

Sustaining Real World Safety

- Through Innovative Technologies -

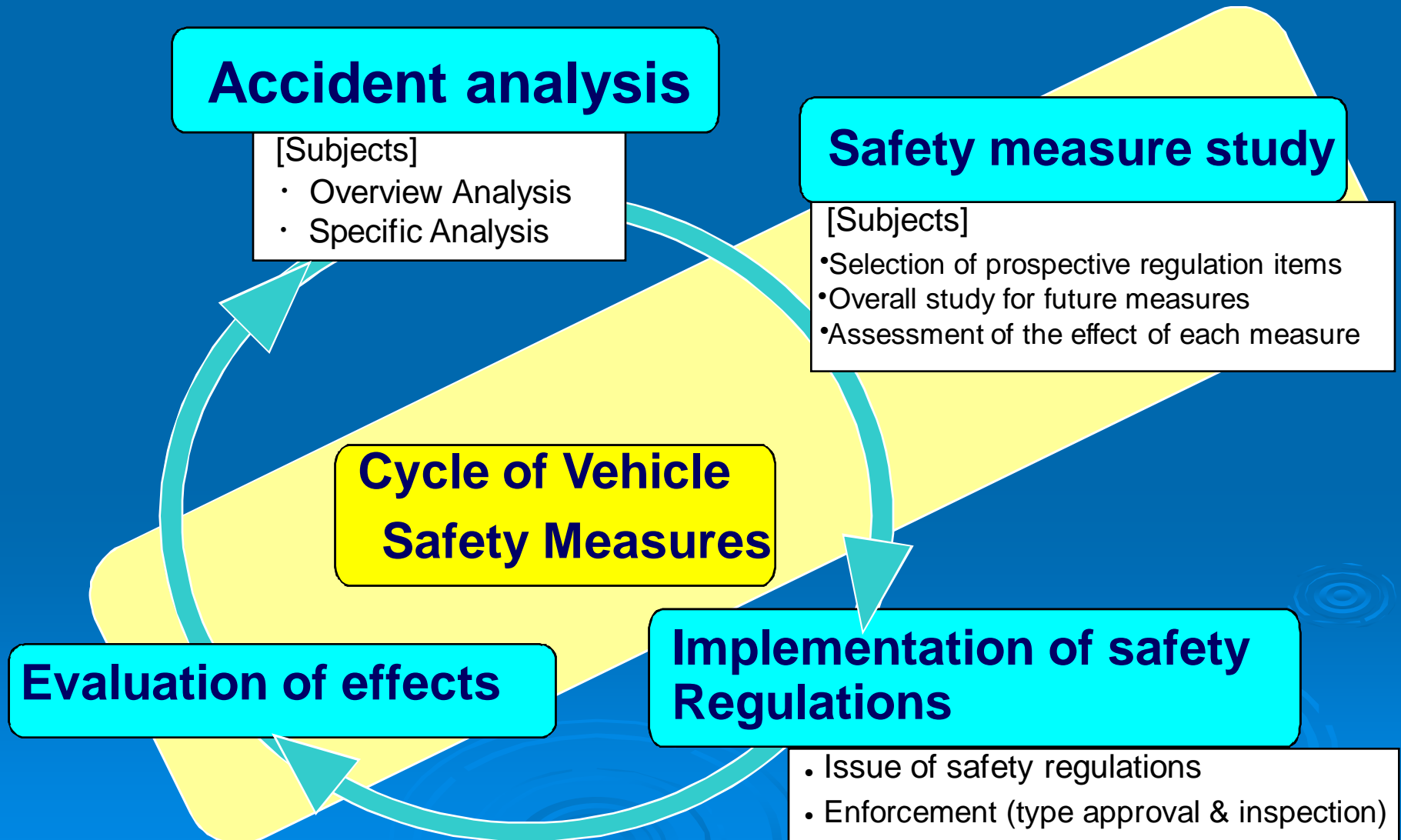
The Government point of view

Hidehobu Kubota

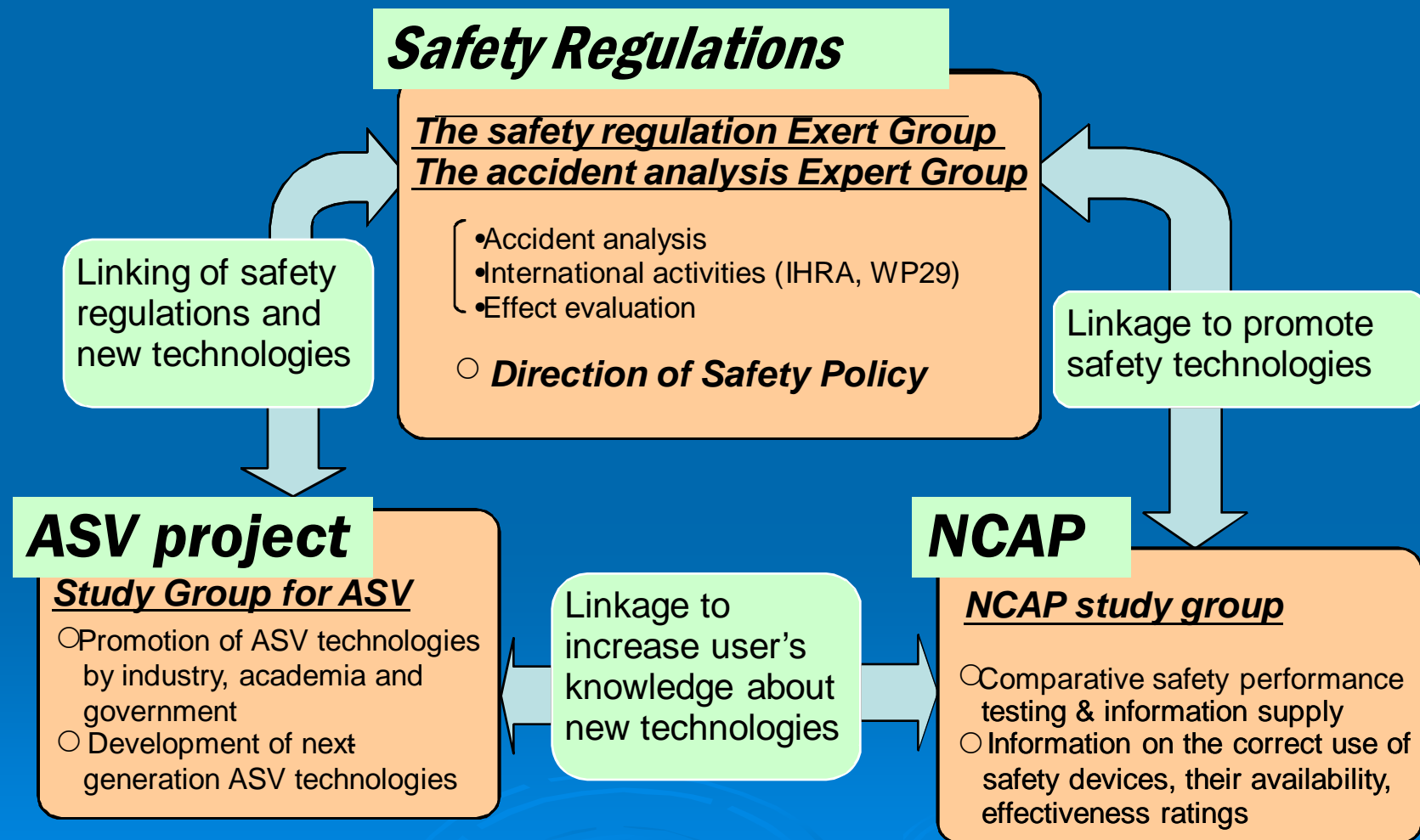
Ministry of Land, Infrastructure, Transport and Tourism of Japan

Cycle of Vehicle Safety Measures

- Study process before & after rulemaking procedure -



Good linkage among Safety Measures



Advanced Safety Vehicle Project

Phase 4:2006-2010

A Large-scale Field Operation Test on public roads using approximately 30 vehicles equipped with inter-vehicle communications.



