



DEVELOPMENT SPRINT REVIEW

CALENDAR WEEK 36.21

GENERAL (1/2)

HIGHLIGHTS:

Program Timing new naming convention introduced

Program Timing

- SVC3/SVC4 Volumes and Purpose

PMCS Assessment

- 60% S0 and 65% S1 unassessed
 - Review of deliverables for S0

BOM

- Extension EBOM flowchart created

GENERAL (2/2)

BOM

- Nightletter introduction
- Cost BOM created
- SVC3 BOM created
- Logistic BOM created

BOM Part_Source attribute improvement → Registration summary: number of blank parts from 2127 to 1590

LOWLIGHTS: None

BLOCKER:

- BOM cost reduction investigations (cost per part)
- Check-list for SVC3 DR defined until 20-AUG-21 (CAD/CAE/QUAL/EBOM/ME)

HIGHLIGHTS:

- SVC3
 - Supplier Sourcing (Sunvisor, Headliner, Soft Trims, Hard Trims, Seats, 1st Aid Kit, ESP)
 - Get technical/cost feedback for the Sunvisors / done
 - Get cost&timing feedbackfor the Sunvisors / WIP
 - Finalized cost&timing feedback is awaited for the headliners / done
 - PO is in internal circulation to be approved for the Hard Trims / WIP
 - 1st Aid Kit supplier will confirm quote status that was agreed in 2018 after summer vacation/ WIP
 - Seat quotes for SVC3-4-5 are awaited / done
 - Cross functional data status for the completion of Interior Development

INTERIOR (2/3)

- To share remaining BIW related Interior attachment points / WIP
 - Some Seats and Restraints attachments are still open /WIP
 - Sunvisor, Front Upper Light Unit attachments are open /WIP
- PMCS
 - PMCS - Pre S0 - Deliverable - checked and judged - Done
 - PMCS - S0 deliverables checked and questions prepared for PM / Done

LOWLIGHTS: None

BLOCKER:

- SVC3
 - Steering Package (steering column, steering column module and steering wheel) to be refined as explained in the last sprint
 - Sunvisor supplier and production feasibility suppliers are missing for the Interior Development

INFOTAINMENT (1/2)

HIGHLIGHTS: SVC3:

- Infotainment commodities are placed in their correct location in 3Dx, the only remaining item is the Ecall button
- All PMCS deliverables for S0 and S1 at 100%
- IHU OS software image is released to Sono-Digital team for APP development.
- VCM software, Speakers, Displays, Antennas, Microphones, Cluster design, Phone Projection and USB's
- Supplier Level 3 will deliver final data on 20.09.21
- Infotainment components are released in 3DX for Version H.1:
- We are working with EE (Arber) to increase the power for the VCM (to allow the BT to stay on longer for better response during vehicle wake up)

INFOTAINMENT (2/2)

LOWLIGHTS:

SVC3

- VCM component change (to improve wake up speed)
- Still investigating Ecall button suppliers
- Supplier Level 3 needs to get instrument cluster wire frames to start development

BLOCKER:

SVC3

- No update on steering wheel controls from suppliers

HIGHLIGHTS:

SVC3

- Chassis subframe vs CRFM issue solved

LOWLIGHTS: None

BLOCKER: None

CHASSIS (1/3)

HIGHLIGHTS:

- Brakes:
 - Freeze fasteners definition-100%
 - FUSA Item Definition – 100%
 - DT For ESC & other Sub systems – 100%
 - Tech file for Foundation Brake – 100%
 - Serviceability attribute – 70%
- CAD / PDM
 - Finalize EVP position - 95%
 - PDM attributes: Serviceability - 100%

CHASSIS (2/3)

- Knuckle/Spindle/Chassis Accessories
 - Freeze fastener definition – 100
 - Confluence Page update – 100%
- Steering
 - Finish DFMEA failure modes – 100%
 - Summarize final TRE results for steering – 100%
 - HARA Discussion – 90%
 - Steering handover - 100%

CHASSIS (3/3)

LOWLIGHTS:

- RFQ for brake piping – Not Started
- Nomination for Knuckle
- Get quotes for tire repair kit
- Handover rear shock mounting plate – still on CAE
- Brake lines update & interface – 50%
- LCA price increased

BLOCKER:

- LKA, AEB, ACC inputs
- Cybersecurity definitions from Sono
- Ass'y sequence for brake piping: No OH station before marriage. Possible issue for E/E as well.

