



DEVELOPMENT SPRINT REVIEW

CALENDAR WEEK 14.21

HIGHLIGHTS: Timing Reviews with R&D Squads done, finishing this sprint with all Competence Clusters.

Cost consolidation done: Potentials/miss alignments identified & further actions on the way.

Q2 budget baseline released.

Issue management transfer from sheets to tool.

Squad / Super Squad / Program management tool rolled out.

Further recruitment success (contracts signed).

Car Clinic Feedback.

LOWLIGHTS: VTS update release delayed.

BLOCKER: Holiday situation and short week caused further priority setting.

OVERALL PROJECT SVC2

Key Milestones Overview:

Shakedown finish SVC2.1 'Salt' car: 16.04.21

Shakedown finish SVC2.2 'Pepper' car: 02.05.21 (+2 days weekend)

HIGHLIGHTS: Problems solving moving on as planned.
E2E testing and presentation to investors successful.

LOWLIGHTS: None

BLOCKER: None

RESTART

HIGHLIGHTS: NEVS onboarding.

LOWLIGHTS: None

BLOCKER: VTS alignment and release topic taken over, but lacking time driving the topic properly.

HIGHLIGHTS:

SOP: Start of a regular meeting with NEVS to align on the logistics process.

LOWLIGHTS: None

BLOCKER: None

HIGHLIGHTS:

Restart: E/E (DESS) - Partner selected for continued EDS development.

LOWLIGHTS: None

BLOCKER: None

HIGHLIGHTS:

SVC2: Optimization of the procedure for the handover inspection at Roding and product audit for the SVC2.2; → Audit SVC 2.2 probably on 26.04.2021 (Roding).

LOWLIGHTS: None

BLOCKER: None

HIGHLIGHTS:

Restart: Concentrate on hiring for the sprint.
Make a try with experteer.

LOWLIGHTS: None

BLOCKER: None

BODY CLOSURE

HIGHLIGHTS:

ML Exterior onboarded, takes over Exterior System Development.

Sealing Concept Development > tailgate water channel and sealing support 3D data available.

SVC2.1: reworked door checks are fitted next by RA to SVC2 (two stop positions > 50% & 100% open).

SVC2.1: side door latches locking with the rest of the car important for E>E testing.

NEVS support available for closures.

LOWLIGHTS: None

BLOCKER: SVC2 problem solving takes directly away from SVC3 restart/series dev and Group Sion budget planning.

BODY STRUCTURE

HIGHLIGHTS:

SVC3: Start enquiry process from CW16.

Start activities with Body Shop Team NEVS.

CAE investigation of weight reduction.

First feedback received from supplier regarding corrosion behavior and material cards.

LOWLIGHTS: None

BLOCKER: None

HIGHLIGHTS:

SVC3: Display for IC & CID is finalized.

LOWLIGHTS: None

BLOCKER: None

HIGHLIGHTS:

SVC2: Changing of compressor damping elements ongoing.

LOWLIGHTS: None

BLOCKER: None

CHASSIS

HIGHLIGHTS:

SVC3: Lead Brakes & Steering Engineer joined.
Suppliers supporting weight change countermeasures.

LOWLIGHTS: None

BLOCKER: None

HIGHLIGHTS:

SVC2: Rear USB fixed on SVC2.1.

Headlight bug fixed in SVC2.1.

AVAS issue fixed, waiting for a SW Update.

SVC3: Series key fob PCB sourced. Design will work on the first 3D design.

LOWLIGHTS: None

BLOCKER: None

VIRTUAL VEHICLE COMPETENCE CLUSTER

HIGHLIGHTS: New integration guidelines published.

LOWLIGHTS:

9 tasks in backlog.

SVC2 update.

SVC2 integration to series.

BLOCKER: None

HIGHLIGHTS:

SVC2:

Exterior: Front & Rear Light Concept Development ongoing. First data delivered and adjusted.

Interior: Styling CAS handover to interior. All new and updated surfaces will be combined with the old engineering status next week so there is a complete set.

Open Next mentorship ongoing. Developing 2 projects with the community: Lockable trunk box for sharing and a phone holder.

LOWLIGHTS: None

BLOCKER: None



DEVELOPMENT SPRINT REVIEW

CALENDAR WEEK 16.21

HIGHLIGHTS: Supplier reviews with each development squad completed: critical systems identified and actions derived.

Issue management reactivation to be completed this sprint.

Program Management Control Suite, as well as Issue Management Tool, rolled out.

LOWLIGHTS: Technical input car clinic moved to next sprint due to attachment to VTS Workshop.

VTS Workshop not possible this sprint.