Phase 3:2001-2005

Crash mitigation brake Lane keep assistance ACC, etc have been introduced in the market



System verification tests were done on the test course of Tomakomai

Phase 2:1996-2000



Demo2000

Phase 1:1991-1995

- *Cooperation among academia, industries and government*
- *Study of technical feasibility*

Design Principles

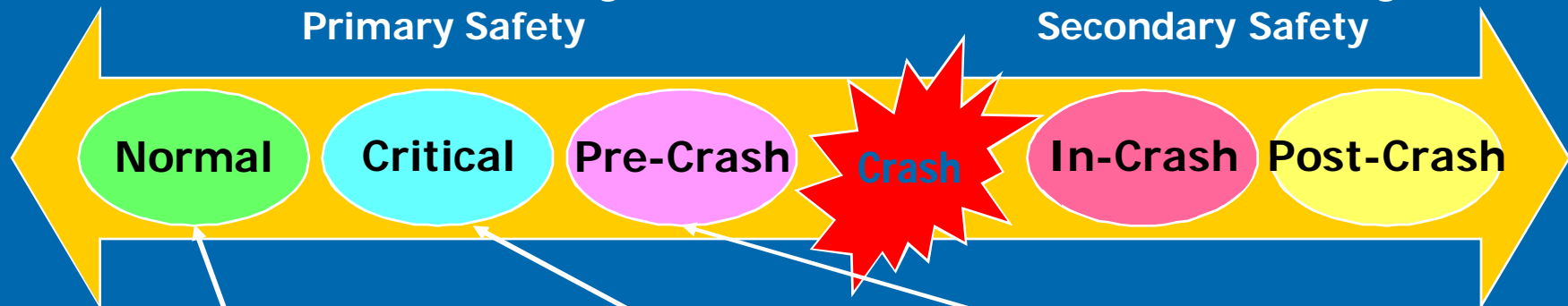
- 1 . *Driver Assistance*
- 2 . *Driver Acceptance*
- 3 . *Social Acceptance*

Driver Assistance according to Sequence of Driving Condition

Driving Condition

Active Safety
Primary Safety

Passive Safety
Secondary Safety



Information
presentation
&
Control

in normal condition

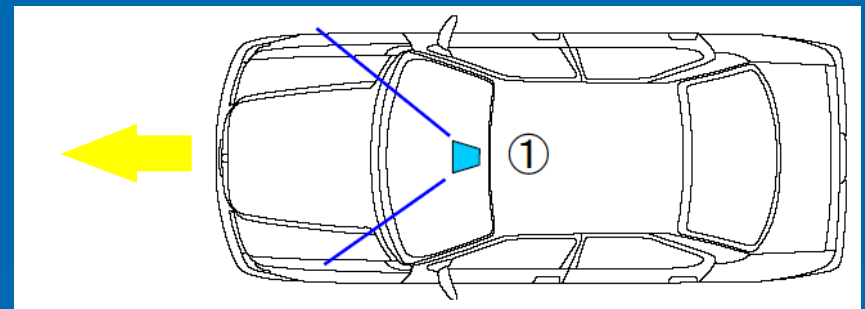
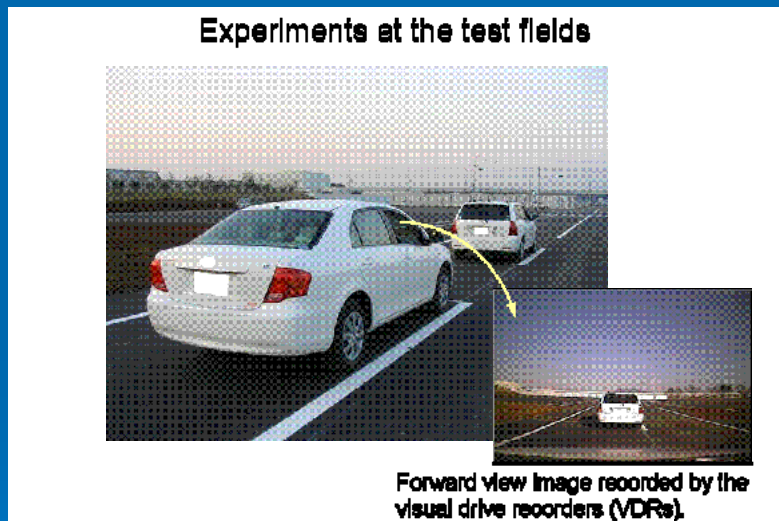
Warning
*in critical
condition*

*Control
in pre-crash
condition*

New Data Collection Devices

1 . Driving Recorders with video (VDRs)

➤ From the view point of accident analysis, video image can be used for analyzing the behavior of the car before accident including distance to a car in front.

