Functional Description

The user can select the V2L function on and off on the IVI\_IFT; The IVI\_IFT does not enable or disable the V2L function, and the VCU processes the logic.

1) Enabling conditions (a&b&c):

a. The power mode of the vehicle is CGW\_VehicleState=Standby-Normal/ StandbyOnlyLVon/Drive-Normal;

b. The user can operate the display;

c. IVI\_IFT can receive the status signal of the corresponding controller;

2) Trigger conditions/ Trigger conditions (a):

a. IVI\_IFT receives vehicle/{VIN}/hardware/battery/chargingConnectorState=0x6:

2000ohm/0x7: 2700ohm

&vehicle/{VIN}/hardware/battery/chargingState≠0x7:V2L Discharging; (without this coding value, IVI will not display the start discharge

switch)

a. IVI\_IFT receives vehicle/{VIN}/hardware/battery/chargingConnectorState=0x6:

2000ohm/0x7: 2700ohm &vehicle/{VIN}/hardware/battery/chargingState≠0x7V2L

Discharging; (without this coding value, IVI will not display the start discharge

switch)

3) Execution output/ Execution output ((a|b)&c):

a. User When the discharge function is turned on, IVI\_IFT sends "vehicle/{VIN}/hardware/battery/dischargingCommand=0x2: ON" to SGW, and SGW sends "IVI\_DschrgOnOffSet =0x2: ON" to VCU; When SGW receives "VCU\_Chargestatus = 0x7: V2L Discharging" from VCU, SGW sends "vehicle/{VIN}/hardware/battery/chargingState= 0x7: V2L Discharging" to IVI\_IFT, and the discharge function is displayed as on, and IVI\_IFT displays the "End Discharging" button; a.. When the user turns on the discharge function, IVI\_IFT send "vehicle/{VIN}/hardware/battery/dischargingCommand=0x2: ON " to SGW, SGW sends

" IVI \_DschrgOnOffSet =0x2: ON " to the VCU; When SGW receives "

VCU\_Chargestatus = 0x7：V2L Discharging " feedback from VCU, SGW sends

"vehicle/{VIN}/hardware/battery/chargingState= 0x7：V2L Discharging" to IVI\_IFT,

the discharge function is displayed as on; IVI\_IFT displays the "End Discharge" button

b. When the user chooses to turn off the discharge function, IVI\_IFT sends

"vehicle/{VIN}/hardware/battery/dischargingCommand=0x1: OFF" to SGW, and SGW sends

"IVI\_DschrgOnOffSet =0x1: OFF" to VCU; When SGW receives VCU When the feedback of "VCU\_Chargestatus≠0x7:V2L Discharging and POD feedback of POD\_OBC\_CCStatus=0x6:

2000ohm/0x7:2700ohm", SGW sends "vehicle/{VIN}/hardware/battery/chargingState=0x4:V2L Plug Detected/ 0xC:V2L

completed/0xE:V2L Fault" to IVI\_IFT, IVI\_IFT displays the "Start Discharging" button;

b. When the user turns off the discharge function, IVI\_IFT sends "

vehicle/{VIN}/hardware/battery/dischargingCommand=0x1: OFF" to SGW, SGW sends

" IVI\_DschrgOnOffSet =0x1: OFF " to the VCU; When SGW receives "

VCU\_Chargestatus≠0x7:V2L Discharging " feedback from VCU and

POD\_OBC\_CCStatus=0x6：2000ohm/0x7：2700ohm feedback from POD, SGW sends

" vehicle/{VIN}/hardware/battery/chargingConnectorState=0x6：2000ohm/0x7：

2700ohm &vehicle/{VIN}/hardware/battery/chargingState≠0x7V2L Discharging " to

IVI\_IFT, IVI\_IFT displays the "Start Discharge" button；

c. SWP sends TouchEvents to IVI\_IFT, informing IVI\_IFT of user touch events; IVI\_IFT sends

VideoStream\_SWP to SWP, informing SWP of display content；

c. SWP sends TouchEvents to IVI\_IFT, informing IVI\_IFT of user touch events;

c. SWP sends TouchEvents to IVI\_IFT, informing IVI\_IFT of display content； IVI\_IFT users of touch events; IVI\_IFT sends VideoStream\_SWP to SWP, inform SWP of the displayed content; 4) Exit conditions/Exit conditions (a): a. The power mode of the vehicle is not Standby-Normal/ Standby-OnlyLVon/Drive-Normal; a. The power mode of the vehicle is CGW\_VehicleState≠Standby-Normal/ StandbyOnlyLVon/Drive-Normal;