Proposal for amendments to FRAV interim submission

General comment:
It is noted that the main objective of this document is to provide guidance for regulatory requirements. In the development of this text, several valuable methods to verify or apply those requirements were outlined. However, we believe that this document should be focused on requirements themselves, especially considering the content and timelines in the framework document. We believe these methods should be kept in a separate document for use in subsequent stages of development.

Move following sections to new document: 5.3, 5.4, 5.5, 5.6, 5.7, 5.8.2, 5.8.14 (after see Annex…), 5.9.2, Appendix A, Annex A

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Current text:
1.4.9 Although the DDT comprises several subtasks (sensing, cognitive processing, action), the DDT itself refers to performing the whole driving task within its Operational Design Domain (ODD). Within the ODD, the ADS or the driver performs the DDT. A system that cannot perform the entire DDT can only assist the driver's performance of the DDT.
Proposed text:
Although the DDT comprises several subtasks (sensing, cognitive processing, action), the DDT itself refers to performing the whole driving task ~~within its Operational Design Domain (ODD). Within the ODD, the ADS or the driver performs the DDT. A system that cannot perform the entire DDT can only assist the driver's performance of the DDT.~~
Justification:
There should be no ODD when talking about driving in general (human or ADS). References to the ODD come into play when talking about Automated driving in later sections.

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Current text:
1.8.1 An ADS feature refers to an application of ADS capabilities designed for use within a defined ODD. In the case of an ADS designed to operate within a single ODD, the ADS and the ADS feature are synonymous.

Proposed text:
An ADS feature refers to an application of ~~ADS capabilities~~ ADS functions designed for use within a defined ODD. In the case of an ADS designed to operate within a single ODD, the ADS and the ADS feature are synonymous.
Justification:
As we defined features and functions. The feature would be an application of the functions.

Proposed text:

2.X WP29 adopted the Framework document on automated/autonomous vehicles (WP.29/2019/34/Rev.2) herein referred to as the Framework document. The Framework document instructed FRAV to develop 'Common functional requirements on existing national/regional guidelines and other relevant reference documents (1958 and 1998

Agreements)'. Specifically relating to the principles of System safety, Failsafe Response, HIM/Operator information and OEDR (Functional Requirements).

Removal/modification of 5.8.1, 5.9.1, 5.10.1,

Justification:

We believe the framework document is better introduced/referenced in the purpose section of the document

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Current text:
5.8.5 The ADS shall recognize the conditions and boundaries of the ODD of its feature(s) pursuant to the manufacturer's declaration under paragraph 4.9

Proposed text:
5.8.5 The ADS shall recognize the conditions and boundaries of the ODD of its feature(s) ~~pursuant to the manufacturer's declaration under paragraph 4.9~~

Justification:
Paragraph 4.9 does not relate to ODD boundaries. The ADS should be able to recognize the conditions and boundaries of the ODD of its features in general.
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Current text:
5.8.15 ADS shall comply with the traffic laws in nominal conditions, except when in specific circumstances or when necessary to enhance the safety of the vehicle's occupants and/or other road users.
Proposed text:
"The ADS shall comply with local traffic rules and regulations (insert footnote)~~in nominal conditions, except when in specific circumstances or when necessary to enhance the safety of the vehicle's occupants and/or other road users.~~
Footnote text:

There may be specific circumstances where deviation is necessary to enhance the safety of the vehicle's occupants and/or other road users. The manufacturer should consult local traffic authorities on how to address these situations.
Justification:
This revision makes it clear that manufacturers will not unilaterally decide the types of situations where local traffic rules may be deviated from, and that there is an active discussion on these types of situations with the relevant local traffic authorities.
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Current text:
5.9.4.2.2 The user should be permitted to override the ADS to assume full control over the vehicle.
Proposed text:
A user who was initially a driver or who is otherwise authorized should be permitted to override the ADS to assume full control over the vehicle provided the driver is deemed to be available.

Justification:
Needs further discussion/review due to jurisdictional boundaries. Some jurisdictions may not want to permit in cases where there is no competent/licensed driver in the vehicle. In L3 vehicles, this could be the requirement as a driver would need to activate the system and be a fallback ready user. Driver availability could use parameters established by UN R157. WP1 should be engaged in this discussion.

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Current text:

5.10.2 [The ADS shall detect faults, malfunctions, and abnormalities that compromise its capability to perform the entire DDT within the ODD of its feature(s) per the manufacturer's documentation under Section 4.]

Proposed text:

5.10.2 [The ADS shall detect faults, malfunctions, and abnormalities that compromise its capability to perform the entire DDT within the ODD of its feature(s) ~~per the manufacturer's documentation under Section 4.~~]

Justification:
The removed text could allude to a method of verification (which should be addressed by VMAD NATM methods) or could introduce limitations as to how the system detects these issues through the documentation. In either case, we believe it should be removed.

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Current text:
Annex A 5.1 This approach would allow the test engineer to map each scenario to a corresponding rule (or set of rules). These rules can then serve as the pass criteria during the scenario-based testing approach. This approach can thus enable engineers and authorities to show/assess compliance to traffic rules by making the rules of the road verifiable
Proposed text:
Review
Justification:
(Although we propose to remove this annex) - In self-certification there is no test engineer, the company provides documentation to prove their compliance.