

# **JAMA's Role for Implementation of VSC**

**JAMA Smart System Expert Group**

**M. Fukushima (Nissan Motor Co.,Ltd.)**

**M. Kakihara (Toyota Motor Corporation)**

# JAMA Profile

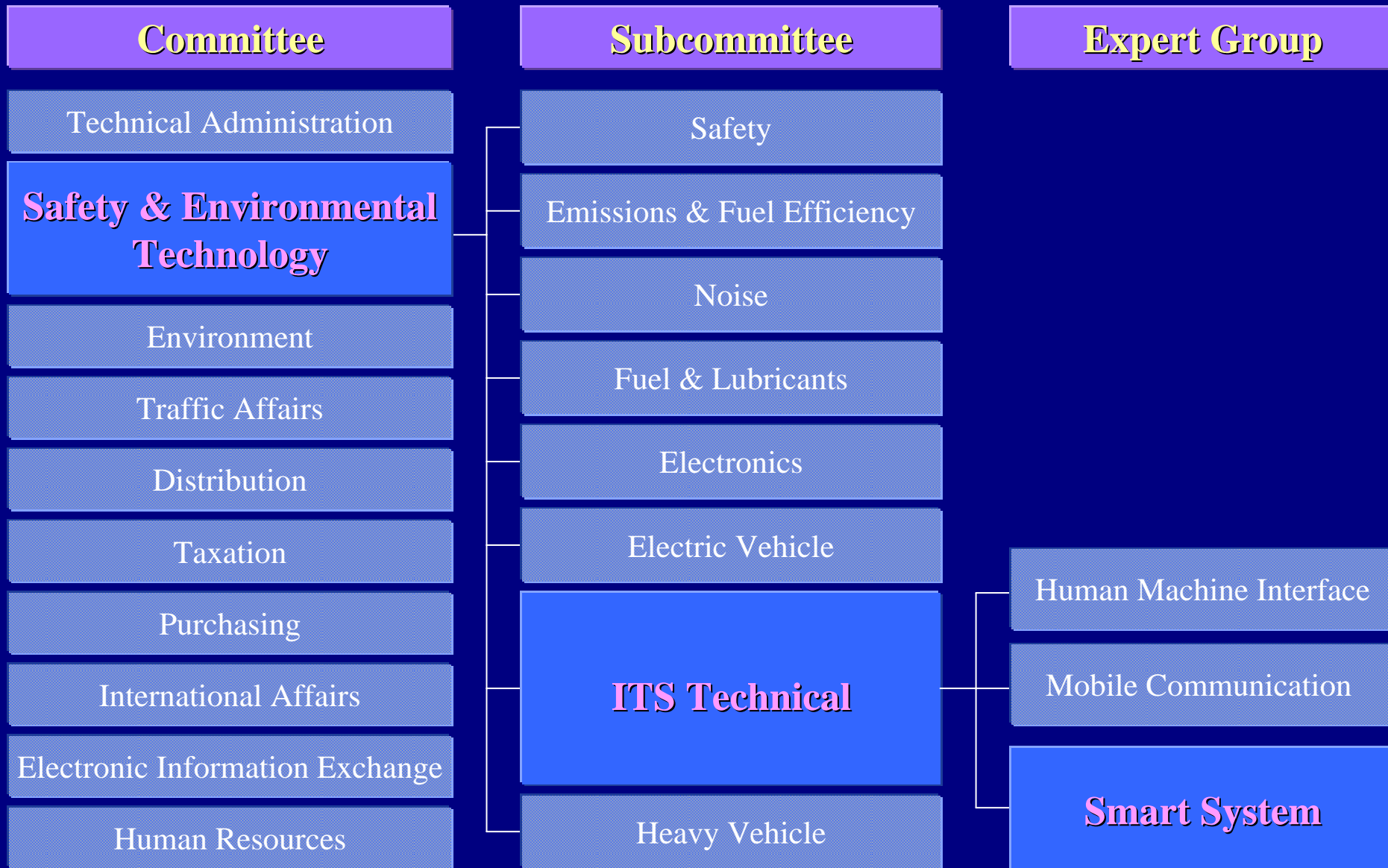
**Name:** Japan Automobile Manufacturers Association, Inc

## **Objectives:**

**To promote the sound development of the Japanese automobile industry and contribute to economic and social welfare.**

**Promoting automotive safety is one of JAMA's focal concerns. Objectives in this area include not only the introduction of expanded and improved safety provisions in vehicles themselves, but also extends to safety measures of the road infrastructure as well.**

