# VF ADAS Database

# Export of APA-V-Parking Comfort System Requirements

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Sep 26 2025 04:39

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## APA-V-Parking Comfort System Requirements overview

System Requirements

## APA-V-Parking Comfort System Requirements

### 1 Revision History:

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415635](#[ISSUE:3415635]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Rev. No | Date | Author | Reviewed/ Approved by | Description |
| 0.1 | 23-May-25 | Abirami K | - | Initial version of System requirements specification for V-Parking Comfort |
| 0.2 | 28-May-25 | Abirami K | Pallavi Advitot | Peer review fixes done across the document |
| 0.3 | 30-May-25 | Abirami K | Hamsa | SQA review comments fixed across the document |
| 1.0 | 30-May-25 | Abirami K | Josip F | Baselined |
| 1.1 | 21-June-25 | Abishna M P, Archana K, Neethu N K | - | Updated the existing requirements and added new requirements |
| 1.2 | 24-June-25 | Abishna M P, Archana K, Neethu N K | Sreejith Pai | Peer review fixes done across the document |
| 1.3 | 30-June-25 | Abishna M P, Archana K, Neethu N K | Hamsa T N | SQA review comments fixed across the document |

### 2 Introduction

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415636](#[ISSUE:3415636]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

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### 3 Purpose

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415637](#[ISSUE:3415637]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

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#### 3.1 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415655](#[ISSUE:3415655]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

The purpose of this document is to clearly define the functional, non-functional and safety requirements of V-Parking Comfort feature for Vinfast automotive VF8, VF9 while taking customer needs and legal requirements into consideration.  
This document provides developers with a detailed blueprint, facilitates clear communication among stakeholders, assists project managers in planning and managing the development process, serves as a reference for testers to ensure quality, and documents the requirements and decisions made during development for future reference and maintenance.

### 4 Scope

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415638](#[ISSUE:3415638]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

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#### 4.1 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415656](#[ISSUE:3415656]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

The scope of this document encompasses the detailed specifications and functional requirements necessary for the development and implementation of a reliable and efficient V-Parking Comfort Parking system. This document will outline V-Parking Comfort system’s objectives, including enhancing driver safety and minimizing the risk of collisions while parking. It will cover hardware and software requirements for real-time data processing and user interface design. Additionally, the document will address compliance with relevant industry standards and regulations.

### 5 Definitions Acronyms and abbreviations

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415639](#[ISSUE:3415639]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

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#### 5.1 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415657](#[ISSUE:3415657]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

ACM : Airbag Control Module  
APA : Advanced Parking Assistance  
APS : Advanced Parking System  
BCM : Body Control Module  
EPB : Emergency Park Brake  
MHU : Multimedia Head Unit  
IDB : Integrated Dynamic Breaking  
IGN : Ignition  
MHU: Multimedia Head Unit   
POV - Privately Owned Vehicle  
SV : Subject Vehicle  
SVM: Surround View Monitoring  
TBD : To Be Decided  
T-Box : Telematics Box  
USS : Ultra Sonic Sensor  
VCU : Vehicle Control Unit  
: V-parking Comfort  
XGW : Communication gateway

### 6 General Description

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415640](#[ISSUE:3415640]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

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### 7 System Overview

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415641](#[ISSUE:3415641]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

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#### 7.1 --

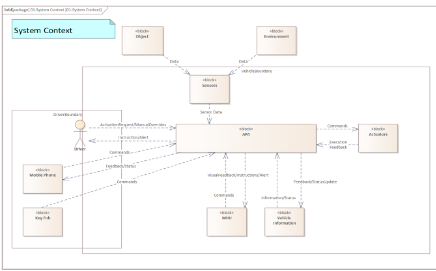
|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415658](#[ISSUE:3415658]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**



### 8 Overview

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415642](#[ISSUE:3415642]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

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#### 8.1 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415659](#[ISSUE:3415659]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

V-Parking Comfort in the Advanced Parking Assist System (APAS) is a cutting-edge feature developed to automate and streamline the parking experience while taking into account the driver’s parking slot preference. V-Parking Comfort helps drivers in locating and picking an optimal parking space, executing automatic parking maneuvers into the selected slot (Park in), and safely exiting a parking space (Park out), all under the supervision of the driver.  
  
Park in: Utilizing camera and ultrasound sensors, the system offers a 3-D visualization of the available parking spots. Once the driver confirms their selected slot, the system autonomously maneuvers into the space with minimal effort from the driver. The user shall oversee the system continuously and can halt the vehicle by discontinuing input to the remote device. Ongoing input to the remote device (e. g. , touch, press, or a designated pattern) is necessary for the vehicle to persist in the parking maneuver. If the user withdraws their input, the vehicle will come to a halt. The user can Then either continue the parking maneuver or assume control of the vehicle.  
  
Park out: The driver can initiate V-Comfort park out via mobile device or key fob. Once activated, the VPC system exits the vehicle from the parking space.

#### 8.2 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415660](#[ISSUE:3415660]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

Current vehicle Inputs:  
Vehicle speed : Current vehicle current speed  
Vehicle longitudinal acceleration : Current vehicle current longitudinal acceleration  
Vehicle lateral acceleration: Current vehicle current lateral acceleration  
Pitch angle : Current vehicle pitch angle  
Acceleration pedal position : Position of the acceleration pedal of the Current vehicle  
Braking applied by driver Pressure applied by the driver to the braking system  
Steering angle: Current vehicle steering wheel angle  
Gear position: Selected gear of the Current vehicle  
Power status : Current vehicle power status (powered on or powered off)  
Door’s status : Open or close for driver and passengers’ doors  
Trunk status : Current trunk status (opened, closed...)  
Hood status : Current hood status (opened, closed...)  
Mirrors : Current hood status (Folded, Un-folded...)  
Battery : State of Charge,   
Turn indicator: on/ off,   
Remote status : remote device connection status  
AEB status : Current status of the AEB feature  
FCTA status (FCW) : Current status of the FCTA feature  
RCTA status (RCW) : Current status of the RCTA feature  
ACC status : Current status of the ACC feature Related system failure Fault in the ESC, ABS, EPS, EPB, VCU, TCU(T-BOX, MHU, encryption error, sensor error, engine failure, low Tyre pressure TPMS.

#### 8.3 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415661](#[ISSUE:3415661]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

Environment (Outside of the vehicle Inputs) :  
Object type : List containing the type of object of each detected object  
Object head : List containing the orientation of each detected object  
Object x position : List containing the longitudinal coordinate of each detected object  
Object y position : List containing the transversal coordinate of each detected object  
Object velocity: List containing the relative velocity in the heading direction of each detected object (ego car health)  
Object acceleration : List containing the acceleration of each detected object  
Object width : List containing the width of each detected object  
Object length : List containing the length of each detected object  
Lines information : Information for the right and left lines (distance, line coefficients, quality, type, validity range, time to line crossing)  
Road surface conditions : Whether the roads are ODD conditions or not need to refer the ODD section  
Road type : Current road type  
Weather status : Current weather status (raining, cloudy, snow, sunny...)  
Visibility status : Current visibility status (good, moderate, poor...) or value of the visual distance (meters)  
Lighting status : Current illuminance status (good, moderate, poor...) or value of the illuminance (lux)

#### 8.4 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415662](#[ISSUE:3415662]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

MHU Inputs:  
Activated / Not activated : Activated by user button press   
RP selection : (V-parking Comfort) Through C-app or Key fob Remote parking option selection.

#### 8.5 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415663](#[ISSUE:3415663]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

Remote C-App / Key Fob Input:  
Start confirmation: Button press to start Maneuvering   
Parking Slot Confirmation : Confirming of suggested parking slot  
Vehicle orientation : View the vehicle orientation on screen  
Remote controller status: Current remote controller status (remote connection quality...) Syncing or pair  
Remote control status : Current remote-control status or driver actions on the remote controller (continuous action , suspend, resume, cancel)  
Remote controller position : Current remote controller position (outside the car in a key fob or c-app within the desired range as per the Market EU, US, VIETNAM) 6 to 30m) [TBD]  
Battery level: Battery level of Key fob or Mobile

#### 8.6 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415664](#[ISSUE:3415664]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

Current Vehicle outputs:  
RP (V-parking Comfort status): Current feature status (disabled, failure, standby, maneuvering...)  
Requested acceleration/deceleration: Current acceleration request  
Requested steering angle : Current steering angle request  
Requested gear shift position : Current gear shift position request  
Requested electronic parking brake Current electronic parking brake request  
Requested right turn light : Current right turn light request  
Requested left turn light : Current left turn light request  
Requested emergency lights: Current emergency lights request  
Requested power off : Current power off request to IGN OFF

#### 8.7 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415665](#[ISSUE:3415665]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

MHU output:  
Screen output Messages are happened based on the request given the MHU Driver: TBD.  
Notifications: Preconditions of current vehicle data notifying

#### 8.8 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415666](#[ISSUE:3415666]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

Remote C-App/Key Fob Output:  
Screen output Messages are happened based on the request given by the Driver: TBD.  
Slot detected: Based on the Outside info given the information   
Path maneuvering: Planned Trajectory   
Notifications: Preconditions of current vehicle data notifying  
Safety Messages : Message on Driver Override request  
SVM Status : Images of SVM and outside monitoring system  
Current Maneuver information and status: Percentage of path covered, expected completion time  
Park in /park-out status : Through the C-app notify to use the if parking is completed successfully.

### 9 External Interface with Other Devices

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415643](#[ISSUE:3415643]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

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#### 9.1 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415667](#[ISSUE:3415667]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

1. Key-fob  
2. C-APP

#### 9.2 --

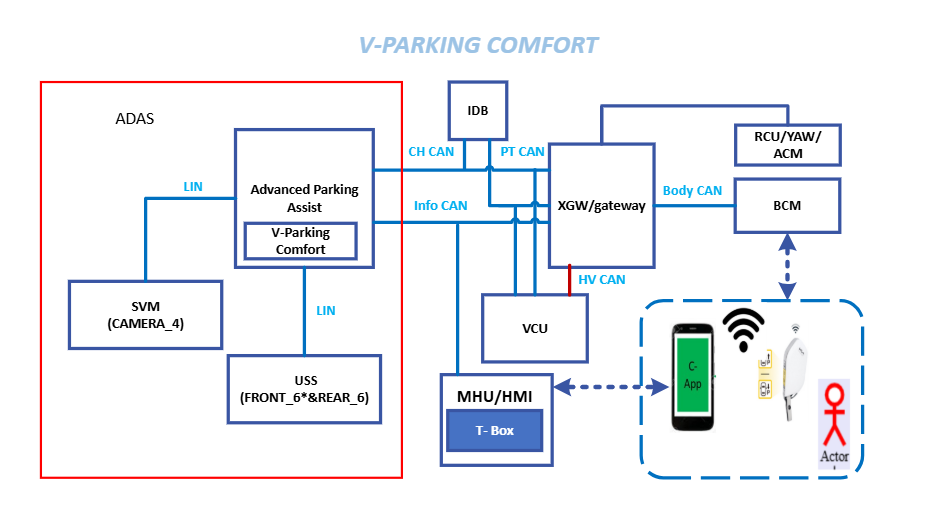
|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415668](#[ISSUE:3415668]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**



#### 9.3 Communication Interface Requirements

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415669](#[ISSUE:3415669]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

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#### 9.4 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415670](#[ISSUE:3415670]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

TBD (CAN DBC MATRIX NEED TO BE PROVIDED BY THE VINFAST TEAM)

### 10 User Characteristics

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415644](#[ISSUE:3415644]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

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#### 10.1 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415671](#[ISSUE:3415671]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

V-Parking Comfort feature of Advanced Parking Assist (APA) system shall be designed to accommodate the diverse characteristics and needs of its users, ensuring a seamless and intuitive parking experience. It shall be intuitive and easy to use for drivers of all ages, including young adults and elderly users, and support multiple languages. The system shall provide a user-friendly interface accessible to both novice and experienced driver, featuring clear and simple instructions. shall provide information to the user via visual, auditory AND HAPTIC feedbacks. The system shall enable users to park their vehicles accurately and safely with minimal effort, supporting inside operation and remote operation from outside the vehicle. It shall function effectively in various parking environments and weather conditions, and include features to assist users with disabilities, such as voice commands and large, easy-to-read display options. The system shall comply with accessibility standards and recognize common user behaviors, providing quick and efficient parking solutions to accommodate users with busy schedules and time constraints.

### 11 General Constraints

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415645](#[ISSUE:3415645]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

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#### 11.1 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415672](#[ISSUE:3415672]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

1. V-Parking Comfort System can operate in Good and moderate illumination with Good and Moderate Visibility(during rainfall / snowfall / fog / smoke / smog / sleet) of 75 to more than 300mts.  
2. V-Parking Comfort System shall Operate in ambient temperatures between less than -20 to 45 °C .

### 12 General Assumptions

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415646](#[ISSUE:3415646]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

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#### 12.1 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415673](#[ISSUE:3415673]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

V-Parking Comfort shall provide a visual and audio warning message if key fob is used for driver communication ([Red LED illuminates Continually) to inform the driver that the subject vehicle has been temporarily stopped due to the presence of an obstacle in the trajectory while the obstacle is present in the trajectory and the feature is in MANOEUVRING state.

#### 12.2 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415674](#[ISSUE:3415674]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

The V-Parking Comfort shall provide a visual and audio warning message eg: Red LED illuminates for 4 seconds tunable and Then IGN turns off to inform the driver if the driver use only key fob for communication that the maneuver has been suspended , When the feature transitions from MANUEVRING to SUSPENDED state.

### 13 Variants to be offered

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415647](#[ISSUE:3415647]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

#### 13.1 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415675](#[ISSUE:3415675]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

No Feature Variants

### 14 User Interface

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415648](#[ISSUE:3415648]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

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### 15 Screen Formats

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415649](#[ISSUE:3415649]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

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#### 15.1 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415676](#[ISSUE:3415676]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

NA

### 16 Warnings:

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415650](#[ISSUE:3415650]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

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#### 16.1 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415677](#[ISSUE:3415677]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415624](https://vgrts.vinfast.vn/cb/item/3415624) | Pause Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering   
AND  
VPC\_Paused is True  
Then  
The V-Parking comfort shall set Reason\_for\_suspend as Req\_Recover\_Press\_Pause(8)

#### 16.2 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415678](#[ISSUE:3415678]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415624](https://vgrts.vinfast.vn/cb/item/3415624) | Pause Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When   
VPC\_Status is Path Maneuvering  
AND  
IDB\_Brake\_Override\_Level is Hard brake  
Then   
The V-Parking comfort shall set Reason\_for\_suspend as Req\_Recover\_Press\_brake (4).

