



DEVELOPMENT SPRINT REVIEW

CALENDAR WEEK 4.21

OVERALL PROJECT SVC2

HIGHLIGHTS: Preparations for EDU shakedown on test track CW6 done. New solar parts fitted. Content production for Marketing upcoming.

LOWLIGHTS: BiDi good progress, but then a defect happened while testing. New sample needed and testing delay.

BLOCKER: Ressources shift between SVC2 and series development. SVC2 -> SVC3 issue log transfer pending.

OVERALL PROJECT SVC3

HIGHLIGHTS: Tooling Budget distribution ready. ReStart Workshop done. ESP (Engineering Service Provider) support Kick-off done. SVC2 CAD-Reviews done. 12V Battery decision, Frontend Extension concept. PDM-System Decision.

LOWLIGHTS: None

BLOCKER: Data Quality Issues in Catia and 3DX (SVC2 and SVC3)

HIGHLIGHTS: Logistics Manager position. ERP-System - On track

LOWLIGHTS: Finalizing consignment implementation plan - Delays but on track.
Finalizing dangerous goods handling - delayed but on tracked.

BLOCKER: None

HIGHLIGHTS: SVC3: Re-starting discussion with all suppliers not just ESP's - 60% complete - good feedback so far. RFQ process updates in final steps. Hiring for commodity managers on track. New NL progress was more efficient with more resources.

LOWLIGHTS: None

BLOCKER: None

HIGHLIGHTS: SVC2: Development of a channel for CIP-Inputs for the SVC2 vehicles.
Optimization of the procedure for the product audit for the SVC2.2

LOWLIGHTS: None

BLOCKER: None

HIGHLIGHTS: RFQ for manufacturing engineering is at purchasing. Meeting with ESP done: highlights the timeline for BIW + marriage of battery. Interested to support our engineering until the gap of open positions is closed. Also offer us their testing area.

LOWLIGHTS: None

BLOCKER: None

BODY CLOSURE / EXTERIOR (1/3)

HIGHLIGHTS: SVC2: Concept FRT DR window regulator below glass support (mitigation only). New solar roof installed on SVC2.1, will test as soon as there is some sun (necessary as long as we don't have a solar simulator).

SVC3: ESP agreed to pre-restart development.

Technical issue resolution: front fender vs wheel envelopes: solution from (styling/chassis/exterior in sight).

Technical issue resolution: BIW <> door hinge type/position: solution in sight.

DFMEA sessions KO with TQ for Closures & Exterior.

Lighting supplier: provided quote.

KO with styling supplier: benefit for closures/exterior team.

PV body panels: testing and timing discussed in detail this week > how system integration is planned. PV responsibility split agreed.

BODY CLOSURE / EXTERIOR (2/3)

LOWLIGHTS: SVC2: Two problems with interior handles in SVC2.1: still existing until new Bowden cable/interior part is manufactured.

Interior door handle cables: pending confirmation from supplier (part of door lock/unlock issue).

SVC3: Capacity constraints to implement SVC2.1 solutions on SVC2.2.

Quote timing: Sealing concept quote timing.

BODY CLOSURE / EXTERIOR (3/3)

BLOCKER: SVC2: Direct conflict: SVC2 detail issue resolution vs good supplier restart progress. Supplier resource for cables is limited.

SVC3: Resource (progressing all clox issues - highest prio only (restart, FE extension, supplier).

Future blocker: reached the point ~8w before the restart with no recruitment yet.

INTERIOR (1/2)

HIGHLIGHTS: SVC2: Audit Issues have been reviewed and any outstanding ones are logged in in the SVC3 Issue Log. Some SVC2 Improvements vs SVC1: Pedal Distances.

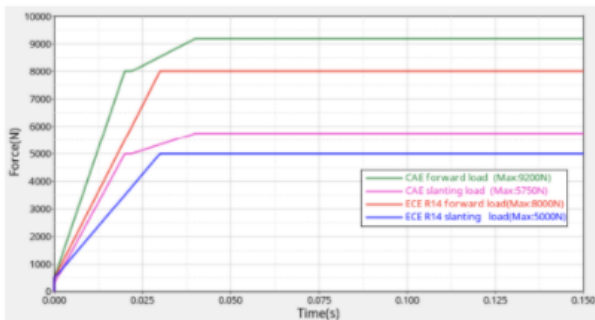
SVC3: Engineering Scope of Work for Interior completed. Handed over for RFQs: Crash & Safety Sub-system Requirements to be put in other modules. Seat Virtual Concept Verification - ISOFIX tests completed.