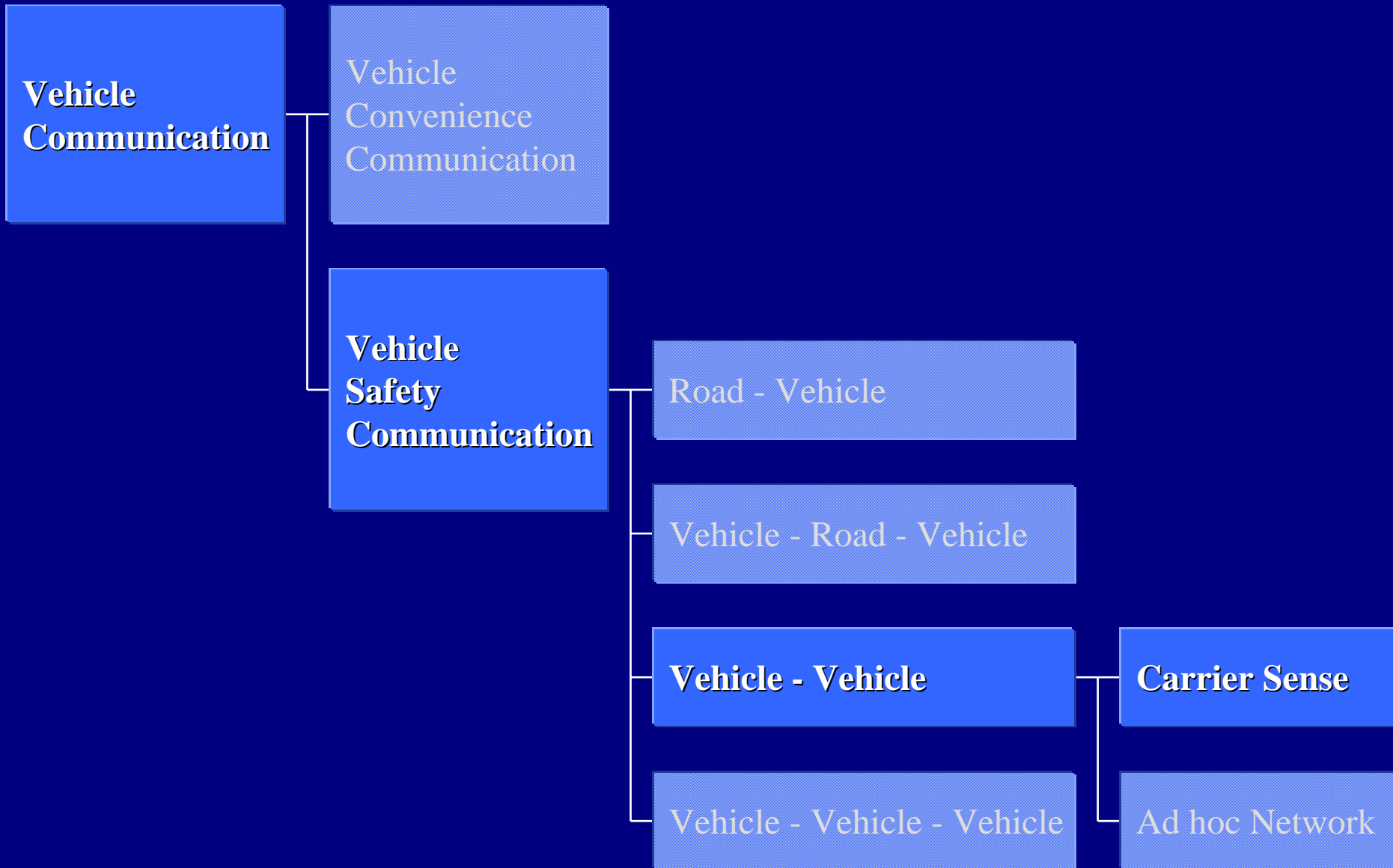
# JAMA Committee Organization



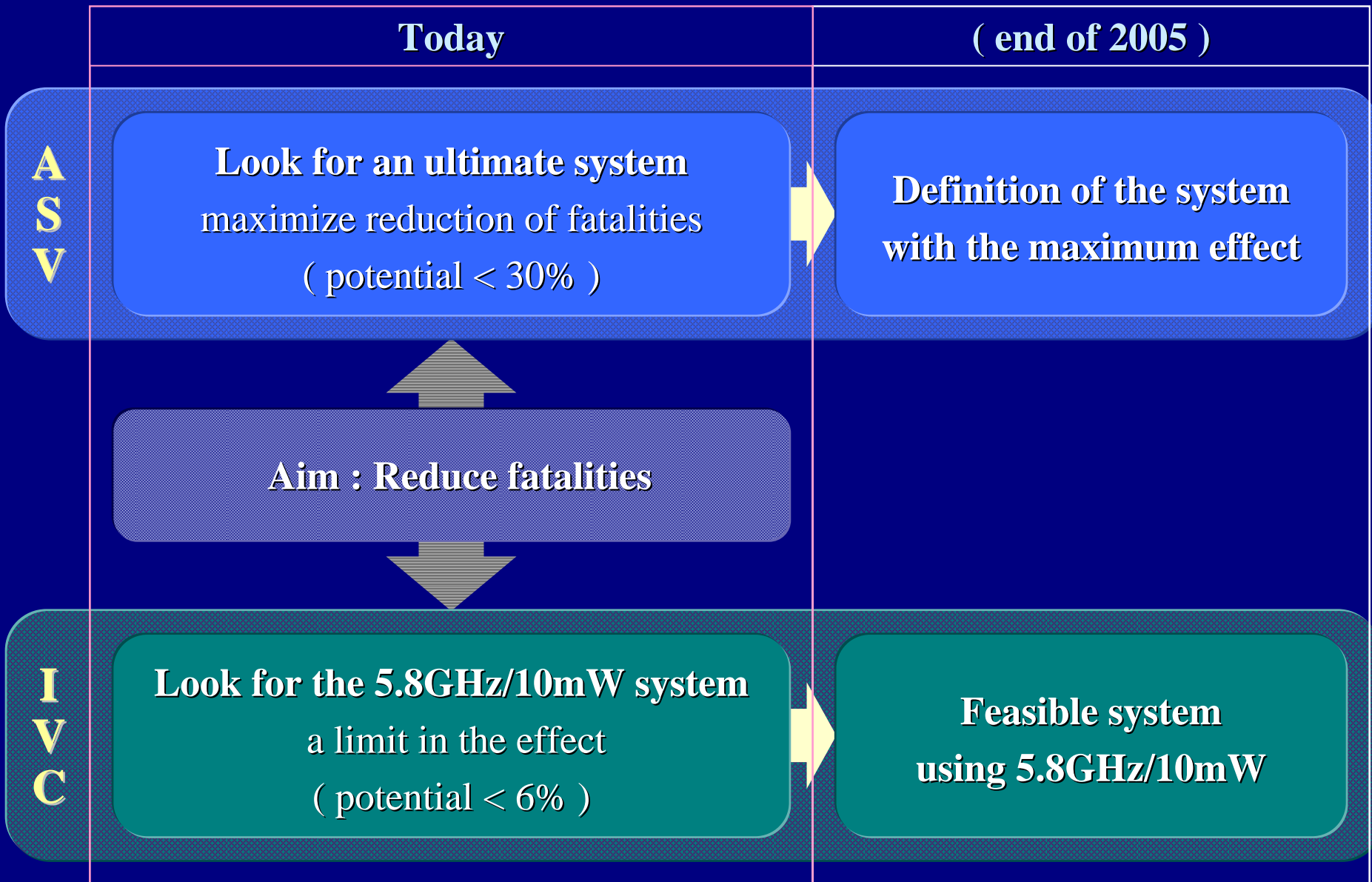
## Main Missions

- ◆ **Prepare the technical conditions effectively for the introduction and deployment of ITS safety/environmental support systems and IT mobile communication systems with