BLOCKER: NVH CAE Package till SVC3, deprioritized for this sprint.

DVP Update, deprioritized for this sprint.

OVERALL PROJECT SVC2

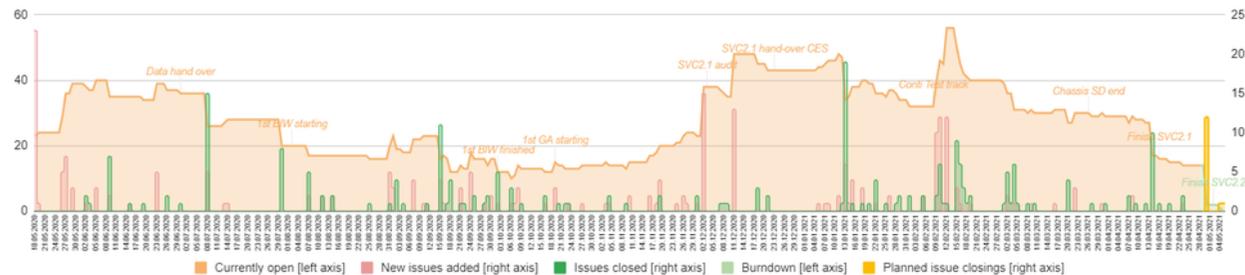
HIGHLIGHTS: Successful testing on Continental test track at Regensburg.

Audit of SVC2.2 took place at Roding → see QUAL.

OBC B-02 sample in SVC2.1.

Burndown chart 28.04.2021

SVC2 Issues since project start



LOWLIGHTS: Misunderstanding on connecting the PV body panels on SVC2.2

BLOCKER: None

RESTART

HIGHLIGHTS: NEVS onboarding.

LOWLIGHTS: None

BLOCKER: VTS alignment and release topic taken over, but lacking time driving the topic properly.

HIGHLIGHTS:

SOP: New Commodity Manager Info and E/E.
New Commodity Manager Body Structure.

LOWLIGHTS: None

BLOCKER: None

HIGHLIGHTS:

SVC2: Optimization of the procedure for the handover inspection at Roding and product audit for the SVC2.2; → Handover SVC 2.2 was on 26.04.2021 (Roding).

SVC3: Definition of processes and swimlanes for Product-Development (Project- / Dev.-Handbook).

LOWLIGHTS: None

BLOCKER: None

HIGHLIGHTS:

Restart: Concentrate on hiring for the sprint - ongoing.

LOWLIGHTS: None

BLOCKER: None

BODY CLOSURE

HIGHLIGHTS:

NEVS manufacturing process working well. First-stage, big open questions/assumptions clarified.

SVC2.2 fix: front window seems to operate correctly now.

Last week with minimum resources.

Window regulator supplier RFQ follow up completed.

LOWLIGHTS: New team: lots of preparation required (consolidating 3+ yrs and decisions of history for new engineers).

Difficult to complete remaining Prio 1/2 RFQs atm (average 1-2hours per RFQ).

BLOCKER: SVC2 still takes time. No simultaneous working SVC2 & SVC3.

Resource. No new applications.

HIGHLIGHTS:

SVC3/Series: FE extension/restyling CAD updates complete, but need to be checked for feasibility and compatibility.

Front/Rear Lighting Concept Development shows lamps feasible for internals.

LOWLIGHTS: None

BLOCKER: None

BODY STRUCTURE

HIGHLIGHTS:

SVC3: Request data of body structure are available including production information:

- RPS.
- Contact surfaces.
- Tolerance definition.

NEVS Body Structure Shop team works well.

LOWLIGHTS: None

BLOCKER: None

INFOTAINMENT

HIGHLIGHTS:

SVC2: SVC 2.1 End-2-End testing was performed on the infotainment system and is good for the tour.

SVC3: Head-unit and speakers nomination moving closer

In discussion with suppliers to have an embedded amplifier in the head unit, instead of external.

LOWLIGHTS: SVC2: In End-2-End testing on OBC was not performed.

BLOCKER: None

HIGHLIGHTS:

SVC3: Good alignments with NEVS about assembly sequence.

Good progress on the compressor bracket.

Packaging for new heater confirmed by CAD team.

LOWLIGHTS: SVC2: New damping elements did not work. New solution is already ordered.

BLOCKER: None

CHASSIS

HIGHLIGHTS:

SVC3: Regen brake strategy decided.

Great process planning review with NEVS. Overall manufacturing concept is the same we had. Good design suggestions. 1 blocking point to be addressed.

LOWLIGHTS: SVC3: MTS depending on tech decisions to be finished.