#### 16.3 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415679](#[ISSUE:3415679]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415624](https://vgrts.vinfast.vn/cb/item/3415624) | Pause Conditions During Automatic Maneuvering |

**Downstream References (2)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

When   
VPC\_Status is Path Maneuvering  
AND  
Obstcl\_Identified is True  
AND  
Alternate\_Path\_Planning is False   
Then   
The V-Parking comfort shall set Reason\_for\_suspend as Req\_Recover\_FoundObstacleInTrajectory (2)

#### 16.4 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415680](#[ISSUE:3415680]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415624](https://vgrts.vinfast.vn/cb/item/3415624) | Pause Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path Maneuvering   
AND  
ACM\_Seat\_Belt\_Status\_Driver is unbuckled  
Then  
The V-Parking comfort shall set Reason\_for\_suspend as Req\_Recover\_driver\_seatbelt\_unbuckle (5)

#### 16.5 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415681](#[ISSUE:3415681]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415624](https://vgrts.vinfast.vn/cb/item/3415624) | Pause Conditions During Automatic Maneuvering |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |

**No Associations**

**Description**

When  
VPC\_Status is Path Maneuvering  
AND  
BCM\_STAT\_TrunkAjar is open  
Then  
The V-Parking comfort shall set Reason\_for\_suspend as Req\_Recover\_Luggage Door Open (3)

#### 16.6 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415682](#[ISSUE:3415682]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415624](https://vgrts.vinfast.vn/cb/item/3415624) | Pause Conditions During Automatic Maneuvering |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |

**No Associations**

**Description**

When   
VPC\_Status is Path Maneuvering  
AND  
BCM\_Doors\_Lock\_Status is Unlocked   
Then  
The V-Parking comfort shall set Reason\_for\_suspend as Req\_Recover\_Doors\_unlock (1)

#### 16.7 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415683](#[ISSUE:3415683]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415624](https://vgrts.vinfast.vn/cb/item/3415624) | Pause Conditions During Automatic Maneuvering |

**Downstream References (2)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering  
AND  
BCM\_STAT\_Mirror is folded  
Then  
The V-Parking comfort shall set Reason\_for\_suspend as Req\_Recover\_Fold\_Mirror (10)

#### 16.8 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415684](#[ISSUE:3415684]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |

**No Associations**

**Description**

When  
VPC\_Status is Path Maneuvering   
AND  
object remains in parking path more than MAX\_OBSTACLE\_WAIT\_TIME ( predefined threshold time)   
Then  
The V-Parking Comfort shall set Reason\_for\_abort as object remains in parking path more than predefined threshold time(37)

#### 16.9 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415685](#[ISSUE:3415685]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**Downstream References (2)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

When  
VPC\_Status is Path Maneuvering  
AND  
C-App\_Maneuver\_Command is False  
OR  
Keyfob\_Maneuver\_Command is False  
Then  
The V-Parking comfort shall set Reason\_for\_abort as driver stops engagement through the remote device(1)

#### 16.10 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415686](#[ISSUE:3415686]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (2)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |
| [AVPCSR-3417045](https://vgrts.vinfast.vn/cb/item/3417045) | -- |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path Maneuvering   
AND  
Manual\_override is set as True / EPS\_Steering\_Control\_Status is Manual Override  
OR  
EPB\_Control\_Status is Manual Override  
OR   
VCU\_Gear\_Control\_Status is Manual Override  
OR  
IDB\_Brake\_Override\_Level is Hard brake  
OR  
VCU\_Throttle\_Control\_Status is Manual Override  
Then  
The V-Parking comfort shall send Reason\_for\_abort as Manually Overrided wrt steering, acceleration or brake(2)

#### 16.11 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415687](#[ISSUE:3415687]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |

**No Associations**

**Description**

When  
VPC\_Status is Path Maneuvering   
AND  
Sensor\_Malfunction is True  
Then  
The V-Parking comfort shall set Reason\_for\_abort as Sensor\_malfuction is True(3)

#### 16.12 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415688](#[ISSUE:3415688]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path Maneuvering   
AND  
VPC\_Fault\_Status is True  
Then  
The V-Parking Comfort shall set Reason\_for\_abort as software error(4)

#### 16.13 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415689](#[ISSUE:3415689]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |

**No Associations**

**Description**

When  
VPC\_Status is Path Maneuvering   
AND  
Camera\_Visibility\_Status is Poor visibility Or Blocked  
Then  
The V-Parking comfort shall set Reason\_for\_abort as Poor visibility(5)

#### 16.14 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415690](#[ISSUE:3415690]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**Downstream References (2)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

When   
VPC\_Status is Slot Display and auto-maneuvering  
AND  
Distance reached is more than the MAX\_DIST , Odometer\_DistanceTrav is greater than the MAX\_DIST  
Then  
The V-Parking comfort shall set Reason\_for\_abort as Parking slot unavailable

#### 16.15 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415691](#[ISSUE:3415691]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path Maneuvering   
AND  
Number\_of\_moves/ Number of attempts to park-in or park-out exceed MAX\_ATTEMPT\_COUNT  
Then  
The V-Parking comfort shall set Reason\_for\_abort as maximum number of moves in a maneuver is exceeded(7)

#### 16.16 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415692](#[ISSUE:3415692]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |

**No Associations**

**Description**

When  
VPC\_Status is Path Maneuvering   
AND  
Low\_battery\_conditions is set True/ BMS\_Battery\_SoC < Battery\_SoC\_THD  
Then  
The V-Parking comfort shall set Reason\_for\_abort as low battery conditions are detected (8)

#### 16.17 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415693](#[ISSUE:3415693]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path Maneuvering   
AND  
Mechanical/Electronic systems failure  
Then  
The V-Parking comfort shall set Reason\_for\_abort as Failure of mechanical/electronic systems (9)

#### 16.18 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415694](#[ISSUE:3415694]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path Maneuvering   
AND  
Vehicle\_speed (VCU\_Veh\_Spd) is greater than SLOT\_SCAN\_SPEED(maximum threshold vehicle speed )  
Then  
V-Parking comfort shall set as Reason\_for\_abort as Req\_Quit\_Speed\_High(10)

#### 16.19 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415695](#[ISSUE:3415695]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path Maneuvering  
AND  
Improper calibration is True  
Then  
The V-Parking comfort shall set Reason\_for\_abort as Failure of Improper calibration (11)

#### 16.20 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415696](#[ISSUE:3415696]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path Maneuvering   
AND  
Park-in or Park-out process exceeds MAX\_MANUEVER\_COMPLT\_TIME  
Then  
The V-Parking comfort shall set Reason\_for\_abort as parking process exceeds the threshold time (12)

#### 16.21 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415697](#[ISSUE:3415697]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving  
AND  
EPB\_Brake\_State is set True  
Then  
V-Parking comfort shall set as Reason\_for\_abort as Req\_Quit\_EPB\_Brake\_State (13)

#### 16.22 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415698](#[ISSUE:3415698]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving  
AND  
Driver\_Gear\_Intervention is set True  
Then  
The V-Parking comfort shall set as Reason\_for\_abort as Req\_Quit\_Driver\_Gear\_Intervention(14)

#### 16.23 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415699](#[ISSUE:3415699]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (5)**

|  |  |
| --- | --- |
| [AVPCSR-3416599](https://vgrts.vinfast.vn/cb/item/3416599) | -- |
| [AVPCSR-3416576](https://vgrts.vinfast.vn/cb/item/3416576) | -- |
| [AVPCSR-3416577](https://vgrts.vinfast.vn/cb/item/3416577) | -- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |
| [AVPCSR-3417011](https://vgrts.vinfast.vn/cb/item/3417011) | -- |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path Maneuvering   
AND  
APA\_Error\_Status is set True  
Then  
The V-Parking comfort shall set Reason\_for\_abort as APA\_system\_failure (15)

#### 16.24 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415700](#[ISSUE:3415700]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |

**No Associations**

**Description**

When  
VPC\_Status is Path Maneuvering   
AND  
VPC\_C-App\_Communication\_Status is Failed  
OR  
VPC\_Keyfob\_Communication\_Status is Failed  
Then  
The V-Parking comfort shall set Reason\_for\_abort Remote\_connection\_timeout (16)

#### 16.25 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415701](#[ISSUE:3415701]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path Maneuvering   
AND  
C-App\_Maneuver\_Command is False for more than MAX\_TIME\_SUSPEND  
OR  
Keyfob\_Maneuver\_Command is False for more than MAX\_TIME\_SUSPEND  
Then  
The V-Parking comfort shall set Reason\_for\_abort as Req\_Quit\_Pause\_Timeout (17)

#### 16.26 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415702](#[ISSUE:3415702]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path Maneuvering   
AND  
VCU\_Throttle\_Control\_Status is Manual Override  
Then  
The V-Parking comfort shall set Reason\_for\_abort as Req\_Quit\_ACC (18)

#### 16.27 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415703](#[ISSUE:3415703]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path Maneuvering   
AND  
HWA\_requested is set True  
Then  
The V-Parking comfort shall set Reason\_for\_abort as Req\_Quit\_HWA (19)

#### 16.28 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415704](#[ISSUE:3415704]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

When  
VPC\_Status is Path Maneuvering  
AND  
MHU\_VPC\_Cancel\_Req is True   
OR  
Keyfob\_VPC\_Cancel\_Req is True   
OR   
C-App\_VPC\_Cancel\_Req is True  
Then  
The V-Parking comfort shall send Reason\_for\_abort as Req\_Quit\_Deactivation\_Button\_Pressed (20)

#### 16.29 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415705](#[ISSUE:3415705]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path Maneuvering  
AND  
Vehicle\_blocked is set True  
Then  
The V-Parking comfort shall set as Reason\_for\_abort as Req\_Quit\_Vehicle Block (21)

#### 16.30 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415706](#[ISSUE:3415706]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (2)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |
| [AVPCSR-3416577](https://vgrts.vinfast.vn/cb/item/3416577) | -- |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving  
AND  
PAS\_internal\_failure is set True  
Then  
The V-Parking shall set as Reason\_for\_abort as Req\_Quit\_PAS\_Failure (22)

#### 16.31 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415707](#[ISSUE:3415707]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving  
AND  
External\_ECU\_failure is set True  
Then  
The V-Parking comfort shall send Reason\_for\_abort as Req\_Quit\_External\_ECU\_failure (23)

#### 16.32 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415708](#[ISSUE:3415708]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [AVPCSR-3417044](https://vgrts.vinfast.vn/cb/item/3417044) | -- |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path Maneuvering   
AND  
VPC\_C-App\_Communication\_Status is Failed   
Then  
The V-Parking comfort shall send Reason\_for\_abort as Req\_Quit\_RD\_Offline (24)

#### 16.33 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415709](#[ISSUE:3415709]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving  
AND  
RPA\_Page\_Off is set True  
Then  
The V-Parking comfort shall send Reason\_for\_abort as Req\_Quit\_RPA\_Page\_Off (25)

#### 16.34 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415710](#[ISSUE:3415710]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving  
AND  
RD\_Failure is set True  
Then  
The V-Parking comfort shall send Reason\_for\_abort as Req\_Quit\_RD\_Failure(26)

#### 16.35 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415711](#[ISSUE:3415711]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving  
AND  
RD\_Deactivation\_Request is set True  
Then  
The V-Parking comfort shall set as Reason\_for\_abort as Req\_Quit\_RD\_Deactivation\_Request(27)

#### 16.36 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415712](#[ISSUE:3415712]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving  
AND  
Moves\_Times\_overflow is set True  
Then  
The V-Parking comfort shall set as Reason\_for\_abort as Req\_Quit\_Move\_times\_overflow (38)

#### 16.37 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415713](#[ISSUE:3415713]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving  
AND  
Interrupt\_Times\_overflow is set as True  
Then  
The V-Parking comfort shall send Reason\_for\_abort as Req\_Quit\_Recover\_Interrupt\_Times\_Overflow(28)

#### 16.38 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415714](#[ISSUE:3415714]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving  
AND  
Moving\_Control\_Timeout is set True  
Then  
The V-Parking comfort shall send Reason\_for\_abort as Req\_Quit\_MovingControl\_Timeout (29)

#### 16.39 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415715](#[ISSUE:3415715]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path Maneuvering   
AND  
Unsafe\_behavior\_detected is set true  
Then  
The V-Parking comfort shall send Reason\_for\_abort as Req\_Quit\_Unsafe\_Behavior (30)

#### 16.40 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415716](#[ISSUE:3415716]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering   
AND  
Slope\_exceeds\_limitation is set True  
Then  
The V-Parking comfort shall send Reason\_for\_abort as Req\_Quit\_Slope\_exceed\_limitation (31)

### 17 Error Messages

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415651](#[ISSUE:3415651]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

#### 17.1 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415717](#[ISSUE:3415717]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

V-parking Comfort shall inform driver with error messages on the reason for suspension, reason for abort, handover the control to driver, misaligned parking slot (error parking slot) , parking slot or area full in the C-app.

### 18 Functional Requirements

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415652](#[ISSUE:3415652]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

#### 18.1 Input /Output Processing

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415718](#[ISSUE:3415718]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

##### 18.1.1 Input Signals

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415782](#[ISSUE:3415782]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

###### 18.1.1.1 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416102](#[ISSUE:3416102]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415501](https://vgrts.vinfast.vn/cb/item/3415501) | Actuator Command Transmission and System Responsiveness |

**No Downstream References**

**No Associations**

**Description**

V-Parking Comfort shall receive the signal MHU\_APA\_Req from MHU.

###### 18.1.1.2 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416103](#[ISSUE:3416103]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (2)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |
| [APAVPC-3415624](https://vgrts.vinfast.vn/cb/item/3415624) | Pause Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

V-parking Comfort shall receive the signal EPB\_Brake\_State from EPB.

###### 18.1.1.3 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416104](#[ISSUE:3416104]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415624](https://vgrts.vinfast.vn/cb/item/3415624) | Pause Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

V-parking Comfort shall receive the signal BCM\_STAT\_Mirror from CGW.

###### 18.1.1.4 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416105](#[ISSUE:3416105]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415624](https://vgrts.vinfast.vn/cb/item/3415624) | Pause Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

V-parking Comfort shall receive the signal BCM\_STAT\_DoorAjarFL from CGW.

###### 18.1.1.5 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416106](#[ISSUE:3416106]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415624](https://vgrts.vinfast.vn/cb/item/3415624) | Pause Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

V-parking Comfort shall receive the signal BCM\_STAT\_DoorAjarFR from CGW.

###### 18.1.1.6 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416107](#[ISSUE:3416107]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415624](https://vgrts.vinfast.vn/cb/item/3415624) | Pause Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

V-parking Comfort shall receive the signal BCM\_STAT\_DoorAjarRL from CGW.

###### 18.1.1.7 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416108](#[ISSUE:3416108]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415624](https://vgrts.vinfast.vn/cb/item/3415624) | Pause Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

V-parking Comfort shall receive the signal BCM\_STAT\_DoorAjarRR from CGW.

###### 18.1.1.8 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416109](#[ISSUE:3416109]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415624](https://vgrts.vinfast.vn/cb/item/3415624) | Pause Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

V-parking Comfort shall receive the signal BCM\_STAT\_TrunkAjar from CGW.

###### 18.1.1.9 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416110](#[ISSUE:3416110]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415624](https://vgrts.vinfast.vn/cb/item/3415624) | Pause Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

V-parking Comfort shall receive the signal ACM\_Seat\_Belt\_Status\_Driver from EPS.

###### 18.1.1.10 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416111](#[ISSUE:3416111]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415584](https://vgrts.vinfast.vn/cb/item/3415584) | Park-In Maneuver Initiation: Control mode change |

**No Downstream References**

**No Associations**

**Description**

V-parking Comfort shall receive the signal Keyfob\_Maneuver\_Command from CGW.

###### 18.1.1.11 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416112](#[ISSUE:3416112]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415584](https://vgrts.vinfast.vn/cb/item/3415584) | Park-In Maneuver Initiation: Control mode change |

**No Downstream References**

**No Associations**

**Description**

V-parking Comfort shall receive the signal C-App\_Maneuver\_Command from TCU.

###### 18.1.1.12 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416113](#[ISSUE:3416113]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415501](https://vgrts.vinfast.vn/cb/item/3415501) | Actuator Command Transmission and System Responsiveness |

**No Downstream References**

**No Associations**

**Description**

V-parking Comfort shall receive the signal Sensor\_input\_Status.

###### 18.1.1.13 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416114](#[ISSUE:3416114]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415501](https://vgrts.vinfast.vn/cb/item/3415501) | Actuator Command Transmission and System Responsiveness |

**No Downstream References**

**No Associations**

**Description**

V-parking Comfort shall receive the signal Camera\_input\_status.

###### 18.1.1.14 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416115](#[ISSUE:3416115]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (2)**

|  |  |
| --- | --- |
| [APAVPC-3415571](https://vgrts.vinfast.vn/cb/item/3415571) | Parking Feasibility Check |
| [APAVPC-3415565](https://vgrts.vinfast.vn/cb/item/3415565) | Remote Mode Selection: Continuous Engagement via Mobile App |

**No Downstream References**

**No Associations**

**Description**

V-parking Comfort shall receive the signal Slot\_markings\_identified.

###### 18.1.1.15 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416116](#[ISSUE:3416116]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (2)**

|  |  |
| --- | --- |
| [APAVPC-3415571](https://vgrts.vinfast.vn/cb/item/3415571) | Parking Feasibility Check |
| [APAVPC-3415565](https://vgrts.vinfast.vn/cb/item/3415565) | Remote Mode Selection: Continuous Engagement via Mobile App |

**No Downstream References**

**No Associations**

**Description**

V-parking Comfort shall receive the signal MHU\_Selected\_Slot\_ID from MHU.

###### 18.1.1.16 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416117](#[ISSUE:3416117]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415542](https://vgrts.vinfast.vn/cb/item/3415542) | Path and Trajectory Planning: Traffic circulation |

**No Downstream References**

**No Associations**

**Description**

V-parking Comfort shall receive the signal VPC\_button from MHU.

###### 18.1.1.17 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416118](#[ISSUE:3416118]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (3)**

|  |  |
| --- | --- |
| [APAVPC-3415624](https://vgrts.vinfast.vn/cb/item/3415624) | Pause Conditions During Automatic Maneuvering |
| [APAVPC-3415564](https://vgrts.vinfast.vn/cb/item/3415564) | Low-speed forward navigation Execution |
| [APAVPC-3415562](https://vgrts.vinfast.vn/cb/item/3415562) | Mid-maneuver Condition Check and Status Communication |

**No Downstream References**

**No Associations**

**Description**

V-parking Comfort shall receive the signal Obstcl\_Identified.

###### 18.1.1.18 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416119](#[ISSUE:3416119]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415577](https://vgrts.vinfast.vn/cb/item/3415577) | Remote Mode Selection: Driver exit without Park brake |

**No Downstream References**

**No Associations**

**Description**

V-parking Comfort shall receive the signal C-App\_Selected\_ Slot\_ID from TCU.

