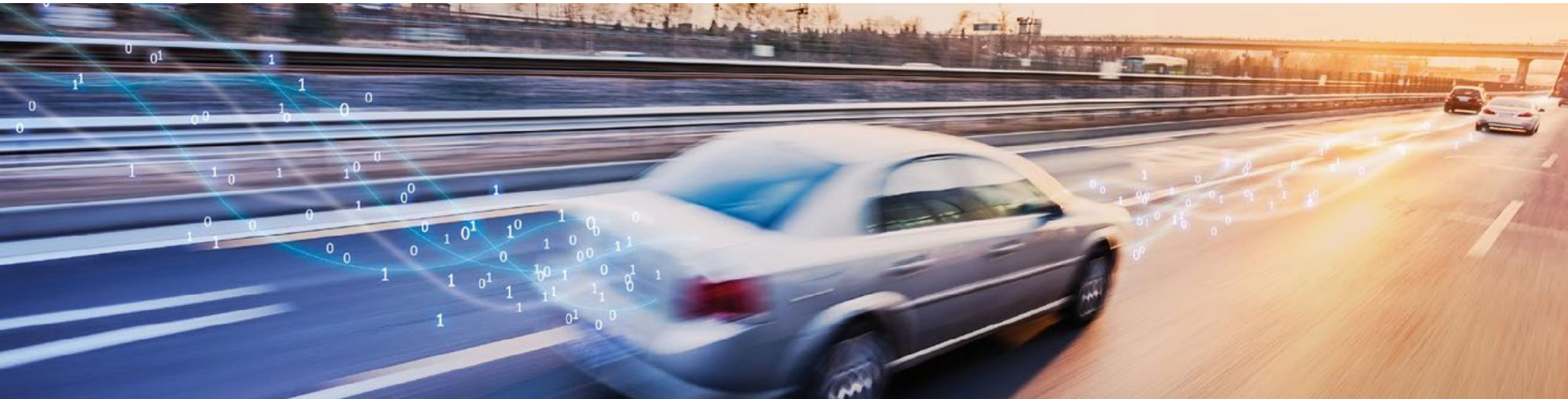


Release Roadmaps 2017 and 2018: New Standards and New Opportunities

Thomas Thomsen
Global Technology Manager

14.06.2018
Höhenkirchen, Germany



Agenda

- 1 Releases in 2017
- 2 Roadmap for 2018

Standard Releases and Projects in 2017

2017

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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Release

- ASAM ODS 6.0
- ASAM ISSUE 3.2.0

Release

- ASAM MCD-1 XCP 1.4
- ASAM MCD-2 NET 4.1.2
- ASAM MCD-1 POD 1.0.0

New
Standard

Thomsen

Release

- ASAM XIL 2.1.0
- ASAM MCD-1 XCP 1.5
- ASAM MCD-1 XCP
Debugging Extension

New
Standard

König,
Eick

Cross Test

- ASAM XIL
2.0.1 EES-Port

Concept Projects

- Big-Data Technologies for ODS
- Conceptual Study on MC-3
Automation Access

Highlight:

First Projects from Japan



- ASAM MCD-2 MC 1.7.1
- HEX File Management Concept

ASAM MCD-1 POD

New Standard

Goal: Standardize the software interface between the POD^{*)} hardware and ECU software.

