



#### Code functionalities:

- VCU + Sub VCU:**
- 1) Brake light activation
  - 2) SCS Monitoring for manual mode and AS signals
  - 3) APPS/Brake Pedal Plausibility Check (If we decide to not compute power, maybe give this responsibility to Actuator Controller)
  - 4) Manual Mode - ready to drive sequence and disabling ASB
  - 5) Inverters power output control
  - 6) Provide Handbook power control
  - 7) Launching AMI chosen mission to ASC and actuating AMI+ASSI
  - 8) Closing SDC if driving mission conditions are fulfilled (T14.5)
  - 9) Power signals of ESB implementation at Actuator Controller, activate SDC if mission is successful
  - 10) Activating the buzzer for Manual R2D
  - 11) Sample rear ASB Signals
  - 12) Decide the mission according to Figure 17 and actions according to the Control ASB status
  - 13) Actuate the SDC according to RES signals
  - 14) Precharge control & actuating the AIR's
  - 15) Receiving messages from BMS and RES.

#### Pedal Node:

- 1) Sample the following signals: APPS, BPPS, BOPS, SWPS
- 2) ASB plausibility check implementation
- 3) ASB SCS scenario monitoring (Watchdog, etc.), T15.2.1 and perform emergency brake whenever (Brake + Steering) if ASB failure.
- 4) Provide ASB signals and front sensors to VCU for datalogger

#### Dashboard Node:

- 1) Receiving chosen mission in AS mode
- 2) Receiving R2D from driver while manually driving
- 3) Receiving heat evacuation mode for the driver
- 4) Show the driver relevant data about the car
- 5) Preparing and sending the updated messages to the Levi Node which control the steering wheel in AS mode.

#### Levi Node:

- 1) Actuates the steering wheel servo according to the generated ASC signals.
- 2) Gives several details about the servo including: temperature, position and velocity.

Mission 1: Actuating the brake light