LOWLIGHTS: None

BLOCKER: None

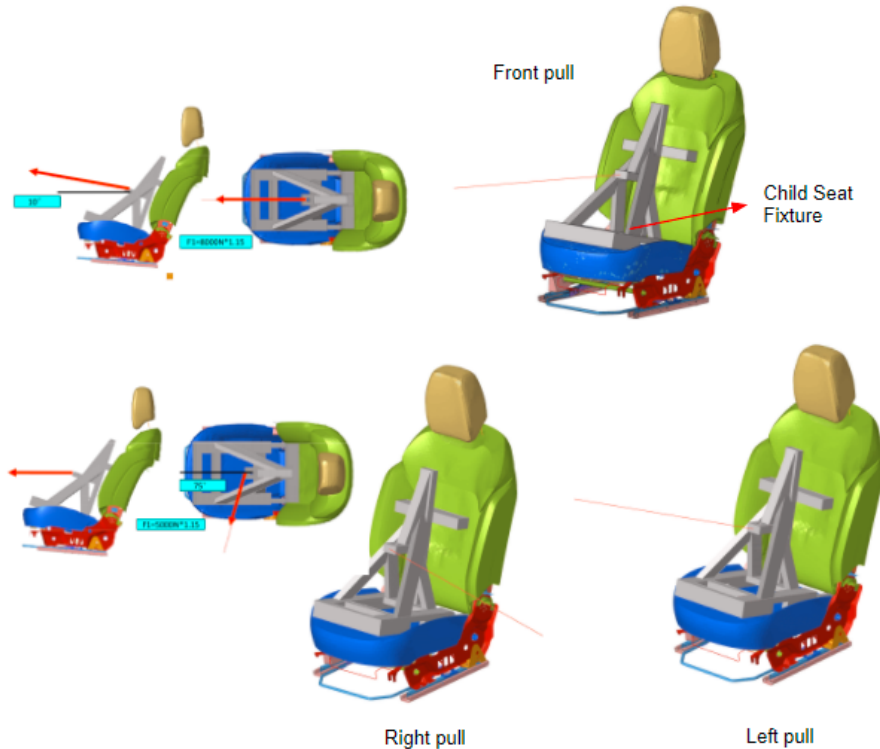
ECE R14 - ISOFIX

Front Passenger



No interruption (breakage, damage etc.) during the loading was observed

ECE R14 ISOFIX - Pass



BODYSTRUCTURE

HIGHLIGHTS: SVC3: Pre-Restart with ESP. Contact with Body Structure Supplier.
Good job interviews.

LOWLIGHTS: SVC3: Supplier no start yet. DFMEA meetings are not effective enough.

BLOCKER: None

INFOTAINMENT (1/3)

HIGHLIGHTS: SVC2: Visit supplier and had USB interfaces for data, debug and Instrument cluster Audio solution installed in SVC2.2

SVC3: IHU head unit deep dive on supplier pool ongoing.

Dual display (with our design proposal) has been accepted from Supplier.

Evaluation of mechanical integration as well as calculation on development and certification costs ongoing.

INFOTAINMENT (2/3)

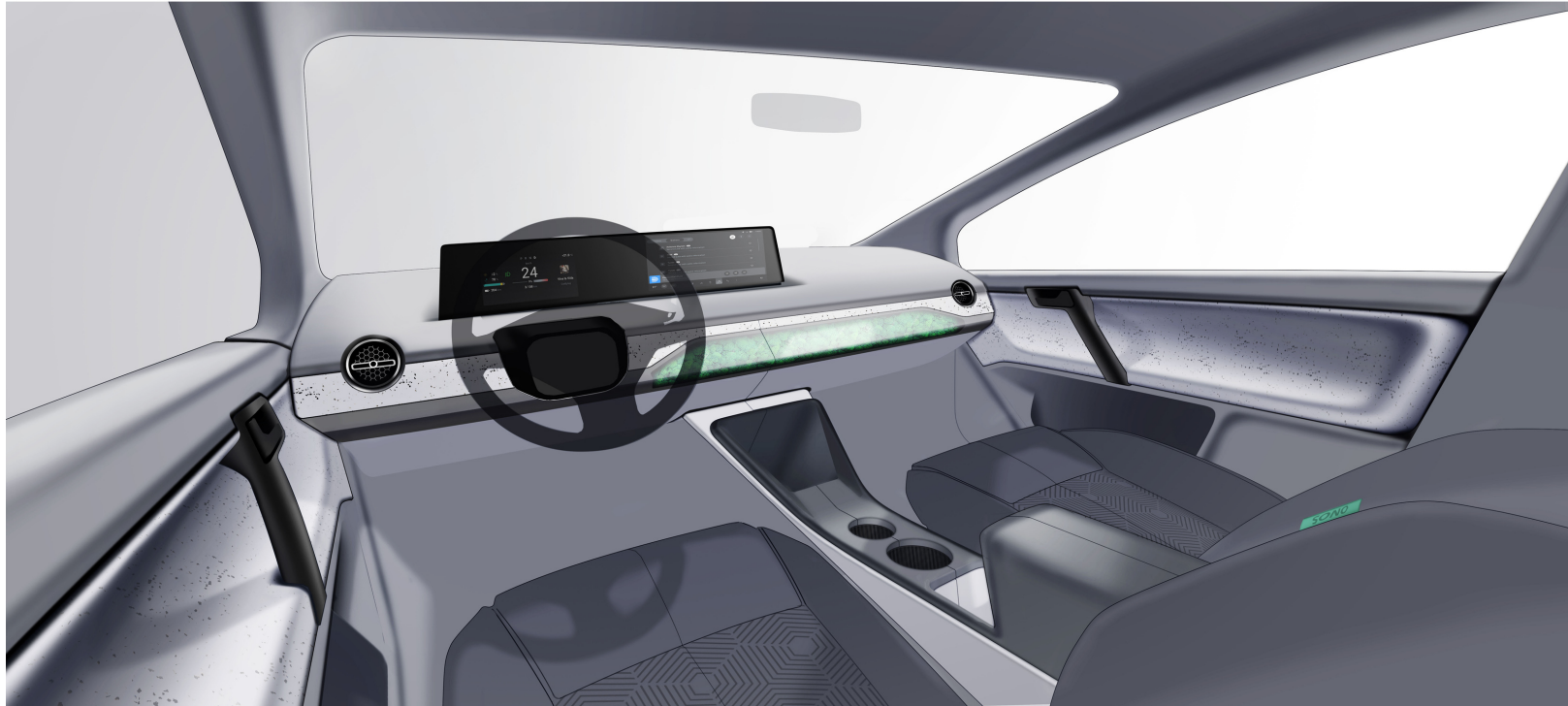
LOWLIGHTS: SVC2: Discharge functionality may not work with current implementation if cable detection does not work. Tests will confirm this.

SVC3: Modules like eCall and Antenna kick-off will be delayed due to missing resources in the team.

BLOCKER: SVC2: If E2E test results require any SW change on the application side (SVC2), changes thru supplier is still possible.