Technical Use-Cases

- Integration of POD-driver into the ECU software
- Configuration of the POD

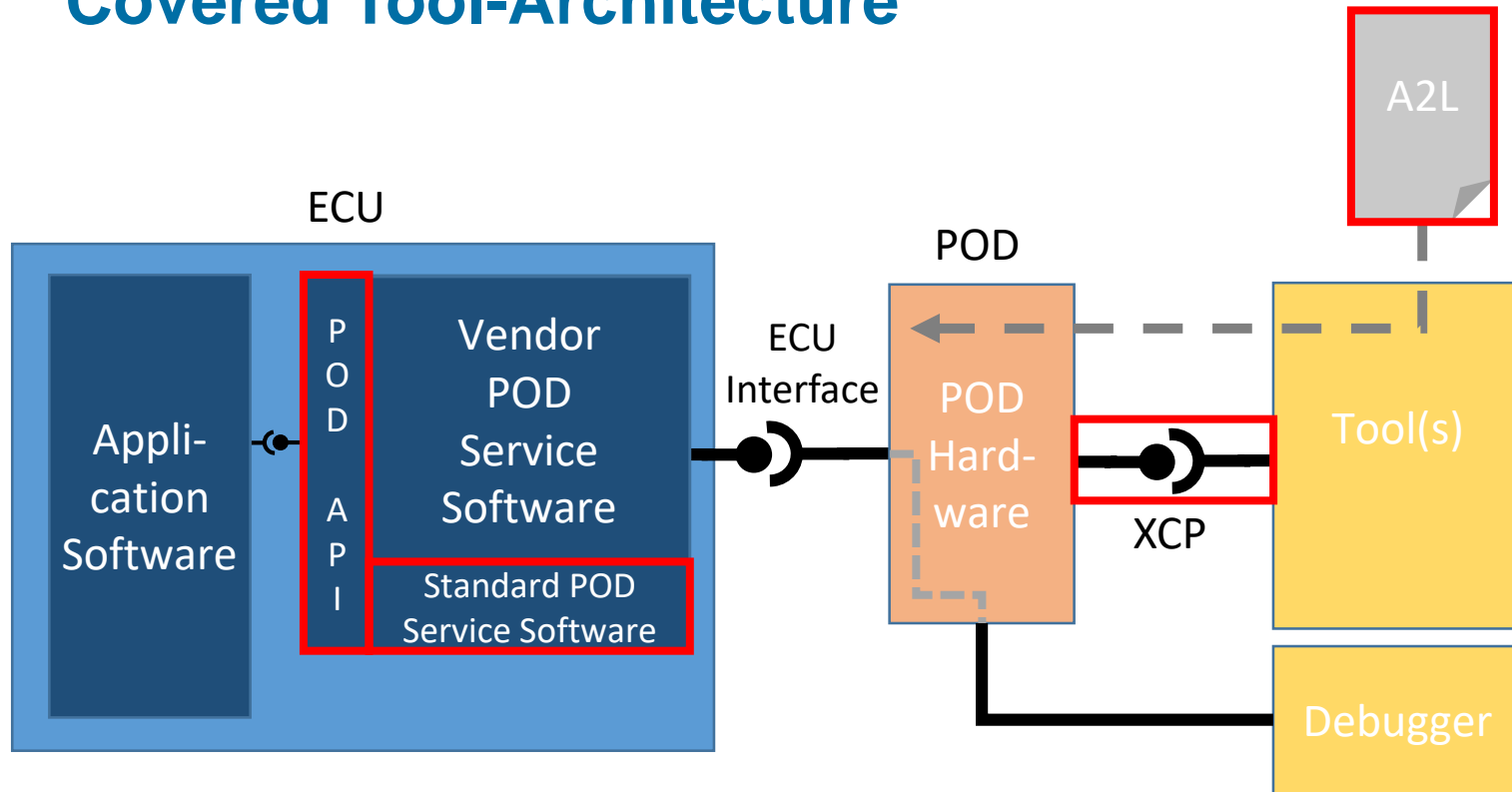
Benefits

- Easier integration of a POD into an ECU
- Use of multiple PODs for one ECU development project
- Easier connection and configuration of multiple tools to one POD

➔ Enables OEMs and Tier-1s to select best-in-class calibration tools

^{*)} Plug-On Device

Covered Tool-Architecture



Standard POD

Service Software: Definition of API, detailed behavior and source-code

POD API: Definition of API and behavior

XCP: Definition of POD-specific commands and events

A2L: Definition of the protocol data structures (AML-file)

Covered Use-Cases

- POD-Detection: API, detailed behavior, source-code
- POD-Initialization: API, behavior
- POD-Configuration: API, behavior
- Synchronous Measurement: API, behavior
- Calibration: API, behavior

Release

- Public review, including OEM-members from Japan
- Includes source code for POD-detection
- Version 1.0 released in June 2017

