

Japan Proposal for ANNEX2  
of Battery Durability GTR  
@EVE54

DRAFT

XX. YY.2022

# 1. Application for registration of SOCE/SOCR to SAE

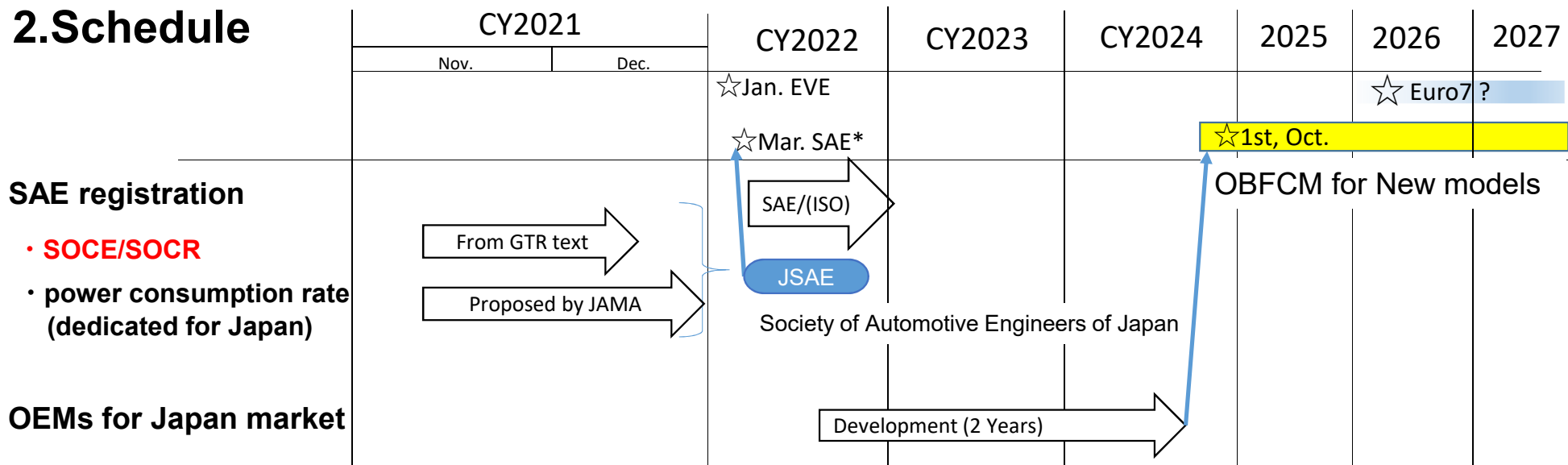
## < Background >

Japan decided to introduce the mandatory SOCE/SOCR monitoring from October 2024. Based on the OEM development schedule, we believe that SAE registration is required in 2022.

## < Proposal >

1. SOCE/SOCR SAE application will be submitted by Japan at the March 2022 SAE meeting.
2. May Japan consider ANNEX2 applications to SAE other than SOCE/SOCR?  
Since there are some issues, the Japan proposal will be presented at EVE in Spring 2022.

## 2. Schedule



\* J1979 TF Schedule @2022 (Since the revision of J1979 has been discussed as version 3, the number of SAE meetings has increased compared to the previous year.) < Jan.14, **March.11**, May 3, July22, Sept.16, Nov.18 >

# Proposed PID (Draft)

## New PID for " State of Certified Energy" as

PID (hex)	Description	Data Byte	Min.Value	Max.Value	Scaling/Bit	External Test Equipment SI(Metric)/English Display
XX	State of certified energy	A	0%	100%	100/255	SOCE: XXX %
	"State of certified energy" (SOCE) means the on-board estimated UBE performance at a specific point in its lifetime, expressed as a percentage of the certified usable battery energy.					

## New PID for " State of Certified Range" as

PID (hex)	Description	Data Byte	Min.Value	Max.Value	Scaling/Bit	External Test Equipment SI(Metric)/English Display
XX	State of certified range	A	0%	100%	100/255	SOCR: XXX %
	"State of certified range" (SOCR) means the on-board estimated electric range at a specific point in its lifetime, expressed as a percentage of the certified electric range.					

**Detailed application will be prepared by J-SAE**

# ANNEX 2: Values to be read from vehicles

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## Values to be read from vehicles:

1. On board SOCE value
2. On board SOCR value
3. Odometer (in km)
4. Date of manufacture of the vehicle
5. Total distance (sum of the distance driven and the virtual distance) [km], if applicable
6. Percentage of virtual distance [in per cent], if applicable
7. Worst case certified energy consumption of PART B family [Wh/km], if applicable
8. Total discharge energy in V2X [Wh], if applicable
9. Last charged by more than 50 per cent SOC swing on [Date]
10. Maximum, minimum, average ambient temperature\* the vehicle was exposed to during its lifetime

Note: \* ambient temperature to be read as daily averages

## Data acquisition issues in ANNEX 2

### 9. Last charged by more than 50 percent SOC swing on [Date]

It is difficult to record the date. In general, **CAN typically has no date information**. If a vehicle doesn't have a cell phone connection, a vehicle can't get it. IG-ON time and/or distance from Last charged can be calculated.

### 10. Maximum, minimum, average ambient temperature the vehicle was exposed to during its life time.

Maximum, minimum and average ambient temperature during IG-ON can be calculated, but "life time" is difficult. **If IG-OFF is included in this calculation, it is technically impossible or very difficult.**

**The Japan proposal which can cope with above issues will be presented at EVE in Spring 2022.**

## **J1979 Information (OBD standard of SAE) Revisions**

1. In California, ACC2 regulations (including ZEV) after 26 MY are under discussion and CCR 1969\* of ACC2 refers to J1979 -3, which is under discussion. (\*California Code of Regulations, Section 1969 )
2. The proposal and discussion of J1979 -3 at SAE started from current conventional specification for ICE toward a "newly made book" which will also cover ZEV or All electrified vehicles.
3. Any new input or read requirements added to EVE-GTR should also be included in J1979 -3.