SVC3: Clear picture on budget distribution between Group Sion and Sono Digital needed. IHU not finalized -> we can not decide on modules like USB interface, Microphones, Amplifiers and Tuner as long as IHU is not frozen.

INFOTAINMENT (3/3)



E/E DESS CLUSTER

HIGHLIGHTS: SVC2: Seat heating is functional and can be controlled by instrument cluster.
SVC3: Making progress with transfer of infotainment items into E/E.
The BCM technical feature list for Series is sent to supplier.

LOWLIGHTS: SVC2: Need to decide: SVC2 vs SVC3 priority. Electrical testing on vehicles is still to be performed.
SVC3: ADAS evaluation. Progress being made on schematics/electrical interface/topology/device transmittals but falling behind schedule.

BLOCKER: None

HIGHLIGHTS: SVC2 : SVC2.1 is going testing on a test track next week. First new features for MCU are developed that allow for solar panel inspections and irradiance measurements.

LOWLIGHTS: SVC2: Driveshafts for SVC2.1 has to be changed, play in the inner joints discovered. Thankfully, no blocker, because we have spares.

BLOCKER: SVC2: coincidence of sunny weather and testing days in Roding tricky.
SVC3: Need to move ahead with feasibility study before restart.

THERMAL

HIGHLIGHTS: SVC3: Restart planning meetings with ESP and supplier done → overall good progress of restart timing with ESPs

LOWLIGHTS: SVC2: Compressor random stopping during operation. Compressor noise is too loud → NVH issue at bracket.

BLOCKER: None

CHASSIS

HIGHLIGHTS: SVC2: Solving SCCM rotation issue.

Springs and dampers MRD OK up to now.

SVC3: Front end extension issue moving forward.

Open discussions about RLDA, DVP, timing. Good hiring progress.

LOWLIGHTS: None

BLOCKER: None

HIGHLIGHTS: SVC2: Interior LOP action Plan at Roding

SVC3: Design CAS: Exterior Styling CAS started.

New solar cell mapping with bigger cells and exterior styling modifications to fit them.

Front hood will fit more cells due to extension.

Sion Key redesign.

LOWLIGHTS: None

BLOCKER: None



DEVELOPMENT SPRINT REVIEW

CALENDAR WEEK 6.21

OVERALL PROJECT SVC3

Key Milestones overview:

Shakedown finish SVC2.1 'Salt' car: 12.04.21

Shakedown finish SVC2.2 'Pepper' car: 26.04.21

HIGHLIGHTS: Successful shakedown at Continental Regensburg. Shakedown plans for chassis getting more concrete (testing ground etc.)

LOWLIGHTS: None

BLOCKER: None

RESTART

HIGHLIGHTS: Review ReStart Timing - done.

Recruiting - still ongoing.

New Frontend - Extension Package.

LOWLIGHTS: Review ReStart Timing & Recruiting more time consuming than expected.

BLOCKER: None

SUPPLY CHAIN MANAGEMENT

HIGHLIGHTS: Restart: Hiring of New Logistics Manager - done.

SOP: Implementation ERP-System - overall progress on track, initial scoping workshops done.

LOWLIGHTS: None

BLOCKER: None

HIGHLIGHTS: SOP: Logistics provider selection & evaluation criteria - done

LOWLIGHTS: None

BLOCKER: None

HIGHLIGHTS: SVC2: Seeing the vehicle driving after months of sourcing, developing, purchasing, logistics, engineering, assembly, troubleshooting.

Considering what has been achieved during COVID restrictions is quite unbelievable. A good example to other partners. (Not withstanding their own countries COVID restrictions).

LOWLIGHTS: None

BLOCKER: None

HIGHLIGHTS: SVC2: Development of a channel for CIP-Inputs for the SVC2 vehicles and the following stages. Optimization of the procedure for the product audit for the SVC2.2

LOWLIGHTS: None

BLOCKER: None

HIGHLIGHTS: Restart: Hiring - On Track.

Set up a workshop with NEVS for BIW in advance to the restart - Done.

Organisational Concept defined - Done.

Group Sion Budget Manufacturing will be finish end of this week.

LOWLIGHTS: None

BLOCKER: None

BODY CLOSURE / EXTERIOR (1/2)

HIGHLIGHTS: SVC2: Planning of work packages SVC2.
RA planned solution for side door closing issues.

SVC3: HSL/lighting pre-development: meeting KO, agreed to resource ramp up/small styling changes.

Final confirmation front end extension 160mm.

RLE confirmed FE extension of 160mm has no additional development/design cost effect from 120 > PO can be kicked off.

Planning styling issue resolution for closures/exterior > better status for 2021 restart.

Hinge topic restart planning: solution in sight: requires budget.

BODY CLOSURE / EXTERIOR (2/2)

LOWLIGHTS: SVC2: Additional issues raised: directly series issues, hard to solve/investigate on SVC2.

BLOCKER: None

INTERIOR (1/2)

HIGHLIGHTS: SVC2: Next Vehicle Inspection of Interior related issues at Roding will take place on 01.03.2021.

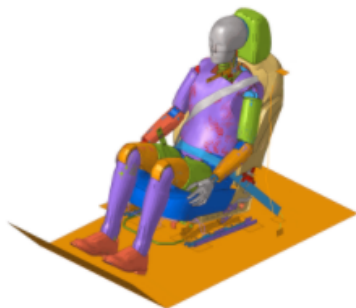
SVC3: Seat Concept Verification - Whiplash Assessment.

LOWLIGHTS: SVC3: Alignment with HR on Interior|Crash&Safety Positions- done, Personio entries to be done till the next Sprint. Engineering Scope of Work for RFQs - done. Pending remaining RFQs to be sent to suppliers. Cost Estimations were transferred to the Budget File.

