## Data Elements/Format Under Consideration

Data element name	Definition	Recording interval/time <sup>1</sup> (relative to time zero)	Data sample rate (samples per second)	Minimum range	Accuracy <sup>2</sup>	Resolution
Normal acceleration (Part 563)	Normal acceleration means the component of the vector acceleration of a point in the vehicle	Part 563 (0 to 250 ms)	Part 563 (100)	Part 563 (-5 g to +5 g)	Part 563 (± 10%)	Part 563 (0.5 g)
	in the z-direction. The normal acceleration is positive in a downward direction and is zero when the accelerometer is at rest.	EC (-1.0 up to 5.0 sec) DE (-1.0 to 250ms)	EC (100)	EC (-10g to +10g)	EC (± 10%)	EC (0.5 g)
Safety belt status, rear passengers	Safety belt status means the feedback from the safety system that is used to determine that an occupant's safety belt (for a rear seat passenger) is fastened or unfastened.	-1.0 sec	N/A	N/A	N/A	On or Off (fastened or unfastened) per seating position
Horn	Operating status of the horn.	-5.0 to 0 second relative to time zero	2	N/A	N/A	On or Off
Turn Indicator status	"Turn indicator status" means a device mounted on a motor vehicle or trailer which, when operated by the driver, signals the latter's	-5.0 to 0 second relative to time zero	2	N/A	N/A	Neutral, Left, Right

<sup>&</sup>lt;sup>1</sup> Pre-crash data and crash data are asynchronous. The sample time accuracy requirement for pre-crash time is -0.1 to 1.0 sec (e.g., T = -1 would need to occur between -1.1 and 0 seconds.)

<sup>&</sup>lt;sup>2</sup> Accuracy requirement only applies within the range of the physical sensor. If measurements captured by a sensor exceed the design range of the sensor, the reported element shall indicate when the measurement first exceeded the design range of the sensor.

Data element name	Definition	Recording interval/time <sup>1</sup> (relative to time zero)	Data sample rate (samples per second)	Minimum range	Accuracy <sup>2</sup>	Resolution
	intention to change the direction in which the vehicle is proceeding.					
Hazard Indicator Status	Operating status of the hazard indicator.	-5.0 to 0 second relative to time zero	2	N/A	N/A	On or Off
Main beam	Operating status of the main headlamp beam.	-5.0 to 0 relative to time zero	2	N/A	N/A	On, Off, or Faulted
Dip beam	Operating status of the dip headlamp beam.	-5.0 to 0 relative to time zero	2	N/A	N/A	On, Off, or Faulted
Advanced adaptive front headlight Status	Operating status of the adaptive front headlamp system.	-5.0 to 0 relative to time zero	2	N/A	N/A	On, Off, or Faulted
Brake lights Status	Operating status of the brake lights.	-5.0 to 0 relative to time zero	2	N/A	N/A	On, Off, or Faulted
Warning Light/ Beacon Light	Operating status of the warning/beacon light					
Tyre Pressure	Tyre pressure, status indicated					

Data element name	Definition	Recording interval/time <sup>1</sup> (relative to time zero)	Data sample rate (samples per second)	Minimum range	Accuracy <sup>2</sup>	Resolution
Tyre Pressure Monitoring System (TPMS) Warning Lamp Status	"Tyre Pressure Monitoring System (TPMS)" means a system fitted on a vehicle, able to perform a function to evaluate the inflation pressure of the tyres or the variation of this inflation pressure over time and to transmit corresponding information to the user while the vehicle is running.	-1.0 second relative to time zero	N/A	N/A	N/A	On, Off
Parking Brake Status	Status of the parking brake.					
Brake Pedal Position	Indicator of brake pedal position within the range from not depressed to fully-depressed.	-5.0 to 0 relative to time zero	10	0 to 100 %	± 10 % of the full range	5
Brake Warning Indicator Status	The displayed status of the brake warning device defined in UNECE Regulation 13H	-1.0 second relative to time zero	N/A	N/A	N/A	On, Off
Brake System Internal Pressure	Indicator of applied brake (master cylinder side). Pressure of the master cylinder	-5.0 to 0 second relative to time zero	10	0 to 10,000 kPa	± 10 %	100 kPa
Braking Request	Application of the brake system by the driver or vehicle.	-5.0 to 0 second relative to time zero	10	N/A	N/A	Yes or No
Gear Position	The operative transmission gear.					
Gear Selection Status	The driver selected transmission gear (shift lever) position					

