# China's comments on the structure, work program and meeting arrangement of GRVA

A. To optimize the current structure of GRVA

1. TFs and IWGs under GRVA are generally originated from the former GRRF and ITS/AD IWG, which have some gaps and overlaps in between. GRVA is advised to elucidate relationships among IWGs, TFs and SGs, clarify scopes of every sub-structures, and optimize its current structure to improve operational efficiency.

2. At request of GRVA, Contracting Parties and other organizations have been submitting comments on the Program of Work. It is anticipated that a large number of topics or tasks will be within the scope of GRVA. To ensure the equal and harmonious participations of CPs, GRVA is advised to consider the existing and newly proposed items as a whole and readjust the structures, responsibilities and assignments of IWGs, TFs and SGs.

Current structure:
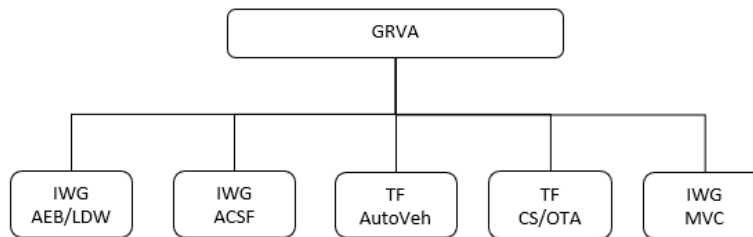
B. To clarify classifications and priorities of Program of work

1. In order to construct a proper structure of GRVA, it is advised to firstly classify all existing and newly proposed items and topics into different categories. A good classification should include all the existing topics and have sufficient compatibility for new ones in the future.

   A recommended classification is shown below:

   I: Perception and warning
   - The perception, decision making and warning functions can be evaluated together by warning performance.

   II: Longitude and latitude control
   - The perception, decision making, warning and control functions can be evaluated together by control performance.

   III: HMI
   - Human Machine Interface.

   IV: Simulation
   - The result of simulation should be also adopted by type approval, and should be independent from physical test such as proving ground test and real word driving test.

   V: Proving-ground certification and audit

- Proving-ground certification and real-world drive certification should be considered simultaneously and paralleled.

VI: Real world drive certification and audit
- Proving-ground certification and real-world drive certification should be considered simultaneously and paralleled.

VII: CS/OTA
- It is an independent topic.

VIII: data storage &communication
- Deal with the data topic, including its storage and communication.

2. The priority of these items and topics should be determined comprehensively based on several factors, such as urgency degrees, application status, management requirements and potential influences, etc.

Items directly related to safety should come as first priority, as well as regulations considered as the basic technology and system of AD.

Num	Title	Classification	Priority	Comments
1	Tyre pressure monitoring system	I	-	Neither ADAS nor AD
2	Axle load monitoring system	I	-	Neither ADAS nor AD
3	Vehicle dangerous condition alerting system	I	-	Too general
4	Night Vision	I	-	-
5	Rear crossing alert	I	High Priority	Relevant to safety
6	Door-open blind spot detection	I	High Priority	Relevant to safety
7	Blind spot monitoring	I	High Priority	Relevant to safety
8	Around view monitor	I	-	-
9	Traffic signal and road sign recognition	I	-	-
10	Recognition of alcohol vapors in driver's exhaled air	I	-	-
11	Current ACSF tasks	II	Existing item	-
12	Adaptive Cruise-Control	II	Existing item	-
13	Automatic Emergency Braking	II	Existing item	-
14	Vehicle parking assitance system	II	-	-
15	Lane keeping assistance system	II	High Priority	Relevant to safety
16	Transition demand	III	High Priority	Basic for AD
17	Driver availability recognition	III	-	-
18	Information to the driver	III	-	-

Num	Title	Classification	Priority	Comments
19	Simulation/Virtual automated assessment	IV	High Priority	Basic for AD
20	Frame work regulation on automated/autonomous vhicles	V	Existing item	-
21	Track/Real world driving evaluation	VI	Existing item	-
22	Cyber security	VII	Existing item	-
23	Software (inc. OTA) update	VII	Existing item	-
24	V2X(Inc. V2V, V2I, V2P)	VIII	-	Too general
25	MVC	VIII	Existing item	Within the scope of GRVA?
26	Platooning	VIII	-	-
27	Vehicle automatic identification	VIII	-	-
28	Data Storage System for AD	VIII	High Priority	Basic for AD
29	High definition map	VIII	High Priority	Basic for AD
30	Intersection traffic perception	VIII	-	-
31	Vulnerable road user safety message	VIII	-	
32	Autonomous vehicles operating in specific conditions (out of the scope R.E.3 and S.R.1)	other	-	-

Note on Priority level:
E->Existing items
H->High Priority

C. To improve meeting arrangement of sub-branches

The experiences from the operation of former TFs as well as its SGs have shown that there are several issues to be addressed by GRVA in the future, including high meeting frequency and short meeting duration. These factors increase more burden and obstacles on some CPs. We hope GRVA can take full consideration of meeting frequency and meeting venue in the future: moderately extend the meeting duration, reduce the frequency of meetings and reasonably select the meeting venue, to encourage more interest parties to join the harmonization work.