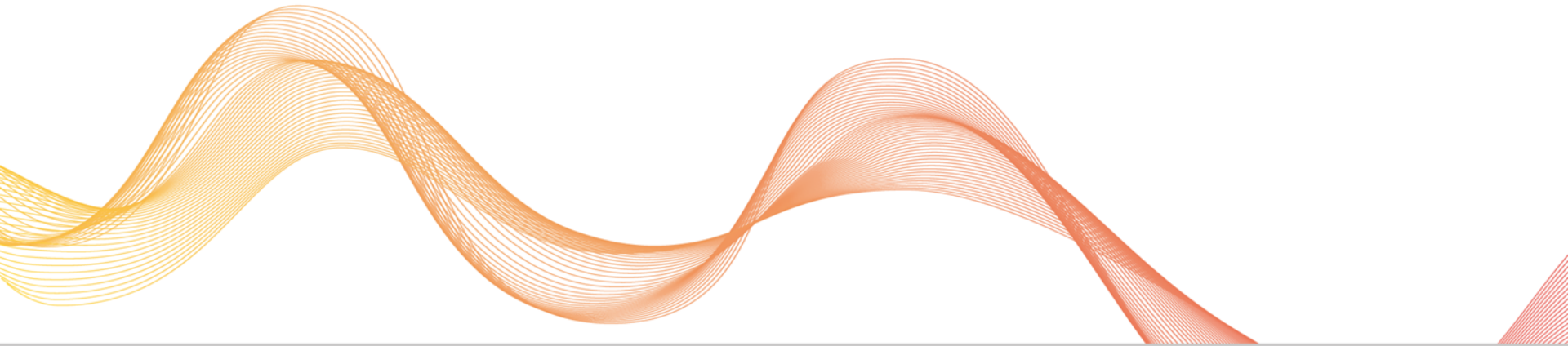




ASAM

Association for Standardization of
Automation and Measuring Systems



MCD-2 MC Pilot Project

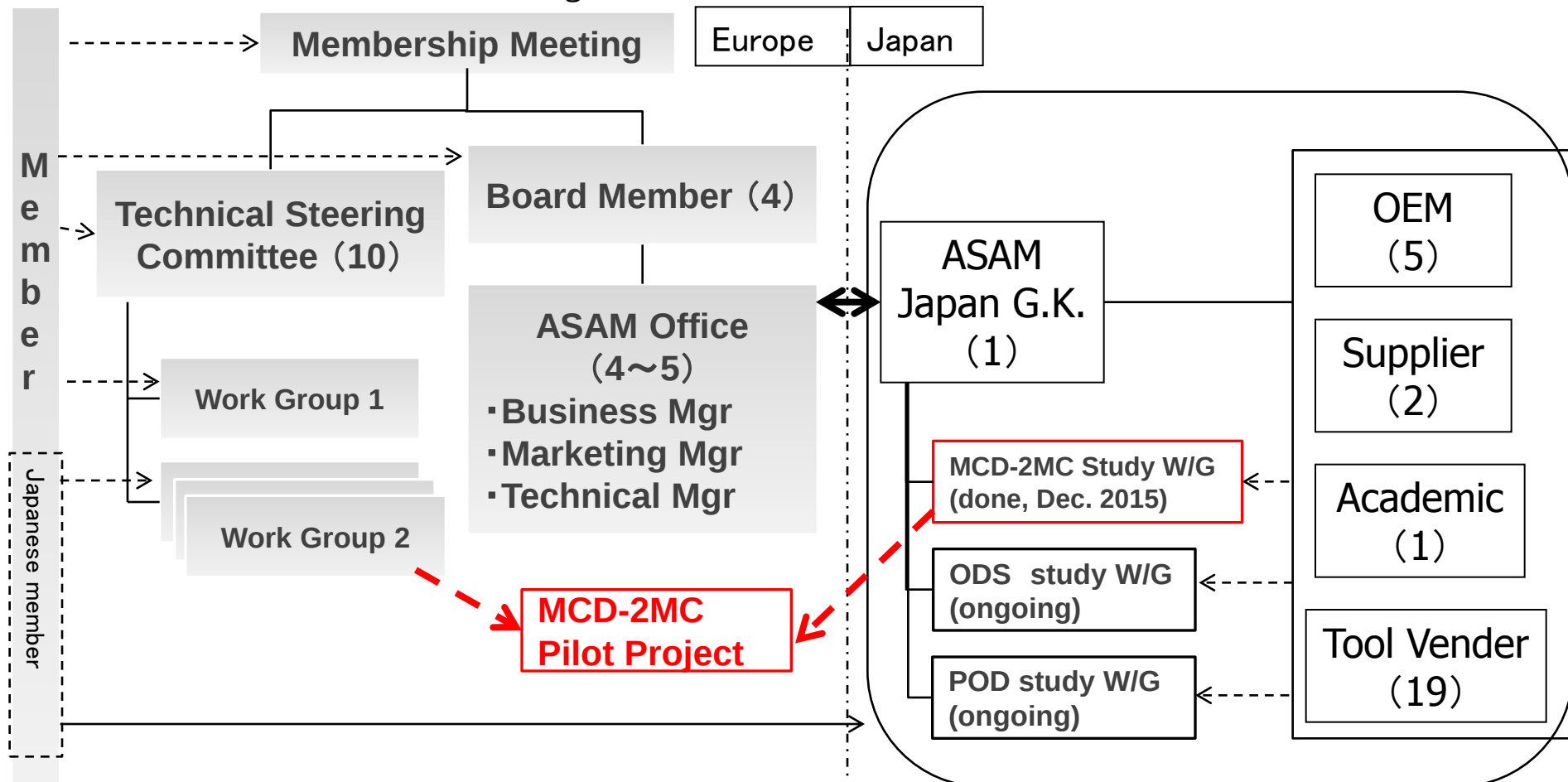
ASAM MCD2-MC V1.7.1 (Maintenance Revision)

Katsuhiro Miyoshi

Background

The establishment of ASAM Japan G.K. helps a lot for all ASAM members in Japan. We submitted Change Requests (CRs) through the MCD-2MC study W/G. But we have no experience to contribute to the W/G activities in Europe.

Fig.1 ASAM overview on Dec. 2015



Pilot Project

Thanks to the ASAM office and board member cooperation ,
the Pilot Project of the MCD-2MC W/G became reality from Feb, 2017 to Feb,
2018

- First project proposal from Japan
- Try out the method of collaboration between European members and Japanese ones via video conferencing
- 21 CRs submitted (including 3 from Japan)

(CR Example 1) White Space handling

- White space is defined as the separator between all language elements e.g. data types or keywords.
- Allowed white spaces

Ascii Code	Code	designation
0x09	HT	Horizontal Tabulation
0x0a	LF/NL	Line Feed / New Line
0x0b	VT	Vertical Tabulation
0x0c	FF/NP	Form Feed / New Page
0x0d	CR	Carriage Return
0x20	SPC	Space

(A2L file example)

```

/begin MOD_COMMON "Characteristic maps always
deposited in same mode"
    DEPOSIT ABSOLUTE
    BYTE_ORDER MSB_LAST
    DATA_SIZE 16
    ALIGNMENT_BYTE 2
/end MOD_COMMON
  
```

(CR Example 2) Dependent Parameters

- ▶ For an observer component it is important that it uses the same values as the main component.
 - The observer runs the same code and checks whether there are differences to the main controller
 - All characteristics must have the same values to get the same result
- ▶ Dependent parameter support now a dedicated set of rules for complex data types.
 - Part of the rules as example

Only the output values are calculated with the formula. The axis values are copied identically.
The formula is applied to each cell of the CURVE.

The dependent curve must have the same number of axis points.
Each cell of the 1st input CURVE is calculated with the related cell of the 2nd CURVE.