Data element name	Definition	Recording interval/time <sup>1</sup> (relative to time zero)	Data sample rate (samples per second)	Minimum range	Accuracy <sup>2</sup>	Resolution
Propulsion Source Torque	Torque value at the propulsion source output shaft.					
Ambient Temperature	The estimated exterior ambient air temperature as measured by the vehicle system.					
Front Wiper Status	Operating status of the front wiper system.					
Vehicle Identification Number (VIN)	The Vehicle Identification Number (VIN), assigned by the vehicle manufacturer.					
Roll over detection	Operating status of the roll over detection.	-5.0 to 0 sec.	2	N/A	N/A	On, Off, Faulted, Engaged
Yaw Angle	Angle of the vehicle about its Z-axis (relative to initial vehicle orientation) prior to an event.	-5 to 0 seconds relative to time zero	2	-1080 to +1080 dgrees	± 10% of the full range of the sensor	10
Yaw Rate	Change in (yaw) angle over time of the vehicle about its Z-axis prior to an event	-5 to 0 seconds relative to time zero	2	-75 to +75 degrees / second	± 10% of the full range of the sensor	0.1
Traction Control Status	Operating status of traction control system.	-5.0 to 0 second relative to time zero	2	N/A	N/A	Actively controlling, Faulted, Commanded

Data element name	Definition	Recording interval/time <sup>1</sup> (relative to time zero)	Data sample rate (samples per second)	Minimum range	Accuracy <sup>2</sup>	Resolution
						Off, or On but Not Controlling
Latitude (GPS)	Latitude of the vehicle at the beginning of an event. Satellite Position Information					
Longitude (GPS)	Longitude of the vehicle at the beginning of an event. Satellite Position Information					
AEBS status	Operating status of the Advanced Emergency Braking System (AEBS).	-5.0 to 0 second relative to time zero	2	N/A	N/A	Actively Warning, Actively Engaged, Faulted, Off, Not Active, or Driver Override
Emergency Steering Function status	"Emergency Steering Function" means a control function which can automatically detect a potential collision and automatically activate the vehicle steering system for a limited duration, to steer the vehicle with the purpose of avoiding or mitigating a collision, with an obstacle obstructing the path of the subject vehicle or when the	-5.0 to 0 second relative to time zero	2	N/A	N/A	Actively Controlling, Faulted, Commanded Off, On but Not Controlling, or Driver Override

Data element name	Definition	Recording interval/time <sup>1</sup> (relative to time zero)	Data sample rate (samples per second)	Minimum range	Accuracy <sup>2</sup>	Resolution
	obstruction of the subject vehicle's path is deemed imminent.					
Emergency Call System status	"Accident Emergency Call System" means a system that is activated either automatically via in-vehicle sensors or manually, which carries, by means of public mobile wireless communications networks, a set of crash-related data and establishes an emergency audio channel between the occupants of the vehicle and an answering point.	Event	N/A	Call triggered, call not triggered, faulted	N/A	Call triggered, call not triggered, faulted
Intelligent Speed Assistance (ISA) Status	Operating status of ISA	-5.0 to 0 second relative to time zero	2	N/A	N/A	Actively Controlling, Actively Warning, Driver Override, Faulted, Commanded Off, On but Not Controlling or Warning
Intelligent Speed	"Intelligent Speed Assistance (ISA")	-1.1 to 0	N/A	0-130 km/h	N/A	10 km/h
Assistance (ISA) road	means a system that determines the	second				
speed limit	applicable speed limit and aids the	relative to				
	driver in not exceeding it by	time zero				