regard to Regulations, Technical standardization, and Guidelines**
- ◆ **Propose and demand the required action to Government**
- ◆ **Standardize acceptability & viability of ITS solutions, both positive and negative side**

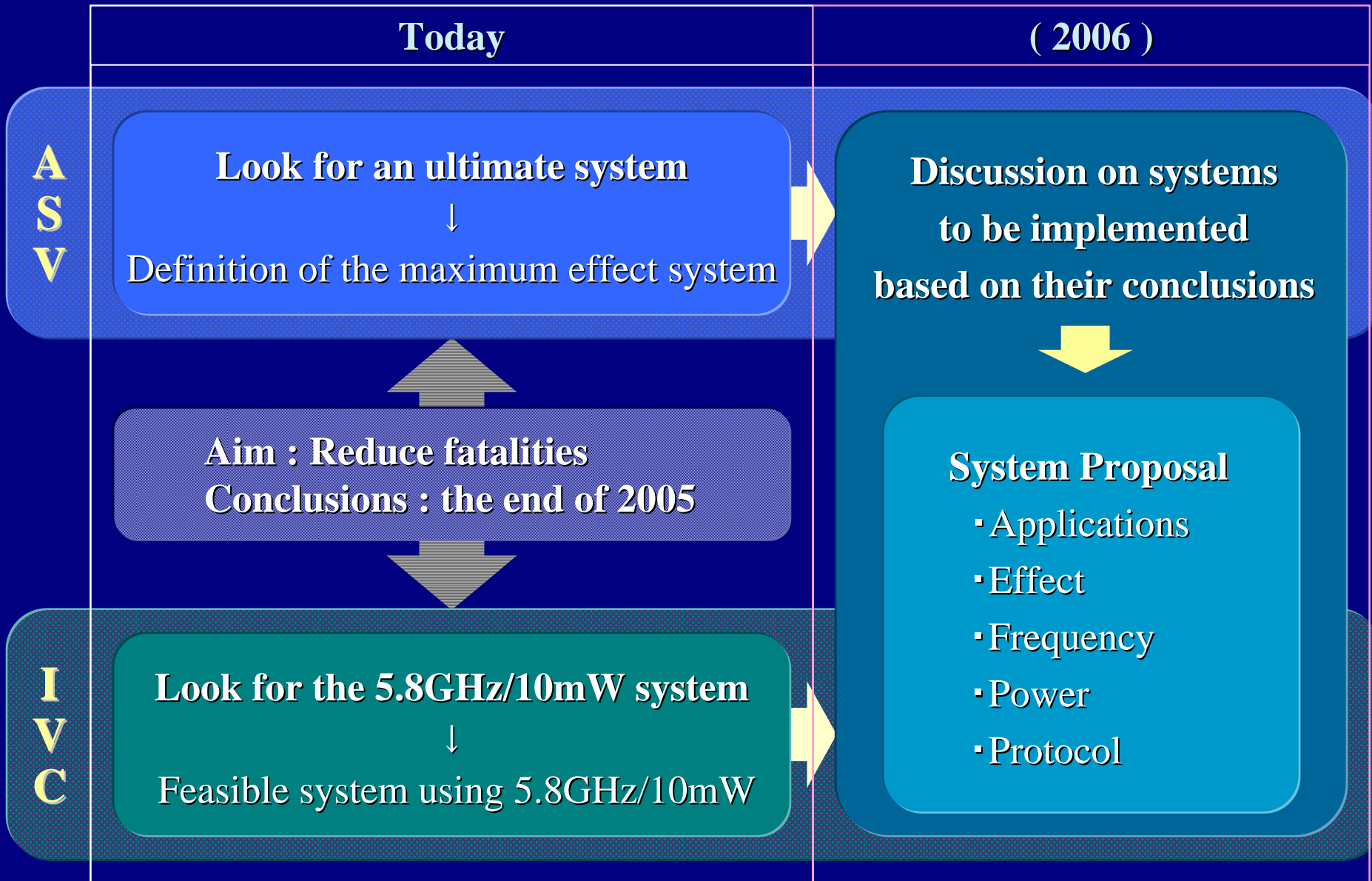
# Review of Vehicle Safety Communication



