Japanese recognition for scenario

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MLIT

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- There are huge amount of traffic situations in real world.
- Including Normal situation, Accident situation, Near Miss situation and ####.
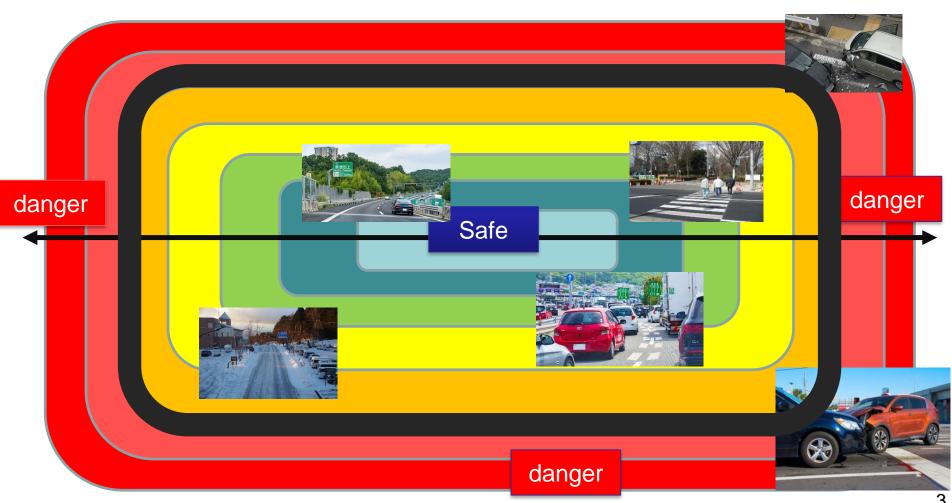- In other words, there are huge amount of Traffic scenarios.

Organizing Traffic Situations

- When we organize these situations from the point of safety level, we can describe a figure below. Center of Circle is safer, Outer of circle is more danger.
- We can find a line dividing accident or non accident, when human drives.

danger

danger

Safe

danger

- From point of validation, it is necessary to be defined this border line situation by FRAV.
- Japan recognizes that AD should be confirmed to keep safe within this border line situation and that identifying scenarios within this border are our task.
- And Japan recognizes we call this border line situations "edge cases" and situations within border "a set of scenarios" in our concept paper(10-04),

"edge cases "

danger

Safe

danger

"a set of scenarios"

How to identifying this "a baseline of scenarios"

- Next question is how to identifying "a baseline of scenarios".
- There are two kind of approaches as below.
- Japan thinks Approach 2 would be better in order not to miss selecting necessary scenarios(but we don't deny, at this time, Approach 1. Approach 1 can be continue to discuss)
- 3 layer concept is the way of Approach 2.
- From this view point, we suggest 3 layer concept in the paragraph of "Identifying Scenarios"

Approach 1(Bottom up approach)

1st   Collecting a huge number of Traffic situations

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2nd Selecting "a baseline of scenarios"   (But How????)

Approach 2(Top down approach)

1st   Assuming edge cases such as "Cutting in situation", "Cutting out situation" etc.

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2nd Logically structuring in accordance with physical principle

Japan would like to ask IWG members

 - our understanding about "edge cases" and "a base line scenarios" is correct or not.

 - If IWG can accept Approach 2, which is better "3 layer approach" to be described in "identifying scenarios" or "scenario properties"

Finally,
Japan wish to continue to contribute IWG and SG1a on the base of IWG suggestions.