2 colleagues affected by Indian travel restrictions.

BLOCKER: None

HIGHLIGHTS:

SVC3: BOM (Cost/Weight) Updates but need to be transferred.
LABCAR Frame designed.

LOWLIGHTS: SVC2: Sim-fuse testing has not taken place yet (parked).

SVC3: EE / BIW Interfaces, Grounding, Retainers, Grommet Positions, Brackets (due 30/04).
Recruiting.

BLOCKER: SVC3: Bench budget.

DT Response.

HIGHLIGHTS:

SVC2: Successful.

HVAC Working in SVC2.2 (Regensburg), waiting for final software release.

Testing on SVC2.2 at Nürnberg was successful.

Brake booster issue fixed temporarily.

Parts ordered to fix permanently.

LOWLIGHTS: SVC3: Requirement tool selection still ongoing, required for VCU.

Recruiting.

BLOCKER: SVC2: OBC precharge error hard to solve.

VIRTUAL VEHICLE COMPETENCE CLUSTER

HIGHLIGHTS: 2 new CAD-Engineers starting in May.

LOWLIGHTS: 12 Tasks in backlog: SVC2 update

BLOCKER: None

HIGHLIGHTS:

SVC3:

Exterior: summing up all surface-driven and technical-driven issues for the next styling loop.

Loop 02 planned for mid-June.

Interior: styling CAS is being evaluated by Engineering ESP.

Styling loop 02 planned for July/August.

OpenNext! mentorship ongoing: developing 2 projects with the community. Lockable trunk box for sharing and a phone holder.

LOWLIGHTS: None

BLOCKER: None

PROCESS OWNER COMPETENCE CLUSTER

HIGHLIGHTS:

Recruiting documentation BOM.

Recruiting documentation VTS.

Regular meeting with PO's.

LOWLIGHTS: None

BLOCKER: Low feedback from responsible change request drivers.



DEVELOPMENT SPRINT REVIEW

CALENDAR WEEK 18.21

GENERAL

HIGHLIGHTS: DVP update received.

VTS release v6.

Timing new VPP release (Group Sion Huddle): competence cluster consolidation.

Group Sion org chart.

LOWLIGHTS: NVH CAE Package till SVC3 only one alignment possible, follow up to run into the next sprint.

PMCS tool fillings.

BLOCKER: None

OVERALL PROJECT SVC2

Key milestones overview:

SVC2.1 hand over to market: 16.04.21 - DONE

SVC2.2 hand over to market: 11.05.2021 - DONE

HIGHLIGHTS: Final issue resolving from Roding.
Handover of both vehicles to the SVC2 managers is done.

LOWLIGHTS: None

BLOCKER: None

HIGHLIGHTS:

Restart: Inbound Logistics Manager onboarded.

Job descriptions for both finished: Vehicle Logistics Specialist and Spare Parts Logistics Specialist done and validated.

Logistics requirements inside of the standard RFQ template reviewed.

LOWLIGHTS: Restart: still open positions to be filled.

BLOCKER: None

HIGHLIGHTS:

SOP: new Commodity Manager Interior.
New Commodity Manager Technology.
SQE started.

LOWLIGHTS: None

BLOCKER: None

HIGHLIGHTS:

Restart: concentrate on hiring for the sprint - ongoing.

LOWLIGHTS: None

BLOCKER: None

HIGHLIGHTS:

New engineers onboarded & getting up to speed.

LOWLIGHTS: None

BLOCKER: SVC2 still takes time. No simultaneous working SVC2 & SVC3.

Resource.

No new applications.

BODY STRUCTURE

HIGHLIGHTS:

SVC3: Contract signed: Senior Engineer Automotive Body.

LOWLIGHTS: SVC3: 3DX upload problems with single parts and sub-assemblies.

BLOCKER: None

HIGHLIGHTS:

Further technical discussion for antennas.

LOWLIGHTS: None

BLOCKER: None

HIGHLIGHTS:

SVC2: refrigerant circuit of “Salt” (SVC2.1) is now tight.

SVC3: final decision for new coolant system layout with 5-way valves due to benefit in price, weight and packaging.

LOWLIGHTS: SVC2: compressor NVH issue still not solved, however progress on the preferred solution: M6 to M8 adapters handcrafted, so now we can use the softer damping elements. Installation and tests planned for next Monday

BLOCKER: None

CHASSIS

HIGHLIGHTS:

SVC2: steering calibration uploaded to SVC2.2

SVC3: upload of SVC3 CAD.

Steering layout out. CFT analyzing (including NEVS ME).

BOM structure.