The dependent array must have the same size as the input.
Each cell of the 1st input VAL_BLK is calculated with the related 2nd input VAL_BLK.

V1.7.0 supports only values

1. Type of VALUE

Input Parameters:

VALUE_A	
Value	2

VALUE_B	
Value	3

Dependent Parameters:

<u>Formula</u> =VALUE_A Already supported.	<table><tr><td colspan="2">VALUE_DEP1</td></tr><tr><td>Value</td><td>2</td></tr></table>	VALUE_DEP1		Value	2
VALUE_DEP1					
Value	2				

<u>Formula</u> =VALUE_A*5 Already supported.	<table><tr><td colspan="2">VALUE_DEP2</td></tr><tr><td>Value</td><td>10</td></tr></table>	VALUE_DEP2		Value	10
VALUE_DEP2					
Value	10				

<u>Formula</u> =VALUE_A*VALUE_B+5 Already supported.	<table><tr><td colspan="2">VALUE_DEP3</td></tr><tr><td>Value</td><td>11</td></tr></table>	VALUE_DEP3		Value	11
VALUE_DEP3					
Value	11				

V1.7.1 supports

2. Type of CURVE, MAP, CUBOID, CUBE_4, CUBE_5

Input Parameters:

VALUE_A

Value	2
-------	---

CURVE_C

Axis	1	2	3	4
Value	10	20	30	40

CURVE_D

Axis	1	2	3	4
Value	100	200	300	400

Dependent Parameters:

CURVE_DEP1 (Original)

Axis	1	2	3	4
Value	1	2	3	4

Formula

=CURVE_C

CURVE_DEP1

Axis	1	2	3	4
Value	10	20	30	40

CURVE_DEP4 (Original)

Axis	1	2	3	4
Value	1	2	3	4

Formula

=CURVE_C
*VALUE_A
+CURVE_D

CURVE_DEP4

Axis	1	2	3	4
Value	120	240	360	480

Project Members

PT Member ID	Name	First Name	Company
Submitter	Miyoshi	Katsuhiro	Toyota
	Sato	Tadamasa	Toyota
	Samezawa	Hiroshi	Honda
	Watanabe	Akira	Nissan
	Sukekawa	Kiyoto	Nissan
	Ebisu	Tomomi	Vector Japan
Leader	Wenzel	Thilo	ETAS
	Amsbeck	Hendirk	dSpace
	Wenzel	Bernd	M&K
	Lohberger	Franz	Visu-IT!
	Schnorr	Elke	Vector
	Paul	Wolfgang	Vector

Fully Supported by Mr. Shoi and Mr. Thomsen

Schedule

X: Plan ▲: actual date

Work Package Nr	Work package short name	Absolute time plan									Year:2017		
		Jan	Feb	March h	April	May	June	July	Aug	Sep	Oct	Nov	Dec
1	Initial Preparation Meeting		X (▲2/14 at Vector, Stuttgart / Tokyo)										
2	Workgroup Meeting I			X (▲4/6 at Vector, Stuttgart / Nagoya)									
3	Workgroup Meeting II				X (▲5/19 at Vector, Stuttgart / Tokyo)								
4	Workgroup Meeting III							X (▲7/29 at Vector, Stuttgart / Tokyo)					
5	Workgroup Meeting IV									X (▲9/19 at WEB)			
6	Finalization Meeting										X (▲10/5 at WEB)		
											(11/7 at WEB)▲		
Work Package Nr	Work package short name	Absolute time plan									Year:2018		
		Jan	Feb	March h	April	May	June	July	Aug	Sep	Oct	Nov	Dec
1	Review Phase	X (▲1/30 at WEB)											
2	Release		X (▲2/12 at WEB)										
3	Checker Release									X			

– On first 4 meetings, we shared the slides by the WebEX and discussed through the video conference system. On last 4 meetings, we used only WebEX system.

(Status)

- v1.7.1 released (exclude the checker tool)
- 83/324 Pages were modified

Thank You