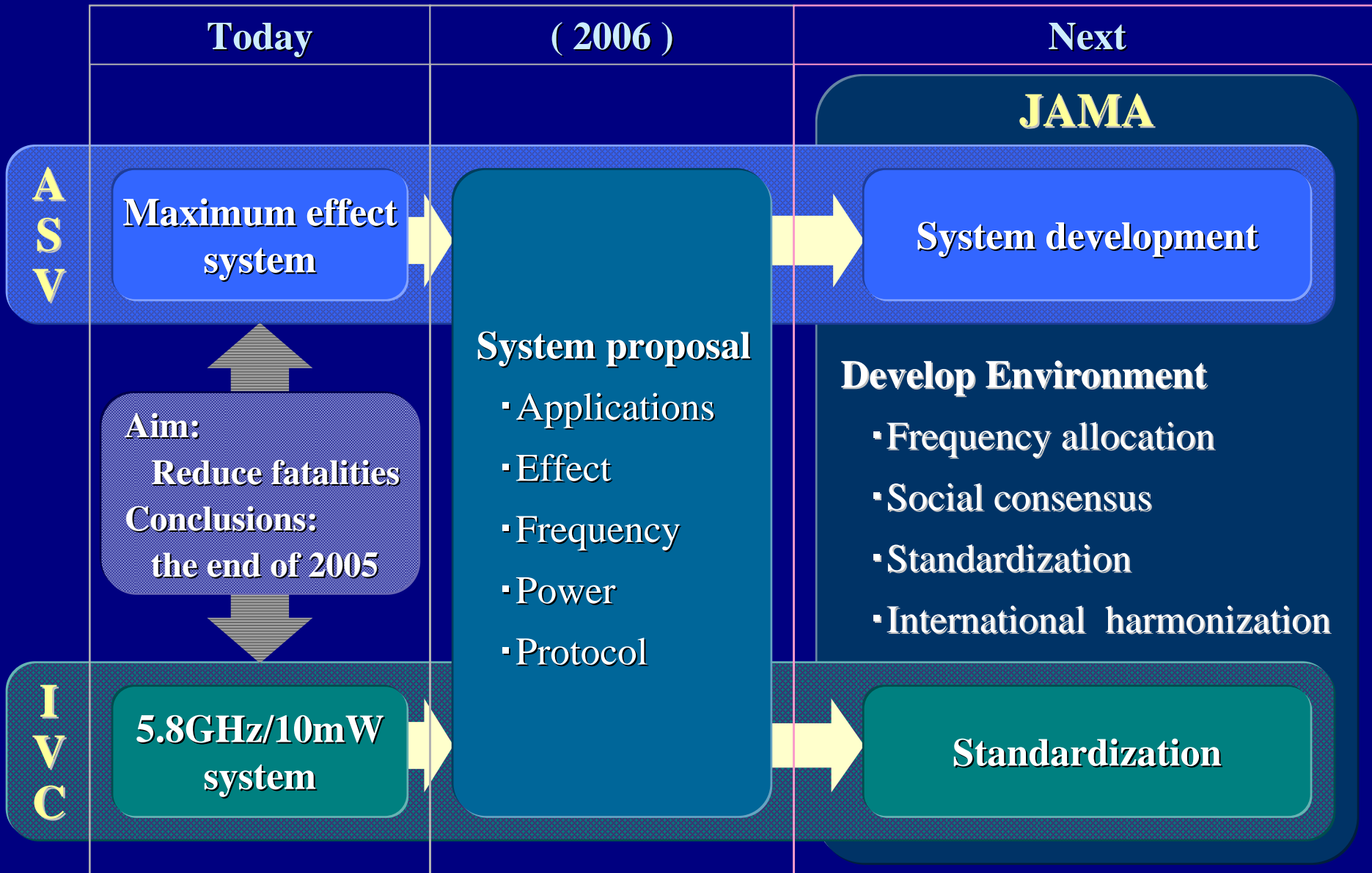
# Japanese Activities on Vehicle Safety Communication