LOWLIGHTS: None

BLOCKER: None

HIGHLIGHTS:

SVC3: 32 tickets closed this sprint.

LABCAR Frame delivered.

LOWLIGHTS: SVC3: recruiting.

BLOCKER: SVC3: DT response.

VIRTUAL VEHICLE COMPETENCE CLUSTER

HIGHLIGHTS: New confluence space for external users.
2 new CAD-Engineers starting in May/June.
CAD data release cw18 in time - extension, SVC2 (before update) included.

LOWLIGHTS: 10 tasks in backlog.

BLOCKER: None

HIGHLIGHTS: SVC3:

Exterior: lights: front and rear light concept development ongoing. Basic development data available front + rear light, now refinement.

Geometry: summing up all technical driven change requests for the next styling loop. Loop 02 planned for mid-June.

Interior: styling CAS is being evaluated by engineering, - collecting engineering / tooling driven change requests.

Styling loop 02 planned for July/August.

Open Next mentorship finished.

LOWLIGHTS: None

BLOCKER: None



DEVELOPMENT SPRINT REVIEW

CALENDAR WEEK 20.21

HIGHLIGHTS: DVP follow ups.

LOWLIGHTS: None.

BLOCKER: Revision F release delay.

HIGHLIGHTS:

Restart: job ad for Finished Vehicle Logistics Specialist is live.

Inbound logistics timeline reviewed and updated. Further discussions with the project team to be done in the next sprint.

SOP: Logistics Manual

- Timeline for the document to be ready defined.
- Purpose / scope done.

LOWLIGHTS: None.

BLOCKER: None.

HIGHLIGHTS:

SVC3 / SOP:

- Quality swimlanes for Sion Vehicle Program Plan
- Responsibilities for MLA deliverables

LOWLIGHTS: None.

BLOCKER: None.

HIGHLIGHTS: Tailgate & charger lid development progresses well.

LOWLIGHTS: Change process & ability to shape processes.

BLOCKER: Ressources/time.

BODY STRUCTURE

HIGHLIGHTS:

SVC3: onboarding new employee.

Body Structure release F.1.

LOWLIGHTS: SVC3: CAD upload problems.

BLOCKER: None.

HIGHLIGHTS:

SVC3: technical investigation/analysis with FM/DAB antenna supplier.

LOWLIGHTS:

SVC3: working with antenna supplier to finalize the FM/DAB antenna type and location for better performance.

BLOCKER: None.

HIGHLIGHTS:

SVC2: new compressor damping elements mounted into Salt (SVC2.1). Will be tested next Monday (31.06.).

LOWLIGHTS: None.

BLOCKER: None.

HIGHLIGHTS:

SVC3: manufacturing engineering "OK" for steering assembly definition.

Preliminary knuckle SVC3 design has a big weight advantage (2,5kg vs 5kg expected).

LOWLIGHTS:

SVC3: some suppliers are not used to our pace.

BLOCKER: None.

HIGHLIGHTS:

SVC3: 21 tickets closed this sprint (Covers both EE & Powertrain).

LOWLIGHTS: None.

BLOCKER: SVC3: SCCM issue still not solved.

VIRTUAL VEHICLE COMPETENCE CLUSTER

HIGHLIGHTS:

New Confluence space for external users.
3 new CAD-Engineers starting in June.

LOWLIGHTS: 10 tasks in backlog.

BLOCKER: None.

HIGHLIGHTS:

Organisation: building a Confluence space.

LOWLIGHTS: None.

BLOCKER: None.



DEVELOPMENT SPRINT REVIEW

CALENDAR WEEK 22.21

HIGHLIGHTS: Last steps of finalizing development SVC3 quantities (final review missing).

HV battery development getting to full speed.

OBC development/validation planning.

Further deliverable clarification runs with new release into PMCS incl.:

- MLA update.
- cross-functional deliverables.

LOWLIGHTS: None.

BLOCKER: None.

HIGHLIGHTS:

Restart: timeline review was done.

SOP: Logistics manual.

LOWLIGHTS: None.

BLOCKER: None.

HIGHLIGHTS: Tailgate development progresses well.

LOWLIGHTS: BIW alignment -> many areas to work on in the next weeks: communication model bracket ownership.

BLOCKER: None.

BODY STRUCTURE

HIGHLIGHTS:

SVC3: Communication with interfaces picks up speed.

New employee brings a lot of input → supplier strategy.

Prepare "Request data" for suppliers package 4 ("small parts").

LOWLIGHTS: None.

BLOCKER: None.

HIGHLIGHTS: Supplier sourcing (restraints, mirror, sunvisor).

LOWLIGHTS: None.