HIGHLIGHTS:

SVC3

- (Nearly) all Part source attribute updated (Large BOM update 02.09 on TCY839 will have to be re-done)
- (Nearly) all enterprise numbers updated (Large BOM update 02.09 on TCY839 will have to be re-done)

E/E (2/2)

LOWLIGHTS:

SVC3:

- E/E BOM and PM BOM not matching although eBOM is up to date
- Sourcing
 - DTs for some switches missing
 - Missing peripheral information attached to BCM

BLOCKER:

SVC3:

- DT Status
- Headcount (Timing)

HV BATTERY (1/2)

HIGHLIGHTS:

- Study regenerative braking and implement in system model (this has strong influence on overall energy consumption)
- Finalize A sample, and get PO
- Sign off BMS diagnostics list and functionalities for B samples
- Set HVB clearances in x and z directions to BIW
- Define a coolant block connection concept for front of the case (outside/inside)

HV BATTERY (2/2)

LOWLIGHTS:

- Communicate BMS / Battery pack warnings icon for infotainment team (Refer to UN ECE R121)
- Implementing coast down curve testcase in the model.
- Screws BIW-HVB dimension preliminary calculation on static loads
- Define requirements and cost (machine, license, maintenance costs etc.) of performing the simulations.

BLOCKER:

- Get quote of complete DVP or part of tests in battery pack DVP

HIGHLIGHTS:

- SOP
 - Logistics Manual - 1rst intermediate Version in english confirmed and provided
 - Customs services cost estimation

LOWLIGHTS:

- VAT concept for customs clearance

BLOCKER: None

HIGHLIGHTS: None

LOWLIGHTS:

- Still valid: Guidance on the HOW of integration into squads not provided due to HOW Master's time constraints. (Ie: No time)

BLOCKER: None

QUALITY (1/2)

HIGHLIGHTS:

SVC3/SOP

- SQA:
 - *Participation in chassis, BIW, thermal, solar, interior sprints, E/E, HV Battery, infotainment sprints to identify and kick-off SQA tasks (waiting for powertrain)*
 - *Supplier Valoe – planned PMCS training for Valoe as pilot is to be arranged.*
- IMS/PQE
 - Training on Parts identification & traceability (09.09.21) - done
 - Preparation of the shortened APQP / MLA training (German and English) - 75% done
 - Content for LCA2 presentation defined

QUALITY (2/2)

LOWLIGHTS: None

BLOCKER: None

PRODUCTION (1/2)

HIGHLIGHTS:

- Contracting
 - Negotiation for BOM level is done
- Organization and Process
 - Beneficial cooperation with NEVS

PRODUCTION (2/2)

- ME
 - Visit NEVS and discuss SVC3 criteria and process is done
 - Timing Meeting for week 37 is done

LOWLIGHTS:

- ME
 - BOM finalizing for contracting is actual not possible because analyze of BOM is missing

BLOCKER: None

PERFORMANCE REQUIREMENTS (1/2)

HIGHLIGHTS:

NVH

- NVH Test organisation in progress vehicle prep Week 38-39, test CW40 or 41 TBD
- Testing scope written
- Engine Mounts Issue - Package checked (minor issues) progressing to impact on driveline dynamic envelope
- Supplier met and design alignment on going (taking into account EVP integration and clashing issue with pipe)
- AVAS system integration Launched - Sound Package on going

PERFORMANCE REQUIREMENTS (1/3)

Weight

- Update Input Quality Monitoring Dashboard
- Release Sion Weight Status Report September
 - Estimated Weight
 - Approved Weight
 - ChangeLog between August and September (complete vehicle and each module)
 - Benchmark complete vehicle/system level: Curb Weight vs. Battery Capacity/Range/Length/Cargo Volume etc.
 - Interior/Crash Safety supplier Report reviewed → Research in Process

PERFORMANCE REQUIREMENTS (2/3)

LOWLIGHTS:

NVH

- Follow CAD issues on various modules
- CAE results analysis, LCO updates
- Jira integration of requirements (training on friday 10-09)
- Assist all PO and modules for NVH topic

Weight

- Input source: still missing some Part_Source and weight information in BOM/EBOM, Details in BOM error Report & Input Quality Monitoring Overview Charts

PERFORMANCE REQUIREMENTS (3/3)

BLOCKER:

- NVH
 - Jira integration of requirements - need help with my decision how to articulate it for NVH at this stage
- Weight
 - Input source