# Japanese Activities on Vehicle Safety Communication



# JAMA's Role for Implementation of V to V Communication Systems







# **Role of ISO/TC204/WG14 for Implementation of VSC**

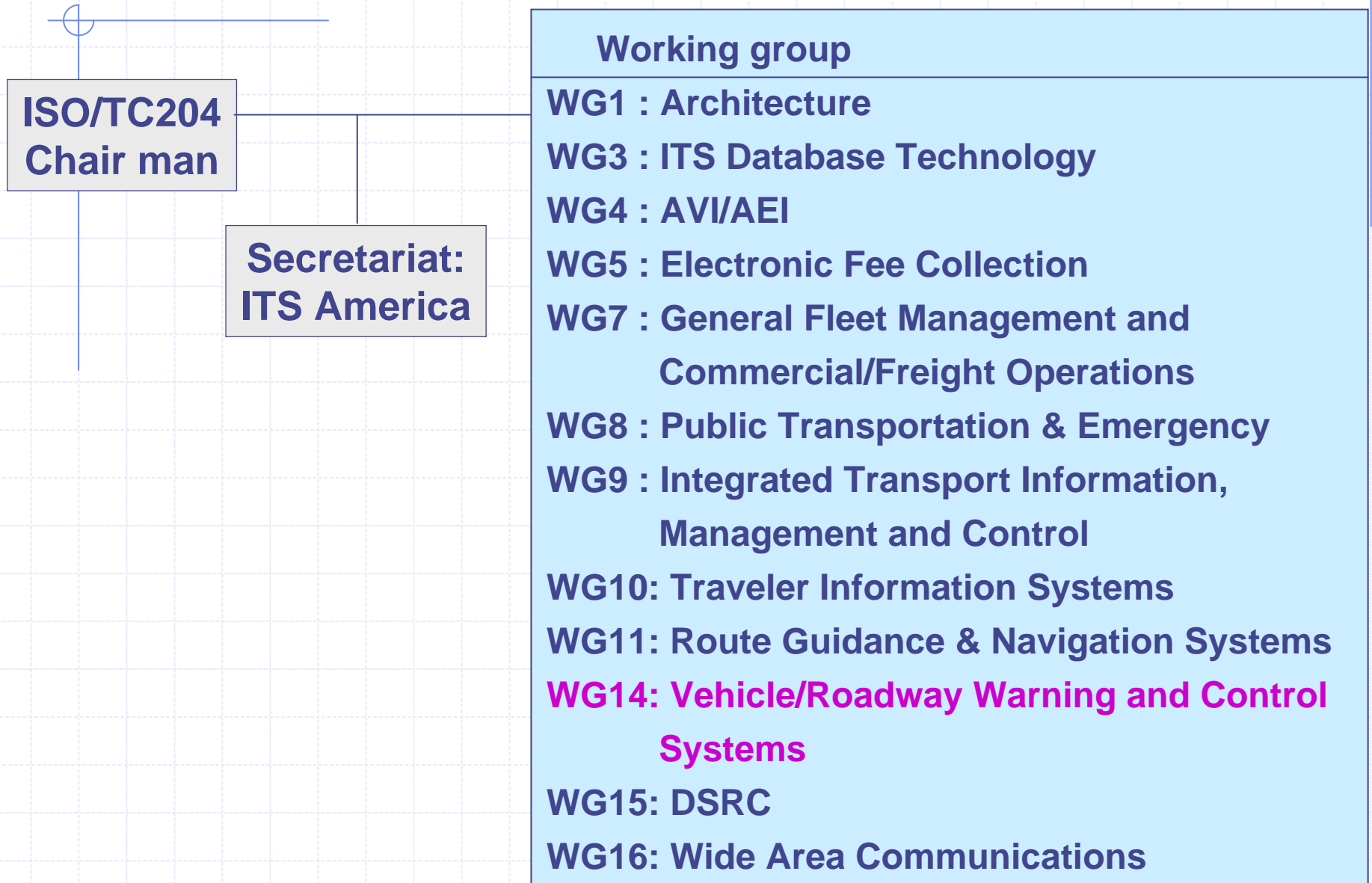
**Japan Automobile Research Institute  
Kiichi Yamada  
(The convener of TC204/WG14)**