###### 18.1.1.19 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416120](#[ISSUE:3416120]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

V-parking Comfort shall receive the signal MHU\_VPC\_Cancel\_Req

###### 18.1.1.20 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416121](#[ISSUE:3416121]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415624](https://vgrts.vinfast.vn/cb/item/3415624) | Pause Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

V-parking Comfort shall receive the signal BCM\_STAT\_BonnetAjar.

###### 18.1.1.21 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416122](#[ISSUE:3416122]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415624](https://vgrts.vinfast.vn/cb/item/3415624) | Pause Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

V-parking Comfort shall receive the signal IDB\_BrakePedal\_State from IDB.

###### 18.1.1.22 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416123](#[ISSUE:3416123]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (16)**

|  |  |
| --- | --- |
| [APAVPC-3415575](https://vgrts.vinfast.vn/cb/item/3415575) | Reserved Slot Display |
| [APAVPC-3415581](https://vgrts.vinfast.vn/cb/item/3415581) | Persistent Obstacle: Abort maneuver by System |
| [APAVPC-3415613](https://vgrts.vinfast.vn/cb/item/3415613) | Reuse |
| [APAVPC-3415611](https://vgrts.vinfast.vn/cb/item/3415611) | Park-Out Cancellation and Safe Maneuver Termination |
| [APAVPC-3415598](https://vgrts.vinfast.vn/cb/item/3415598) | Low-speed navigation: Initiation via MHU |
| [APAVPC-3415590](https://vgrts.vinfast.vn/cb/item/3415590) | Park-In Maneuver terminated by Driver seated |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |
| [APAVPC-3415624](https://vgrts.vinfast.vn/cb/item/3415624) | Pause Conditions During Automatic Maneuvering |
| [APAVPC-3415621](https://vgrts.vinfast.vn/cb/item/3415621) | Support OTA Updates |
| [APAVPC-3415600](https://vgrts.vinfast.vn/cb/item/3415600) | V\_Comfort Park-Out Maneuver Controls |
| [APAVPC-3415583](https://vgrts.vinfast.vn/cb/item/3415583) | Display Park-In Trajectory and progress |
| [APAVPC-3415584](https://vgrts.vinfast.vn/cb/item/3415584) | Park-In Maneuver Initiation: Control mode change |
| [APAVPC-3415564](https://vgrts.vinfast.vn/cb/item/3415564) | Low-speed forward navigation Execution |
| [APAVPC-3415559](https://vgrts.vinfast.vn/cb/item/3415559) | Pre-Maneuver Condition Check and Status Communication |
| [APAVPC-3415544](https://vgrts.vinfast.vn/cb/item/3415544) | Communicate activation status to driver |
| [APAVPC-3415542](https://vgrts.vinfast.vn/cb/item/3415542) | Path and Trajectory Planning: Traffic circulation |

**No Downstream References**

**No Associations**

**Description**

V-parking Comfort shall receive the signal VCU\_Gear\_Ctrl\_Status from VCU.

###### 18.1.1.23 VF\_PF\_SYSRS\_1536

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416124](#[ISSUE:3416124]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

V-Parking Comfort shall receive the signal EPB\_Ctrl\_Status from EPB

###### 18.1.1.24 VF\_PF\_SYSRS\_1537

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416125](#[ISSUE:3416125]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

V-Parking Comfort shall receive the signal VCU\_Throttle\_Ctrl\_Status from VCU

###### 18.1.1.25 VF\_PF\_SYSRS\_1538

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416126](#[ISSUE:3416126]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

V-Parking Comfort shall receive the signal IDB\_Ctrl\_Status from IDB

###### 18.1.1.26 VF\_PF\_SYSRS\_1539

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416127](#[ISSUE:3416127]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

V-Parking Comfort shall receive the signal VCU\_Veh\_Spd from VCU.

###### 18.1.1.27 VF\_PF\_SYSRS\_1540

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416128](#[ISSUE:3416128]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

V-Parking Comfort shall receive the signal VCU\_Ign\_On from VCU.

###### 18.1.1.28 VF\_PF\_SYSRS\_1541

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416129](#[ISSUE:3416129]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

V-Parking Comfort shall receive the signal MHU\_Selected\_Park-out\_Dir from MHU.

###### 18.1.1.29 VF\_PF\_SYSRS\_1542

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416130](#[ISSUE:3416130]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

V-Parking Comfort shall receive the signal C-App\_Selected\_Park-out\_Dir from TCU

###### 18.1.1.30 VF\_PF\_SYSRS\_1543

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416131](#[ISSUE:3416131]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

V-Parking Comfort shall receive the signal MHU\_User\_Comm\_dev from MHU

###### 18.1.1.31 VF\_PF\_SYSRS\_1544

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416132](#[ISSUE:3416132]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

V-Parking Comfort shall receive the signal MHU\_Maneuver\_Command from MHU

###### 18.1.1.32 VF\_PF\_SYSRS\_1545

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416133](#[ISSUE:3416133]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

V-Parking Comfort shall receive the signal TCU\_Current\_Veh\_Posn from TCU

###### 18.1.1.33 VF\_PF\_SYSRS\_1546

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416134](#[ISSUE:3416134]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

V-Parking Comfort shall receive the signal C-App\_VPC\_Actvn\_Req from CGW.

###### 18.1.1.34 VF\_PF\_SYSRS\_1547

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416135](#[ISSUE:3416135]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

V-Parking Comfort shall receive the signal VCU\_Gear\_State from VCU

###### 18.1.1.35 VF\_PF\_SYSRS\_1548

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416136](#[ISSUE:3416136]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

V-Parking Comfort shall receive the signal ACM\_Seat\_Adj\_Status from ACM

###### 18.1.1.36 VF\_PF\_SYSRS\_1549

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416137](#[ISSUE:3416137]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

V-Parking Comfort shall receive the signal MHU\_Park\_Type\_Req from MHU

###### 18.1.1.37 VF\_PF\_SYSRS\_1550

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416138](#[ISSUE:3416138]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

V-Parking Comfort shall receive the signal C-App\_Park\_Type\_Req from TCU

###### 18.1.1.38 VF\_PF\_SYSRS\_1551

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416139](#[ISSUE:3416139]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

V-Parking Comfort shall receive the signal MHU\_Nose-in\_Req from MHU

###### 18.1.1.39 VF\_PF\_SYSRS\_1552

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416140](#[ISSUE:3416140]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

V-Parking Comfort shall receive the signal MHU\_Selected\_Trajectory from MHU

###### 18.1.1.40 VF\_PF\_SYSRS\_1553

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416141](#[ISSUE:3416141]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

V-Parking Comfort shall receive the signal DMS\_DriverOccupancy from DMS

###### 18.1.1.41 VF\_PF\_SYSRS\_1554

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416142](#[ISSUE:3416142]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

V-Parking Comfort shall receive the signal DMS\_button\_released from DMS   
Note: Set to True when the driver is inattentive

###### 18.1.1.42 VF\_PF\_SYSRS\_1555

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416143](#[ISSUE:3416143]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

V-Parking Comfort shall receive the signal CMS\_Occupancy from CMS

###### 18.1.1.43 VF\_PF\_SYSRS\_1556

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416144](#[ISSUE:3416144]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

V-Parking Comfort shall receive the signal OTA\_ APA\_SW\_Upd from OTA

###### 18.1.1.44 VF\_PF\_SYSRS\_1557

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416145](#[ISSUE:3416145]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

V-Parking Comfort shall receive the signal Keyfob\_VPC\_Cancel\_Req from Key Fob

###### 18.1.1.45 VF\_PF\_SYSRS\_1558

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416146](#[ISSUE:3416146]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

V-Parking Comfort shall receive the signal C-App\_VPC\_Cancel\_Req from TCU

###### 18.1.1.46 VF\_PF\_SYSRS\_1559

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416147](#[ISSUE:3416147]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

V-Parking Comfort shall receive the signal IDB\_Brake\_Override\_Level from IDB

###### 18.1.1.47 VF\_PF\_SYSRS\_1560

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416148](#[ISSUE:3416148]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

V-Parking Comfort shall receive the signal Camera\_Visibility\_Status from Camera Module

###### 18.1.1.48 VF\_PF\_SYSRS\_1561

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416149](#[ISSUE:3416149]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

V-Parking Comfort shall receive the signal BMS\_Battery\_SoC from BMS

###### 18.1.1.49 VF\_PF\_SYSRS\_1562

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416150](#[ISSUE:3416150]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

V-Parking Comfort shall receive the signal ACC\_Requested from ACC

###### 18.1.1.50 VF\_PF\_SYSRS\_1563

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416151](#[ISSUE:3416151]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

V-Parking Comfort shall receive the signal BCM\_Doors\_Lock\_Status from BCM

###### 18.1.1.51 VF\_PF\_SYSRS\_1564

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416152](#[ISSUE:3416152]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

V-Parking Comfort shall receive the signal BCM\_Trailer\_Attachment\_Status from BCM

###### 18.1.1.52 VF\_PF\_SYSRS\_1565

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416153](#[ISSUE:3416153]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

V-Parking Comfort shall receive the signal Slope\_exceeds\_limitation from ESP

###### 18.1.1.53 VF\_PF\_SYSRS\_1566

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416154](#[ISSUE:3416154]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

V-Parking Comfort shall receive the signal MHU\_Display\_Slot\_Ack from MHU

##### 18.1.2 Output Signals

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415783](#[ISSUE:3415783]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

###### 18.1.2.1 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416155](#[ISSUE:3416155]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (2)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |
| [APAVPC-3415624](https://vgrts.vinfast.vn/cb/item/3415624) | Pause Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

V-parking Comfort shall update the signal APA\_Status in MHU.

###### 18.1.2.2 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416156](#[ISSUE:3416156]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (2)**

|  |  |
| --- | --- |
| [APAVPC-3415624](https://vgrts.vinfast.vn/cb/item/3415624) | Pause Conditions During Automatic Maneuvering |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

V-parking Comfort shall update the signal VPC\_Parking\_Active

###### 18.1.2.3 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416157](#[ISSUE:3416157]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (2)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |
| [APAVPC-3415624](https://vgrts.vinfast.vn/cb/item/3415624) | Pause Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

V-parking Comfort shall update the signal VPC\_Status in MHU.

###### 18.1.2.4 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416158](#[ISSUE:3416158]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (2)**

|  |  |
| --- | --- |
| [APAVPC-3415559](https://vgrts.vinfast.vn/cb/item/3415559) | Pre-Maneuver Condition Check and Status Communication |
| [APAVPC-3415560](https://vgrts.vinfast.vn/cb/item/3415560) | Pre-Maneuver Condition Failure Notification |

**No Downstream References**

**No Associations**

**Description**

V-parking Comfort shall update the signal VPC\_Maneuver\_precond in MHU.

###### 18.1.2.5 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416159](#[ISSUE:3416159]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415545](https://vgrts.vinfast.vn/cb/item/3415545) | Remote Mode Selection: Occupancy detection |

**No Downstream References**

**No Associations**

**Description**

V-parking Comfort shall update the signal VPC\_MHU\_Nose-in\_feasible in MHU.

###### 18.1.2.6 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416160](#[ISSUE:3416160]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415545](https://vgrts.vinfast.vn/cb/item/3415545) | Remote Mode Selection: Occupancy detection |

**No Downstream References**

**No Associations**

**Description**

V-parking Comfort shall update the signal VPC\_MHU\_Nose-out\_feasible in MHU.

###### 18.1.2.7 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416161](#[ISSUE:3416161]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415554](https://vgrts.vinfast.vn/cb/item/3415554) | Selection of Control mode for V\_Comfort Operation |

**No Downstream References**

**No Associations**

**Description**

V-parking Comfort shall update the signal VPC\_MHU\_User\_Comm\_dev in MHU.

###### 18.1.2.8 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416162](#[ISSUE:3416162]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415545](https://vgrts.vinfast.vn/cb/item/3415545) | Remote Mode Selection: Occupancy detection |

**No Downstream References**

**No Associations**

**Description**

V-parking Comfort shall update the signal VPC\_Maneuver\_precond in MHU.

###### 18.1.2.9 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416163](#[ISSUE:3416163]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (2)**

|  |  |
| --- | --- |
| [APAVPC-3415565](https://vgrts.vinfast.vn/cb/item/3415565) | Remote Mode Selection: Continuous Engagement via Mobile App |
| [APAVPC-3415571](https://vgrts.vinfast.vn/cb/item/3415571) | Parking Feasibility Check |

**No Downstream References**

**No Associations**

**Description**

V-parking Comfort shall update the signal VPC\_MHU\_Nose-in\_Trajectory

###### 18.1.2.10 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416164](#[ISSUE:3416164]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415587](https://vgrts.vinfast.vn/cb/item/3415587) | Park-In Completion: Alignment Check |

**No Downstream References**

**No Associations**

**Description**

V-parking Comfort shall update the signal VPC\_SuccessTxt in MHU

###### 18.1.2.11 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416165](#[ISSUE:3416165]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (2)**

|  |  |
| --- | --- |
| [APAVPC-3415526](https://vgrts.vinfast.vn/cb/item/3415526) | Automated Alert Generation for VPARK System Performance Degradation |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

V-parking Comfort shall update the signal APA\_Error\_status in MHU.

###### 18.1.2.12 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416166](#[ISSUE:3416166]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (3)**

|  |  |
| --- | --- |
| [APAVPC-3415573](https://vgrts.vinfast.vn/cb/item/3415573) | System Recommendation |
| [APAVPC-3415577](https://vgrts.vinfast.vn/cb/item/3415577) | Remote Mode Selection: Driver exit without Park brake |
| [APAVPC-3415561](https://vgrts.vinfast.vn/cb/item/3415561) | Parking Slot Detection |

**No Downstream References**

**No Associations**

**Description**

V-parking Comfort shall update the signal VPC\_MHU\_Nose-out\_Trajectory

###### 18.1.2.13 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416167](#[ISSUE:3416167]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415580](https://vgrts.vinfast.vn/cb/item/3415580) | Trajectory Calculation Based on Driver’s Slot and Direction Selection |

**No Downstream References**

**No Associations**

**Description**

V-parking Comfort shall update the signal Trace\_Path in MHU.

###### 18.1.2.14 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416168](#[ISSUE:3416168]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (3)**

|  |  |
| --- | --- |
| [APAVPC-3415617](https://vgrts.vinfast.vn/cb/item/3415617) | Remote Interface Connectivity |
| [APAVPC-3415559](https://vgrts.vinfast.vn/cb/item/3415559) | Pre-Maneuver Condition Check and Status Communication |
| [APAVPC-3415601](https://vgrts.vinfast.vn/cb/item/3415601) | Remote Supervision During V\_Comfort Park-Out via Mobile App |

**No Downstream References**

**No Associations**

**Description**

V-parking Comfort shall update the signal VPC\_C-App\_Comm\_Status in MHU.

###### 18.1.2.15 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416169](#[ISSUE:3416169]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (2)**

|  |  |
| --- | --- |
| [APAVPC-3415601](https://vgrts.vinfast.vn/cb/item/3415601) | Remote Supervision During V\_Comfort Park-Out via Mobile App |
| [APAVPC-3415617](https://vgrts.vinfast.vn/cb/item/3415617) | Remote Interface Connectivity |

**No Downstream References**

**No Associations**

**Description**

V-parking Comfort shall update the signal VPC\_Keyfob\_Comm\_Status in MHU.

###### 18.1.2.16 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416170](#[ISSUE:3416170]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415624](https://vgrts.vinfast.vn/cb/item/3415624) | Pause Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

V-parking Comfort shall update the signal Reason\_for\_suspend in MHU.

###### 18.1.2.17 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416171](#[ISSUE:3416171]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415587](https://vgrts.vinfast.vn/cb/item/3415587) | Park-In Completion: Alignment Check |

**No Downstream References**

**No Associations**

**Description**

V-parking Comfort shall update the signal VPC\_Park-in\_Finished\_Status

###### 18.1.2.18 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416172](#[ISSUE:3416172]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415610](https://vgrts.vinfast.vn/cb/item/3415610) | Maneuver Completion Actions After Successful Park-Out |

**No Downstream References**

**No Associations**

**Description**

V-parking Comfort shall update the signal VPC\_Park-out\_Finished\_Status

###### 18.1.2.19 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416173](#[ISSUE:3416173]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

V-parking Comfort shall update the signal Reason\_for\_abort in MHU.