Data element name	Definition	Recording interval/time <sup>1</sup> (relative to time zero)	Data sample rate (samples per second)	Minimum range	Accuracy <sup>2</sup>	Resolution
	providing feedback or limiting the vehicle speed.					
Traffic Sign Recognition	Operating status of the traffic sign recognition system					
Cruise Control System	"Cruise Control" is a system that, when manual activated, maintains a driver-selected constant speed without the use of the accelerator pedal, it does not exercise any control over the vehicles braking system.	-5.0 to 0 second relative to time zero	2	N/A	N/A	Actively Controlling, Faulted, Commanded Off, On but Not Controlling, or Driver Override
Adaptive Cruise Control Status (driving automation system level 1)	"Adaptive Cruise Control" (ACC) is a system that, when activated, exercises longitudinal control over the vehicle using sensors and automation, with the purpose of maintaining a set distance relative to other slower moving vehicles in front up to a set speed, set by the driver.	-5.0 to 0 second relative to time zero	2	N/A	N/A	Actively Controlling, Faulted, Commanded Off
Blind Spot Monitoring Status	Operating status of the side blind spot system.	-5.0 to 0 seconds relative to time zero	2	N/A	N/A	On, Off, Faulted, Warning left,

Data element name	Definition	Recording interval/time <sup>1</sup> (relative to time zero)	Data sample rate (samples per second)	Minimum range	Accuracy <sup>2</sup>	Resolution
						Warning right
Lane Departure Warning Status	"Lane Departure Warning System (LDWS)" means a system to warn the driver of an unintentional drift of the vehicle out of its travel lane.	-5s to 0 relative to time zero	2	N/A	N/A	On, Off, Faulted, Warning left/right, Intervention left/right
Lane Keep Assist Status	"Lane Keep Assist" means a function which assists the driver in keeping the vehicle within the chosen lane, by influencing the lateral movement of the vehicle	-5s to 0 relative to time zero	2	N/A	N/A	On, Off, Faulted, Warning left/right, Intervention left/right
Emergency Lane Keeping Status	'Emergency lane-keeping system' means a system that assists the driver in keeping a safe position of the vehicle with respect to the lane or road boundary, at least when a lane departure occurs or is about to occur and a collision might be imminent.	-5.0 to 0 second relative to time zero	2	N/A	N/A	On, Off, Faulted, Intervention left/right
Lane Centering Assist	Operating status of the lane centering system.	-5.0 to 0 second relative to time zero	2	N/A	N/A	On, Off, Engaged, Faulted, Driver Override

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Data element name	Definition	Recording interval/time <sup>1</sup> (relative to time zero)	Data sample rate (samples per second)	Minimum range	Accuracy <sup>2</sup>	Resolution
Forward Collision Warning Status	Operating status of the forward collision warning system.	-5.0 to 0 second relative to time zero	2	N/A	N/A	On, Off, Faulted, Warning
Emergency Stop Signal Status	Operating status of the Emergency Stop Signal system.	-5.0 to 0 second relative to time zero	2	N/A	N/A	On, Off, Faulted, Warning
Multi collision brake	Operating status of the multi collision brake system.	-5.0 to 0 second relative to time zero	2	N/A	N/A	On, Off, Faulted, Warning
Rear Cross-traffic Collision Warning Status	Operating status of the rear cross- traffic collision warning system.	-5.0 to 0 second relative to time zero	2	N/A	N/A	On, Off, Faulted, Warning
Reversing Detection System Status	Operating status of the Reversing Detection System.	-5.0 to 0 second relative to time zero	2	N/A	N/A	On, Off, Faulted, Warning
Advanced Driver Distraction Warning Status	Operating status of the Advanced Driver Distraction Warning system.	-5.0 to 0 second relative to time zero	2	N/A	N/A	On, Off, Faulted, Warning
Driver Drowsiness and Attention Warning Status	Operating status of the Driver Drowsiness and Attention Warning system. Driver model, driver monitoring	-5.0 to 0 second relative to time zero	2	N/A	N/A	On, Off, Faulted, Warning

Data element name	Definition	Recording interval/time <sup>1</sup> (relative to time zero)	Data sample rate (samples per second)	Minimum range	Accuracy <sup>2</sup>	Resolution
Alcohol Interlock Status	Operating status of the Alcohol Interlock system	-1.1 to 0 second relative to time zero	N/A	N/A	N/A	Off, Faulted, Pass or Fail
Parking Assist Status	Operating status of the parking assist system.					
Rear AEBS Status	Operating status of the rear automatic emergency braking system.	-5.0 to 0 second relative to time zero	2	N/A	N/A	Actively Warning, Actively Engaged, Faulted, Off, Not Active, or Driver Override
Partial Driving Operating Status (driving automation system level 2)	"Driving automation system level 2" means a system that performs the sustained and operational design domain-specific execution of both the lateral and longitudinal vehicle motion control subtasks of the dynamic driving task with the expectation that the driver completes the object and event detection response subtask and supervises the driving automation system.	-30.0 to 0 second relative to time zero	2	N/A	N/A	Off - Not Controlling, On - Actively Controlling, Faulted, Request to Intervene

