Functional Description

users can set the battery keep warm mode on IVI\_IFT; The battery insulation mode can be

switched between any gear position；

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 (a):

a. The user is operating with the battery keep warm mode switch UI element;

a. The user is operating with the battery keep warm mode switch UI element;

switch UI element

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

a. When the user turns on battery keep warm mode through SWP soft switch, IVI\_IFT sends

"vehicle/{VIN}/hardware/battery/tractionKeepWarmCommand=0x2:ON" to SGW,

SGW sends IVI\_KeepWarmRequest =0x2:ON" to BMS; when SGW receives

"BMS\_KeepWarmStatus = 0x2:ON" from BMS, SGW sends

"vehicle/{VIN}/hardware/battery/tractionKeepWarmState= 0x2:ON" to IVI\_IFT, showing

that battery keep warm mode is on;

a.When the user turns on battery keep warm mode through SWP soft switch, IVI\_IFT

sends "vehicle/{VIN}/hardware/battery/tractionKeepWarmCommand=0x2:ON " to SGW,

SGW sends "IVI\_KeepWarmRequest =0x2:ON " to BMS； When SGW receives

"BMS\_KeepWarmStatus = 0x2:ON " feedback from BMS, SGW sends

"vehicle/{VIN}/hardware/battery/tractionKeepWarmState= 0x2:ON " to IVI\_IFT,

displays keep warm mode as on;

b. When the user chooses to turn off the battery warming mode through the SWP soft switch, IVI\_IFT sends

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

SGW sends IVI\_KeepWarmRequest =0x1: OFF" to BMS; When SGW receives "BMS\_KeepWarmStatus =0x1: OFF" from BMS, SGW sends "vehicle/{VIN}/hardware/battery/tractionKeepWarmState=0x1: OFF" to IVI\_IFT, indicating that the battery keep warm mode is off; b. When the user turns off battery keep warm mode through SWP soft switch, IVI\_IFT

sends "vehicle/{VIN}/hardware/battery/tractionKeepWarmCommand=0x1: OFF " to

SGW，SGW sends "IVI\_KeepWarmRequest =0x1: OFF " to BMS； When SGW

receives "BMS\_KeepWarmStatus =0x1: OFF " feedback from BMS, SGW sends

"vehicle/{VIN}/hardware/battery/tractionKeepWarmState=0x1: OFF " to IVI\_IFT,

displays keep warm mode as off;

c. SWP sends TouchEvents to IVI\_IFT, informing IVI\_IFT users of touch events; IVI\_IFT sends VideoStream\_SWP to SWP, inform SWP of the displayed content;

c. SWP sends TouchEvents to IVI\_IFT, informing 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 state 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;

Notes:

1. The default setting is off. (BMS will set to default) BMS memorizes the setting state, and IVI\_IFT does not memorize the setting state;

1. The default setting is off. (BMS will set to default) BMS memorizes the setting state, and IVI\_IFT does not memorize the setting state;