###### 18.1.2.20 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416174](#[ISSUE:3416174]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415580](https://vgrts.vinfast.vn/cb/item/3415580) | Trajectory Calculation Based on Driver’s Slot and Direction Selection |

**No Downstream References**

**No Associations**

**Description**

V-parking Comfort shall update the signal VPC\_Park\_out\_directions

###### 18.1.2.21 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416175](#[ISSUE:3416175]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (2)**

|  |  |
| --- | --- |
| [APAVPC-3415583](https://vgrts.vinfast.vn/cb/item/3415583) | Display Park-In Trajectory and progress |
| [APAVPC-3415598](https://vgrts.vinfast.vn/cb/item/3415598) | Low-speed navigation: Initiation via MHU |

**No Downstream References**

**No Associations**

**Description**

V-parking Comfort shall update the signal VPC\_C-App\_Park-out\_Trajectory

###### 18.1.2.22 VF\_PF\_SYSRS\_1566

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416176](#[ISSUE:3416176]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

V-parking Comfort shall update the signal VPC\_MHU\_Parking\_Slot\_Info in MHU

###### 18.1.2.23 VF\_PF\_SYSRS\_1567

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416177](#[ISSUE:3416177]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

V-parking Comfort shall update the signal VPC\_MHU\_Nose-out\_CompltnTime in MHU

###### 18.1.2.24 VF\_PF\_SYSRS\_1568

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416178](#[ISSUE:3416178]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

V-parking Comfort shall update the signal VPC\_MHU\_Nose-in\_CompltnTime in MHU

###### 18.1.2.25 VF\_PF\_SYSRS\_1569

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416179](#[ISSUE:3416179]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

V-parking Comfort shall update the signal VPC\_EPS\_Steering\_Ctrl\_Req to EPS

###### 18.1.2.26 VF\_PF\_SYSRS\_1570

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416180](#[ISSUE:3416180]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

V-parking Comfort shall update the signal VPC\_IDB\_Ctrl\_Req

###### 18.1.2.27 VF\_PF\_SYSRS\_1571

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416181](#[ISSUE:3416181]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

V-parking Comfort shall update the signal VPC\_VCU\_Gear\_Ctrl\_Req to VCU

###### 18.1.2.28 VF\_PF\_SYSRS\_1572

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416182](#[ISSUE:3416182]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

V-parking Comfort shall update the signal VPC\_VCU\_Throttle\_Ctrl\_Req to VCU

###### 18.1.2.29 VF\_PF\_SYSRS\_1573

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416183](#[ISSUE:3416183]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

V-parking Comfort shall update the signal VPC\_IDB\_Cmd

###### 18.1.2.30 VF\_PF\_SYSRS\_1574

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416184](#[ISSUE:3416184]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

V-parking Comfort shall update the signal VPC\_EPB\_Cmd

###### 18.1.2.31 VF\_PF\_SYSRS\_1575

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416185](#[ISSUE:3416185]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

V-parking Comfort shall update the signal VPC\_EPS\_Steering\_Cmd

###### 18.1.2.32 VF\_PF\_SYSRS\_1576

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416186](#[ISSUE:3416186]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

V-parking Comfort shall update the signal VPC\_VCU\_Throttle\_Cmd to VCU

###### 18.1.2.33 VF\_PF\_SYSRS\_1577

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416187](#[ISSUE:3416187]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

V-parking Comfort shall update the signal VPC\_VCU\_Gear\_Cmd to VCU

###### 18.1.2.34 VF\_PF\_SYSRS\_1578

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416188](#[ISSUE:3416188]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

V-parking Comfort shall update the signal VPC\_EPS\_Steering\_Cmd

###### 18.1.2.35 VF\_PF\_SYSRS\_1579

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416189](#[ISSUE:3416189]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

V-parking Comfort shall update the signal VPC\_EPB\_Ctrl\_Req

#### 18.2 State Diagram:

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415719](#[ISSUE:3415719]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

##### 18.2.1 --

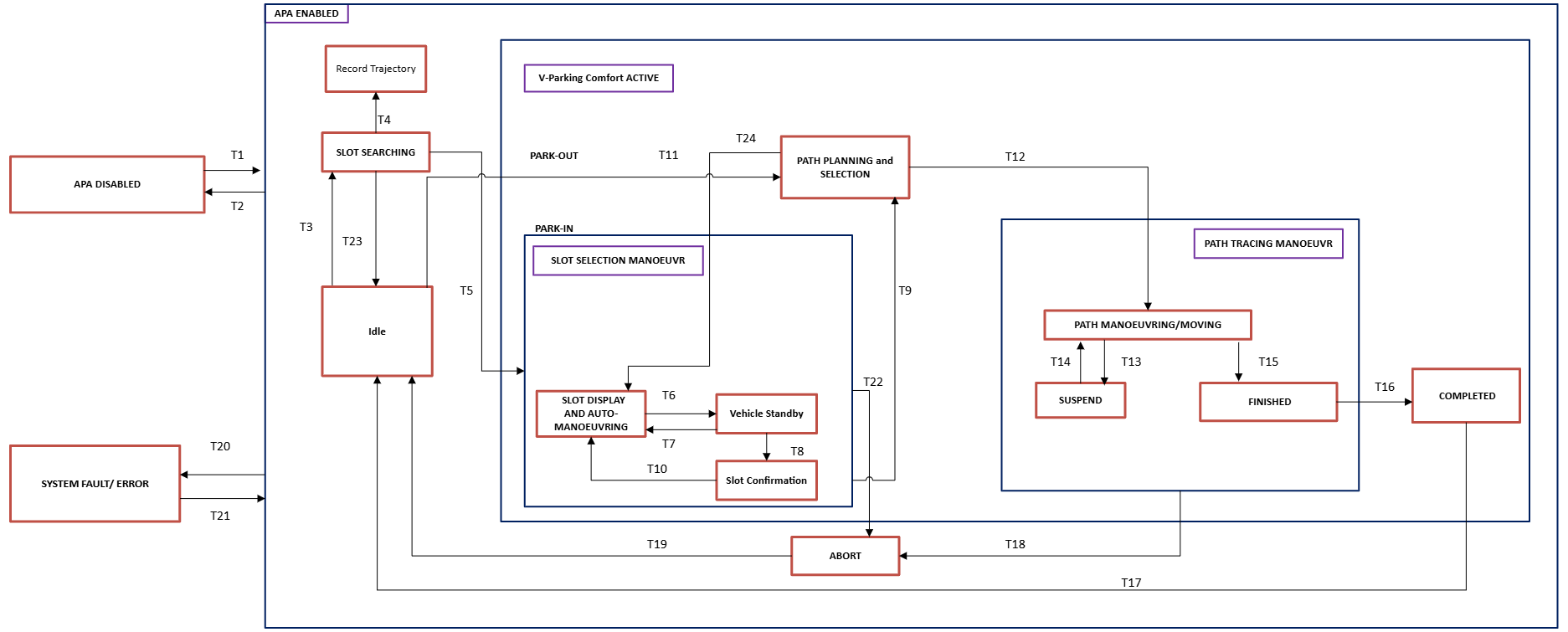
|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415784](#[ISSUE:3415784]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**



#### 18.3 State Transitions:

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415720](#[ISSUE:3415720]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

##### 18.3.1 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415785](#[ISSUE:3415785]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415542](https://vgrts.vinfast.vn/cb/item/3415542) | Path and Trajectory Planning: Traffic circulation |

**Downstream References (2)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

T1: APA Disabled To APA Enabled:   
When  
MHU\_APA\_Req is Enable  
AND   
OTA\_ APA\_SW\_Upd is False  
AND   
APA\_Error\_Status is False  
Then  
The APA system shall set APA\_Status as APA Enabled.

##### 18.3.2 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415786](#[ISSUE:3415786]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415625](https://vgrts.vinfast.vn/cb/item/3415625) | System states in Drive mode |

**Downstream References (2)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

T2: APA Enabled To APA Disabled :   
When  
MHU\_APA\_Req is Disable  
OR   
OTA\_APA\_SW\_Upd is True  
AND   
APA\_Error\_Status is False  
Then  
The APA system shall set APA\_Status as APA Disabled.

##### 18.3.3 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415787](#[ISSUE:3415787]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415626](https://vgrts.vinfast.vn/cb/item/3415626) | Vehicle mode to enable V\_Comfort |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |

**No Associations**

**Description**

Idle  
When  
    APA\_Status is Enabled   
AND  
    VCU\_Ign\_On is True  
AND  
    VCU\_Veh\_Spd is greater than SLOT\_SCAN\_SPEED  
Then  
   The APA system shall set APA\_Status as Idle

##### 18.3.4 VF\_PF\_SYSRS\_1580

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415788](#[ISSUE:3415788]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

Idle  
When  
APA\_Status is Enabled   
AND  
VCU\_Ign\_On is True  
AND  
VPC\_Parking\_Active is False  
Then  
The APA system shall set VPC\_Status as Idle

##### 18.3.5 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415789](#[ISSUE:3415789]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (2)**

|  |  |
| --- | --- |
| [AVPCSR-3417038](https://vgrts.vinfast.vn/cb/item/3417038) | -- |
| [APAVPC-3415541](https://vgrts.vinfast.vn/cb/item/3415541) | VPARK background scanning |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |

**No Associations**

**Description**

T3:Idle To Slot-Searching:  
When  
APA\_Status is Idle  
AND   
VCU\_Veh\_Spd is less than or equal to SLOT\_SCAN\_SPEED  
Then  
The APA system shall set APA\_Status as Slot Searching

##### 18.3.6 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415790](#[ISSUE:3415790]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415563](https://vgrts.vinfast.vn/cb/item/3415563) | Continuous Trajectory Recording |

**Downstream References (2)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

T4: Slot-Searching To Record Trajectory:  
When  
APA\_Status is Slot-Searching  
Then  
APA system shall set APA\_Status as Record Trajectory

##### 18.3.7 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415791](#[ISSUE:3415791]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (2)**

|  |  |
| --- | --- |
| [APAVPC-3415563](https://vgrts.vinfast.vn/cb/item/3415563) | Continuous Trajectory Recording |
| [AVPCSR-3416560](https://vgrts.vinfast.vn/cb/item/3416560) | -- |

**Downstream References (2)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

T5: Slot-Searching To Slot Display AND Auto-Maneuvering  
When  
APA\_Status is Slot Searching  
AND  
VPC\_Parking\_Active is True  
AND  
VPC\_Maneuver\_Precond is True  
AND  
(MHU\_Maneuver\_Command is True AND DMS\_DriverOccupancy is True)  
OR  
C-App\_Maneuver\_Command is True  
AND  
MHU\_Park\_Type\_Req is Park-in  
OR  
C-App\_Park\_Type\_Req is Park-in  
Then  
V-Parking Comfort shall set VPC\_Status as Slot Display AND Auto-Maneuvering

##### 18.3.8 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415792](#[ISSUE:3415792]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415624](https://vgrts.vinfast.vn/cb/item/3415624) | Pause Conditions During Automatic Maneuvering |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |

**No Associations**

**Description**

T6:Slot Display AND auto-maneuvering To Vehicle Standby  
When  
VPC\_Status is Slot Display AND auto-maneuvering   
AND  
Slot\_Detected is True   
OR  
Obstcl\_Identified is True  
OR  
C-App\_Maneuver\_Command is False  
OR  
DMS\_DriverOccupancy is False  
OR  
Distance reached is more than the MAX\_DIST , Odometer\_DistanceTrav is greater than the MAX\_DIST   
Then  
V-Parking Comfort shall set VPC\_Status as Vehicle Standby

##### 18.3.9 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415793](#[ISSUE:3415793]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415564](https://vgrts.vinfast.vn/cb/item/3415564) | Low-speed forward navigation Execution |

**Downstream References (2)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

T7: Vehicle Standby to Slot Display AND auto-maneuvering  
When  
VPC\_Status is Vehicle Standby   
AND  
The user resumes auto-park by doing the activating command,C-App\_Maneuver\_Command is True within MAX\_STANDBY\_TIME  
OR  
Obstcl\_Identified is False   
Then  
V-Parking Comfort shall set VPC\_Status as Slot Display AND auto-maneuvering

##### 18.3.10 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415794](#[ISSUE:3415794]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415577](https://vgrts.vinfast.vn/cb/item/3415577) | Remote Mode Selection: Driver exit without Park brake |

**Downstream References (2)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

T8: Vehicle Standby To Slot Confirmation  
When  
VPC\_Status is Vehicle Standby  
AND  
VPC\_MHU\_Parking\_Slot\_Info sent to MHU   
AND   
MHU\_Display\_Slot\_Ack is True from MHU   
AND  
VPC\_C-App\_Parking\_Slot\_Info sent to C-App   
AND   
C-App\_Display\_Slot\_Ack is True from C-App  
Then   
V-Parking Comfort shall set VPC\_Status as Slot Confirmation

##### 18.3.11 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415795](#[ISSUE:3415795]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415580](https://vgrts.vinfast.vn/cb/item/3415580) | Trajectory Calculation Based on Driver’s Slot and Direction Selection |

**Downstream References (2)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

T9: Slot Confirmation To PATH PLANNING and SELECTION  
When  
VPC\_Status is Slot Confirmation  
AND  
C-App\_Slot\_Confrm is True  
OR  
MHU\_Slot\_Confrm is True  
Then   
V-Parking Comfort shall set VPC\_Status as PATH PLANNING and SELECTION

##### 18.3.12 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415796](#[ISSUE:3415796]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415581](https://vgrts.vinfast.vn/cb/item/3415581) | Persistent Obstacle: Abort maneuver by System |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |

**No Associations**

**Description**

T10: Slot Confirmation To Slot Display AND auto-maneuvering  
When  
VPC\_Status is Slot Confirmation  
AND  
C-App\_Slot\_Confrm is False  
OR  
MHU\_Slot\_Confrm is False  
Then   
V-Parking Comfort shall set VPC\_Status as Slot Display AND auto-maneuvering

##### 18.3.13 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415797](#[ISSUE:3415797]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415597](https://vgrts.vinfast.vn/cb/item/3415597) | Park-In Maneuver terminated by Remote Driver |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |

**No Associations**

**Description**

T11: Reset To PATH PLANNING and SELECTION (Park-Out)  
When  
VPC \_Status is Reset  
AND  
VPC\_Parking\_Active is True  
AND   
MHU\_Park\_Type\_Req is Park-out  
OR  
C-App\_Park\_Type\_Req is Park-out  
AND  
Record\_Avlbty is True, Recorded data is available  
Then   
V-Parking Comfort shall set VPC\_Status as PATH PLANNING and SELECTION

##### 18.3.14 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415798](#[ISSUE:3415798]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415601](https://vgrts.vinfast.vn/cb/item/3415601) | Remote Supervision During V\_Comfort Park-Out via Mobile App |

**Downstream References (2)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

T12: PATH PLANNING and SELECTION To PATH MANOEUVRING/MOVING  
When  
VPC\_Status is PATH PLANNING and SELECTION   
AND  
User provides confirmation to start maneuvering in C-App,   
C-App\_Maneuver\_Command is True  
OR   
MHU\_Maneuver\_Command is True  
AND  
VPC\_Maneuver\_Precond is true  
Then  
V-Parking Comfort shall set VPC\_Status as Path Maneuvering/moving.  
Note:  
C-App Command need to be continously active for maneuvering

##### 18.3.15 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415799](#[ISSUE:3415799]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (2)**

|  |  |
| --- | --- |
| [APAVPC-3415602](https://vgrts.vinfast.vn/cb/item/3415602) | Deactivation: System Abort |
| [APAVPC-3415624](https://vgrts.vinfast.vn/cb/item/3415624) | Pause Conditions During Automatic Maneuvering |

**Downstream References (2)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

T13: PATH MANOEUVRING/MOVING To Suspend  
When   
VPC\_Status is Path Maneuvering/moving  
AND  
Driver releases button in C-App, C-App\_Maneuver\_Command is False  
OR  
Obstcl\_Identified is True   
Then  
V-Parking Comfort shall set VPC\_Status as Suspend

##### 18.3.16 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415800](#[ISSUE:3415800]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (2)**

|  |  |
| --- | --- |
| [AVPCSR-3417035](https://vgrts.vinfast.vn/cb/item/3417035) | -- |
| [APAVPC-3415602](https://vgrts.vinfast.vn/cb/item/3415602) | Deactivation: System Abort |

**Downstream References (2)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

T14: Suspend To PATH MANOEUVRING/MOVING   
When   
VPC\_Status is Suspend  
AND  
The user resumes auto-park by doing the activating command , C-App\_Maneuver\_Command is True within MAX\_SUSPEND\_TIME  
OR  
Obstcl\_Identified is False within MAX\_SUSPEND\_TIME   
Then  
V-Parking Comfort shall set VPC\_Status as Path Maneuvering/moving

##### 18.3.17 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415801](#[ISSUE:3415801]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (2)**

|  |  |
| --- | --- |
| [APAVPC-3415585](https://vgrts.vinfast.vn/cb/item/3415585) | Status Updates during Park-in maneuver: Remote |
| [APAVPC-3415584](https://vgrts.vinfast.vn/cb/item/3415584) | Park-In Maneuver Initiation: Control mode change |

**Downstream References (2)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

T15: Path Maneuvering/moving To Finished  
When   
VPC\_Status is Path Maneuvering/moving  
AND  
Target\_Coordinate equals to TCU\_Current\_Veh\_Posn (The planned path is traced successfully)  
Then  
V-Parking Comfort shall set VPC\_Status as Finished