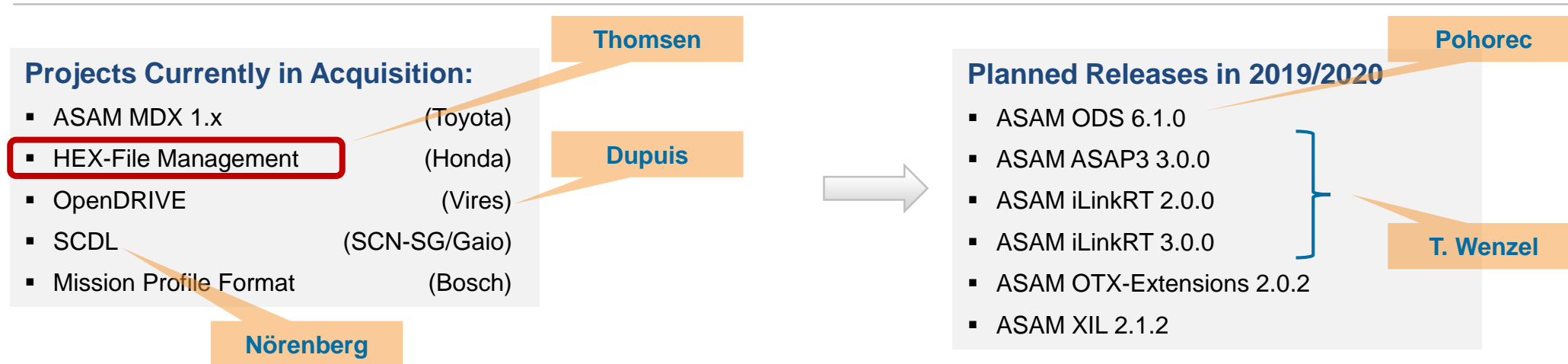
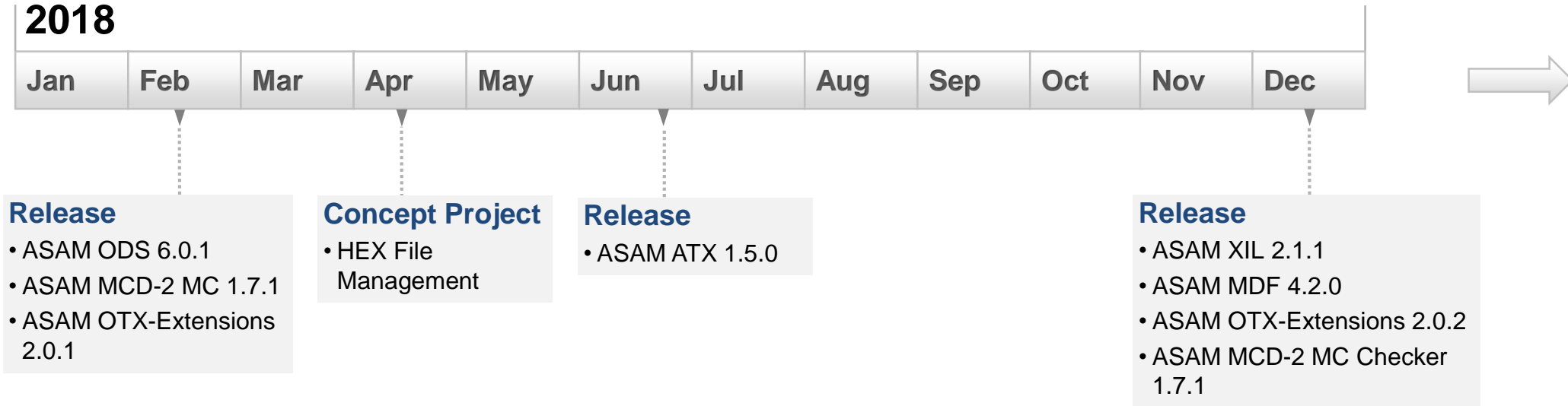
Agenda