Data element name	Definition	Recording interval/time <sup>1</sup> (relative to time zero)	Data sample rate (samples per second)	Minimum range	Accuracy <sup>2</sup>	Resolution
ADAS Software version	A means to identify the software version of any given ADAS system Software Versions [ECU software part number]					
Automated Driving System - Change in Status	Time stamp for a change in status of the automated driving system. Operating mode of the ADS.	-30.0 to 0 second relative to time zero	2	N/A	N/A	Off - Not Controlling, On - Actively Controlling, Faulted
Automated Driving System - Transition Demand	Time stamp for a transition demand of the automated driving system.	-30.0 to 0 second relative to time zero	2	N/A	N/A	Driver Not Availiable, Driver Override, System Failure, Planned Event, Unplanned Event
Automated Driving System - Minimal Risk Maneuver/ Failure Mitigation Strategy Activated	Time stamp for a minimal risk maneuver engagement the automated driving system / Vehicle mode if Dynamic Driving Task (DDT) fallback is not performed.	-30.0 to 0 second relative to time zero	2	N/A	N/A	Yes or No

Data element name	Definition	Recording interval/time <sup>1</sup> (relative to time zero)	Data sample rate (samples per second)	Minimum range	Accuracy <sup>2</sup>	Resolution
Automated Driving System – Override/ADS - Fallback-Ready User Intervention	Time stamp for a driver override of the automated driving system/Flag to indicate if Fallback-Ready User has intervened or not.	-30.0 to 0 second relative to time zero	2	N/A	N/A	Steering Control, Brake Control, Accelerator Control
Steering Input Requested	The vehicle -system-requested steering input.	-5.0 to 0 sec.	2	-250 deg CW to +250 deg CCW	±5%	1%
Pedestrian protection device deployment Status.	Status of each VRU protection device. Each vehicle VRU protection system device that is reported should be reported independently.	Event	N/A	N/A	N/A	Yes or No
Occupant Protection Pressure Sensor	This parameter reflects the feedback from a pressure sensor converted to mbars. In the case of multiple sensor data, this parameter is for sensors 1 to "n" number of sensors.					
Occupant Protection Pressure Rate of Change	This parameter is the pressure rate of change relative to rest.					

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Data element name	Definition	Recording interval/time <sup>1</sup> (relative to time zero)	Data sample rate (samples per second)	Minimum range	Accuracy <sup>2</sup>	Resolution
Pedestrian protection device deployment time.	The elapsed time from crash time zero to the deployment command for a VRU secondary safety protection system.	Event	N/A	0 to 250 ms	± 2 ms	1 ms
Pedestrian protection device Warning lamp.	The status of an indicator in the instrument panel that provides the information to the driver of the existence of an VRU secondary safety protection system malfunction, when lit.	-1.1 to 0 relative to time zero	N/A	N/A	N/A	On or Off
Pedestrian protection device System Warning lamp On Time.	The total accumulated amount of time the occupant/pedestrian protection system warning lamp indicator in the instrument panel has been illuminated.					
Number of cycles Pedestrian protection device System Warning lamp has been on.	The number of ignition/run cycles the pedestrian protection system warning lamp indicator in the instrument panel has been illuminated.					
Pedestrian Protection Acceleration	The vector acceleration of a point in the vehicle.					
Pedestrian Protection Pressure Sensor	This parameter reflects the feedback from a pressure sensor converted to mbars. In the case of multiple sensor data, this parameter is for sensors 1 to "n" number of sensors.	0 to +25 ms relative to time zero	250	-50 to +150 Mbars	± 10% within range of the physical sensor	1 Mbars