##### 18.3.18 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415802](#[ISSUE:3415802]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (2)**

|  |  |
| --- | --- |
| [APAVPC-3415585](https://vgrts.vinfast.vn/cb/item/3415585) | Status Updates during Park-in maneuver: Remote |
| [APAVPC-3415589](https://vgrts.vinfast.vn/cb/item/3415589) | Park-In Completion Activities: Remote driver |

**Downstream References (2)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

T16: Finished To Completed  
When   
VPC\_Status is Finished   
AND  
VPC\_Park in\_Finished\_Status is success  
OR  
VPC\_Park out\_Finished\_Status is success  
Then  
V-Parking Comfort shall set VPC\_Status as Completed

##### 18.3.19 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415803](#[ISSUE:3415803]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

T17: Completed To Idle  
When   
VPC\_Status is Completed for more than MAX\_TIME\_CMPLTD  
Then  
V-Parking Comfort shall set VPC\_Status as Idle

##### 18.3.20 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415804](#[ISSUE:3415804]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (2)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |
| [AVPCSR-3417124](https://vgrts.vinfast.vn/cb/item/3417124) | -- |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |

**No Associations**

**Description**

T18: Path Tracing Maneuver To Abort  
When   
VPC\_Status is Path Maneuvering/moving or Suspend or Finished   
AND  
VPC\_Fault\_Status is True  
OR   
Obstcl\_Identified is True for more than MAX\_SUSPEND\_TIME  
OR  
VPC\_Park in\_Finished\_Status is Failed  
OR  
VPC\_Park out\_Finished\_Status is Failed  
Then  
V-Parking Comfort shall set VPC\_Status as Abort

##### 18.3.21 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415805](#[ISSUE:3415805]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

T19: Abort To Idle  
When   
VPC\_Status is Abort   
AND  
The driver takes control over the vehicle,   
IDB\_Ctrl\_Status is Driver Control  
AND   
EPB\_Ctrl\_Status is Driver Control  
AND  
EPS\_Steering\_Ctrl\_Status is Driver Control  
AND  
VCU\_Throttle\_Ctrl\_Status is Driver Control  
AND  
VCU\_Gear\_Ctrl\_Status is Driver Control  
Then  
V-Parking Comfort shall set VPC\_Status as Idle

##### 18.3.22 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415806](#[ISSUE:3415806]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (2)**

|  |  |
| --- | --- |
| [AVPCSR-3417010](https://vgrts.vinfast.vn/cb/item/3417010) | -- |
| [AVPCSR-3417011](https://vgrts.vinfast.vn/cb/item/3417011) | -- |

**No Downstream References**

**No Associations**

**Description**

T20: APA Enabled To System Fault/Error  
When   
APA\_Status is APA Enabled  
AND  
APA\_Error\_Status is True  
Then  
APA shall set APA\_Status as System Fault/Error

##### 18.3.23 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415807](#[ISSUE:3415807]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415625](https://vgrts.vinfast.vn/cb/item/3415625) | System states in Drive mode |

**No Downstream References**

**No Associations**

**Description**

T21:System Fault/Error To APA Enabled  
When   
APA\_Status is System Fault/Error  
AND  
APA\_Error\_Status is resolved,APA\_Error\_Status is False  
AND  
OTA\_APA\_SW\_Upd is False  
Then  
APA shall set APA\_Status as APA Enabled

##### 18.3.24 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415808](#[ISSUE:3415808]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |

**No Associations**

**Description**

T22: Slot Selection Maneuver To ABORT  
When   
VPC\_Status is Slot Selection Maneuver  
AND  
VPC\_Fault\_Status is True during Maneuver  
OR   
Obstcl\_Identified is True for more than MAX\_SUSPEND\_TIME  
Then  
V-Parking Comfort shall set VPC\_Status as Abort

##### 18.3.25 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415809](#[ISSUE:3415809]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415541](https://vgrts.vinfast.vn/cb/item/3415541) | VPARK background scanning |

**No Downstream References**

**No Associations**

**Description**

T23: Slot Searching To Idle  
When  
APA\_Status is Slot Searching  
AND  
VCU\_Veh\_Spd is greater than SLOT\_SCAN\_SPEED  
Then  
V-Parking Comfort shall set APA\_Status is Idle

##### 18.3.26 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415810](#[ISSUE:3415810]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (2)**

|  |  |
| --- | --- |
| [APAVPC-3415581](https://vgrts.vinfast.vn/cb/item/3415581) | Persistent Obstacle: Abort maneuver by System |
| [APAVPC-3415580](https://vgrts.vinfast.vn/cb/item/3415580) | Trajectory Calculation Based on Driver’s Slot and Direction Selection |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

T24:Path-planning and selection To Slot Display and Auto-Maneuvering  
When  
MHU\_Park\_Type\_Req is Park-in  
OR  
C-App\_Park\_Type\_Req is Park-in  
AND  
VPC\_Status is Path-planning and selection  
AND  
Nose-in\_feasible is False   
AND   
Nose-out\_feasible is False   
Then  
V-Parking Comfort shall send VPC\_Parking\_NotFeasibleTxt to MHU  
  
  
Note: Inform driver that no feasible path is available to reach the selected slot and prompt to select another slot.

##### 18.3.27 VF\_PF\_SYSRS\_1581

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415811](#[ISSUE:3415811]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

T24:Path-planning and selection To Slot Display and Auto-Maneuvering  
When  
Park\_type is Park in  
AND  
VPC\_Status is Path-planning and selection  
AND  
Nose-in\_feasible is False   
AND  
Nose-out\_feasible is False  
Then  
V-Parking Comfort shall set VPC\_Status as Slot Display and Auto-Maneuvering

#### 18.4 APA Enable/Disable:

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415721](#[ISSUE:3415721]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

##### 18.4.1 Description

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415812](#[ISSUE:3415812]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

The Automatic Parking Assist (APA) system supports vehicle maneuvering during parking operations. Drivers have the option to enable or disable APA. To utilize the Comfort feature, APA must be turned on.

##### 18.4.2 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415813](#[ISSUE:3415813]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415501](https://vgrts.vinfast.vn/cb/item/3415501) | Actuator Command Transmission and System Responsiveness |

**Downstream References (2)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

APA Functionality shall be Enabled/Disabled by user through any of the following:(refer T1)  
MHU   
Dedicated Hard button(if available)

#### 18.5 Slot- Searching:

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415722](#[ISSUE:3415722]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

##### 18.5.1 Descrption

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415814](#[ISSUE:3415814]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

Slot-Searching detects and classifies available parking spaces within a parking facility, making it easier for users to find open spots. The Comfort feature relies on Slot-Searching being active to function properly.

##### 18.5.2 Input Signals

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415815](#[ISSUE:3415815]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

VCU\_Veh\_Spd  
Camer\_Input  
Sensor\_Input

##### 18.5.3 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415816](#[ISSUE:3415816]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415561](https://vgrts.vinfast.vn/cb/item/3415561) | Parking Slot Detection |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

V-Parking comfort shall identify and categorize the Parking slots with and without markings.

##### 18.5.4 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415817](#[ISSUE:3415817]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (4)**

|  |  |
| --- | --- |
| [APAVPC-3415492](https://vgrts.vinfast.vn/cb/item/3415492) | Slot Detection Capability |
| [APAVPC-3415571](https://vgrts.vinfast.vn/cb/item/3415571) | Parking Feasibility Check |
| [APAVPC-3415565](https://vgrts.vinfast.vn/cb/item/3415565) | Remote Mode Selection: Continuous Engagement via Mobile App |
| [APAVPC-3415561](https://vgrts.vinfast.vn/cb/item/3415561) | Parking Slot Detection |

**Downstream References (2)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

When   
The APA system is enabled   
AND  
VCU\_Veh\_Spd is less than SLOT\_SCAN\_SPEED  
Then  
The APA System shall receive input from Camera(Camera\_Input) and Sensor (Sensor\_Input) to scan the surroundings automatically in the background

#### 18.6 V-Parking Comfort Active:

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415723](#[ISSUE:3415723]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

##### 18.6.1 Descrption

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415818](#[ISSUE:3415818]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

Indicates that the vehicle's remote parking system is active, guiding the user through Auto or Manual slot selection based on pre-condition status and user input.

##### 18.6.2 Input Signals

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415819](#[ISSUE:3415819]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

MHU\_VPC\_Actvn\_Req  
C-App\_VPC\_Actvn\_Req  
BCM\_STAT\_DoorAjarFL  
BCM\_STAT\_DoorAjarFR  
BCM\_STAT\_DoorAjarRL  
BCM\_STAT\_DoorAjarRR  
BCM\_STAT\_BonnetAjar  
BCM\_STAT\_Mirror  
BCM\_STAT\_TrunkAjar  
Sensor\_Input\_Status  
Camera\_Input\_Status  
MHU\_Parking\_Mode  
C-App\_Parking\_Mode

##### 18.6.3 Output Signals

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415820](#[ISSUE:3415820]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

VPC\_Maneuver\_precond  
VPC\_Parking\_Active  
VPC\_Precond   
VPC\_StartInstrText  
VPC\_Parking\_Mode\_Req

##### 18.6.4 Internal Signals

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415821](#[ISSUE:3415821]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

##### 18.6.5 VF\_PF\_SYSRS\_1582

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415822](#[ISSUE:3415822]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**Upstream References (2)**

|  |  |
| --- | --- |
| [APAVPC-3415543](https://vgrts.vinfast.vn/cb/item/3415543) | V\_Comfort Park-In Selection via MHU |
| [APAVPC-3415544](https://vgrts.vinfast.vn/cb/item/3415544) | Communicate activation status to driver |

**No Downstream References**

**No Associations**

**Description**

When  
BCM\_STAT\_DoorAjarFL is Closed (Door Front Left Status is closed)  
AND  
BCM\_STAT\_DoorAjarFR is Closed (Door Front Right Status is closed)  
AND  
BCM\_STAT\_DoorAjarRL is Closed (Door Rear Left Status is closed)  
AND  
BCM\_STAT\_DoorAjarRR is Closed (Door Rear Right Status is closed)  
AND  
BCM\_STAT\_BonnetAjar is Closed (Bonnet Status)  
AND  
BCM\_STAT\_Mirror is Unfold (Mirrors are unfolded)  
AND   
BCM\_STAT\_TrunkAjar is Closed (Trunk Ajar Door Status)  
AND  
Sensor\_Input\_Status is valid  
AND  
Camera\_Input\_Status is valid  
Then  
V-Parking System shall set VPC\_Precond as True

##### 18.6.6 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415823](#[ISSUE:3415823]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (2)**

|  |  |
| --- | --- |
| [APAVPC-3415543](https://vgrts.vinfast.vn/cb/item/3415543) | V\_Comfort Park-In Selection via MHU |
| [APAVPC-3415544](https://vgrts.vinfast.vn/cb/item/3415544) | Communicate activation status to driver |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

When   
The user presses the V-Parking Comfort active button in MHU Interface  
MHU\_VPC\_Actvn\_Req is True  
AND  
C-App\_VPC\_Actvn\_Req is True  
AND  
VPC\_Precond is True  
Then  
The APA system shall set VPC\_Parking\_Active as true.

##### 18.6.7 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415824](#[ISSUE:3415824]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (3)**

|  |  |
| --- | --- |
| [APAVPC-3415543](https://vgrts.vinfast.vn/cb/item/3415543) | V\_Comfort Park-In Selection via MHU |
| [APAVPC-3415544](https://vgrts.vinfast.vn/cb/item/3415544) | Communicate activation status to driver |
| [APAVPC-3415550](https://vgrts.vinfast.vn/cb/item/3415550) | Park In Mission: Comply with Legal Driving Side |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

When   
The user presses the V-Parking Comfort active button in MHU Interface,  
MHU\_VPC\_Actvn\_Req is True  
OR  
C-App\_VPC\_Actvn\_Req is True  
AND  
VPC\_Precond is False  
Then  
The APA system shall set VPC\_Parking\_Active as false

##### 18.6.8 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415825](#[ISSUE:3415825]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (2)**

|  |  |
| --- | --- |
| [APAVPC-3415558](https://vgrts.vinfast.vn/cb/item/3415558) | Post selection of V\_Comfort: Align vehicle using Perception Info |
| [APAVPC-3415557](https://vgrts.vinfast.vn/cb/item/3415557) | Remote Mode Selection: Request Driver exit |

**Downstream References (2)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

When   
VPC\_Parking\_Active is True  
Then  
The V-Parking Comfort shall send VPC\_StartInstrText to instruct the driver to perform the following   
actions like:  
- Align the vehicle with the driveway  
- Engage Parking brake  
- Release brake and throttle controls  
- Handoff the Steering  
- Lock the doors  
- Take Remote device and other belongings (remote activation)  
- Roll up the windows

##### 18.6.9 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415826](#[ISSUE:3415826]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (2)**

|  |  |
| --- | --- |
| [APAVPC-3415551](https://vgrts.vinfast.vn/cb/item/3415551) | Reuse |
| [APAVPC-3415576](https://vgrts.vinfast.vn/cb/item/3415576) | Remote Mode Selection: Request User to open C-App |

**Downstream References (2)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

When   
VPC\_Parking\_Active is True  
Then  
V-Parking Comfort shall send VPC\_Parking\_Mode\_Req to choose between AUTO or MANUAL  
Note:  
When the Park in is activated, the VPC shall provide the user to select the remote Park in options   
AUTO  
MANUAL

##### 18.6.10 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415827](#[ISSUE:3415827]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415551](https://vgrts.vinfast.vn/cb/item/3415551) | Reuse |

**Downstream References (2)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

When   
VPC\_Parking\_Active is True  
AND  
MHU\_Parking\_Mode is AUTO  
OR   
C-App\_Parking\_Mode is AUTO  
Then   
V-Parking Comfort shall set VPC\_Recommend\_Slot as first available slot(Slot\_ID )  
Note:  
When the remote Park in option is AUTO, the VPC shall automatically recommend the first available slot

##### 18.6.11 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415828](#[ISSUE:3415828]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415552](https://vgrts.vinfast.vn/cb/item/3415552) | Path and Trajectory Planning: Drivable Area Topology |

**Downstream References (2)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

When   
VPC\_Parking\_Active is True  
Then  
V-Parking Comfort shall set VPC\_Parking\_Mode as AUTO  
  
Note:  
When the Park in is activated, the VPC shall provide AUTO Selection as the default option.

##### 18.6.12 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415829](#[ISSUE:3415829]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415551](https://vgrts.vinfast.vn/cb/item/3415551) | Reuse |

**Downstream References (2)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

When   
VPC\_Parking\_Active is True  
AND  
MHU\_Parking\_Mode is MANUAL  
OR   
C-App\_Parking\_Mode is MANUAL  
Then  
V-Parking Comfort shall send VPC\_SlotSelnTxt to prompt the driver to select a slot   
  
Note:  
When the remote Park in option is MANUAL, the VPC system shall ask the driver to select the slot and the desired direction

#### 18.7 Park in/Park- out Selection:

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415724](#[ISSUE:3415724]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

##### 18.7.1 Descrption

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415830](#[ISSUE:3415830]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

Lets the system choose Park-in or Park-out mode, setting Park-in automatically when VPC is active and all conditions are met.

##### 18.7.2 Input Signals

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415831](#[ISSUE:3415831]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

MHU\_Park\_Type\_Req  
C-App\_Park\_Type\_Req

##### 18.7.3 Output Signals

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415832](#[ISSUE:3415832]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

VPC\_Parking\_Active

##### 18.7.4 Internal Signals

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415833](#[ISSUE:3415833]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

Park\_type

##### 18.7.5 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415834](#[ISSUE:3415834]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415551](https://vgrts.vinfast.vn/cb/item/3415551) | Reuse |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

When  
VPC\_Parking\_Active is true  
AND  
MHU\_Park\_Type\_Req is Park-in  
OR  
C-App\_Park\_Type\_Req is Park-in  
Then  
V-Parking Comfort shall set Park\_type as Park-in

#### 18.8 Park in:

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415725](#[ISSUE:3415725]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

##### 18.8.1 Slot Selection Maneuver:

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415835](#[ISSUE:3415835]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

##### 18.8.2 Start Recording:

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415836](#[ISSUE:3415836]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

###### 18.8.2.1 Descrption

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416190](#[ISSUE:3416190]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

Begins recording the vehicle’s movement path during auto-maneuver when VPC is active and conditions are met.

###### 18.8.2.2 Output Signals

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416191](#[ISSUE:3416191]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

VPC\_Status  
APA\_Status

###### 18.8.2.3 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416192](#[ISSUE:3416192]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415564](https://vgrts.vinfast.vn/cb/item/3415564) | Low-speed forward navigation Execution |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

When  
APA\_Status is Record Trajectory  
Then  
The V-Parking Comfort shall start recording the trajectory traced during the auto-maneuver.

##### 18.8.3 Slot Display and Auto-Maneuvering:

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415837](#[ISSUE:3415837]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

###### 18.8.3.1 Descrption

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416193](#[ISSUE:3416193]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

Displays categorized parking slots and initiates automated maneuvering with safe trajectory and speed, while sharing slot data with the companion app when VPC is active and conditions are met.