HOMOLOGATION & RECYCLING (1/2)

HIGHLIGHTS:

Homologation

- General enquiry KBA

Recycling

- Meetings with potential imds service providers
- Presentation concerning European Green Deal and impact on resource and recycling laws and how Sono is affected
- Uptake recycled content in plastic parts internship and Master Thesis on Recycling Process for Solar Body Panels First outline of Research on legal requirements and Market analysis concerning OEM with integrated solar roof / suppliers of free available solar panels

HOMOGOLATION & RECYCLING (2/2)

LOWLIGHTS: None

BLOCKER: None

PROGRAM MANAGEMENT (1/3)

HIGHLIGHTS:

Issue Management

- Kick-off for PMCS Platform transition in CW35 (1 month time estimated)

Change Management Process

- Using Change Actions for DR SVC3 as sign off tool (Agreed with 90% of the Squads - Agreement with missing Squads will be done till end of the week)

Release Management

- Release for RFQ work process is created and aligned with Purchasing

Cost Management

- Draft structure for new Budget File

PROGRAM MANAGEMENT (2/3)

LOWLIGHTS:

Issue Management

- Feedback from drivers and solvers are time consuming
- There is no automatic warning system implemented yet

Release Management

- EBOM work process draft is created, but downstream information flow and requirements for implementation need to be defined

PROGRAM MANAGEMENT (3/3)

BLOCKER:

VTS

- Low feedback on VTS change requests (driver + stakeholder approval)

Issue Management

- Expired issues have not been updated until the end of sprint

Release Management

- Decision to be made: shall we use Change Action for minor releases

VIRTUAL VEHICLE (1/2)

HIGHLIGHTS:

12 issues resolved

- CW36
 - PFX - SM000545 - Subframe package
 - PFX - SM000621 - Brake Booster Integration
 - PFZ - SM000596 - Frunk Package Completed
 - PIY - SM000823 - Tire Envelopes interfere with CD-Pillar and Wheel Arch Liner
 - PFY - SM000xxx - 12V Battery Positioning and Bracket
 - PFX - SM000566 - Fender Package
 - PIY - SMxxxxxx - BCM_PASE

VIRTUAL VEHICLE (2/2)

- CW37:
 - PFX - SM000565 - Headlamp Integration
 - PFX - SM000616 - Radar Sensor Integration
 - PFX - SMxxxxxx - ELECTRIC_COOLANT_PUMPS_ASSY
 - PFZ - SM000564 - Vehicle Control Unit interference
 - PIX - SM000708 - HV battery Integration
- Standard Parts Structure created and Responsibility defined in CAD-Guidelines

LOWLIGHTS:

- Integration Report moved to next Sprint
- 3DX Issues after Update

BLOCKER: No alignment on VIN/Tire Pressure Label Responsibility

DESIGN (1/2)

HIGHLIGHTS: SVC3

- Exterior
 - Styling Loop 03 ongoing. approximately 87% done
 - detailed work on gap / flanges / over / underflush conditions. part releases of updated overflush condition in hood and a pillar + corrected charging lid gap
- *Interior*
 - Styling loop 03 ongoing. Overall about 70 % done
 - IP 85%
 - doors 95%
 - Center console: 90%
 - Greenhouse / Headliner / trims 25% done. A pillar: 80%, lower trim: 30 % , upper trim: 20%

DESIGN (2/2)

- *Wallbox*
 - community chose design “3”

LOWLIGHTS: None

BLOCKER: None

FUNCTIONAL SAFTEY

HIGHLIGHTS:

SVC3

- FuSa Process
 - Alignment on Checklist with RLE
 - Alignment on further HARA deliverables with RLE
- FuSa Requirements
 - Connecting FuSa Jira Board to VTS requirements in Jira > done
- Supplier Management
- Resource planning

LOWLIGHTS: None

BLOCKER: None

CRASH & SAFETY

HIGHLIGHTS:

- preSVC3 PedPro status overview is outstanding /WIP
- SVC3Prog PedPro is planned in 3 weeks / WIP
- SVC3Prog Structural Crash status to be reviewed on 21-Sep with Body Structures, Chassis, CTO /WIP
- preSVC3 Occupant Safety vehicle model is ready with generic restraints / Done
- SVC3Prog Occupant Safety vehicle model is ready with updated interior and available restraints / WIP

LOWLIGHTS: Recruitment is ongoing /WIP

BLOCKER: None