Data element name	Definition	Recording interval/time <sup>1</sup> (relative to time zero)	Data sample rate (samples per second)	Minimum range	Accuracy <sup>2</sup>	Resolution
Pedestrian Protection Pressure Rate of Change	This parameter is the pressure rate of change relative to rest.	0 to +25 ms relative to time zero	250	0 to 100 % ΔΡ/Ρο	± 10% within range of the physical sensor	1
Occupant protection device Warning lamp.	The status of an indicator in the instrument panel that provides the information to the driver of the existence of an occupant protection system malfunction, when lit.	-1.1 to 0 relative to time zero	N/A	N/A	N/A	On or Off
Number of Cycles Occupant Protection System Warning Lamp On Time	The total accumulated amount of time the occupant protection system warning lamp indicator in the instrument panel has been illuminated.					
Pedestrian and cyclist collision warning system.	Operating status of the pedestrian and cyclist collision warning system.					
Pre-Safe Systems		-1.1 to 0 second relative to time zero	N/A	N/A	N/A	Engaged, Non- engaged, Faulted
Accident Year	Accident Date - Year Trigger Source (Sensor/Control unit/Manual), Date, Time					
Accident Month	Accident Date - Month					

Data element name	Definition	Recording interval/time <sup>1</sup> (relative to time zero)	Data sample rate (samples per second)	Minimum range	Accuracy <sup>2</sup>	Resolution
	Trigger Source (Sensor/Control unit/Manual), Date, Time					
Accident Day	Accident Date - Day Trigger Source (Sensor/Control unit/Manual), Date, Time					
Accident Hour	Accident Time - Hour Trigger Source (Sensor/Control unit/Manual), Date, Time					
Accident Minute	Accident Time - Minute Trigger Source (Sensor/Control unit/Manual), Date, Time					
Accident Second	Accident Time - Second Trigger Source (Sensor/Control unit/Manual), Date, Time					
Download Year	Accident Date - Year Download Date Time					
Download Month	Accident Date - Month Download Date Time					
Download Day	Accident Date - Day Download Date Time					
Download Hour	Accident Time - Hour Download Date Time					
Download Minute	Accident Time - Minute					
Download Second	Accident Time - Second Download Date Time					
Highly accurate position Information						

Data element name	Definition	Recording interval/time <sup>1</sup> (relative to time zero)	Data sample rate (samples per second)	Minimum range	Accuracy <sup>2</sup>	Resolution
Images Outside	Images of the environment outside of the vehicle					
Surrounding Objects	Identification, classification of surrounding objects.					
Other ADAS		-5s to 0 relative to time zero	2	N/A	N/A	On, Off, Actively Warning, Actively Engaged, Faulted, Driver Override
Domain / street type	Identification, classification of road type					
Driving Profile Status	Driving profile status					
V2X warnings type	Classification of V2X warning.	-5.0 to 0 second relative to time zero	2	N/A	N/A	[warning type]
V2X warnings time	Time of V2X warning	Event	N/A	0 to 250 ms	+/-2 ms	1 ms
Door lock	Status of the door locks					
List of Error codes of active and passive safety systems	Error codes.					
Connected functions	Operating status of the connectivity systems.					
Cyber attack	Identification of a cyber attack.					

Data element name	Definition	Recording interval/time <sup>1</sup> (relative to time zero)	Data sample rate (samples per second)	Minimum range	Accuracy <sup>2</sup>	Resolution
Trigger type	Type of trigger to start EDR recording.	Event	N/A	N/A	N/A	(list to be decided)
State of battery charge						
State of battery health						
State of battery function						
Brake override system	Operating status of the brake override system	-5.0 to 0 sec.	2	On or Off	N/A	On or Off
Clipping flag						
ECU Hardware number	Part number(s) of the ECU(s).					
ECU(s) Software Number(s)	Software part number(s) of the ECU(s).					
ECU(s) Serial Number(s)	Serial number of the ECU(s).					
ECU(s) Power Applied	Value of the voltage applied to (present at) the ECU.					
ECU(s) Life Timer at event	ECU(s) cumulative power on time.					
ECU(s) Life Timer at imaging	ECU(s) cumulative power on time.					