BLOCKER: No feedback received from departments regarding crash & safety requirements.

INFOTAINMENT

HIGHLIGHTS: SVC3:

PO generated for VCM/Telematic System.

Antenna calibration investigation completed with location and performance is acceptable by the supplier.

Tech discussions are underway for antenna cable routing with the supplier and closure team.

LOWLIGHTS: None.

BLOCKER: None.

HIGHLIGHTS:

SVC2: New compressor damping elements mounted in Salt (SVC2.1) and tested. Due to the softer damping elements the vibration is way less noticeable in the cabin. Still not perfect, but that can only be solved with the new dampening concept from SVC3 onwards. Issue for SVC2 can be closed. Softer damping elements still need to be mounted to Pepper (SVC2.2)

LOWLIGHTS: None.

BLOCKER: None.

CHASSIS

HIGHLIGHTS: SVC3:

Timing on track (except steering).

Good options for knuckle manufacturing.

System level DVP defined.

LOWLIGHTS: SVC3: CAD integration being made manually.

BLOCKER: SVC3: ESP access to PDM.

HIGHLIGHTS:

SVC3: 16 tickets closed this sprint (covers both EE & Powertrain).
4 colleagues started this sprint.

LOWLIGHTS: None.

BLOCKER: None.

HIGHLIGHTS:

SVC3: Many technical topics being discussed and resolved on a weekly basis.

LOWLIGHTS: None.

BLOCKER: None.

VIRTUAL VEHICLE COMPETENCE CLUSTER

HIGHLIGHTS:

Focus on front end.

12V battery and fuse box position fixed.

AC-compressor and MCU solution in place.

All backlog tasks addressed.

LOWLIGHTS: 3DX topics confusion (GD&T, 3D-Master, Drawings).

BLOCKER: None.

HIGHLIGHTS:

Organization: definition of styling swim lane.

Exterior:

- Geometry: summing up all technical driven change requests for the next styling loop
- Styling react Loop 02 starting this week for 3- 4 weeks.

Interior:

- IP and Center console already analyzed, ready for loop 02.
- Styling react loop 02 starting this week for 3 -4 weeks.

LOWLIGHTS: None.

BLOCKER: None.



DEVELOPMENT SPRINT REVIEW

CALENDAR WEEK 24.21

HIGHLIGHTS:

HV Battery Nomination.

BOM Days: EBOM increased from 3072 to 3174 BOM-lines. 55 new part numbers were added. 33 part numbers were deleted. Make/Buy fill rate cannot be measured since the field was empty from the 3DX-export.

VTS updates within BOM Days: expected to implement biggest change (HV Battery) to be implemented in release 02.07.2. Prep this Friday.

OBC Development/Validation planning.

NEVS Engineering Rep - Visit 22-23.06.: Alignment and further F2F discussions with POs

PMCS Status Review.

Software release plan overview.

GENERAL (2/2)

LOWLIGHTS:

Last steps of finalizing Development SVC3 Quantities (Final Review missing): missing inputs. Bracket "Org".

BLOCKER: Off-Site, BOM Focus Days, Supplier Visit (6 workingdays of sprint).

HIGHLIGHTS:

SOP: Logistics Manual:

Purpose / Scope - done. List of Abbreviations - done. Contacts & Delivery Address - 80%.

Logistics Requirements - 90%. Transport & Delivery - 90%

LOWLIGHTS: None.

BLOCKER: None.

HIGHLIGHTS:

Contracting: First alignment with NEVS for Start up.

ME: One of the top issues for manufacturing (lower bold) is solved.

LOWLIGHTS: Organization and Process.

BLOCKER: None.

BODY CLOSURE

HIGHLIGHTS: None.

LOWLIGHTS: None.

BLOCKER: Adhesive supplier agreement needed.

HIGHLIGHTS:

SVC3/Series only: 1 new Engineer signed contract.

Lighting: Kick off HSL and start to look at package of headlamp. - Complete.

LOWLIGHTS: None.

BLOCKER: None.

BODY STRUCTURE

HIGHLIGHTS:

SVC3: Steering integration approval from NEVS assembly. 3DX Licence available. EBoM Update.

Interfaces: DMU_FR_000002 Body Closures Grommet (Side door). Body Structure position proposal implemented in CAD data.

Good external teamwork between Body Structure and Interior.
Update 3DX attributes.

LOWLIGHTS: None.

BLOCKER: None.

HIGHLIGHTS:

SVC3: share remaining BIW related Interior attachment points / WIP (APA)

LOWLIGHTS: None.

BLOCKER: None.