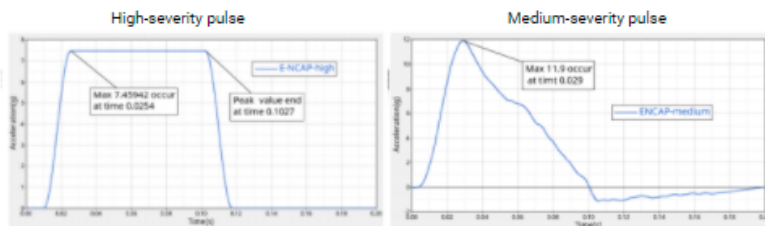
BLOCKER: SVC3: Progress in getting all of the suppliers onboard till April that will be important for Interior and Crash&Safety development.

EUNCAP (info only) - Whiplash

1st Row Seats



EUNCAP Whiplash – 2.7/3 Points, Pass
(Predicted Target – 2 Points)



Static Assessments				
Worst Backrest Geometry	Effective Height (mm)	Point	Average Backrest Incl.	Point
	838.6	1.000	9.5	1.000
Static Points		1.000		

Dynamic Assessments				
Parameters	Medium-severity pulse		High-severity pulse	
	Value	Point	Value	Point
NRG	14.00	0.000	12.00	1.000
Men	0.233	0.000	0.191	0.000
Rebound Velocity (m/s)	3.88	0.000	3.58	0.000
Upper Neck Shear Fx (N)	58.58	0.045	68.50	0.789
Upper Neck Shear Fz (N)	86.94	0.000	89.87	0.000
Upper Neck Tension Fz (N)	224.11	1.000	282.19	1.000
Upper Neck Extension My(N)	3.54	0.000	4.43	0.000
Upper Neck Flexion My(N)	16.18	0.000	11.48	0.000
Lower Neck Shear Fx (ABR) (N)	194.48	0.000	169.03	0.000
Lower Neck Extension My(N)	3.32	0.000	4.49	0.000
Lower Neck Flexion My(N)	5.70	0.000	6.96	0.000
T-FRC (mm) (mm)	58.6	0.000	63.9	0.000
T1 Acceleration Average (g)	11.18	0.000	11.58	0.000
Pulse Points		2.503	5.422	2.789
Dynamic Points				

Test is split in 2 Criteria:

1- Static Assessment meaning that seats are geometrically compatible with the EUNCAP requirements

2- Dynamic Assessment meaning with given pulses, simulating a rear-impact case, Occupant Injury Criteria especially for Neck and overall seat behavior should meet EUNCAP requirements

Worst Case Geometry Credit			
Driver	Effective Height (mm)	Average Backrest Incl.	Credit
Driver	838.6	9.5	3.5
Passenger	825.5	10.5	3.5

Whiplash Modifier		
High Severity Pulse	Maximal Deflection Angle (°)	Modify
Seatback Dynamic Deflection	11.5	0
Dummy Artefact Loading	Description	Modify
	No	0

Total Points (8)	7.422
Rating (3)	2.783

BODYSTRUCTURE (1/2)

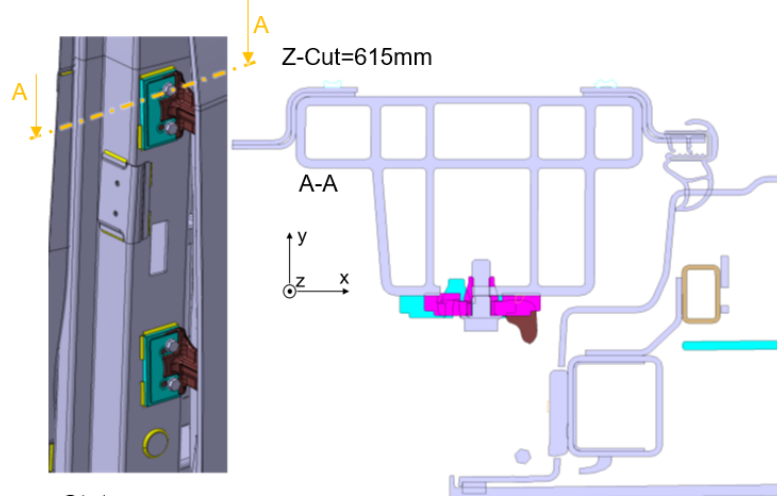
HIGHLIGHTS: SVC3: Decision Solving Strategy --> Hinge Issue.
Contact re-start with part suppliers (profiles and sheet metals).
Sign of contract for Position Senior Manager Automotive Body.
ARRK Start: Working access to 3DX & First technical discussions.

LOWLIGHTS: SVC3: Rejection by an applicant.

BLOCKER: None

BODYSTRUCTURE (2/2)

B-Pillar upper door hinge



Status

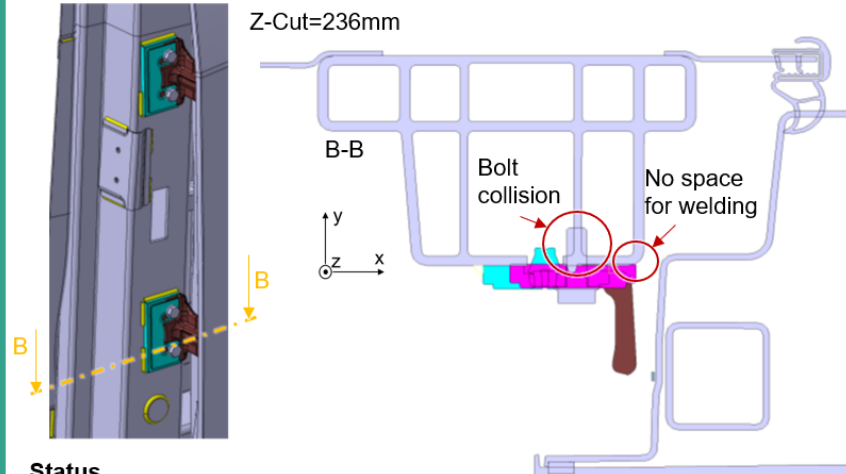
Body Structure can solve the mismatch

- Body Structure hinge bracket can move to hinge position



Body Structure Hinge Bracket
Current body structure position
Needed position for current hinge position