Data element name	Definition	Recording interval/time <sup>1</sup> (relative to time zero)	Data sample rate (samples per second)	Minimum range	Accuracy <sup>2</sup>	Resolution
Peripheral Acceleration	The acceleration of a point in the vehicle. The SAE J211-1 sign convention should be used to define orientation of the accelerometer					
Electronic Stop Start	Operating status of the electronic stop start system.					
Event Type	Non-deployment indicates that the algorithm wakeup or threshold conditions were achieved but no device was commanded while Deployment indicates a deployment threshold has been satisfied.					
Ignition Button Counter per key cycle	Number of times the ignition button has been depressed per key cycle.					
Powertrain Control Module Malfunction Indicator Status (PCM MIL Status)	Status of PCM MIL lamp indicating that fault code(s) are either active or stored in the powertrain control module.					
Manifold Absolute Pressure (MAP)	Mean gas absolute static pressure in the engine induction manifold.					
Mass Airflow	Measurement of air flow entering the throttle body.					

Data element name	Definition	Recording interval/time <sup>1</sup> (relative to time zero)	Data sample rate (samples per second)	Minimum range	Accuracy <sup>2</sup>	Resolution
Minutes in Operation at Event	Number of total minutes when the ignition has been in the ON/RUN mode for the current ignition cycle					
Sensor Design Range Exceeded, XX	Indicates the point in time at which a sensor first reaches the maximum value of the specified range of that sensor.					
Pre-event Synchronization Timer	Time from last pre-crash data sample to time zero.					
Vehicle Mileage	Odometer reading of the vehicle at the beginning of the event.					
Rollover Restraint System Disabled Indicator Status	The displayed suppression status of the rollover restraint system.					
EDR retrieval tool software status	The software version of the EDR retrieval tool.					
Soft object collisions						
ADS Emergency Maneuver	Time points of activation and deactivation	-30.0 to 0 second relative to time zero	2	N/A	N/A	Yes or No
Safety belt status mid-position front	Safety belt status means the feedback from the safety system that is used to determine that an	-1.0 sec	N/A	N/A	N/A	On and Off

Data element name	Definition	Recording interval/time <sup>1</sup> (relative to time zero)	Data sample rate (samples per second)	Minimum range	Accuracy <sup>2</sup>	Resolution
	occupant's safety belt (for mid position front) is fastened or unfastened.					
Far side impact airbag	"Far-side impact airbag" means the deployment time of an airbag between driver and passenger, relative to TO.	Event	N/A	0 to 250 ms	+/-2 ms	1 ms
Belt force limiter	Activation for each seat (inc rear)					
Elevation Profile	To understand whether the road elevation profile might have had an influence					
High Voltage	If the vehicle gains its primary energy from a high voltage battery – this voltage shall be stored					
Suspension settings	Suspension settings					
Rotational velocity of each wheel	Rotational velocity of each wheel					
Steering output of each wheel	Steering output of each wheel for cases of steering by wire					

Data element name	Definition	Recording interval/time <sup>1</sup> (relative to time zero)	Data sample rate (samples per second)	Minimum range	Accuracy <sup>2</sup>	Resolution
Key on seconds						
Vehicle pitch angle	Angle of the vehicle about its Y-axis (relative to initial vehicle orientation) prior to and during an event					
Position of the vehicle on the road	[to be defined]					

