

# The 3<sup>rd</sup> STAMP Workshop in Japan

## Title

STPA Trial Case for Automated Driving System ～From JASPAR Functional Safety WG Activity Result～

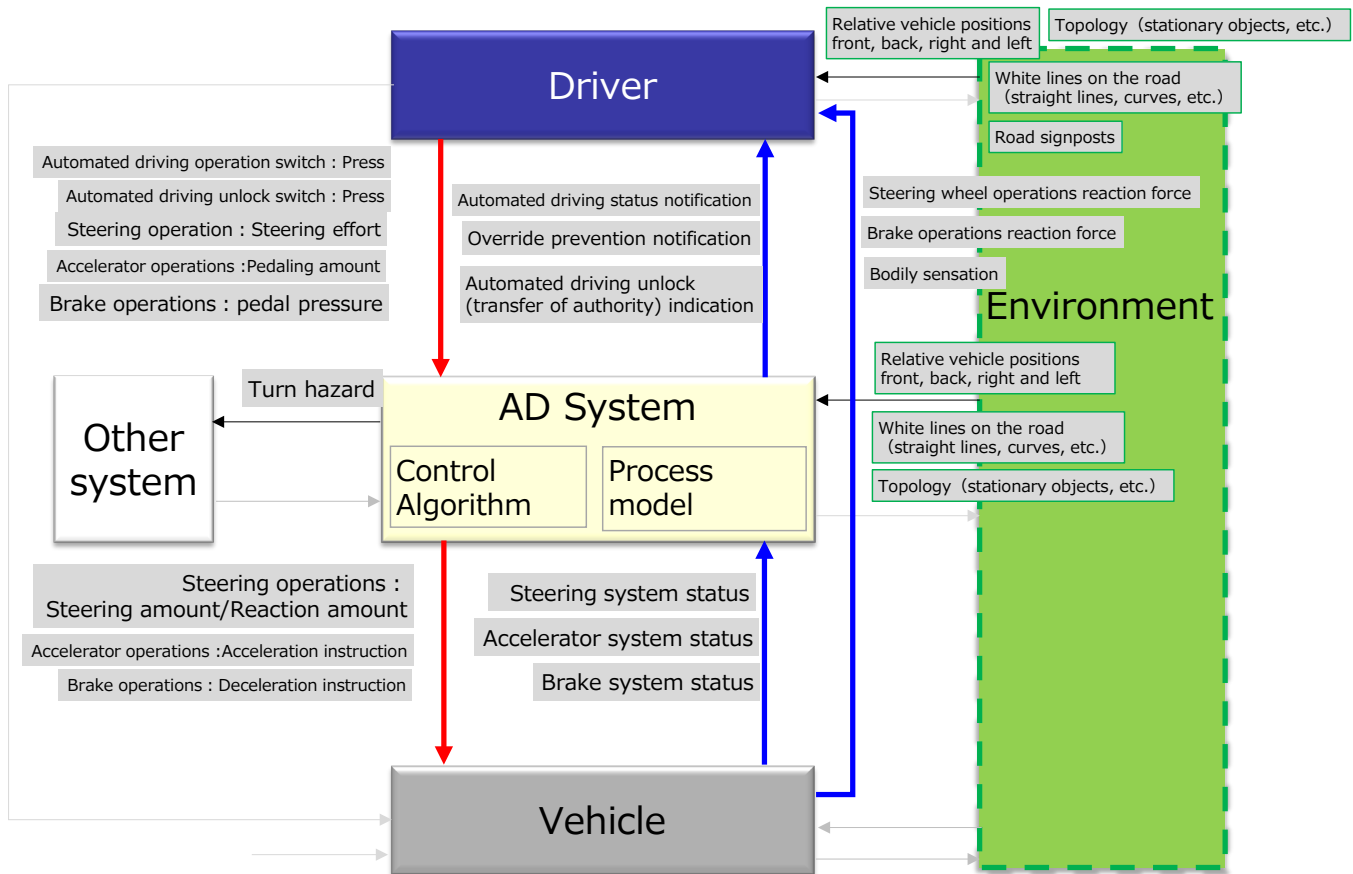
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## Abstract

In case of automotive automated driving, it becomes huge and complicated system that plural systems and human cooperate. It is thought that applying only conventional safety analysis method (FTA, FMEA) may derive risk of oversight and that applying STAMP/STPA additionally will be effective. Because STAMP/STPA performs hazard analysis and safety analysis by accident model that pays its attention to the interactions between each component in the system. JASPAR Functional Safety WG considered how to apply STAMP/STPA efficiently and effectively at development sites, and gathered it up as an application guide for development sites. When the application guide～automotive use case expansion edition～ was additionally made in 2017～2018 FY, STAMP/STPA which targeted automated driving system was tried, and the followings were convinced, (1) STPA being effective for consideration of the conflict between the system and the driver, (2) effectiveness of “the control structure template” and “visualization of the loss scenario” proposed by JASPAR, etc. They will be introduced in this presentation.

## Control Structure of Automated Driving System



## Keywords

- (1) STAMP/STPA
- (2) Automated Driving System
- (3) Control structure
- (4) Conflict between system and driver
- (5) Loss scenario