HIGHLIGHTS:

SVC3: Technical specs for all Antennas are complete. Device transmittal data for IC, CID, USB, Microphone, Ecall and VCM.

LOWLIGHTS:

SVC3: Still having some minor issues with current CAD data and data from SVC2, even after we the data from CAD removed it still turns up in our reviews. Timing for NXP IMX-8 Dev kit to Sono digital team.

BLOCKER: None.

THERMAL (1/2)

HIGHLIGHTS:

SVC2: SVC2 (Salt) first inspection with ARRK to check performance of new compressor damper elements and to check for signs of wear due to tight clearances of thermal parts (especially coolant hoses). Compressor dampening performance evaluated as sufficient for prototypes. However for series the development of a new professional dampening concept will be continued. No critical issues found regarding clearances and wear of thermal parts. Minor contact between one coolant valve and the ARB (anti roll bar) detected. However no damage to either of the parts. Solved by minor change to bracket angle (pipe wrench and force). Issue not relevant for series due to new packaging concept.

THERMAL (2/2)

HIGHLIGHTS:

SVC3: BOM now completely up to date and attributes filled in. Position of compressor finally fixed. Therefore packaging of thermal parts finalized now. Compressor vibrations testing on schedule. Compressor, cables and connectors have been sent. Tests will take place in the next two weeks. All potential suppliers for coolant and refrigerant lines have been reactivated. 100% positive feedback. CAD will be sent in the next weeks to initiate technical discussions.

LOWLIGHTS: None.

BLOCKER: None.

CHASSIS (1/2)

HIGHLIGHTS:

SVC3:

Suspension: Subframe package to LCA - OK. ARB routing on the back of EDU - Next Monday. Subframe to steering attachment fix - OK. LCA testing procedure - OK.

Steering: PDM update including steering system, correct models and structure (Interior is waiting for that) - OK. V16 is baseline. Define the steering gear geometry by optimizing the tierod outer ball joint hardpoint. - OK. Column and handle sweep zone to be created in PDM structure (Interior is waiting for that) - OK. New steering column packaging model from Nexteer. Rotation of MPP to create more clearance - OK. HVAC - steering column (Bene, Arrk) - OK. BCM - steering column clearance (Arber) - OK. Intermediate shaft - body interface - OK. Get scan + CAD for the sealing grommets - Scan OK. CAD ongoing.

CHASSIS (2/2)

HIGHLIGHTS:

Brakes: Brake Booster & Pedal tech alignment - OK. ESC supplier onboarding - OK. Define the Wheel / Caliper / Disk packaging - OK.

CAD / PDM / Knuckle: Implement latest CAD on PDM - OK. 3D printing analysis for knuckle w/ AM - Ongoing.

General: E-BOM update - OK. Train squad on PMCS - 25.06.

LOWLIGHTS: SVC3: CAD integration being made manually.

BLOCKER: SVC3: ESP access to PDM.

HIGHLIGHTS:

SVC3: 26~ tickets closed this sprint (Covers both EE & Powertrain). Much more time spent with new colleagues. BOM updates (some attributes to be added). BCM SW-Implementation for SVC3 started. LabCAR built moving forward quickly -> LabCAR confluence page set

LOWLIGHTS: SVC3: E/E CAD data mechanical integration -> NEVS report.

BLOCKER: SVC3: SCCM issue still not solved. Headcount (Timing).

HIGHLIGHTS:

SVC2: Gateway Testing completed.

LOWLIGHTS:

SVC2: Pre-Charge Error slowly being resolved.

SVC3: Requirement Tool.

BLOCKER:

SVC3: Headcount.

PROCESS OWNER

HIGHLIGHTS:

Change Management Process: Common tool and process til SAP availability → 3DX.

LOWLIGHTS:

Issue Management: summarize PMCS Product Owner requests.

BLOCKER:

None.

VIRTUAL VEHICLE

HIGHLIGHTS:

Focus on Frontend.

Part Number Uniqueness ensured by System.

LOWLIGHTS:

Some Processes not reflected in 3DX.

MCU needs additional space for cooling.

BLOCKER:

Headcount Competence Cluster.

Delay in 3DX Licenses.

CUSTOMER EXPERIENCE CLUSTER

HIGHLIGHTS:

SVC3:

Organisation: Definition of styling swimlane progressing.

Exterior: Styling Loop 02 ongoing. Plan to finish mid / end of July.

Interior: Styling loop 02 ongoing. Focus on IP, center console and doors.

Visualization: Visualization started for internal purposes.

LOWLIGHTS:

None.

BLOCKER:

None.

FUNCTIONAL SAFTEY

HIGHLIGHTS:

FuSa Processes: Alignment with Open Service Squad > done.