1 Releases in 2017

2 Roadmap for 2018

Release and Project Roadmap for 2018

2018



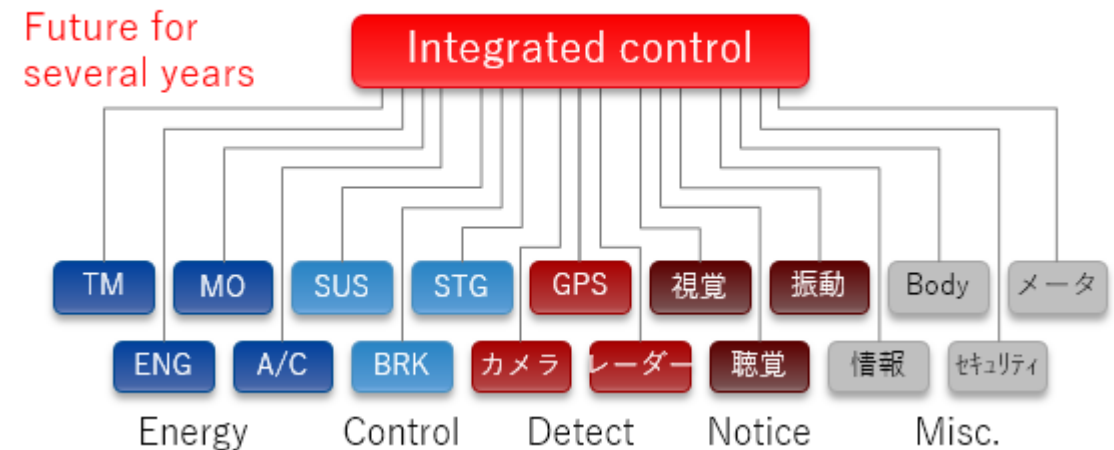
Future Standardization "HEX-File Management"

- Goals:**
- Systematically determine matching HEX-files of a complex E/E system
 - Link development artefacts to specific HEX-files

Problem

- Complex functional interdependencies between many ECUs.
- Engineers work in different domains. They have problems to understand the status of development of the other domains.
- Which of the many versions of HEX-files for each ECU will work together in the test vehicle?

Complicated relation (e.g. autonomous car) *)



