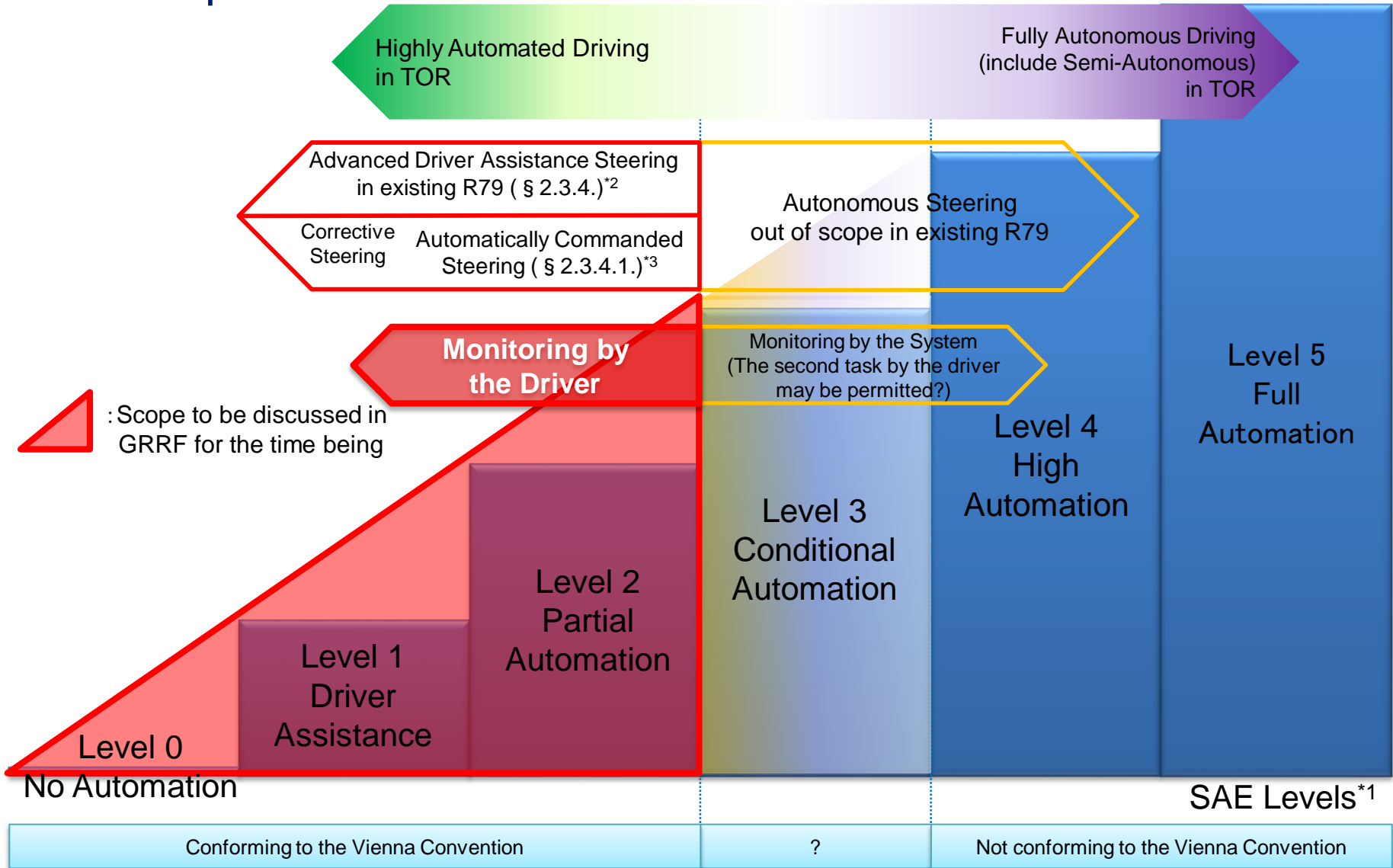


# Comparison between TOR of IG-ITS/AD and SAE Levels\*1



\*1: WP29 definition of Automated Driving Technology will be discussed by IG-AD from the point of view of the vehicle regulation.

\*2: existing R79 2.3.4. "Advanced Driver Assistance Steering System" means a system, additional to the main steering system, that provides assistance to the driver in steering the vehicle but in which the driver remains at all times in primary control of the vehicle.

\*3: existing R79 2.3.4.1. "Automatically commanded steering function" means the function within a complex electronic control system where actuation of the steering system can result from automatic evaluation of signals initiated on-board the vehicle, possibly in conjunction with passive infrastructure features, to generate continuous control action in order to assist the driver in following a particular path, in low speed manoeuvring or parking operations.

# SAE (Society of Automotive Engineers) International Levels of Driving Automation

Level	Name	Narrative definition	Execution of steering and acceleration/ deceleration	Monitoring of driving environment	Fallback performance of <i>dynamic driving task</i>	System capability ( <i>driving modes</i> )	BASt Level	NHTSA level
<b>Human driver monitors the driving environment</b>								
0	<b>No Automation</b>	the full-time performance by the <i>human driver</i> of all aspects of the <i>dynamic driving task</i> , even when enhanced by warning of intervention system	Human driver	Human driver	Human driver	n/a	Driver Only	0
1	<b>Driver Assistance</b>	the <i>driving mode</i> -specific execution by a driver assistance system of either steering or acceleration/ deceleration using information about the driving environment and with expectation that the <i>human driver</i> perform all remaining aspects of the <i>dynamic driving task</i>	Human driver and system	Human driver	Human driver	Some driving modes	Assisted	1
2	<b>Partial Automation</b>	the <i>driving mode</i> -specific execution by one or more driver assistance systems of both steering and acceleration/ deceleration using information about the driving environment and with the expectation that the <i>human driver</i> perform all remaining aspects of the <i>dynamic driving task</i>	<b>System</b>	Human driver	Human driver	Some driving modes	Partially automated	2
<b>Automated driving system( "system") monitors the driving environment</b>								
3	<b>Conditional Automation</b>	the <i>driving mode</i> -specific performance by an <i>automated driving system</i> of all aspects of the <i>dynamic driving task</i> with the expectation that the <i>human driver</i> will respond appropriately to a <i>request to intervene</i>	System	<b>System</b>	Human driver	Some driving modes	Highly automated	3
4	<b>High Automation</b>	the <i>driving mode</i> -specific performance by an <i>automated driving system</i> of all aspects of the <i>dynamic driving task</i> , even if a <i>human driver</i> does not respond appropriately to a <i>request to intervene</i>	System	System	<b>System</b>	Some driving modes	Fully automated	3/4
5	<b>Full Automation</b>	the full-time performance by an <i>automated driving system</i> of all aspects of the <i>dynamic driving task</i> under all roadway and environmental conditions that can be managed by a <i>human driver</i>	System	System	System	<b>All driving modes</b>	1	