in a safe shoulder. But what will be the motivation for the patrol officer to do all those jobs to find out a user declaring that their system was allowing SCU as presumably the system provided Level 4 automation. Provide with no tools to retrieve recorded data which could contain detailed interaction from recording system may prevent identifying system abuse.

When system detected a possible need to abort its Level 4 operation?

How the system decided and notified the user to consider possible request to resume manual driving?

Had driver neglected the notification and continued gaming?

Was the driver lazy to follow instruction or was the system late to inform driver of possible risk or failure that could require to end its Level 4 operation?

Was the driver in appropriate position to driver?

Were the driver/passenger allowed to be out of their seat of position?

How the system detected possible irregularities that could cause a delay by the user to resume manual driving?

In brief, it is time to consider adding new requirements to introduce confirmation tool into vehicle requirements so that automation use could be properly regulated to the safety and benefit of all road user.