###### 18.8.3.2 Input Signals

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416194](#[ISSUE:3416194]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

MHU\_Park\_Type\_Req  
C-App\_Park\_Type\_Req  
IDB\_Ctrl\_Status  
EPB\_Ctrl\_Status  
EPS\_Steering\_Ctrl\_Status  
VCU\_Throttle\_Ctrl\_Status  
VCU\_Gear\_Ctrl\_Status  
MHU\_Parking\_Mode  
C-App\_Parking\_Mode  
MHU\_Maneuver\_Command  
DMS\_DriverOccupancy  
C-App\_Maneuver\_Command

###### 18.8.3.3 Output Signals

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416195](#[ISSUE:3416195]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

VPC\_Status  
VPC\_Maneuver\_Precond  
VPC\_EPB\_Ctrl\_Req  
VPC\_EPS\_Steering\_Ctrl\_Req  
VPC\_IDB\_Ctrl\_Req  
VPC\_VCU\_Gear\_Ctrl\_Req  
VPC\_VCU\_Throttle\_Ctrl\_Req  
VPC\_IDB\_Cmd  
VPC\_EPB\_Cmd  
VPC\_EPS\_Steering\_Cmd  
VPC\_VCU\_Throttle\_Cmd  
VPC\_VCU\_Gear\_Cmd   
VPC\_Parking\_Slot\_Info  
VPC\_Recommend\_Slot

###### 18.8.3.4 Internal Signals

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416196](#[ISSUE:3416196]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

Slot\_Detected  
Obstcl\_Identified

###### 18.8.3.5 VF\_PF\_SYSRS\_1583

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416197](#[ISSUE:3416197]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

When   
VPC\_Status is Slot Display and Auto-Maneuvering  
AND  
VPC\_Maneuver\_Precond is True  
AND  
MHU\_Park\_Type\_Req is Park-in  
OR  
C-App\_Park\_Type\_Req is Park-in  
Then  
The V-Parking Comfort shall send VPC\_EPB\_Ctrl\_Req as True to request control of the park brake

###### 18.8.3.6 VF\_PF\_SYSRS\_1584

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416198](#[ISSUE:3416198]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

When   
VPC\_Status is Slot Display and Auto-Maneuvering  
AND  
VPC\_Maneuver\_Precond is True  
AND  
MHU\_Park\_Type\_Req is Park-in  
OR  
C-App\_Park\_Type\_Req is Park-in  
Then  
The V-Parking Comfort shall send VPC\_EPS\_Steering\_Ctrl\_Req as True to request control of the Steering

###### 18.8.3.7 VF\_PF\_SYSRS\_1585

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416199](#[ISSUE:3416199]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

When   
VPC\_Status is Slot Display and Auto-Maneuvering  
AND  
VPC\_Maneuver\_Precond is True  
AND  
MHU\_Park\_Type\_Req is Park-in  
OR  
C-App\_Park\_Type\_Req is Park-in  
Then  
The V-Parking Comfort shall send VPC\_IDB\_Ctrl\_Req (True) to request control of the brake

###### 18.8.3.8 VF\_PF\_SYSRS\_1586

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416200](#[ISSUE:3416200]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

When   
VPC\_Status is Slot Display and Auto-Maneuvering  
AND  
VPC\_Maneuver\_Precond is True  
AND  
MHU\_Park\_Type\_Req is Park-in  
OR  
C-App\_Park\_Type\_Req is Park-in  
Then  
The V-Parking Comfort shall send VPC\_VCU\_Gear\_Ctrl\_Req (True) to request control of the gear selector

###### 18.8.3.9 VF\_PF\_SYSRS\_1587

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416201](#[ISSUE:3416201]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

When   
VPC\_Status is Slot Display and Auto-Maneuvering  
AND  
VPC\_Maneuver\_Precond is True  
AND  
MHU\_Park\_Type\_Req is Park-in  
OR  
C-App\_Park\_Type\_Req is Park-in  
Then  
The V-Parking Comfort shall send VPC\_VCU\_Throttle\_Ctrl\_Req (True) to request control of the throttle

###### 18.8.3.10 VF\_PF\_SYSRS\_1588

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416202](#[ISSUE:3416202]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

When   
VPC\_Status is Slot Display and Auto-Maneuvering  
AND  
VPC\_Maneuver\_Precond is True  
AND  
MHU\_Park\_Type\_Req is Park-in  
OR  
C-App\_Park\_Type\_Req is Park-in  
AND  
IDB\_Ctrl\_Status is System Control  
AND   
EPB\_Ctrl\_Status is System Control  
AND  
EPS\_Steering\_Ctrl\_Status is System Control  
AND  
VCU\_Throttle\_Ctrl\_Status is System Control  
AND  
VCU\_Gear\_Ctrl\_Status is System Control  
Then  
The V-Parking Comfort shall send VPC\_IDB\_Cmd to control brake

###### 18.8.3.11 VF\_PF\_SYSRS\_1589

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416203](#[ISSUE:3416203]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

When   
VPC\_Status is Slot Display and Auto-Maneuvering  
AND  
VPC\_Maneuver\_Precond is True  
AND  
IDB\_Ctrl\_Status is System Control  
AND   
EPB\_Ctrl\_Status is System Control  
AND  
EPS\_Steering\_Ctrl\_Status is System Control  
AND  
VCU\_Throttle\_Ctrl\_Status is System Control  
AND  
VCU\_Gear\_Ctrl\_Status is System Control  
Then  
The V-Parking Comfort shall send VPC\_EPB\_Cmd to control Parking brake

###### 18.8.3.12 VF\_PF\_SYSRS\_1590

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416204](#[ISSUE:3416204]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

When   
VPC\_Status is Slot Display and Auto-Maneuvering  
AND  
VPC\_Maneuver\_Precond is True  
AND  
MHU\_Park\_Type\_Req is Park-in  
OR  
C-App\_Park\_Type\_Req is Park-in  
AND  
IDB\_Ctrl\_Status is System Control  
AND   
EPB\_Ctrl\_Status is System Control  
AND  
EPS\_Steering\_Ctrl\_Status is System Control  
AND  
VCU\_Throttle\_Ctrl\_Status is System Control  
AND  
VCU\_Gear\_Ctrl\_Status is System Control  
Then  
The V-Parking Comfort shall send VPC\_EPS\_Steering\_Cmd to EPS to Control Steering

###### 18.8.3.13 VF\_PF\_SYSRS\_1591

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416205](#[ISSUE:3416205]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

When   
VPC\_Status is Slot Display and Auto-Maneuvering  
AND  
VPC\_Maneuver\_Precond is True  
AND  
MHU\_Park\_Type\_Req is Park-in  
OR  
C-App\_Park\_Type\_Req is Park-in  
AND  
IDB\_Ctrl\_Status is System Control  
AND   
EPB\_Ctrl\_Status is System Control  
AND  
EPS\_Steering\_Ctrl\_Status is System Control  
AND  
VCU\_Throttle\_Ctrl\_Status is System Control  
AND  
VCU\_Gear\_Ctrl\_Status is System Control  
Then  
The V-Parking Comfort shall send VPC\_VCU\_Throttle\_Cmd to VCU to control throttle

###### 18.8.3.14 VF\_PF\_SYSRS\_1592

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416206](#[ISSUE:3416206]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

When   
VPC\_Status is Slot Display and Auto-Maneuvering  
AND  
VPC\_Maneuver\_Precond is True  
AND  
MHU\_Park\_Type\_Req is Park-in  
OR  
C-App\_Park\_Type\_Req is Park-in  
AND  
IDB\_Ctrl\_Status is System Control  
AND   
EPB\_Ctrl\_Status is System Control  
AND  
EPS\_Steering\_Ctrl\_Status is System Control  
AND  
VCU\_Throttle\_Ctrl\_Status is System Control  
AND  
VCU\_Gear\_Ctrl\_Status is System Control  
Then  
The V-Parking Comfort shall send VPC\_VCU\_Gear\_Cmd to VCU to Control gear selector

###### 18.8.3.15 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416207](#[ISSUE:3416207]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

In case of predefined slots with markings in parking area, the identified free slot is highlighted in C-APP and the driver shall confirm the slot.

###### 18.8.3.16 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416208](#[ISSUE:3416208]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415577](https://vgrts.vinfast.vn/cb/item/3415577) | Remote Mode Selection: Driver exit without Park brake |

**Downstream References (2)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

When  
VPC\_Status is Slot Display and Auto-Maneuvering  
AND  
Slot\_Detected is True   
AND  
No Obstacles Identified in the free slot , Obstcl\_Identified is False   
AND  
VCU\_Throttle\_Ctrl\_Status is System Control  
AND  
Slot width is greater than vehicle\_width + X\_OFFSET  
AND  
Slot length is greater than Vehicle\_length +Y\_OFFSET  
Then  
The V-Parking Comfrot shall send VPC\_Parking\_Slot\_Info with slot infromations to display in MHU and C-App  
  
Note: Slot information include Slot type(Perpendicular, Parallel, Angular), Slot length and width, Slot Position (Position with respect to the vehicle), Slot validity(not reserved, disabled, pregnant, senior citizen, EV charging point (if identified from sensor data)

###### 18.8.3.17 VF\_PF\_SYSRS\_1593

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416209](#[ISSUE:3416209]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Slot Display and Auto-Maneuvering  
AND  
Slot\_Detected is True   
AND  
No Obstacles Identified in the free slot , Obstcl\_Identified is False   
AND  
Slot width is greater than VEH\_WIDTH+ X\_OFFSET  
AND  
Slot length is greater than VEH\_LEN + Y\_OFFSET  
AND  
MHU\_Parking\_Mode is AUTO  
OR   
C-App\_Parking\_Mode is AUTO  
Then  
V-Parking Comfort shall recommend a slot (VPC\_Recommend\_Slot)to park-in

###### 18.8.3.18 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416210](#[ISSUE:3416210]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

V-Parking Comfort shall scan and recognize reserved parking slot and highlight in C-APP for the user to select if it is applicable.

###### 18.8.3.19 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416211](#[ISSUE:3416211]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415492](https://vgrts.vinfast.vn/cb/item/3415492) | Slot Detection Capability |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

The APA system shall perform slot detection using the feature in the following scenarios with a minimum target KPI of 92%, ensuring improved detection reliability.  
1. Parallel (USS)\_Vehicle Length+1m   
2. Perpendicular(USS)\_Vehicle Width+0.8m  
3. Fishbone (USS)\_Vehicle Width+0.8m   
4. Parallel (Line)  
5. Perpendicular(Line)  
6. Fishbone(Line)

###### 18.8.3.20 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416212](#[ISSUE:3416212]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415577](https://vgrts.vinfast.vn/cb/item/3415577) | Remote Mode Selection: Driver exit without Park brake |

**Downstream References (2)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

When  
VPC\_Status is Slot Display and Auto-Maneuvering  
AND  
VPC\_Maneuver\_Precond is True  
AND  
Obstcl\_Identified is False  
AND  
(MHU\_Maneuver\_Command is True AND DMS\_DriverOccupancy is True)  
OR   
C-App\_Maneuver\_Command is True   
Then  
The V-Parking Comfort shall send VPC\_VCU\_Throttle\_Cmd to maneuver along the Trace\_Path coordinates at a speed of less than or equal to MAX\_AUTO\_MANEUVERING\_SPEED [10kmph +or- 2kmph(tolerance)]  
Note:   
C-App Command need to be continously active for maneuvering

##### 18.8.4 Vehicle Standby:

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415838](#[ISSUE:3415838]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

###### 18.8.4.1 Descrption

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416213](#[ISSUE:3416213]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

Brings the vehicle to a complete stop (0 km/h) when in standby mode, ensuring safety while VPC is active and conditions are met.

###### 18.8.4.2 Input Signals

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416214](#[ISSUE:3416214]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

###### 18.8.4.3 Output Signals

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416215](#[ISSUE:3416215]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

VPC\_Status  
VPC\_IDB\_Cmd  
VPC\_VCU\_Gear\_State  
VPC\_EPB\_Cmd

###### 18.8.4.4 Internal Signals

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416216](#[ISSUE:3416216]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

###### 18.8.4.5 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416217](#[ISSUE:3416217]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415624](https://vgrts.vinfast.vn/cb/item/3415624) | Pause Conditions During Automatic Maneuvering |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

When  
VPC\_Status is Vehicle Standby  
Then  
V-Parking Comfort shall send VPC\_IDB\_Cmd (Applied) to IDB --> To bring the vehicle to a stop

###### 18.8.4.6 VF\_PF\_SYSRS\_1594

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416218](#[ISSUE:3416218]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Vehicle Standby  
Then  
V-Parking Comfort shall send VPC\_VCU\_Gear\_State(Park) to bring the vehicle to stationary

###### 18.8.4.7 VF\_PF\_SYSRS\_1595

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416219](#[ISSUE:3416219]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Vehicle Standby  
Then  
V-Parking Comfort shall send VPC\_EPB\_Cmd (Applied) to EPB --> To bring the vehicle to a stop

##### 18.8.5 Slot Confirmation

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415839](#[ISSUE:3415839]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

###### 18.8.5.1 Descrption

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416220](#[ISSUE:3416220]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

Allows the user to confirm or select a parking slot through the companion app (C-APP), enabling the system to automatically park the vehicle in the chosen slot when VPC is active and all conditions are met.

###### 18.8.5.2 Input Signals

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416221](#[ISSUE:3416221]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

MHU\_Parking\_Mode  
C-App\_Parking\_Mode  
C-App\_Slot\_Confrm  
MHU\_Slot\_Confrm

###### 18.8.5.3 Output Signals

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416222](#[ISSUE:3416222]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

VPC\_Status  
VPC\_Recommend\_Slot  
VPC\_Slot\_Confrm\_Req

###### 18.8.5.4 Internal Signals

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416223](#[ISSUE:3416223]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

###### 18.8.5.5 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416224](#[ISSUE:3416224]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

The VPC shall provide AI-generated parking spot recommendations based on multi-criteria optimization (space constraints, vehicle dimensions, and optimal positioning for a smooth exit), while allowing drivers to manually select alternate locations via Mobile application using intuitive drag-and-drop functionality with real-time environmental data.

###### 18.8.5.6 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416225](#[ISSUE:3416225]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (2)**

|  |  |
| --- | --- |
| [APAVPC-3415584](https://vgrts.vinfast.vn/cb/item/3415584) | Park-In Maneuver Initiation: Control mode change |
| [APAVPC-3415500](https://vgrts.vinfast.vn/cb/item/3415500) | Parking Parameters Input from Mobile Interface |

**Downstream References (2)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

When  
VPC\_Status is Slot Confirmation  
AND  
MHU\_Parking\_Mode is MANUAL  
OR   
C-App\_Parking\_Mode is MANUAL  
AND  
C-App\_Slot\_Confrm is True  
OR  
MHU\_Slot\_Confrm is True  
Then  
The V-Parking Comfort shall set VPC\_Status as PATH PLANNING and SELECTION

###### 18.8.5.7 VF\_PF\_SYSRS\_1596

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416226](#[ISSUE:3416226]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Slot Confirmation  
AND  
MHU\_Parking\_Mode is AUTO  
OR   
C-App\_Parking\_Mode is AUTO  
AND  
VPC\_Recommend\_Slot is first available slot(Slot\_ID)   
Then  
V-Parking Comfort shall send VPC\_Slot\_Confrm\_Req as True to request user confirmation for the recommended slot

#### 18.9 Park out:

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415726](#[ISSUE:3415726]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

##### 18.9.1 User preferred communication device:

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415840](#[ISSUE:3415840]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

###### 18.9.1.1 Descrption

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416227](#[ISSUE:3416227]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

Park-out can be initiated via C-App with user confirmation. The system communicates with the selected device and proceeds with auto-maneuvering only when all conditions are met.

###### 18.9.1.2 Input Signals

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416228](#[ISSUE:3416228]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

C-App\_VPC\_Actvn\_Req   
Keyfob\_Maneuver\_Command   
C-App\_Maneuver\_Command  
MHU\_Maneuver\_Command  
DMS\_DriverOccupancy

###### 18.9.1.3 Output Signals

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416229](#[ISSUE:3416229]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

APA\_Status  
VPC\_Status  
VPC\_User\_Comm\_dev  
VPC\_MHU\_User\_Comm\_dev   
VPC\_C-App\_Communication\_Status  
VPC\_Keyfob\_Communication\_Status

###### 18.9.1.4 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416230](#[ISSUE:3416230]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (2)**

|  |  |
| --- | --- |
| [APAVPC-3415554](https://vgrts.vinfast.vn/cb/item/3415554) | Selection of Control mode for V\_Comfort Operation |
| [APAVPC-3415617](https://vgrts.vinfast.vn/cb/item/3415617) | Remote Interface Connectivity |

**Downstream References (2)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

When  
VPC\_Parking\_Active is True  
AND  
C-App\_VPC\_Actvn\_Req is True  
Then  
V-Parking Comfort shall ensure communication with C-App.

