Contribution to realize the Cyber-safe Automated Driving

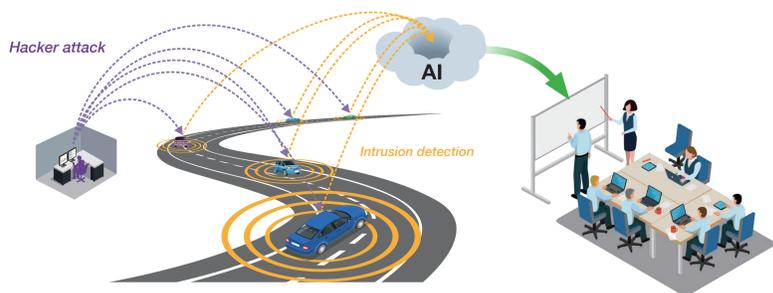## Condition of Cyber-safe Automated Driving

Explaining along the NIST Frame-Work

1. Equipping the system spec. which correspond to all possible cyber-threats

2. Establishing the **sure intrusion detecting process** for in/out vehicle when attacked at the field

3. Condition such as **Quick technical judgment to vehicle behavior, Accurate first action** and Speedy tentative counter-measure can be done when intrusion detected

4. Condition such as Permanent counter-measure can be studied and surely practiced

5. Condition such as Obtained knowledge through these action can be feedbacked to Vehicle development process

Identify

Protect

Detect

Respond

Recover

Verification for the effectiveness of in-vehicle IDS/IPS system

Life-cycle of a vehicle

| Plan | Develop | Manufacture | Sale | Post Production ＊ | Scrap |

SIP the 1st term tackling

SIP the 2nd term tackling

Define CS performance to request

— Inspection —

Defined the Guideline for CS performance-Evaluation（PEN-test procedure and criteria）

Verify the **effectiveness** of IDS/IPS and establish the **evaluating method** for them（At the first half of the 2nd term）and then, **Define it as a Guideline** of Automobile industry（At the last half of the 2nd term）

Define CS Spec to request

— Evaluation →

Confirm CS function

Equip CS function

V-shape process of vehicle development

＊ Post production phase by WP29 7.2.2.2 **Watch** → **Triage** → Investigate → Recover → Report → Feedback to development

The 2nd term tackling