LOWLIGHTS:

None.

BLOCKER:

None.



DEVELOPMENT SPRINT REVIEW

CALENDAR WEEK 26.21

HIGHLIGHTS:

- Welding/Gluing technology support
 - Competence available
- Alignments
 - Main release completed
- Issue/Change Management Reporting focus
- BOM Support
 - Improve BOM effectiveness of transfers (3dx, EEBOM etc.)
- Cross Functional Synchronisation Points
- PMCS Status Review

GENERAL (2/3)

- PMCS Assessment
 - 100% pre S0 and S0 assessed
- VPP Release
 - Next release of VPP incl. Comms of major changes
- Software release plan overview

LOWLIGHTS:

- Part Quantity Strategy
 - Define strategy for hardware quantity requirements
- Software release plan overview
 - Software Level definition

BLOCKER:

- SBP Focus
 - Understand current status
- Test/Hardware validation Org
 - Organisational set-up clarified and actions taken

HIGHLIGHTS:

SOP:

- Logistics Manual:
 - Purpose / Scope - Done
 - List of Abbreviations - Done
 - Contacts & Delivery Address - 80%
 - Logistics Requirements - 90%
 - Transport & Delivery - 90%

LOWLIGHTS: None

BLOCKER: None

HIGHLIGHTS:

- ME
 - Concentrating now at team members show promising candidates

LOWLIGHTS:

- ME
 - Concentrate on BOM show several questions in case of make or buy at NEVS

BLOCKER: None

BODY CLOSURE

HIGHLIGHTS:

- Charger Lid complete module --> could be a solution here
- RLE supplier visit closures/exterior
- KO meeting suppliers

LOWLIGHTS:

3DX lowlight: unable to release top level, unable to create new revisions in 06_BC

BLOCKER: None

HIGHLIGHTS:

- SVC3/Series only
 - 1 new engineer signed contract
- Bumper
 - Update styling surfaces to improve CFD

LOWLIGHTS: None

BLOCKER: None

BODY STRUCTURE

HIGHLIGHTS: SVC3:

- 3DX Body Structure Release G.1
- Sealing Concept to NEVS
- Drawing decision matrix
- PMCS deliverables
 - Status check (pre S0)
 - Filled S0
- Prepare BoM for supplier (Definition of mirrored parts)

LOWLIGHTS: None

BLOCKER: None

INTERIOR

HIGHLIGHTS:

SVC3:

- PMCS
 - PMCS - Pre S0 - Deliverable - checked and judged - Done
 - Regular meetings with ARRK Interior on I/P, doors, trunk, and console hard points - WIP

LOWLIGHTS: None

BLOCKER: None

HIGHLIGHTS:

SVC3:

- Systems received the quad max Dev kit and Base board and are in the process of porting Android 11 OS. Should be delivered to the digital team in week 27
- Technical process is underway to reduce the number of antennas, numbers of cables and the location of the VCM, headunit and Ecall modules
- Propose of mating the VCM and headunit together (two modules, fastened together in a single location) Systems are on board, there are connector details to workout

INFOTAINMENT (2/2)

LOWLIGHTS:

SVC3:

- The number of antennas are driving up cost
- Studying the full CarPlay certification documents, if they are not able to complete we will have to contract an ESP to complete the certification
- Suppliers are on summer vacation

BLOCKER:

SVC3: The current VCM/Headunit/Ecall location is not acceptable for manufacturing (too close to the floor and between the cross brace)

HIGHLIGHTS:

SVC3:

- 1D simulation results have been presented (Documentation outstanding). Results look promising:
 - Heat rejection (75kW fast charging) of the battery can be cooled in a steady state
- Compressor vibrations testing successful. Minor communication problems did not cause issues. Result outstanding
- Creation of requirements sheet (SSTS) for coolant and refrigerant lines on track

LOWLIGHTS: None

BLOCKER: None

CHASSIS (1/4)

HIGHLIGHTS: SVC3:

- Steering
 - Tierod Obj Freeze - 80%
 - Straight Tierod Freeze - 80%
 - Tierod Sweep Zone Freeze - 50% (100% next Tue)
 - CAD Model Freeze on PDM - 80%
 - Grommets scanned model to be modelled, interfaces to be sent to Cikautxo to move forward with RFP - Upper 100% / Lower 0% (60% next Thu)
 - Steering column fastener to be decided, added in PDM and frozen - 70%
 - Intermediate shaft fastener to be decided, added in PDM and frozen - 70%
 - Steering gear fastener to be decided, added in PDM and frozen - 70%

CHASSIS (2/4)