###### 18.9.1.5 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416231](#[ISSUE:3416231]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (2)**

|  |  |
| --- | --- |
| [APAVPC-3415617](https://vgrts.vinfast.vn/cb/item/3415617) | Remote Interface Connectivity |
| [APAVPC-3415554](https://vgrts.vinfast.vn/cb/item/3415554) | Selection of Control mode for V\_Comfort Operation |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |

**No Associations**

**Description**

When  
VPC\_Status is active  
AND  
Keyfob\_VPC\_Actvn\_Req  
Then  
V-Parking Comfort shall ensure communication with key-fob.

###### 18.9.1.6 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416232](#[ISSUE:3416232]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415554](https://vgrts.vinfast.vn/cb/item/3415554) | Selection of Control mode for V\_Comfort Operation |

**No Downstream References**

**No Associations**

**Description**

When  
APA\_Status is APA Enabled   
AND  
C-App\_VPC\_Actvn\_Req is True  
Then  
V-parking comfort shall set User\_Comm\_dev as C-App

###### 18.9.1.7 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416233](#[ISSUE:3416233]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415554](https://vgrts.vinfast.vn/cb/item/3415554) | Selection of Control mode for V\_Comfort Operation |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

When  
APA\_Status is APA Enabled   
AND  
Keyfob\_Maneuver\_Command is True  
Then  
V-parking comfort shall set User\_Comm\_dev as key fob

###### 18.9.1.8 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416234](#[ISSUE:3416234]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (2)**

|  |  |
| --- | --- |
| [APAVPC-3415594](https://vgrts.vinfast.vn/cb/item/3415594) | Driver Proximity Requirement for Remote Control |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

When  
The user mobile is not identified within the MAX\_CONNECT\_RANGE mts  
Then  
V-Parking comfort shall set VPC\_C-App\_Communication\_Status as failed

###### 18.9.1.9 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416235](#[ISSUE:3416235]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (3)**

|  |  |
| --- | --- |
| [APAVPC-3415554](https://vgrts.vinfast.vn/cb/item/3415554) | Selection of Control mode for V\_Comfort Operation |
| [APAVPC-3415545](https://vgrts.vinfast.vn/cb/item/3415545) | Remote Mode Selection: Occupancy detection |
| [APAVPC-3415594](https://vgrts.vinfast.vn/cb/item/3415594) | Driver Proximity Requirement for Remote Control |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

When  
The user mobile is identified within the MAX\_CONNECT\_RANGE mts and connected  
Then  
V-Parking Comfort shall set VPC\_C-App\_Communication\_Status as Success

###### 18.9.1.10 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416236](#[ISSUE:3416236]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415594](https://vgrts.vinfast.vn/cb/item/3415594) | Driver Proximity Requirement for Remote Control |

**No Downstream References**

**No Associations**

**Description**

When  
The key fob is not identified within the MAX\_CONNECT\_RANGE mts  
Then  
V-Parking comfort shall set VPC\_Keyfob\_Communication\_Status as failed

###### 18.9.1.11 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416237](#[ISSUE:3416237]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415584](https://vgrts.vinfast.vn/cb/item/3415584) | Park-In Maneuver Initiation: Control mode change |

**No Downstream References**

**No Associations**

**Description**

When  
The key fob is identified within the MAX\_CONNECT\_RANGE mts and connected  
Then  
V-Parking comfort shall set VPC\_Keyfob\_Communication\_Status as Success

###### 18.9.1.12 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416238](#[ISSUE:3416238]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (2)**

|  |  |
| --- | --- |
| [APAVPC-3415585](https://vgrts.vinfast.vn/cb/item/3415585) | Status Updates during Park-in maneuver: Remote |
| [APAVPC-3415607](https://vgrts.vinfast.vn/cb/item/3415607) | Real-Time Trajectory and Vehicle Status Display - Remote Park-Out |

**Downstream References (2)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

When  
VPC\_Status is Path-planning and Selection  
AND  
VPC\_C-App\_Communication\_Status is Success  
Then  
V-Parking Comfort shall send VPC\_C-App\_Communication\_Status as Succes to notify the user

###### 18.9.1.13 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416239](#[ISSUE:3416239]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (3)**

|  |  |
| --- | --- |
| [APAVPC-3415554](https://vgrts.vinfast.vn/cb/item/3415554) | Selection of Control mode for V\_Comfort Operation |
| [APAVPC-3415559](https://vgrts.vinfast.vn/cb/item/3415559) | Pre-Maneuver Condition Check and Status Communication |
| [APAVPC-3415584](https://vgrts.vinfast.vn/cb/item/3415584) | Park-In Maneuver Initiation: Control mode change |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

When  
VPC\_Status is Path-planning and selection   
OR  
VPC\_Status is Slot Display and Auto-Maneuvering  
AND  
C-App\_Maneuver\_Command is True  
OR  
(MHU\_Maneuver\_Command is True AND DMS\_DriverOccupancy is True)  
Then  
V-Parking Comfort shall check for the preconditions for Auto-Maneuvering

##### 18.9.2 Pre- conditions for Auto- Maneuvering:

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415841](#[ISSUE:3415841]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

###### 18.9.2.1 Descrption

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416240](#[ISSUE:3416240]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

Auto Maneuvering possible only when all pre conditions are satisfied.

###### 18.9.2.2 Input Signals

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416241](#[ISSUE:3416241]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

IDB\_BrakePedal\_State  
VCU\_Gear\_State   
VCU\_Veh\_Spd   
Sensor\_Input\_Status  
Camera\_Input\_Status  
BCM\_STAT\_BonnetAjar  
CMS\_Occupancy  
BCM\_Trailer\_Attachment\_Status  
BCM\_Windows\_Lock\_Status  
BMS\_Battery\_SoC  
TPMS\_Tire\_Pressure  
BCM\_Doors\_Lock\_Status  
BCM\_STAT\_TrunkAjar  
BCM\_STAT\_Mirror  
MHU\_Maneuver\_Command  
DMS\_DriverOccupancy  
VCU\_Veh\_Spd  
ACU\_STAT\_Airbag  
ACM\_Seat\_Belt\_Status\_Driver  
IDB\_BrakePedal\_State

###### 18.9.2.3 Output Signals

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416242](#[ISSUE:3416242]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**Upstream References (12)**

|  |  |
| --- | --- |
| [APAVPC-3415594](https://vgrts.vinfast.vn/cb/item/3415594) | Driver Proximity Requirement for Remote Control |
| [APAVPC-3415584](https://vgrts.vinfast.vn/cb/item/3415584) | Park-In Maneuver Initiation: Control mode change |
| [APAVPC-3415585](https://vgrts.vinfast.vn/cb/item/3415585) | Status Updates during Park-in maneuver: Remote |
| [APAVPC-3415607](https://vgrts.vinfast.vn/cb/item/3415607) | Real-Time Trajectory and Vehicle Status Display - Remote Park-Out |
| [APAVPC-3415554](https://vgrts.vinfast.vn/cb/item/3415554) | Selection of Control mode for V\_Comfort Operation |
| [APAVPC-3415559](https://vgrts.vinfast.vn/cb/item/3415559) | Pre-Maneuver Condition Check and Status Communication |
| [APAVPC-3415545](https://vgrts.vinfast.vn/cb/item/3415545) | Remote Mode Selection: Occupancy detection |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |
| [APAVPC-3415617](https://vgrts.vinfast.vn/cb/item/3415617) | Remote Interface Connectivity |
| [AVPCSR-3416567](https://vgrts.vinfast.vn/cb/item/3416567) | -- |
| [AVPCSR-3416574](https://vgrts.vinfast.vn/cb/item/3416574) | -- |
| [AVPCSR-3416566](https://vgrts.vinfast.vn/cb/item/3416566) | -- |

**No Downstream References**

**No Associations**

**Description**

VPC\_Status  
VPC\_User\_Comm\_dev  
VPC\_C-App\_Comm\_Status  
VPC\_Maneuver\_Precond

###### 18.9.2.4 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416243](#[ISSUE:3416243]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415559](https://vgrts.vinfast.vn/cb/item/3415559) | Pre-Maneuver Condition Check and Status Communication |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

When  
VPC\_Precond is True  
AND  
User\_Comm\_dev is C-app  
AND  
Brake Pedal and steering is released  
AND  
gear\_selection is Park  
Then  
V Parking Comfort System shall set VPC\_Maneuver\_precond as True

###### 18.9.2.5 VF\_PF\_SYSRS\_1597

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416244](#[ISSUE:3416244]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415559](https://vgrts.vinfast.vn/cb/item/3415559) | Pre-Maneuver Condition Check and Status Communication |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path-planning and selection   
OR  
VPC\_Status is Slot Display and Auto-Maneuvering  
AND  
(MHU\_Maneuver\_Command is True AND DMS\_DriverOccupancy is True)   
AND  
VCU\_Veh\_Spd =0  
AND  
Sensor\_Input\_Status is True  
AND  
Camera\_Input\_Status is True  
AND  
BCM\_STAT\_BonnetAjar is closed  
AND  
BMS\_Battery\_SoC > [Battery\_SoC\_THD]  
AND  
BCM\_Trailer\_Attachment\_Status is False  
AND  
ACU\_STAT\_Airbag is Active  
AND  
TPMS\_Tire\_Pressure > [MIN\_TIRE\_PRESSURE]  
AND  
BCM\_Windows\_Lock\_Status is locked  
AND   
ACM\_Seat\_Belt\_Status\_Driver is Buckled  
AND  
IDB\_BrakePedal\_State is Released   
AND  
VCU\_Gear\_State is Park  
AND  
BCM\_Doors\_Lock\_Status is locked   
AND  
BCM\_STAT\_TrunkAjar is closed  
AND  
ACU\_Seat\_Adj\_Status is Inactive  
AND  
BCM\_STAT\_Mirror is unfolded  
Then  
The V-Parking System shall set VPC\_Maneuver\_Precond as True  
  
Note:  
Maneuvering precondition for when the driver is controlling the maneuver from inside the vehicle.

##### 18.9.3 Path-Maneuvering/moving:

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415842](#[ISSUE:3415842]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

###### 18.9.3.1 Descrption

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416245](#[ISSUE:3416245]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

Feature automatically guides the vehicle along a planned path at low speed, ensuring safe park-in or park-out with obstacle detection and suspension on safety triggers.

###### 18.9.3.2 Input Signals

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416246](#[ISSUE:3416246]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

MHU\_Maneuver\_Command  
C-App\_Maneuver\_Command  
Keyfob\_Maneuver\_Command   
DMS\_DriverOccupancy  
BCM\_Doors\_Lock\_Status  
MHU\_Park\_Type\_Req  
C-App\_Park\_Type\_Req  
IDB\_Ctrl\_Status  
EPB\_Ctrl\_Status  
EPS\_Steering\_Ctrl\_Status  
VCU\_Gear\_Ctrl\_Status  
VCU\_Throttle\_Ctrl\_Status  
IDB\_BrakePedal\_State  
IDB\_Ctrl\_Status  
DMS\_Occupancy  
BCM\_Doors\_Lock\_Status  
BCM\_STAT\_Mirror

###### 18.9.3.3 Output Signals

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416247](#[ISSUE:3416247]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**Upstream References (2)**

|  |  |
| --- | --- |
| [APAVPC-3415559](https://vgrts.vinfast.vn/cb/item/3415559) | Pre-Maneuver Condition Check and Status Communication |
| [AVPCSR-3416627](https://vgrts.vinfast.vn/cb/item/3416627) | -- |

**No Downstream References**

**No Associations**

**Description**

VPC\_Status  
VPC\_EPB\_Ctrl\_Req  
VPC\_EPS\_Steering\_Ctrl\_Req   
VPC\_IDB\_Ctrl\_Req  
VPC\_VCU\_Gear\_Ctrl\_Req  
VPC\_VCU\_Throttle\_Ctrl\_Req  
VPC\_IDB\_Cmd  
VPC\_EPB\_Cmd   
VPC\_EPS\_Steering\_Cmd  
VPC\_VCU\_Throttle\_Cmd  
VPC\_VCU\_Gear\_Cmd  
VPC\_EPB\_Brake\_Req   
Reason\_for\_suspend  
VPC\_User\_Comm\_dev  
VPC\_Keyfob\_Communication\_Status  
VPC\_C-App\_Communication\_Status  
VPC\_Maneuver\_Precond  
VPC\_Keyfob\_Commu\_Status   
VPC\_C-App\_Commu\_Status

###### 18.9.3.4 Internal Signals

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416248](#[ISSUE:3416248]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

Obstcl\_Identified  
Alternate\_Path\_Planning  
Movable\_object\_in\_path

###### 18.9.3.5 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416249](#[ISSUE:3416249]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415584](https://vgrts.vinfast.vn/cb/item/3415584) | Park-In Maneuver Initiation: Control mode change |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

When  
VPC\_Status is Path Planning and Selection  
AND  
(MHU\_Maneuver\_Command is True AND DMS\_DriverOccupancy is True)  
OR   
C-App\_Maneuver\_Command is True   
OR   
Keyfob\_Maneuver\_Command is True  
AND  
VPC\_Maneuver\_Precond is true  
Then  
V-Parking Comfort Select shall set VPC\_Status as Path-Maneuvering/moving

###### 18.9.3.6 VF\_PF\_SYSRS\_1598

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416250](#[ISSUE:3416250]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415564](https://vgrts.vinfast.vn/cb/item/3415564) | Low-speed forward navigation Execution |

**No Downstream References**

**No Associations**

**Description**

When   
VPC\_Status is Status is Path-Maneuvering/moving  
AND  
VPC\_Maneuver\_Precond is True  
AND  
MHU\_Park\_Type\_Req is Park-out  
OR  
C-App\_Park\_Type\_Req is Park-out  
Then  
The V-Parking Comfort shall send VPC\_EPB\_Ctrl\_Req as True to request control of the park brake

###### 18.9.3.7 VF\_PF\_SYSRS\_1599

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416251](#[ISSUE:3416251]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415564](https://vgrts.vinfast.vn/cb/item/3415564) | Low-speed forward navigation Execution |

**No Downstream References**

**No Associations**

**Description**

When   
VPC\_Status is Status is Path-Maneuvering/moving  
AND  
VPC\_Maneuver\_Precond is True  
AND  
MHU\_Park\_Type\_Req is Park-out  
OR  
C-App\_Park\_Type\_Req is Park-out  
Then  
The V-Parking Comfort shall send VPC\_EPS\_Steering\_Ctrl\_Req as True to request control of the Steering

###### 18.9.3.8 VF\_PF\_SYSRS\_1600

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416252](#[ISSUE:3416252]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415564](https://vgrts.vinfast.vn/cb/item/3415564) | Low-speed forward navigation Execution |

**No Downstream References**

**No Associations**

**Description**

When   
VPC\_Status is Status is Path-Maneuvering/moving  
AND  
VPC\_Maneuver\_Precond is True  
AND  
MHU\_Park\_Type\_Req is Park-out  
OR  
C-App\_Park\_Type\_Req is Park-out  
Then  
The V-Parking Comfort shall send VPC\_IDB\_Ctrl\_Req (True) to request control of the brake

###### 18.9.3.9 VF\_PF\_SYSRS\_1601

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416253](#[ISSUE:3416253]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415564](https://vgrts.vinfast.vn/cb/item/3415564) | Low-speed forward navigation Execution |

**No Downstream References**

**No Associations**

**Description**

When   
VPC\_Status is Path-Maneuvering/moving  
AND  
VPC\_Maneuver\_Precond is True  
AND  
MHU\_Park\_Type\_Req is Park-out  
OR  
C-App\_Park\_Type\_Req is Park-out  
Then  
The V-Parking Comfort shall send VPC\_VCU\_Gear\_Ctrl\_Req (True) to request control of the gear selector

###### 18.9.3.10 VF\_PF\_SYSRS\_1602

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416254](#[ISSUE:3416254]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415564](https://vgrts.vinfast.vn/cb/item/3415564) | Low-speed forward navigation Execution |

**No Downstream References**

**No Associations**

**Description**

When   
VPC\_Status is Path-Maneuvering/moving  
AND  
VPC\_Maneuver\_Precond is True  
AND  
MHU\_Park\_Type\_Req is Park-out  
OR  
C-App\_Park\_Type\_Req is Park-out  
Then  
The V-Parking Comfort shall send VPC\_VCU\_Throttle\_Ctrl\_Req (True) to request control of the throttle

###### 18.9.3.11 VF\_PF\_SYSRS\_1603

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416255](#[ISSUE:3416255]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (2)**

|  |  |
| --- | --- |
| [AVPCSR-3417042](https://vgrts.vinfast.vn/cb/item/3417042) | -- |
| [APAVPC-3415564](https://vgrts.vinfast.vn/cb/item/3415564) | Low-speed forward navigation Execution |