B-Pillar lower door hinge



Status

Body Structure cannot solve the mismatch easy

- Collision of hinge bolt with profil bar
- No space for body structure hinge bracket welding

Next step

- Body Closures have to check, if hinge position can move



INFOTAINMENT

HIGHLIGHTS: SVC3: Supplier for USB interfaces will deliver products according to our specs (USB-C with power delivery / up to 18watt charging output).

LOWLIGHTS: SVC2: vehicle still not mature enough to do reliable Infotainment testing (mainly OBC and HV activation topics).

BLOCKER: SVC2: Infotainment testing not possible due to unstable systems in the car (OBC and high voltage). System integration just requires more time and focus for SVC2.

HIGHLIGHTS: SVC2: Sim-Fuse Testing planned WK8 at Roding.
SVC3: Working Students joining. Engineer agreed to join.
Plan for external support on EDS topics making progress (1 Head).
STS for SCCM complete and sent.

LOWLIGHTS: SVC2: BreSono hindering A_CAN, causing HV-Battery from operating intermittently (DTCs).
SVC3: Need to rework BCM STS from Schematic findings.
Progress being made on schematics/electrical interface/topology/device transmittals but falling behind schedule.

BLOCKER: SVC3: Need all technology decisions made ASAP so we don't have to deviate later.

HIGHLIGHTS: SVC2 : First solar charging with part of the roof panels was successfully witnessed on Vitesco's test track in low irradiance environment last week.
SVC3: Working Student Joining.

LOWLIGHTS: None

BLOCKER: SVC2: OBC sample in SVC2.2 is defective (not charging anymore).
Frequent travels to Roding could be avoided if vehicles could be maintained in our HQ.

HIGHLIGHTS: SVC2: Steering static calibration finished.

LOWLIGHTS: SVC2: Access to test tracks due Corona restrictions.

BLOCKER: None

HIGHLIGHTS: SVC3: Exterior CAS progressing. extended front design planned to be finished at the end of next week. + minor changes on rear bumper (styling).

Lighting concept supplier briefed and kicked off.

Interior CAS progressing. IP, Center Console basic data almost finished, doors ongoing, upper lower trim / headliner is starting. Planned to be finished at the end of March.

LOWLIGHTS: None

BLOCKER: None



DEVELOPMENT SPRINT REVIEW

CALENDAR WEEK 8.21

OVERALL PROJECT SVC3

Key Milestones overview:

Shakedown finish SVC2.1 'Salt' car: 12.04.21

Shakedown finish SVC2.2 'Pepper' car: 28.04.21 (+2 days for audit)

HIGHLIGHTS: Hand over agreement with Roding + QUAL

Final inspection documents draft available, loop with module leads next sprint (VTS, mechanical functions, appearance).

LOWLIGHTS: None

BLOCKER: None

RESTART

HIGHLIGHTS: CAD-Reviews for Basic Data starting next week.

LOWLIGHTS: None

BLOCKER: None

HIGHLIGHTS: SOP: Implementation ERP-System - overall progress on track.
Implementation partner selection ready for closure.

LOWLIGHTS: None

BLOCKER: None

HIGHLIGHTS:

Development of a channel for CIP-Inputs for the SVC2 vehicles and the following stages. Optimization of the procedure for the product audit for the SVC2.2 (and SVC2.1); Hand-over protocol for SVC2 - draft and process preliminary agreed with Roding.

LOWLIGHTS: None

BLOCKER: None

HIGHLIGHTS:

Restart:

Update restart timing - Done.

Job Add ME Assembly online - Done.

Group Sion Budget Manufacturing - Done.

LOWLIGHTS: None

BLOCKER: None

BODY CLOSURE (1/2)

HIGHLIGHTS: SVC2: RA kicked off on 1st work package: design/manufacture türstopperrn. Hood release handle will be implemented in SVC2.

SVC3: Charger Lid location: remains at the front due to package constraints in other areas. Pre-Development support is on track: FE extension/restyling work starts next week. Sealing concept PO is sent out.

BODY CLOSURE (2/2)

LOWLIGHTS: SVC2: Remaining SVC2 work packages > not kicked off yet (tailgate gas strut design, charger lid optimisation).

Optimisation charger lid: current mechanism will prove difficult to get good pedestrian protection/user functionality > means new opening concept.

BLOCKER: Resource: blocker for numerous topics: styling, technical development, ESP/supplier management, creation of detailed RFQ/SSTS & DFMEA workshop.

SVC2/3 work split: difficult to work on both projects at the same time, especially considering implementation of series designs onto SVC2 datacut.

HIGHLIGHTS:

SVC2: Door opening/closing no problems reported with door catching seal/interior panels.
SVC3: Pre-Development support is on track: FE extension/restyling work starts next week, lighting concept development work starts at the end of this week.

Lowlights: SVC3: Styling topics not completed before end of existing support > means work package 2, directly before or overlapping the restart.
Onboarding/handover to new team members: time consuming, but super important.

BLOCKER: Resource: blocker for numerous topics: styling, technical development, ESP/supplier management, creation of detailed RFQ/SSTS & DFMEA workshop.