# Contents

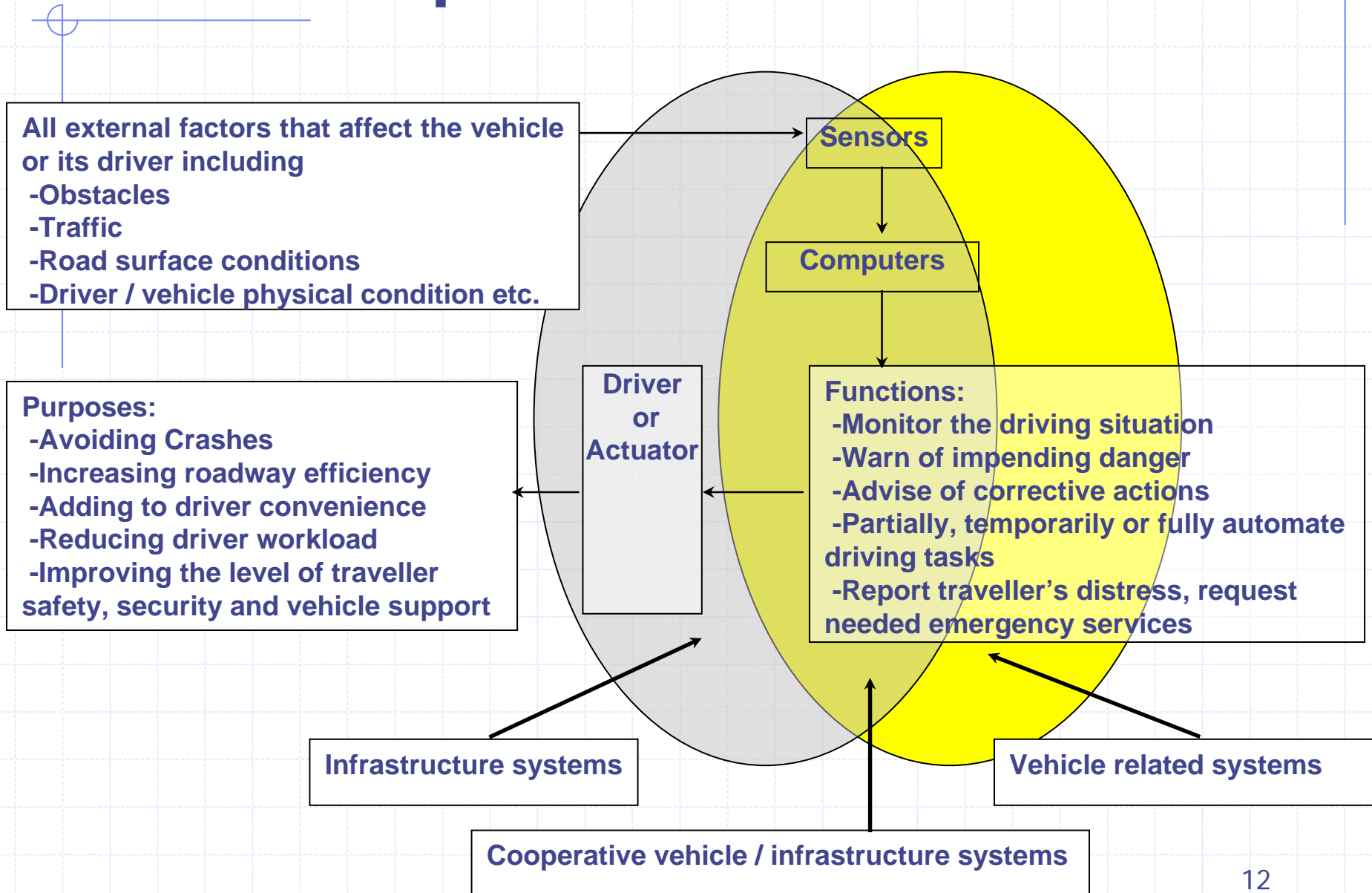


- 1. ISO/TC204**
- 2. Scope of ISO/TC204/WG14**
- 3. Standardization items**
- 4. Future activities**
- 5. Conclusion**

# ISO/TC204 Structure



# Scope of TC204/WG14



# Standardization Items in TC204/WG14

Warning

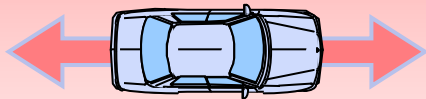
Assist

Forward Vehicle Collision Warning System (FVCWS)

Adaptive Cruise Control Systems (ACC)

Traffic impediment warning system (TIWS)

Full Speed Range ACC (FSRA)



Low Speed Following System (LSF)

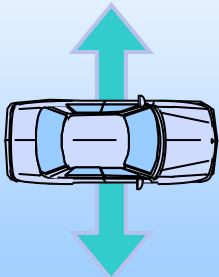
Forward Collision Avoidance Assistance Systems (FCAAS)

Extended Range Backing Aid Systems (ERBA)

Maneuvering Aid for Low Speed Operation (MALSO)

Lane Change Decision Aid Systems (LCDAS)

Lane Departure Warning Systems (LDWS)



