

Submitted by the experts from
Japan (NTSEL)

Informal document **GRVA-13-16**
13th GRVA, 23 - 27 May 2022
Provisional agenda item 5(a)

Report of the Workshop on R155 Implementation

for 13th session of GRVA
May 2022

Purpose

The purpose of this workshop was to gather the Approval Authorities that are working on the provisions of para. 5.3. of the Regulation. Approval Authorities of CPs could report about the process of implementation for fulfilment of the requirements of the Regulation. An exchange could take place on the difficulties and challenges that occurred during this process.

Meetings

After 12th session of GRVA

- 6th meeting, 4th February 2022
- 7th meeting, 23th March
- 8th meeting, 12th April
- 9th meeting, 12th May

(2 hours for each session)

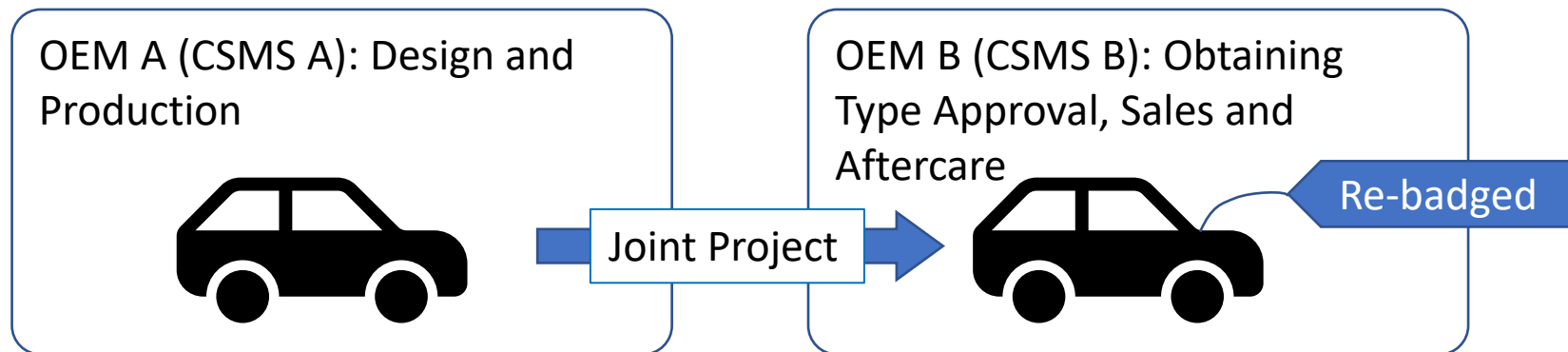
around 25 participants from type approval authorities and technical services

Current Status

- Discussion has been started with the items which are relevant to initiate activities for Type Approvals for R155.
- The group is currently working on issues for "Multiple CSMSs for one vehicle type", "Mutual recognition".

Scope of Cyber Security Management System (CSMS)

- The group focuses on cases in which multiple OEMs are involved in a vehicle type.



- How can be dealt with such cases is a key question.

CSMS for Joint Project

- Two methods have been identified to deal with multiple OEMs working together:

- Integrating partners within the CSMS

- Pros: only one CoC to manage,
- Cons: risk to have parts of a CSMS evaluated by different authorities

CSMS CoC (A)

...

CSMS CoC (B)

...

Joint project

- Issuing a CSMS CoC for the joint project

- Pros: better separation between OEMs, easier to trace for authorities
- Cons: more difficult to manage

CSMS CoC (A)

...

CSMS CoC (B)

...

CSMS CoC (B)