INTERIOR (1/2)

HIGHLIGHTS: SVC2: Next Vehicle Inspection of Interior related issues at Roding will take place on 01.03.2021 - Done, Improvement achieved versus November status, Many issues are closed. Only SVC2.1 was inspected as other was not ready. Roding will check SVC2.2 themselves and report back. Remaining issues on seats and seatbelts will be followed up to closure as long as other vehicle plans (testing, shooting etc.) permit. One of the issues closed is the child seat placement- a bit difficult to install in terms of force required but acceptable to close the issue at this stage.

SVC3: Engineering Scope of Work for RFQs - done. Pending remaining RFQs to be sent to suppliers- ongoing.

PM Epic: APQP/MLV Part Risk Assessment - Loop1 - Done.

Crash&Safety: Sion's Type Class Estimation for Vehicle Insurance.

LOWLIGHTS: None

BLOCKER:

SVC3: First indication of Restraints Supplier (Airbags, Steering Wheel, Seatbelts) that they do not have a capacity to support till August 2021, still waiting for feedback.

INFOTAINMENT

HIGHLIGHTS: SVC3: STS for Infotainment HU is 75% completed.

Decision on the Infotainment display is to go with two separate displays.

BOM price for two separate displays is expected this week.

eCall system I talks with suppliers.

LOWLIGHTS: SVC2: vehicle still not mature enough to do reliable Infotainment testing (to test OBC and HV activation topics).

SVC3: Instrument Cluster STS is in progress.

BLOCKER: SVC2: Infotainment testing not possible due to unstable systems in the car (OBC and high voltage).

THERMAL

HIGHLIGHTS: SVC2: SVC2.2 at Continental Thermo Team in Nürnberg right now. We are doing tests with the compressor, heater, pumps, valves and sensors. Fine tuning of thermal software based on the tests will be done.

Compressor damper elements to solve the NVH issue at SVC2 are ordered.

LOWLIGHTS: None

BLOCKER: None

CHASSIS

HIGHLIGHTS:

SVC2: Dampers replaced by proper development models

SVC3: ESC + TRE scope and deliverables defined.

Brake system analysis / review kicked-off.

New Team members starting next week.

LOWLIGHTS: SVC3: Risk assessment + MTS taking long to be finished (though it's worthwhile).

BLOCKER: None

HIGHLIGHTS:

SVC3: Exterior Styling CAS ready tomorrow for RLE Restart.

Lightning design kick-off this week.

Interior CAS progressing. interior basic data almost finished. Planned to be finished at the end of March.

Open next mentorship: developing 2 projects with the community.

Developing an interface concept for the interior for added (printed) parts.

LOWLIGHTS: None

BLOCKER: None



DEVELOPMENT SPRINT REVIEW

CALENDAR WEEK 10.21

HIGHLIGHTS: Updated Organisational structure in Confluence.

LOWLIGHTS: Next to no participation in group retro.

Several tasks steered into squads during sprint without alignment.

Budget consolidation to be squeezed into the next sprint.

BLOCKER: None

OVERALL PROJECT SVC2

HIGHLIGHTS: Final inspection documents feedback received (by module leads).
Preparations for final vehicle handover done 22.03.21.
Most of the thermal issues closed at thermal shakedown.
Successful chassis shakedown at Memmingen.
WLTP run scheduled.

LOWLIGHTS: None

BLOCKER: None

HIGHLIGHTS: SOP: Implementation ERP-System - overall progress on track - Commercial agreements achieved, contracts in final loop.

LOWLIGHTS: None

BLOCKER: None

HIGHLIGHTS:

SVC2: Optimization of the procedure for the product audit for the SVC2.2 (and SVC2.1);
Hand-over protocol for SVC2 - draft and process preliminary agreed with Roding.
SVC2.1 handover inspection at Roding.

SVC3: First consultations on the results of the life cycle assessment done.
Norms and Standards: Collection finalized on confluence.

LOWLIGHTS: None

BLOCKER: None

HIGHLIGHTS:

Restart:

Evaluate additional way of hiring - ongoing.

Prepare Topics for timeline production - ongoing.

LOWLIGHTS: Restart: Hiring takes more time as expected.

BLOCKER: None

BODY STRUCTURE

HIGHLIGHTS:

SVC3: RLE joins the sealing concept development.

First meeting with NEVS after Series Development Pause

LOWLIGHTS: SVC3: Suppliers need more time for their feedback than assumed.

--> Reason: the suppliers in turn need feedback from their suppliers.

BLOCKER: None

HIGHLIGHTS: SVC2: Further improvements took place, a few open issues remain: Below is the improved condition between rear seats and trunk.

SVC3: Request from PM regarding:

- Consolidation ESP/Supplier Status - Done.
- Review VTS Target: VTS Freeze until end of sprint - Done/Revision requests have been provided.
- Consolidation Cost actual/target for business plan Target: Content Development & Testing / specify usage SVC3 Vehicles - Done, required # of bucks and vehicles were provided.

INTERIOR (2/4)



INTERIOR (3/4)