Finished

Under discussion

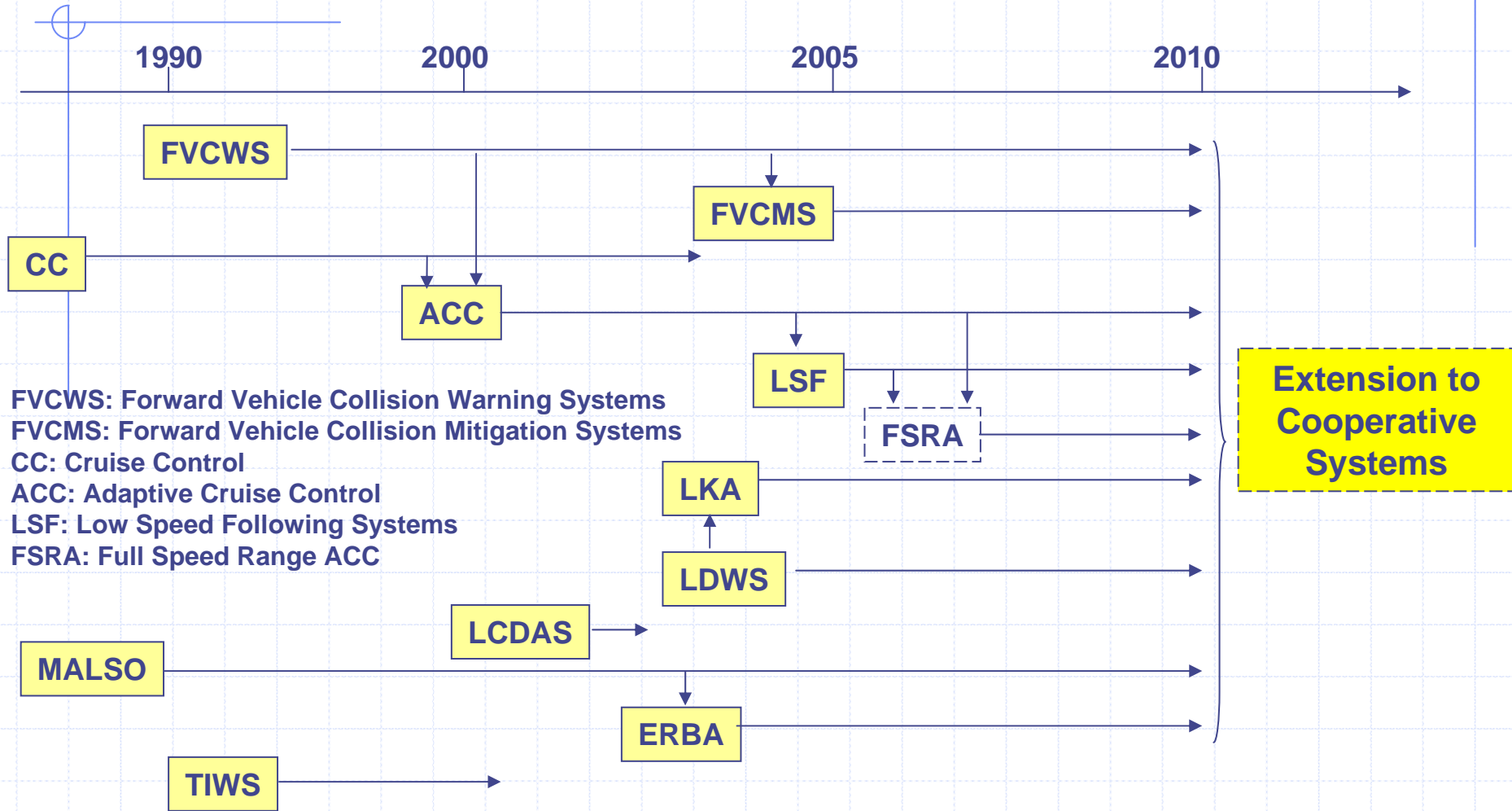
# Drafting Status

	Work Item	Leader
ISO15622	Adaptive Cruise Control	Germany
ISO15623	Forward Vehicle Collision Warning System	Japan
TS215624	Traffic Impediment Warning System	Japan
ISO17386	Maneuvering Aid for Low Speed Operation	Germany
DIS17361	Lane Departure Warning System	Japan
CD17387	Lane Change Decision Aids Systems	US
NP22179	Full Speed Range ACC	Germany
NP22178	Low Speed Following Systems	Japan
PWI 22839	Forward Collision Avoidance Assistance Systems	US
NP 22840	Extended Range Backing Aid Systems	US

**PWI** :Preliminary Work Item  
**NP** :New work item Proposal  
**CD** :Committee Draft

**DIS** :Draft International Standard  
**FDIS** :Final Draft International Standard  
**IS** : International Standard  
**TS** :Technical Specification