## **Definitions Under Consideration**

- 2.x "Adaptive Cruise Control" (ACC) is a system that, when activated, exercises longitudinal control over the vehicle using sensors and automation, with the purpose of maintaining a set distance relative to other slower moving vehicles in front up to a set speed, set by the driver.
- 2.x "Cruise Control" is a system that, when manual activated, maintains a driver-selected constant speed without the use of the accelerator pedal, it does not exercise any control over the vehicles braking system.
- 2.x "Intelligent Speed Assistance (ISA") means a system that determines the applicable speed limit and aids the driver in not exceeding it by providing feedback or limiting the vehicle speed.
- 2.x "Power On Time" means the cumulative time that the vehicle has been operating since it was last switched on.
- 2.x Safety belt status means the feedback from the safety system that is used to determine that an occupant's safety belt (for a rear seat passenger) is fastened or unfastened.
- 2.x "Audible warning device" means a device consisting of one or several sound emission outlets that are excited simultaneously, emitting an acoustic signal which is intended to give audible warning of the presence of a vehicle in a dangerous road traffic situation and which is intentionally operated by a driver;
- 2.x "Direction indicator" means a device mounted on a motor vehicle or trailer which, when operated by the driver, signals the latter's intention to change the direction in which the vehicle is proceeding.
- 2.x "Hazard warning signal" means the simultaneous operation of all of a vehicle's direction-indicator lamps to show that the vehicle temporarily constitutes a special danger to other road users.
- 2.x "Driving-beam (main-beam) headlamp" means the lamp used to illuminate the road over a long distance ahead of the vehicle.
- 2.x "Passing-beam (dipped-beam) headlamp" means the lamp used to illuminate the road ahead of the vehicle without causing undue dazzle or discomfort to oncoming drivers and other road-users.
- 2.x "Adaptive front lighting system" (or "system") means a lighting device, providing beams with differing characteristics for automatic adaptation to varying conditions of use of the dipped-beam (passing-beam) and, if it applies, the main-beam (driving-beam) with a minimum functional content, such systems consist of the "system control", one or more "supply and operating device(s)", if any, and the "installation units" of the right and of the left side of the vehicle.
- 2.x "Stop lamp" means a lamp used to indicate to other road users to the rear of the vehicle that the longitudinal movement of the vehicle is intentionally retarded.
- 2.x "Tyre Pressure" means the inflation pressure of the tyres while the vehicle is in transit.
- 2.x "Tyre Pressure Monitoring System (TPMS)" means a system fitted on a vehicle, able to perform a function to evaluate the inflation pressure of the tyres or the variation of this inflation pressure over time and to transmit corresponding information to the user while the vehicle is running.

- 2.x Brake Pedal Position means an indication of the brake pedal position within the range from not depressed to fully-depressed.
- 2.x Brake warning indicator status means the displayed status of the brake warning system.
- 2.x "Roll rate" means the change in angle over time of the vehicle about its X-axis prior to and during an event.
- 2.x "Roll over detection" means a function that monitors the vehicle's roll around the X-axis and issues a signal when a rollover situation is detected.
- 2.x "Yaw angle" means the angle of the vehicle about its Z-axis (relative to initial vehicle orientation) prior to an event.
- 2.x "Yaw rate" means the change in angle of the vehicle about its Z-axis prior to an event.
- 2.x A "traction control device" means a system that selectively retards a vehicle's wheel speed to mitigate a loss of traction.
- 2.x "Advanced Emergency Braking System (AEBS)" means a system which can automatically detect an imminent forward collision and activate the vehicle braking system to decelerate the vehicle with the purpose of avoiding or mitigating a collision.
- 2.x "Steering Assist Function" means a control function which can automatically detect a potential collision and automatically activate the vehicle steering system for a limited duration, to steer the vehicle with the purpose of avoiding or mitigating a collision, with an obstacle obstructing the path of the subject vehicle or when the obstruction of the subject vehicle's path is deemed imminent.
- 2.x "Emergency Call System" means a system that is activated either automatically via in-vehicle sensors or manually, which carries, by means of public mobile wireless communications networks, a set of crash-related data and establishes an emergency audio channel between the occupants of the vehicle and an answering point.
- 2.x "ISA speed limit" means the means the applicable speed limit as obtained by the speed limit determination system of the ISA system.
- 2.x "Blind Spot Monitoring System" means a system to aid the driver to perform safe lane changes by informing of the presence of adjacent vehicles.
- 2.x "Lane Departure Warning System (LDWS)" means a system to warn the driver of an unintentional drift of the vehicle out of its travel lane.
- 2.x "Lane Keep Assist" means a function which assists the driver in keeping the vehicle within the chosen lane, by influencing the lateral movement of the vehicle.
- 2.x 'Emergency lane-keeping system' means a system that assists the driver in keeping a safe position of the vehicle with respect to the lane or road boundary, at least when a lane departure occurs or is about to occur and a collision might be imminent.
- 2.x "Lane Centering Assist" means a function which is initiated/activated by the driver and which keeps the vehicle within its lane by influencing the lateral movement of the vehicle for extended periods without further driver command/confirmation.
- 2.x "Forward Collision Warning" means a function, which may be part of an AEBS system, and that warns the driver when a potential forward collision is detected.