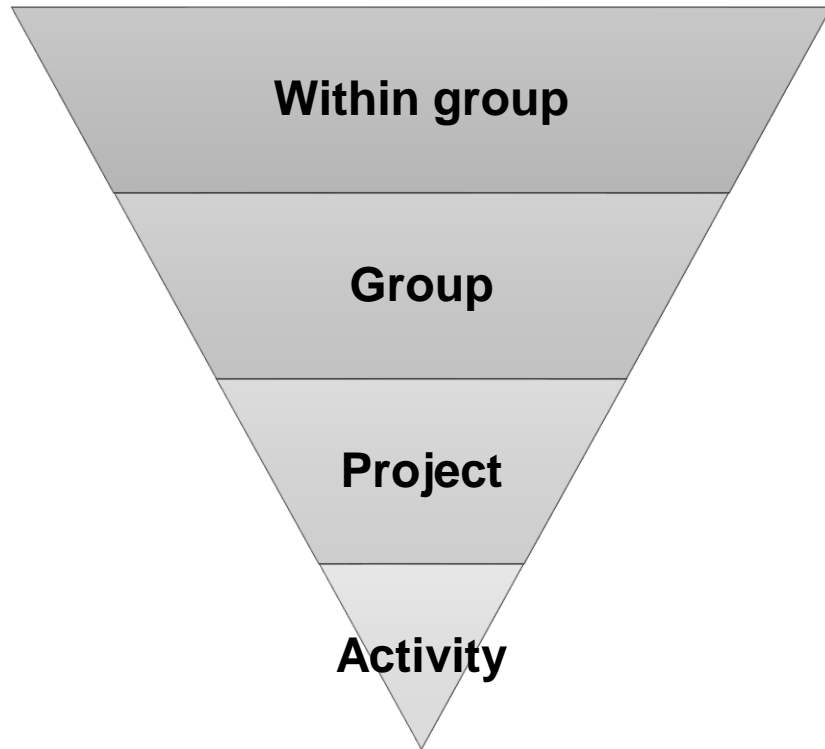
Joint project

- Either option is valid depending on the specific nature of each partnership**

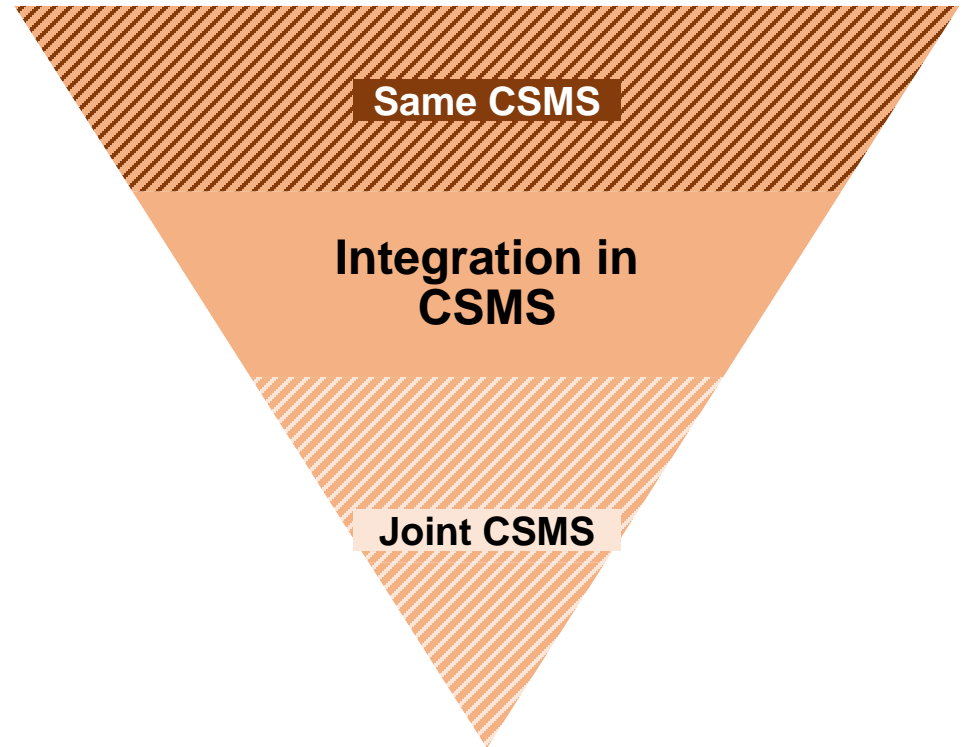
Issues for Multiple CSMS

- Types of joint projects: a non-exhaustive inventory
- Transition between CSMS certification and R155 type-approval across different authorities

Types of joint projects: an inventory



Depth of the partnership

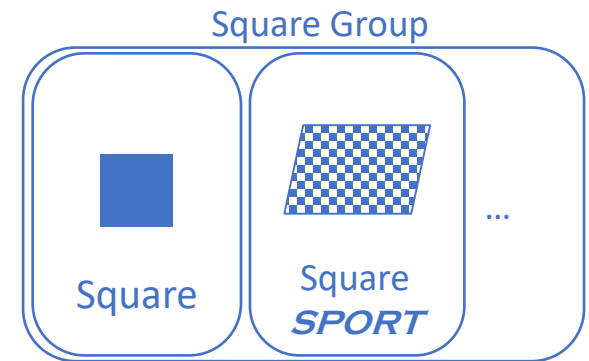


CSMS solutions

Types of joint projects: an inventory

1) The partners are in the same group

Example: Square OEM ■ Group has a division “Square Sport” 🏁; both Square and Square Sport are OEMs



Possible solutions:

- a) Square and Square Sport share the same CSMS
- a) Square Sport has its own CSMS