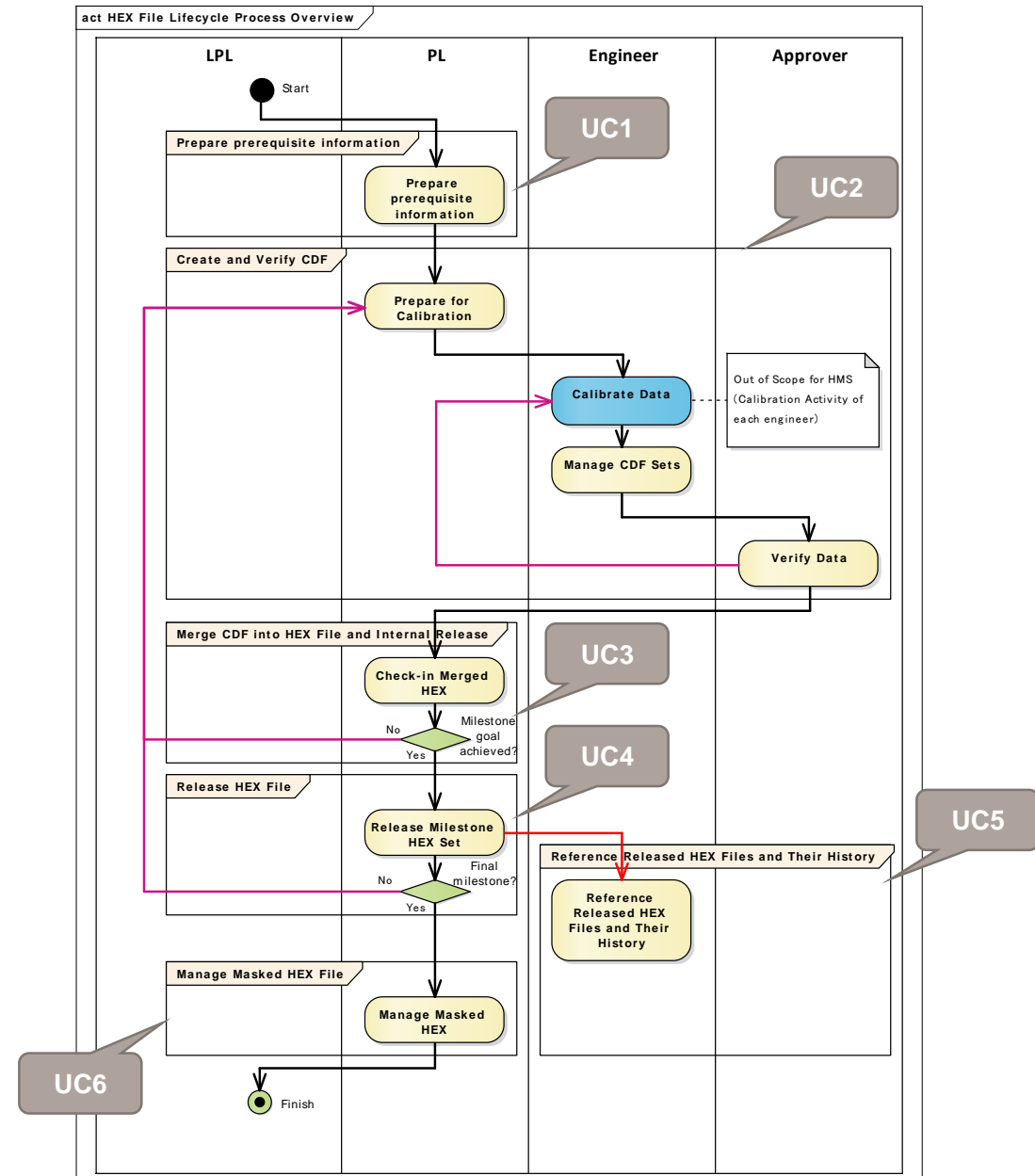
*) Source: Honda R&D

Solutions Proposed by the Concept Project

- Meta-model, which describes development and test data related to the HEX-file.
- API of the HEX-file management system:
 - import of data from external system
 - linking of data (internal or external)
- HEX-file identification, integrated in the ECU flash file.