- 2.x 'Emergency stop signal' means a light-signalling function to indicate to other road users to the rear of the vehicle that a high retardation force is being applied to the vehicle relative to the prevailing road conditions.
- 2.x A "Multi-collision brake" is a device that reduces the speed of the vehicle following a collision to mitigate the severity of any subsequent collisions.
- 2.x "Rear Cross-traffic Collision Warning" means a system to make the driver aware of vehicles approaching to cross behind the vehicle when reversing.
- 2.x 'Advanced driver distraction warning' means a system that helps the driver to pay attention to the traffic situation and that warns the driver when he or she is distracted.
- 2.x 'Driver drowsiness and attention warning' means a system that assesses the driver's alertness through vehicle systems analysis and warns the driver if needed.
- 2.x "Alcohol Interlock" means a device that immobilises the vehicle unless a breath sample of the driver indicates an alcohol level legal for driving.
- 2.x "Rear Advanced Emergency Braking System (AEBS)" means a system which can automatically detect an imminent rearward collision and activate the vehicle braking system to decelerate the vehicle with the purpose of avoiding or mitigating a collision.
- 2.x "Driving automation system level 2" means a system that performs the sustained and operational design domain-specific execution of both the lateral and longitudinal vehicle motion control subtasks of the dynamic driving task with the expectation that the driver completes the object and event detection response subtask and supervises the driving automation system.
- 2.x "Automated Driving System" means a system that performs the sustained and operational design domain-specific execution of the entire dynamic driving task with or without a fallback-ready user.
- 2.x "ADS Transition demand" is a logical and intuitive procedure to transfer the Dynamic Driving Task (DDT) from the system (automated control) to the human driver (manual control). This request is given from the system to the human driver.
- 2.x "ADS Minimum Risk Manoeuvre" means a procedure aimed at minimising risks in traffic, which is automatically performed by the system after a transition demand without driver response or in the case of a severe ADS or vehicle failure.
- 2.x "ADS override" by the driver means a situation when the driver provides an input to a control which has priority over the longitudinal or lateral control of the system, while the system is still active.
- 2.x "ADS steering input requested" means the ADS-requested steering input.
- 2.x "Torque applied at the steering wheel" means the torque between the steering wheel and the steering column.
- 2.x Deployment status of the VRU secondary safety protection system.
- 2.x "Occupant/Pedestrian protection device deployment time" means the elapsed time from crash time zero to the deployment command for a VRU secondary safety protection system.

- 2.x Pedestrian protection device Warning lamp means the status of an indicator in the instrument panel that provides the information to the driver of the existence of an VRU secondary safety protection system malfunction, when lit.
- 2.x Occupant protection device Warning lamp means the status of an indicator in the instrument panel that provides the information to the driver of the existence of an occupant protection system malfunction, when lit.
- 2.x A "Pre-Safe System" is a function that makes reversible adjustments to the vehicle or occupant seating position to prepare for an imminent collision.
- 2.x "Other ADAS" means any additional Advanced Driver Assistance System (ADAS) that is not specifically defined on the list of 'EDR Data Elements'.
- 2.x "V2X warnings type" means the type of a warning received by an in-vehicle system over the air from another vehicle or an infrastructure unit.
- 2.x "V2X warnings time" means the time relative to T0 when the V2X warning was received by the in-vehicle system.
- 2.x "Trigger type" identifies which trigger threshold was exceeded to trigger the recording of data.
- 2.x A "brake override system" means a system that prevents the unintended application of the accelerator and brake simultaneously.
- 2.x "Sensor Design Range Exceeded" means the time relative to T0 when a sensor first reaches the maximum value of the specified range of that sensor.
- 2.x "EDR retrieval tool software version" means the software part number for the data retrieval tool at the time of data retrieval.
- 2.x "ADS Emergency Manoeuvre" is a manoeuvre performed by the system in case of an event in which the vehicle is at imminent collision risk and has the purpose of avoiding or mitigating a collision.
- 2.x Safety belt status means the feedback from the safety system that is used to determine that an occupant's safety belt (for mid position front) is fastened or unfastened.
- 2.x "Far-side impact airbag" means the deployment time of an airbag between driver and passenger, relative to T0.
- 2.x "Vehicle Pitch Angle" means the angle of the vehicle about its Y-axis (relative to initial vehicle orientation) prior to and during an event.