1 CoC per OEM but same test report etc.

OR



1 CoC for both OEMs with reference to information package

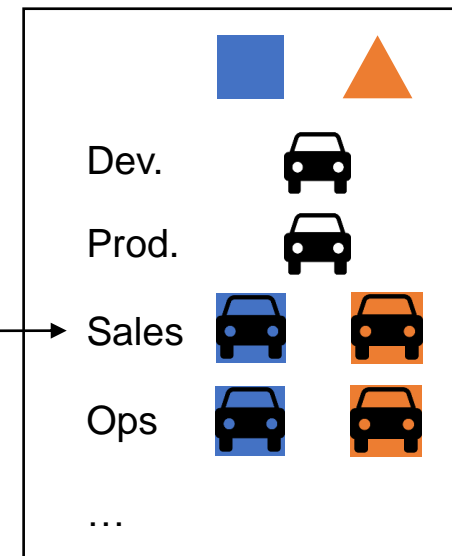
Types of joint projects: an inventory

2) Group-level partnership

Example: Square OEM ■ has a group-level partnership with Triangle OEM ▲ and many vehicles are rebadged by one or the other

Possible solutions:

-  a) Processes are always identical between both versions of a vehicle : Partnership integrated in the CSMS of both OEMs
-  b) Processes are different: see case 3)



Here, ■ and ▲ share development and production processes but have different sales and operations processes (e.g. incident reporting)

Types of joint projects: an inventory

3) Project-specific partnership

Example: Square OEM ■ has a one-time partnership with Triangle OEM ▲ and responsibilities are clearly identified

Possible solutions:

- a) Joint CSMS
- b) Integrate partners in each other's CSMS as suppliers

Phase	■	▲
Development	X	X
Production	X	
Sales	X	X
Operations	X	

See the presentation "CSMS CoC for joint projects" from the 5th workshop for more details

Types of joint projects: an inventory

4) Activity-specific partnership (Partner does not have a certified CSMS)

(If partner has a certified CSMS, see 3))

Example: Auto Factory  produces a vehicle for Square OEM ■, but Auto Factory does not have a CSMS

Possible solution:

a) Integrate  in ■ CSMS as a supplier

Transition between CSMS certification and R155 type-approval across different authorities

Example: OEM has certified its CSMS with TAA/TS A, and goes to TAA/TS B for a R155 type-approval for a joint project

Problem: how can TAA/TS B certify the good application of the OEM's CSMS if they do not know it?

This problem may occur for mutual CSMS CoC recognition in general, even in the absence of joint projects

Possible solutions:

- a) Never recognize a CSMS CoC issued by another TAA / audited by a different TS
- b) Establish a data exchange process with the OEM(s)

Possible Solution

- The OEM applying for the R155 type is responsible for giving all necessary elements to the TAA/TS about the separation of responsibilities
- The TAA/TS may deal separately with each OEM for confidentiality reasons
- The TAA/TS may request information from the TAA/TS which certified the CSMS
- Elements given to the TAA/TS should include:
 1. Information documents according to Annex 1.
 2. Test reports
 3. CoC(s) of CSMS(s) (Reminder: CoC itself is not subject to the mutual recognition.)
 4. Additional information regarding interface of the joint project and declaration of responsible bodies to the type within the CSMS(s).

The interface should be documented similarly to suppliers:

 - a. Processes in place, especially those related to risk management
 - b. Inputs and outputs of the interface

Etc.

R155 req.	Phase in vehicle life cycle			OEM to apply the type of vehicle
	Development	Production	Post-production	
7.2.2.2 (a)	XYZ MOTOR COMPANY, AD development division,...	XYZ MOTOR COMPANY, Production division,...	ABC AUTO Co., Ltd, Customer service division,...	ABC AUTO Co., Ltd,
7.2.2.2 (b)	XYZ MOTOR COMPANY, AD development division,...	XYZ MOTOR COMPANY, Production division,...	ABC AUTO Co., Ltd, Customer service division,...	
7.2.2.2 (c)	XYZ MOTOR COMPANY, AD development division,...	XYZ MOTOR COMPANY, Production division,...	ABC AUTO Co., Ltd, Customer service division,...	
...	
7.2.2.2 (d)	XYZ MOTOR COMPANY, AD development division,...	XYZ MOTOR COMPANY, Production division,...	ABC AUTO Co., Ltd, Customer service division,...	

Joint project

Example of a declaration of responsible bodies

Open issues

- Approving architectures based on already approved architectures
 - Multi-stage TA is not within the scope of 1958 agreements, but OEMs doing multi-stage approvals may modify or connect to an existing architecture

Thank you!