



# **DEVELOPMENT SPRINT REVIEW**

## **CALENDAR WEEK 12.22**

### HIGHLIGHTS:

- Headcount: DVP and testing engineers contracted (key for SVC3 commissioning and testing)
- SCCM SVC3 SW release is finished and delivered to Sono with the components for testing
- Vehicle start via app and key fob are almost finished (only small details to be aligned between E/E and Sono Digital and the supplier)
- Body Structure: Updates for SVC3 are released in 3DX
- Logistics: Carrier's quotation for the Supply Chain of PV labels - V2
- Crash & Safety: Charger Lid – requirement "functional after a crash" → Done

## GENERAL (2/3)

### IN PROGRESS:

- SVC3: Feedback supplier: Sono number system needs update, because for supplier is it hard to sort the single part to sub-assemblies (only with CAD system possible)
- Body Electronics: BCM SW has bugs on the functional implementation → Time intensive & slows down the LabCar progress
- Powertrain: Assembly manual for powertrain
- DCU (Distribution & Charging Unit): Resolve all errors in SVC3 order book
- Logistics: Evaluation of a packaging station inside SONO
- Freeze color & trim for interior SVC3 vehicles → In progress
- Crash & Safety: HV Safety - Crash - AVAS, 12V Battery, DCU → In progress

### LOWLIGHTS:

- Communication that Sono will change to the newest Catia Version (2022) too late. Our ESP's cannot switch in a few days.
- SVC4: Renaming of the new SVC4 3DX data was in some areas not adapted → 2 days needed for correction of naming
- DCU (Distribution & Charging Unit): Software release plan for SVC3 vehicles
- Logistics: SVC3 L-BOM data populating → Parked

## BODY STRUCTURE (1/2)

### HIGHLIGHTS:

- SVC3
  - Updates for SVC3 are released in 3DX → Body structure
  - Supplier visit → SVC3 build status check
- SVC4
  - SVC4 CAD updates can start → 3DX base is done
  - Change request from other squad are in Jira right now

## BODY STRUCTURE (2/2)

**IN PROGRESS:** None

**LOWLIGHTS:**

- High workload → Some topics cannot proceed

### HIGHLIGHTS:

- E/E Integration:
  - Body Electronics:
    - BCM SVC3 SW release is finished and delivered to Sono for testing
    - SCCM SVC3 SW release is finished and delivered to Sono with the components for testing
    - Vehicle start via app and key fob are almost finished (only small details to be aligned between E/E and Sono Digital and their supplier)
    - E/E commissioning and DVP Plan is defined
    - Media gateway proposal send to supplier
    - GEM SVC3 release is finished

## E/E (2/3)

- ADAS: TARA (Threat Analyses and Risk Assessment) development is in progress (for cybersecurity req's)
- CAD Integration: BOM split in SVC3 and SVC4 helps a lot
- Review CAD and release GEM for SVC3
- BMS input/output diagram

### IN PROGRESS:

- E/E Integration:
  - Body Electronics:
    - BCM SW has bugs on the functional implementation → Time intensive & slows down the LabCar progress
    - SVC3 vehicle sleep strategy ongoing

- ADAS:
  - Refining plan for first stage of integration in SVC3
  - Improving communication in the squad
- Wiring harness:
  - Not good enough quality of the drawings→ Slows down progress
  - Access to Catia & 3Dx causes time problems
  - Grommets: Did not receive full and updated design from supplier, because of their manufacturing alignment
- CAD Integration:
  - CAD release takes a lot of time

**LOWLIGHTS:** None

# POWERTRAIN (1/2)

**HIGHLIGHTS:** None

**IN PROGRESS:**

- Assembly manual for powertrain
- Design verification
- Follow-up meeting with supplier on environmental quote
- Integrate HV battery into reviews with suppliers
- Package investigation movement envelope EDU
- Powertrain assembly – tolerance chain investigation
- Powertrain provides status of individual DTs for SVC4
- Review misuse simulation results

## POWERTRAIN (2/2)

- Select test facility provider
- SVC3 powertrain system test facilities
- SVC3 provision of assembly instructions
- Torque value definition

### LOWLIGHTS:

- CAD end stop – check – blocked
- Switch module CAD design for LabCAR – blocked

# DCU (DISTRIBUTION & CHARGING UNIT) (1/2)

## HIGHLIGHTS:

- We renamed the OBC to DCU (Distribution & Charging Unit)
- DTs finalized

## IN PROGRESS:

- Create tickets for supplier
- Diagnostic requirements
- EE DVP plan for SVC3
- DCU Hiring Development Engineer
- DCU resource planning

## DCU (DISTRIBUTION & CHARGING UNIT) (2/2)

- DCU state machine
- Resolve all errors in SVC3 order book
- Update DCU tech spec