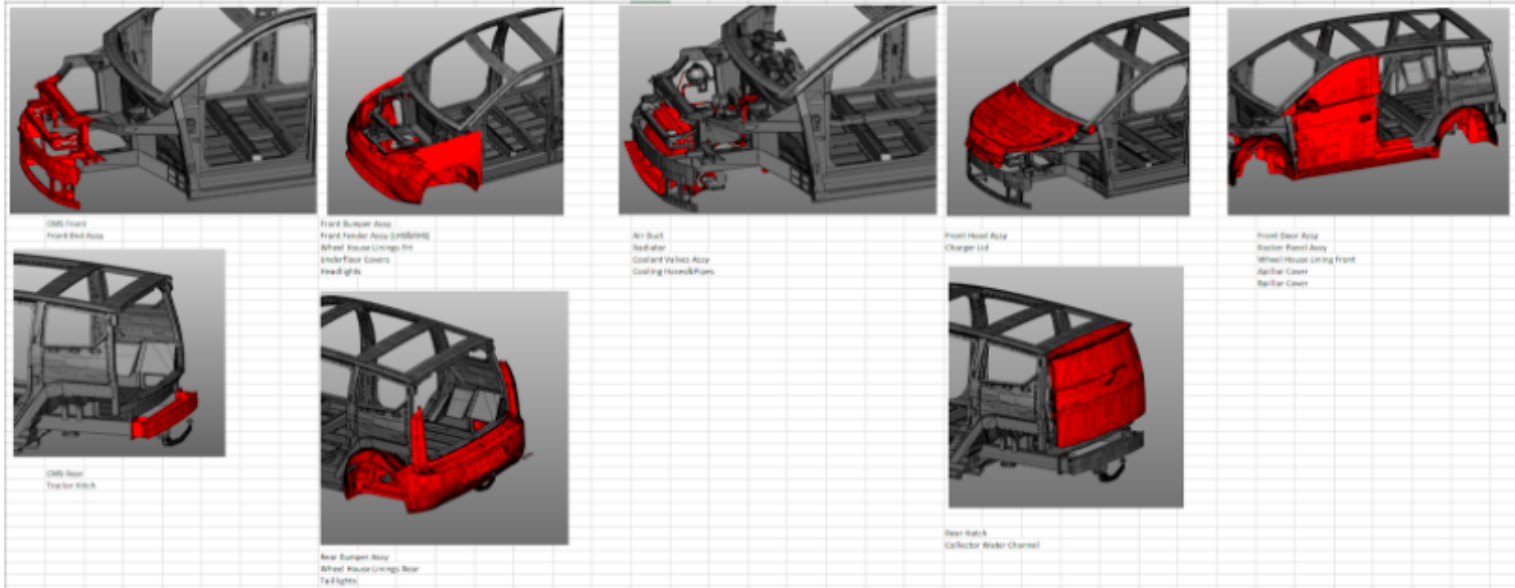
HIGHLIGHTS: Crash&Safety Vehicle Model Status (as of previous design development phase); module leaders to chase suppliers for the compliance of Crash&Safety Requirements put in purchasing RFQ.

From previous Sprint:

Engineering Scope of Work for RFQs - done. Pending remaining RFQs to be sent to suppliers-ongoing.

Crash&Safety: Sion's Type Class Estimation for Vehicle Insurance.

Type Class Estimation for Vehicle Insurances Affected Components in Damageability Assessment



INTERIOR (2/2)

LOWLIGHTS: SVC3: Alignment with HR on Interior|Crash&Safety Positions- done, Personio entries to be done till the next Sprint - Done, bottleneck to post the (Interior + Crash&Safety) ads - no update.

Previous Sprint: Cost Estimations were transferred to the Budget File; Risk remains for the overall vehicle costs due to upcoming design releases. Cost update phases need to be planned at Design Releases.

This Sprint: Any feedback since the feedbacks were provided? - No update

BLOCKER:

SVC3: Progress in getting all of the suppliers onboard till April that will be important for Interior and Crash&Safety development.

INFOTAINMENT

HIGHLIGHTS: SVC3: Infotainment lead joining remotely (from 1st of April).
Instrument Cluster STS is in progress.
NDA signed for Instrument Cluster FuSa (ASIL-B compliant).
eCall system and Microphone started talks with supplier's.

LOWLIGHTS: None

BLOCKER: SVC2: Infotainment testing still not possible yet due to unstable systems in the car (OBC).

HIGHLIGHTS: SVC2: Software calibration at Continental successful. Solved a total of 6 minor issues during the three days in Nürnberg.

LOWLIGHTS: None

BLOCKER: None

CHASSIS

HIGHLIGHTS:

SVC2: Finishing shakedown tomorrow (19.03.2021)

SVC2.1 dynamic performance is beyond expectations (Ex: double lane change at 74km/h).
Even without ESC and carrying All Season tires.

SVC3: ESC RFP progressing.

LOWLIGHTS: SVC2: Minor issues that take time to be solved.

SVC2.2 will need some shakedown time for NVH, mechanical checks, small clashes, etc...

SVC3: Supplier info on expected component performance.

DVP will require very careful planning and execution.

BLOCKER: None

HIGHLIGHTS:

SVC3: Exterior Styling CAS delivered last week Monday to RLE. Parametric Gap Concept I will start building tomorrow.

Interior CAS progressing. interior basic data almost finished. Planned to be finished Friday 2nd April.

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

LOWLIGHTS: None

BLOCKER: A pillar obstruction topic has to be aligned internally - (Information is essential for interior trim and exterior to progress.)

FUNCTIONAL SAFETY

HIGHLIGHTS:

The Functional Safety Team part of ReStart talks with suppliers.

LOWLIGHTS: None

BLOCKER: None



DEVELOPMENT SPRINT REVIEW

CALENDAR WEEK 12.21

OVERALL PROJECT SVC2 (1/2)

Key Milestones Overview:

Shakedown finish SVC2.1 'Salt' car: 19.04.21 (+1 week for WLTP run with SVC2.1, because of PO issue)

Shakedown finish SVC2.2 'Pepper' car: 30.04.21

HIGHLIGHTS: Continuous improvement process started (QR-Code in the vehicle) → QUAL