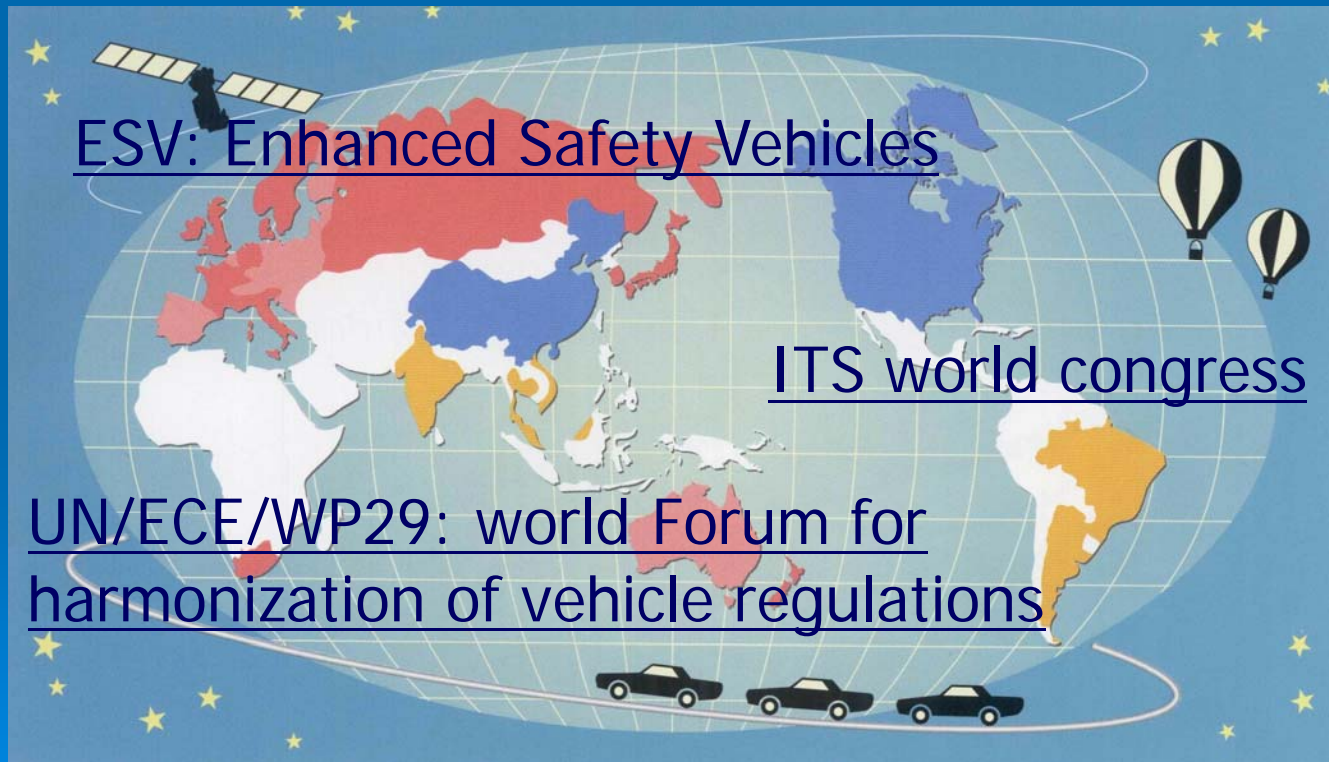


2 . Event Data Recorder (EDR)

➤ An EDR's main purpose is to record data for retrieval after a crash that will assist in the understanding of how a particular vehicle's systems performed.

Growing importance of international partnership

There is a growing importance for taking into account the ongoing world-wide efforts in responding with the need to provide higher levels of vehicle safety, environmental protection, energy efficiency, etc.



• • • • and many other relationships for global vehicle saf

Thank you for your kind attention.