Use-Cases

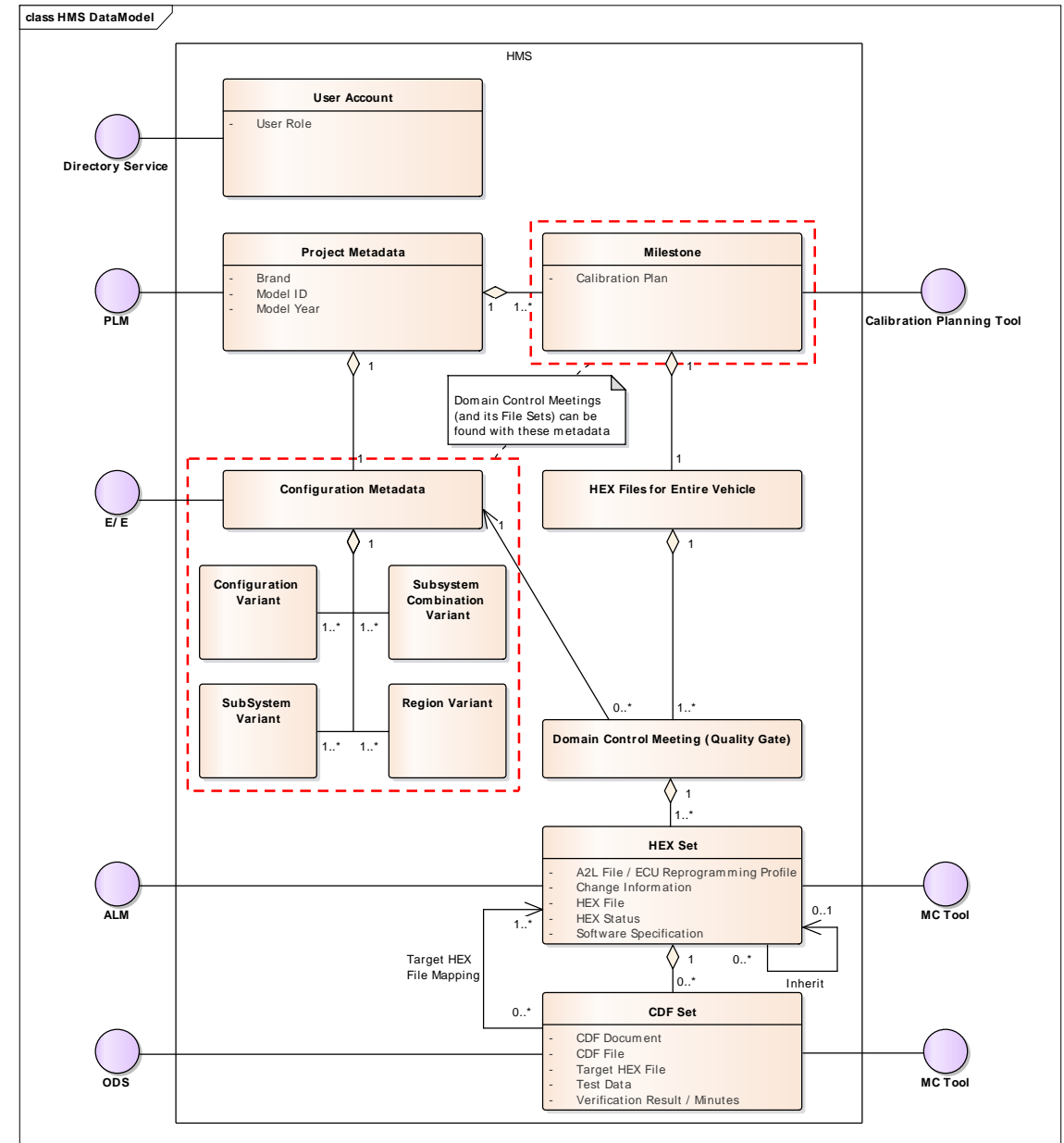
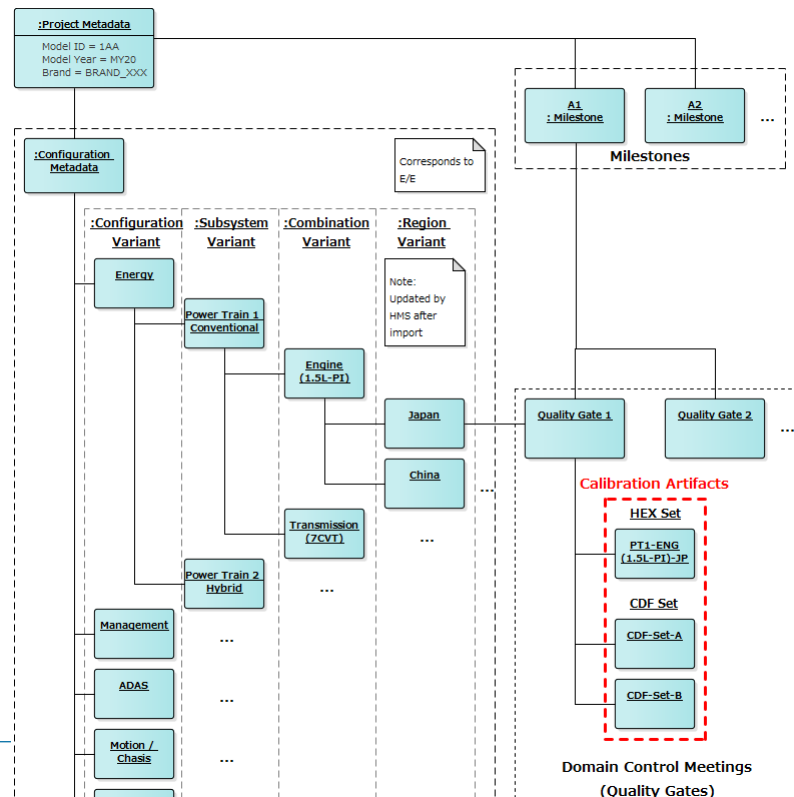
- The group started with the definition of a typical HEX-file lifecycle ...
- ... and derived 6 use-cases from it.