# Introduction of ADAS

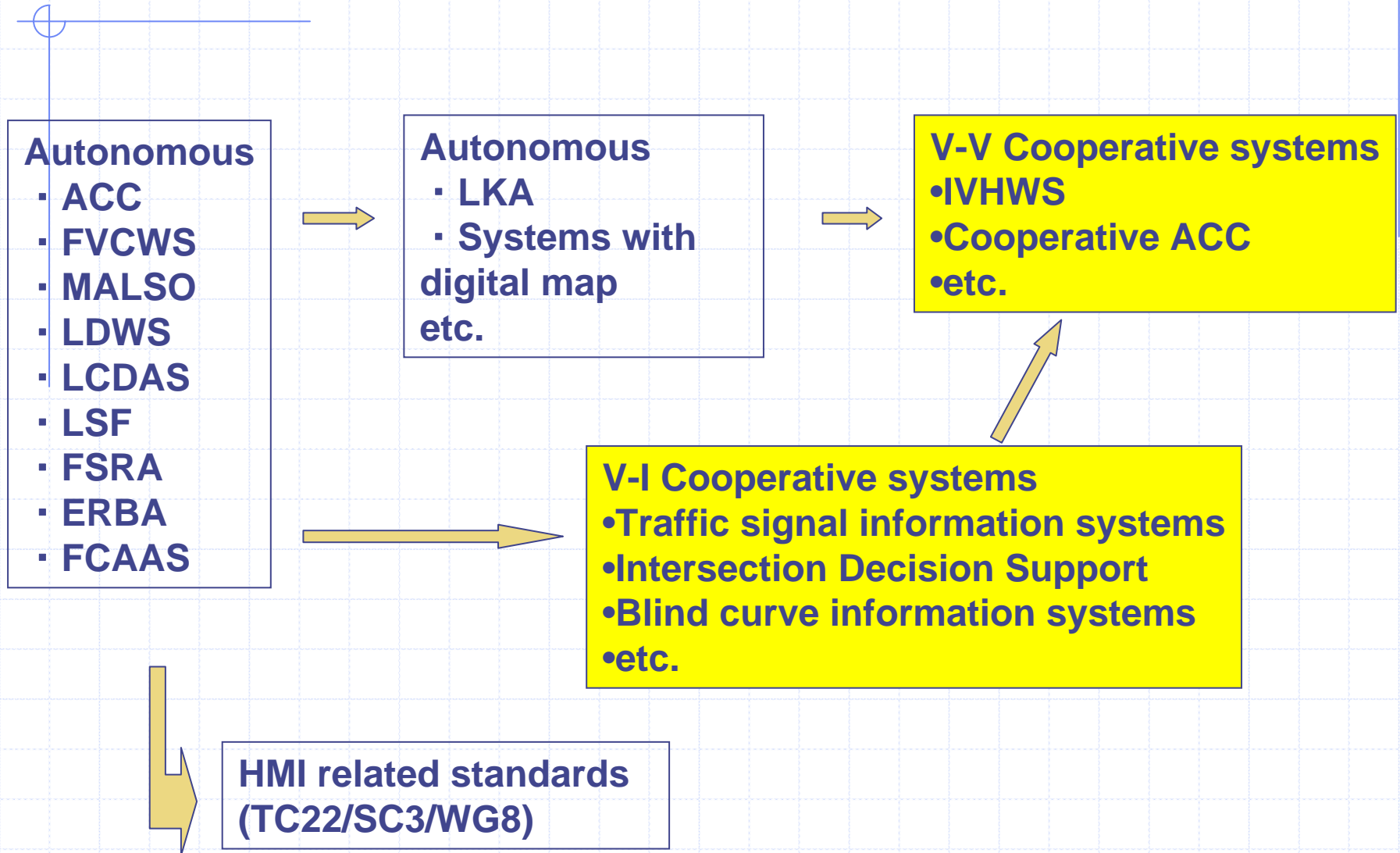


FVCWS: Forward Vehicle Collision Warning Systems  
 FVCMS: Forward Vehicle Collision Mitigation Systems  
 CC: Cruise Control  
 ACC: Adaptive Cruise Control  
 LSF: Low Speed Following Systems  
 FSRA: Full Speed Range ACC

LKA: Lane Keep Assist Systems  
 LDWS: Lane Departure Warning Systems  
 LCDAS\* Lane Change Decision Aids Systems  
 MALSO: Maneuvering Aids for Low Speed Operation  
 ERBA: Extended Range Backing Aids

TIWS: Traffic Impediment Warning Systems  
 IVHW: Inter Vehicle Hazard Warning  
 FOWS at BC: Forward Obstacle Warning Systems at Blind Curve  
 ISWS: Intersection Signal Warning Systems  
 IDS: Intersection Decision Support

# Future Items





# Sub Working Group for Cooperative Systems

Participant countries: US(Leader), Japan, Korea

(1) Cooperative systems (Information flow)

Road→Vehicle, Vehicle→Road, Vehicle→Vehicle

(2) Contents of standard

Basic system architecture

Exchanging information

Evaluation methods, etc.

(3) Standard item selection criteria

Systems which are used by cars traveling through countries.

Systems which are applied in many countries.

(4) Items not included in WG14

Communication systems, HMI, Map data base, etc

# Conclusion



**Let's Start Standardization  
Process for VSC Systems  
in ISO/TC204/WG14  
Soon!!**