- Brakes
 - Develop brake pedal CAD and DVP - 50%
 - Freeze foundation brakes (caliper + disk) - 80%
 - Sign off ESC communication strategy - 60%

- Suspensions
 - Sample size for Durability (LCA) - 100%
 - Design inputs implemented for Subframe - 50%
 - Design inputs implemented for RTB - 60%
 - Implement Top down targets given by NVH - 50%
 - Interference Fender x tire envelope - 60%

CHASSIS (3/4)

- Knuckle
 - Optimized design - 90%
 - Get new loadcase data - 100%

- CAD / PDM
 - Upload latest geometry into PDM - 100%
 - Add number logic to structure - 100%
 - Kick off GD&T (integration)

- Cross Functional
 - BIW x Subframe mounting hardpoints - 50%

CHASSIS (4/4)

LOWLIGHTS:

SVC3:

- CAD integration being made manually. Probably will be solved next week
- Increase DM robustness

BLOCKER:

SVC3: SF front Extension: crash and radiator assembly

HIGHLIGHTS:

SVC3:

- Regular meetings with ARRK Interior and Sono Interior Team → Major improvements on the Center Console
- Started product requirement in Jira defined-> Need further investigation

LOWLIGHTS:

SVC3:

- Missing peripheral information attached to BCM
- Missing peripheral information attached to RCM

BLOCKER: SVC3: Headcount (Timing)

HIGHLIGHTS:

SVC2: OBC Testing was done last week with Casco on SVC2.2 (Pepper):

- V2L working

SVC3:

- Requirements for VCU taking shape with Continental (Weekly reviews in place)
- OBC Discussion with suppliers
- OBC DVP plan (Environmental & EMC)

LOWLIGHTS:

- SVC2: V2V not working

BLOCKER:

SVC2: Sleep Mode not tested in SVC2.2

HV BATTERY

HIGHLIGHTS:

SVC3:

- Review information for connector and EE parts selection required: WIP
- New team member joining the HV battery team as lead CAE engineer: WIP

LOWLIGHTS:

SVC2:

- Implement WLTP cycle --> Pedal Position --> EDU requested torque --> EDU efficiency map in MATLAB: WIP
- Implement vehicle dynamics for available information on vehicle: WIP

BLOCKER: None

PROCESS OWNER (1/3)

HIGHLIGHTS:

- VTS
 - Release VTS V6.2 completed
- BOM
 - 3DX issues partly solved
- Issue Management
 - Issue report to be published this week
 - PMCS trainings per module
- Release Management
 - First draft of 'valid from' attribute

PROCESS OWNER (2/3)

- Cost Management
 - Alignment on budget status (Spent until end of June)
 - Justification for overspend cost items
 - Cost report manufacturing

LOWLIGHTS:

- VTS
 - Slow progress in update
- BOM
 - BOM viewer issues
- Issue Management
 - Critical known DMU issues have not been introduced into the system yet

PROCESS OWNER (3/3)

BLOCKER:

- Issue Management
 - PMCS tool issues due to update (e.g. login of external partners) → issue performance can't be shown at 100%
- Release Management
 - Define content of initial release → Stakeholders / Project Lead

VIRTUAL VEHICLE (1/2)

HIGHLIGHTS:

- Integration Guidelines updated (incl. Change Action)
- VTS Update SAE J1100
- Release G.1 and local export, data ok for NEVS
- Focus on Frontend
 - HV Wiring Charging Lid to OBC concept completed
 - Frunk volume 15L
 - Trunk volume optimized
 - Front Radar positioned
 - 12V Battery Tray optimized (Manufacturing, heater)

VIRTUAL VEHICLE (2/2)

- HV Battery Product Structure
- 3DX Coaching new employees
- Model based Definition/Drawing Strategy defined, additional Alignment with Body Structure
- VDA Tech Days

LOWLIGHTS:

Some processes not reflected in 3DX

BLOCKER:

Headcount Competence Cluster - Validation Report moved to next sprint

DESIGN (1/2)

HIGHLIGHTS: SVC3:

- Organisation
 - Definition of styling swimlane - done
- Exterior:
 - Styling Loop 02 ongoing. Updated Hood / Bumper / A pillar ready 09.07.21. Rear ongoing. Estimate that about 60% of styling loop 02 is done. Plan to finish mid / end of July.
- Interior:
 - Styling loop 02 ongoing. IP and Center Console are progressing well, door (window switch area) complicated but will progress. Greenhouse / Headliner not yet touched. Estimate that about 30% of styling loop 02 - done
- Visualization:
 - Visualization is progressing

LOWLIGHTS: None

BLOCKER: None