Meta-Model

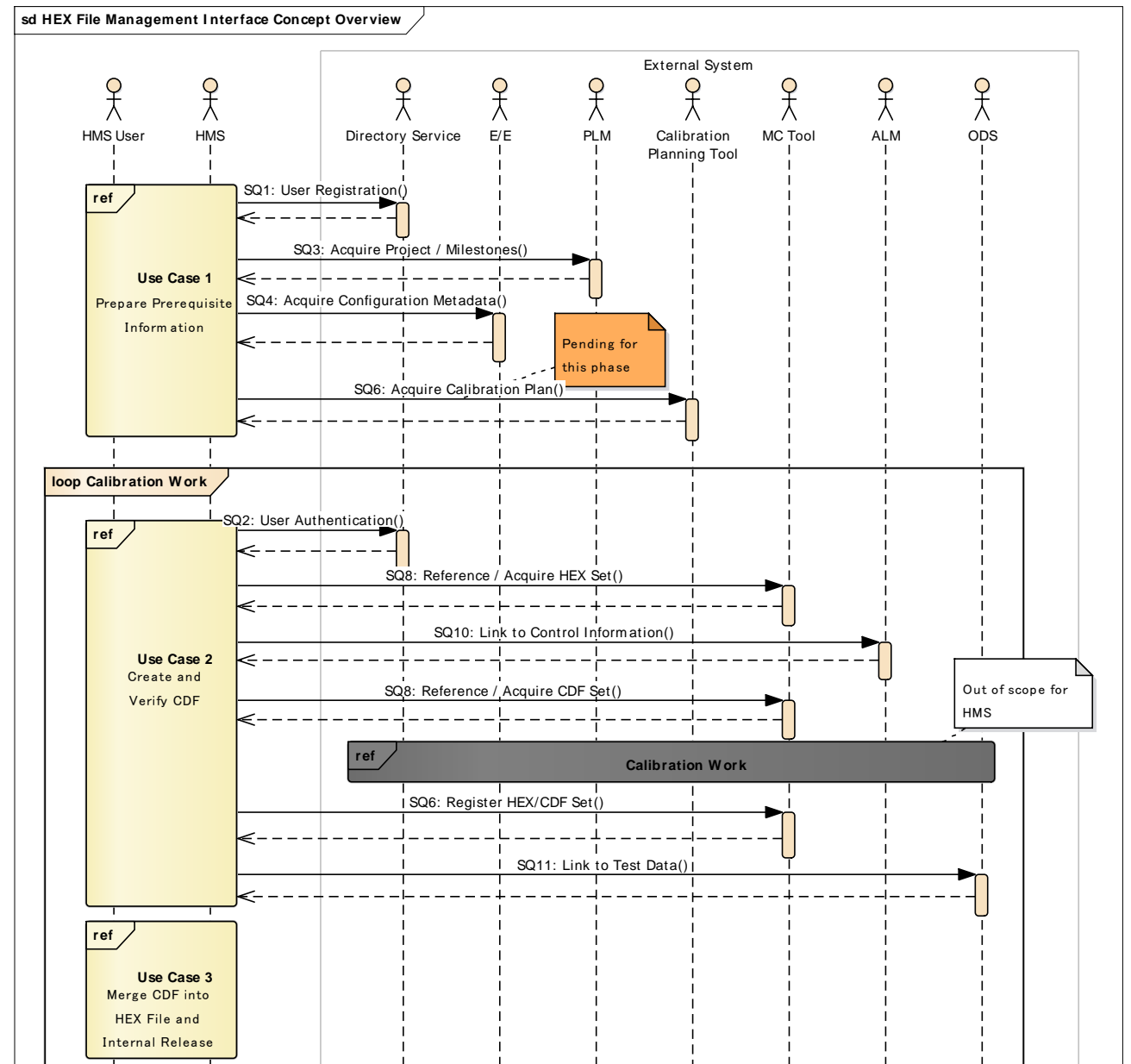
- Based on the use-cases, the group defined a meta-model ...
- ... which includes descriptive data and development artefacts that belongs to each use-case.

Example:



API

- Because development artefacts (specs, code, data, etc.) are typically distributed across many different departments and tools ...
- ... the group defined an API to access the data.



Next Steps

- Concept project finished in March 2018. Paper is available upon request.
- Concept group members are committed to proceed with developing a standard.
- Honda committed to lead the project.
- Version 1.0 shall be primarily developed by Japanese members.
- EU/US members are welcome.
- Project proposal expected by Q4 2018.



For further information, or if you are interested to participate in the project, please contact the ASAM Office:

thomas.thomsen@asam.net

Thank you!

Thomas Thomsen

Global Technology Manager, ASAM e.V.

Phone: +49 8102 8061 64

Email: thomas.thomsen@asam.net

For more information
on ASAM visit

www.asam.net