Received SVC2.1 at the office and successful internal audit → QUAL

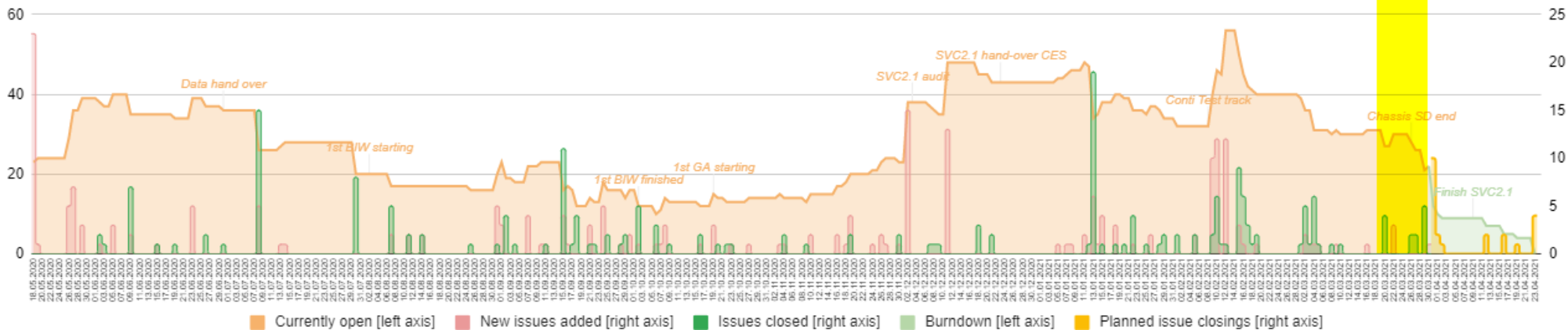
Burndown Chart: (next slide)

LOWLIGHTS: None

BLOCKER: None

OVERALL PROJECT SVC2 (2/2)

SVC2 Issues since project start



RESTART

HIGHLIGHTS: CAD-Reviews for Hardpoints (Basic Data) done, RLE is completing the list.

LOWLIGHTS: ESP/Supplier Status: minor changes.

BLOCKER: Sickness cw12.

HIGHLIGHTS: SOP: Implementation ERP-System - Commercial agreements closed, project Kick-Off April 6th 2021.

LOWLIGHTS: None

BLOCKER: None

HIGHLIGHTS:

Restart: BM Plastic contract signed, started already for Sono Solar.

SOP: 1 x Hybrid Commodity Manager and SQE starting in July. (E/E & Infotainment).

LOWLIGHTS: None

BLOCKER: None

HIGHLIGHTS:

SVC2: Optimization of the procedure for the product audit for the SVC2.2 (and SVC2.1)
→ Audit SVC 2.1 on 30.03.2021.

SVC2.1 handover inspection at Roding done.

Establishment of an issue collection process in relation to vehicle -> also intended for series.

LOWLIGHTS: None

BLOCKER: None

HIGHLIGHTS:

Restart: Evaluate additional way of hiring - Done.

Series: Prepare all information for RFQ for Start up. Ongoing.

LOWLIGHTS: Restart: Hiring takes more time than expected.

Series: Prepare all information for RFQ for Start up. Ongoing. Not finished because of concentrating on hiring.

BLOCKER: None



BODY CLOSURE

HIGHLIGHTS:

ML Exterior started & onboarded, starts to take over Exterior system development. Good progress on lighting development > FRT/RR lights are nearly all homologation checked.

Sealing concept development RLE/ARRK KO > rough direction agreed for Tailgate water channel (compromise plastic cover & BIW support).

SVC2: tailgate gas struts positions are changed & opening angle is now higher (clears head height > questions from community).

SVC2: reworked door checks are fitted next week by RA.

NEVS support for closures engineering available > will start reviewing in cw 14.

LOWLIGHTS: None

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

HIGHLIGHTS:

SVC3/Series:

Pre-Development support is on track: FE extension/restyling work started.

Aerodynamic review held this week and feedback provided to improve airflow around the vehicle.

Front/Rear lighting concept development first drafts complete, Sealing concepts of exterior panels started to ensure good water management.

LOWLIGHTS: None

BLOCKER: None

BODY STRUCTURE

HIGHLIGHTS:

SVC3: Overview about corrosion protection.

CAE Investigation of weight reduction --> potential about 20kg.

Ongoing discussions/ feedback with suppliers.

LOWLIGHTS: None

BLOCKER: None

HIGHLIGHTS: SVC2: Remaining issues will be reviewed with Roding.

SVC3: Road to SVC3 design release meeting/input provided again to RLE/PM.

Kick-off of Crash&Safety and Interior ESPs with limited capacity will take place next week ahead of collecting the quotes from the main RFQ.

Crash&Safety Vehicle Model Status (as of the previous design development phase between April-July 2020); module leaders to chase suppliers for the compliance of Crash&Safety Requirements put in purchasing RFQ.

INTERIOR (2/2)

LOWLIGHTS: From previous Sprint:

Alignment with HR on Interior|Crash&Safety Positions- 54 application in 1 week; scrutiny check will happen next.

BLOCKER:

SVC3: Progress in getting all of the suppliers onboard till April that will be important for Interior and Crash&Safety development.

INFOTAINMENT

HIGHLIGHTS: SVC3: Instrument Cluster STS is done, need some changes with regards to ASIL-B compliant.
Hiring is in progress.

LOWLIGHTS: None

BLOCKER: None

DESIGN (1/2)

HIGHLIGHTS:

SVC2: updated center console color, regained plastic decorative trim and steering wheel rubber checked and looks good.

SVC3:

Exterior: Styling Gap design with radii and first flange delivered.

Front and rear Light Concept development ongoing. Additional support by styling Strak supplier.

Aerodynamic improvements vs. design compromises.

Interior: Styling CAS will be finished at the end of next week.

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

LOWLIGHTS: None

BLOCKER: A pillar obstruction topic has to be aligned internally - (Information is essential for interior styling and exterior styling to progress.)

Steering shroud position unclear to work out a cut out for the shroud / position the steering wheel.

HIGHLIGHTS:

SVC3:

Alignment with CTO on FuSa ReStart > ongoing.

LOWLIGHTS: None

BLOCKER: None