### LOWLIGHTS:

- Adapter V2V and V2L
- Test standards - E/E - DESS
- Software release plan for SVC3 vehicles

### HIGHLIGHTS:

- Tasks for the closings Q1/22
- Carriers quotation for the Supply Chain of PV labels - V2
- Decision / contract for a LOG quotation tool
- Collect requirements – market vehicle
- Collect requirements – test vehicle
- Logistics clerk – recruiting
- Loading / transport details for PV labels + connection boxes
- Contract global transportation insurance → In review

## LOGISTICS (2/4)

### IN PROGRESS:

- Create shipping documents templates
- Onboard intern
- Transport cost estimation for PV labels (V2) + package details provided
- PDS test phase
- Evaluation of a packaging station inside SONO
- Fix the current translation EN → DE from the logistics manual
- Screening - Inventory Management Expert
- SVC3 parts transportation from third party countries
- Start the classification of the parts

## LOGISTICS (3/4)

- Enter information on critical parts for packaging
- Estimation for the Inventory for series production
- Decision matrix for After Sales LSP
- Define list of critical parts with special packaging requirements
- Categorize new parts in the InfoRecord\_Bom
- Define packaging approval process
- Process documentation – goods receiving
- VIN & invoice for the car (SVC3) which is planned to be transported to US → Backlog
- Define the list of parts that requires packaging specifications → Backlog

### LOWLIGHTS:

- SVC3 L-BOM data populating → Parked
- Legal review of the logistics manual (checking German version about legal wording) → Parked

## HIGHLIGHTS:

- gap bumper front light → Done
- grille styling → Done

## IN PROGRESS:

- Freeze color & trim for interior SVC3 vehicles → In progress

## LOWLIGHTS: None

## CRASH & SAFETY (1/5)

### HIGHLIGHTS:

- Abolition of HVAC and interior air ducts for IPs intended to be used in sled testing → Done
- Accessibility issue on B-pillar weld → Done
- CAE models for IAC/MOLD → Done
- Charger lid – requirement "functional after a crash" → Done
- Crash vehicle usage - crash sensing - SVC3-11 + 12 → Done
- Crash/Safety CAE - SVC3 status review – Low Speed → Done
- Crash/Safety CAE - SVC3 status review – Occ. Safety → Done
- Crash/Safety CAE - SVC3 status review – Occ. Safety - PMCS Issue list → Done
- Crash/Safety CAE - SVC3 status review – PedPro → Done
- Headcount plan update interior → Done

## CRASH & SAFETY (2/5)

- Keyhole opening for headliner clip in roof header → Done
- Side crash – barrier – integrity lower B-pillar patch → Done
- Side crash – Pole – failure upper B-pillar patch → Done
- Side crash – pole – structural integrity of rocker → Done
- Tack weld (Heftnaht) on Z-bar → Done
- Update Door-In-White → Done
- Updated frontend cross-member → Done
- Vehicle and buck availability → Done
- Alternative seat attachment concept → In review
- DEBUG passenger seat model → In review
- Headliner clip resistance - evaluation of current development state → In review
- Material card creation for supplier [product 1] and supplier 30gl foam → In review

## CRASH & SAFETY (3/5)

- SVC3 ECE R-14 2SR → In review
- SVC3 ECE R-145 2SR → In review
- SVC3 ECE R-17 2SR → In review
- SVC3 integration 1SR model → In review
- SVC3 integration 2SR model → In review
- Update seatbelt model due model v004 → In review

## CRASH & SAFETY (4/5)

### IN PROGRESS:

- Crash/Safety – results to LCO → In progress
- Crash/Safety – SVC3 DR status reporting → In progress
- Crash/Safety CAE – SVC3 status review - Seats & Restraints → In progress
- Slight delay interior parts for testing → In progress
- HV safety – crash - AVAS, 12V Battery, DCU → In progress
- Lashing Eye 01V089 → In progress
- Material & Joining Validation → In progress
- Status update with body structures release → In progress
- Supplement SVC3 ECE R-17 1SR → In progress
- SVC3 body structure component testing → In progress

## CRASH & SAFETY (5/5)

- SVC3 CMT welding validation → In progress
- TL471 Due Care → In progress
- Crash/Safety CAE - SVC3 status review – sensoring → Backlog
- ECE R-14 Safety belt anchorage points → Backlog
- Joining technology replacement and reduction → Backlog
- OOP tests airbags requirements → Backlog
- Pre-simulation of component tests → Backlog
- SM-6-220 - Stress/Strain-curve from supplier → Backlog
- SVC3 Crash/Safety status available on confluence → Backlog
- SVC3 point joining technology validation → Backlog

**LOWLIGHTS:** None