**No Downstream References**

**No Associations**

**Description**

When   
VPC\_Status is Status is Path-Maneuvering/moving  
AND  
VPC\_Maneuver\_Precond is True  
AND  
IDB\_Ctrl\_Status is System Control  
AND   
EPB\_Ctrl\_Status is System Control  
AND  
EPS\_Steering\_Ctrl\_Status is System Control  
AND  
VCU\_Throttle\_Ctrl\_Status is System Control  
AND  
VCU\_Gear\_Ctrl\_Status is System Control  
Then  
The V-Parking Comfort shall send VPC\_IDB\_Cmd to control brake

###### 18.9.3.12 VF\_PF\_SYSRS\_1604

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416256](#[ISSUE:3416256]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415564](https://vgrts.vinfast.vn/cb/item/3415564) | Low-speed forward navigation Execution |

**No Downstream References**

**No Associations**

**Description**

When   
VPC\_Status is Path-Maneuvering/moving  
AND  
VPC\_Maneuver\_Precond is True  
AND  
IDB\_Ctrl\_Status is System Control  
AND   
EPB\_Ctrl\_Status is System Control  
AND  
EPS\_Steering\_Ctrl\_Status is System Control  
AND  
VCU\_Throttle\_Ctrl\_Status is System Control  
AND  
VCU\_Gear\_Ctrl\_Status is System Control  
Then  
The V-Parking Comfort shall send VPC\_EPB\_Cmd to control Parking brake

###### 18.9.3.13 VF\_PF\_SYSRS\_1605

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416257](#[ISSUE:3416257]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (2)**

|  |  |
| --- | --- |
| [APAVPC-3415564](https://vgrts.vinfast.vn/cb/item/3415564) | Low-speed forward navigation Execution |
| [AVPCSR-3417042](https://vgrts.vinfast.vn/cb/item/3417042) | -- |

**No Downstream References**

**No Associations**

**Description**

When   
VPC\_Status is Path-Maneuvering/moving  
AND  
VPC\_Maneuver\_Precond is True  
AND  
IDB\_Ctrl\_Status is System Control  
AND   
EPB\_Ctrl\_Status is System Control  
AND  
EPS\_Steering\_Ctrl\_Status is System Control  
AND  
VCU\_Throttle\_Ctrl\_Status is System Control  
AND  
VCU\_Gear\_Ctrl\_Status is System Control  
Then  
The V-Parking Comfort shall send VPC\_EPS\_Steering\_Cmd to EPS to Control Steering

###### 18.9.3.14 VF\_PF\_SYSRS\_1606

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416258](#[ISSUE:3416258]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (2)**

|  |  |
| --- | --- |
| [APAVPC-3415564](https://vgrts.vinfast.vn/cb/item/3415564) | Low-speed forward navigation Execution |
| [AVPCSR-3417042](https://vgrts.vinfast.vn/cb/item/3417042) | -- |

**No Downstream References**

**No Associations**

**Description**

When   
VPC\_Status is Path-Maneuvering/moving  
AND  
VPC\_Maneuver\_Precond is True  
AND  
IDB\_Ctrl\_Status is System Control  
AND   
EPB\_Ctrl\_Status is System Control  
AND  
EPS\_Steering\_Ctrl\_Status is System Control  
AND  
VCU\_Throttle\_Ctrl\_Status is System Control  
AND  
VCU\_Gear\_Ctrl\_Status is Sytsem Control  
Then  
The V-Parking Comfort shall send VPC\_VCU\_Throttle\_Cmd to VCU to control throttle

###### 18.9.3.15 VF\_PF\_SYSRS\_1607

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416259](#[ISSUE:3416259]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (2)**

|  |  |
| --- | --- |
| [APAVPC-3415564](https://vgrts.vinfast.vn/cb/item/3415564) | Low-speed forward navigation Execution |
| [AVPCSR-3417042](https://vgrts.vinfast.vn/cb/item/3417042) | -- |

**No Downstream References**

**No Associations**

**Description**

When   
VPC\_Status is Path-Maneuvering/moving  
AND  
VPC\_Maneuver\_Precond is True  
AND  
IDB\_Ctrl\_Status is System Control  
AND   
EPB\_Ctrl\_Status is System Control  
AND  
EPS\_Steering\_Ctrl\_Status is System Control  
AND  
VCU\_Throttle\_Ctrl\_Status is System Control  
AND  
VCU\_Gear\_Ctrl\_Status is System Control  
Then  
The V-Parking Comfort shall send VPC\_VCU\_Gear\_Cmd to VCU to Control gear selector

###### 18.9.3.16 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416260](#[ISSUE:3416260]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (2)**

|  |  |
| --- | --- |
| [APAVPC-3415584](https://vgrts.vinfast.vn/cb/item/3415584) | Park-In Maneuver Initiation: Control mode change |
| [APAVPC-3415562](https://vgrts.vinfast.vn/cb/item/3415562) | Mid-maneuver Condition Check and Status Communication |

**Downstream References (2)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

When  
VPC\_Status is Path-Maneuvering/moving  
AND  
(MHU\_Maneuver\_Command is True AND DMS\_DriverOccupancy is True)   
OR   
C-App\_Maneuver\_Command is True   
OR   
Keyfob\_Maneuver\_Command is True  
Then  
V-Parking Comfort shall move in Trace\_Path coordinate values at a speed less than or equal to MAX\_AUTO\_MANEUVERING\_SPEED [10kmph +or- 2kmph(tolerance)] /   
  
Note:   
C-App/Keyfob Command need to be continously active for maneuvering.

###### 18.9.3.17 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416261](#[ISSUE:3416261]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415565](https://vgrts.vinfast.vn/cb/item/3415565) | Remote Mode Selection: Continuous Engagement via Mobile App |

**Downstream References (2)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering/moving  
Then  
APA shall scan surrounding actively to detect obstacle

###### 18.9.3.18 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416262](#[ISSUE:3416262]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415624](https://vgrts.vinfast.vn/cb/item/3415624) | Pause Conditions During Automatic Maneuvering |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |

**No Associations**

**Description**

When  
VPC\_Status is Suspend  
Then  
V-Parking Comfort shall set VPC\_EPB\_Brake\_Req as True to bring vehicle to stationary.

###### 18.9.3.19 VF\_PF\_SYSRS\_1608

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416263](#[ISSUE:3416263]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415624](https://vgrts.vinfast.vn/cb/item/3415624) | Pause Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Suspend  
Then  
V-Parking Comfort shall send Reason\_for\_suspend to VPC\_User\_Comm\_dev (MHU/ C-App)

###### 18.9.3.20 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416264](#[ISSUE:3416264]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (2)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |
| [APAVPC-3415624](https://vgrts.vinfast.vn/cb/item/3415624) | Pause Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Suspend for more than MAX\_SUSPEND\_TIME  
Then  
V-Parking Comfort shall set VPC\_Status as Abort

###### 18.9.3.21 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416265](#[ISSUE:3416265]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415624](https://vgrts.vinfast.vn/cb/item/3415624) | Pause Conditions During Automatic Maneuvering |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

When  
VPC\_Status is Path-Maneuvering/moving  
AND  
VPC\_Keyfob\_Communication\_Status is Failed   
OR   
VPC\_C-App\_Communication\_Status is Failed  
OR  
DMS\_Occupancy is False  
Then  
V-Parking Comfort shall set VPC\_Status as Suspend

###### 18.9.3.22 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416266](#[ISSUE:3416266]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415624](https://vgrts.vinfast.vn/cb/item/3415624) | Pause Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When   
VPC\_Status is Path-Maneuvering/moving  
AND  
IDB\_BrakePedal\_State is Applied   
AND   
IDB\_Ctrl\_Status is Driver Control  
Then   
V-Parking Comfort shall set VPC\_Status as Suspend.

###### 18.9.3.23 VF\_PF\_SYSRS\_1609

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416267](#[ISSUE:3416267]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415624](https://vgrts.vinfast.vn/cb/item/3415624) | Pause Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When   
VPC\_Status is Path-Maneuvering/moving  
AND  
IDB\_BrakePedal\_State is Applied   
AND   
IDB\_Ctrl\_Status is Driver Control  
Then   
V-Parking Comfort shall set Reason\_for\_suspend as Req\_Recover\_Press\_brake (4). .

###### 18.9.3.24 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416268](#[ISSUE:3416268]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415624](https://vgrts.vinfast.vn/cb/item/3415624) | Pause Conditions During Automatic Maneuvering |

**Downstream References (2)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

When   
VPC\_Status is Path-Maneuvering/moving  
AND  
VPC\_Maneuver\_precond is False  
Then   
V-Parking Comfort shall set VPC\_Status as Suspend.

###### 18.9.3.25 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416269](#[ISSUE:3416269]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415624](https://vgrts.vinfast.vn/cb/item/3415624) | Pause Conditions During Automatic Maneuvering |

**Downstream References (2)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

When  
VPC\_Status is Path-Maneuvering/moving  
AND  
Obstcl\_Identified is True in the target\_trajectory  
AND  
Alternate\_Path\_Planning is False   
Then  
V-Parking Comfort shall set VPC\_Status as Suspend.

###### 18.9.3.26 VF\_PF\_SYSRS\_1610

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416270](#[ISSUE:3416270]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415624](https://vgrts.vinfast.vn/cb/item/3415624) | Pause Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path-Maneuvering/moving  
AND  
Obstcl\_Identified is True in the target\_trajectory  
Then  
V-Parking Comfort shall inform about the object to the driver

###### 18.9.3.27 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416271](#[ISSUE:3416271]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415624](https://vgrts.vinfast.vn/cb/item/3415624) | Pause Conditions During Automatic Maneuvering |

**Downstream References (2)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

When   
VPC\_Status is Path-Maneuvering/moving  
AND  
Driver release button, VPC\_Keyfob\_Commu\_Status is False OR VPC\_C-App\_Commu\_Status is False  
Then   
V-Parking Comfort shall set VPC\_Status as Suspend.

###### 18.9.3.28 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416272](#[ISSUE:3416272]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415624](https://vgrts.vinfast.vn/cb/item/3415624) | Pause Conditions During Automatic Maneuvering |

**Downstream References (2)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving  
AND  
Movable\_object\_in\_path is true  
AND  
Alternate\_Path\_Planning is False  
Then  
V-Parking Comfort shall set Reason\_for\_suspend as Req\_Recover\_FoundObstacleInTrajectory

###### 18.9.3.29 VF\_PF\_SYSRS\_1611

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416273](#[ISSUE:3416273]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415624](https://vgrts.vinfast.vn/cb/item/3415624) | Pause Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving  
AND  
Movable\_object\_in\_path is true  
AND  
Alternate\_Path\_Planning is False  
Then  
V-Parking Comfort shall set VPC\_Status as suspend

###### 18.9.3.30 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416274](#[ISSUE:3416274]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415624](https://vgrts.vinfast.vn/cb/item/3415624) | Pause Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving  
AND  
BCM\_Doors\_Lock\_Status is Unlocked  
Then  
V-Parking Comfort shall set Reason\_for\_suspend as Req\_Recover\_Doors\_unlock

###### 18.9.3.31 VF\_PF\_SYSRS\_1612

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416275](#[ISSUE:3416275]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415624](https://vgrts.vinfast.vn/cb/item/3415624) | Pause Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving  
AND  
BCM\_Doors\_Lock\_Status is Unlocked  
Then  
V-Parking Comfort shall set VPC\_Status as suspend

###### 18.9.3.32 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416276](#[ISSUE:3416276]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415624](https://vgrts.vinfast.vn/cb/item/3415624) | Pause Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving  
AND  
BCM\_STAT\_Mirror is folded  
Then  
V-Parking Comfort shall set VPC\_Status as suspend

###### 18.9.3.33 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416277](#[ISSUE:3416277]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415624](https://vgrts.vinfast.vn/cb/item/3415624) | Pause Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving  
AND  
BCM\_STAT\_DoorAjarFL OR BCM\_STAT\_DoorAjarFR OR BCM\_STAT\_DoorAjarRL OR BCM\_STAT\_DoorAjarRR is Open  
Then  
V-Parking Comfort shall set Reason\_for\_suspend as Req\_Recover\_Close\_Doors (3)

###### 18.9.3.34 VF\_PF\_SYSRS\_1613

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416278](#[ISSUE:3416278]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415624](https://vgrts.vinfast.vn/cb/item/3415624) | Pause Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving  
AND  
BCM\_STAT\_DoorAjarFL OR BCM\_STAT\_DoorAjarFR OR BCM\_STAT\_DoorAjarRL OR BCM\_STAT\_DoorAjarRR is open  
Then  
V-Parking Comfort shall set VPC\_Status as suspend

###### 18.9.3.35 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416279](#[ISSUE:3416279]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415624](https://vgrts.vinfast.vn/cb/item/3415624) | Pause Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving  
AND  
DMS\_button\_released is true  
Then  
V-Parking Comfort shall set Reason\_for\_suspend as Req\_Recover\_DMS\_Release (5)

###### 18.9.3.36 VF\_PF\_SYSRS\_1614

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416280](#[ISSUE:3416280]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415624](https://vgrts.vinfast.vn/cb/item/3415624) | Pause Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving  
AND  
DMS\_button\_released is true  
Then  
V-Parking Comfort shall set VPC\_Status as suspend

###### 18.9.3.37 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416281](#[ISSUE:3416281]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415624](https://vgrts.vinfast.vn/cb/item/3415624) | Pause Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving  
AND  
BCM\_STAT\_TrunkAjar is open  
Then  
V-Parking Comfort shall set VPC\_Status as suspend

###### 18.9.3.38 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416282](#[ISSUE:3416282]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415624](https://vgrts.vinfast.vn/cb/item/3415624) | Pause Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving  
AND  
Mode\_select is true  
Then  
V-Parking Comfort shall set Reason\_for\_suspend as Req\_Mode Select (1)

###### 18.9.3.39 VF\_PF\_SYSRS\_1615

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416283](#[ISSUE:3416283]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415624](https://vgrts.vinfast.vn/cb/item/3415624) | Pause Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving  
AND  
Mode\_select is true  
Then  
V-Parking Comfort shall set VPC\_Status as suspend

###### 18.9.3.40 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416284](#[ISSUE:3416284]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415624](https://vgrts.vinfast.vn/cb/item/3415624) | Pause Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving  
AND  
Pull\_out\_direction\_selected is false  
Then  
V-Parking Comfort shall set Reason\_for\_suspend as Req\_Select\_Pull\_out\_Direction (D)

###### 18.9.3.41 VF\_PF\_SYSRS\_1616

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416285](#[ISSUE:3416285]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving  
AND  
Pull\_out\_direction\_selected is false  
Then  
V-Parking Comfort shall set VPC\_Status as suspend

###### 18.9.3.42 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416286](#[ISSUE:3416286]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415624](https://vgrts.vinfast.vn/cb/item/3415624) | Pause Conditions During Automatic Maneuvering |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving  
AND  
C-App\_Maneuver\_Command is False  
OR  
Keyfob\_Maneuver\_Command is False  
Then  
V-Parking Comfort shall set Reason\_for\_suspend as Req\_Press\_ParkingSwitch (E)

###### 18.9.3.43 VF\_PF\_SYSRS\_1617

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416287](#[ISSUE:3416287]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving  
AND  
C-App\_Maneuver\_Command is False  
OR  
Keyfob\_Maneuver\_Command is False  
Then  
V-Parking Comfort shall set VPC\_Status as suspend

###### 18.9.3.44 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416288](#[ISSUE:3416288]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415624](https://vgrts.vinfast.vn/cb/item/3415624) | Pause Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving  
AND  
C-App\_Maneuver\_Command is True  
OR  
Keyfob\_Maneuver\_Command is True  
AND  
CMS\_Occupancy is true  
Then  
V-Parking Comfort shall set Reason\_for\_suspend as Req\_Occu\_Vehicle (11)

###### 18.9.3.45 VF\_PF\_SYSRS\_1618

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416289](#[ISSUE:3416289]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving  
AND  
C-App\_Maneuver\_Command is True  
OR  
Keyfob\_Maneuver\_Command is True  
AND  
CMS\_Occupancy is true  
Then  
V-Parking Comfort shall set VPC\_Status as suspend

###### 18.9.3.46 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416290](#[ISSUE:3416290]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415624](https://vgrts.vinfast.vn/cb/item/3415624) | Pause Conditions During Automatic Maneuvering |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving  
AND  
Remote\_device\_connected is false  
Then  
V-Parking Comfort shall set Reason\_for\_suspend as Req\_Connect\_RD (13)

###### 18.9.3.47 VF\_PF\_SYSRS\_1619

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416291](#[ISSUE:3416291]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415624](https://vgrts.vinfast.vn/cb/item/3415624) | Pause Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving  
AND  
Remote\_device\_connected is false  
Then  
V-Parking Comfort shall set VPC\_Status as suspend

###### 18.9.3.48 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416292](#[ISSUE:3416292]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415624](https://vgrts.vinfast.vn/cb/item/3415624) | Pause Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving  
AND  
VPC\_Paused is True  
Then  
V-Parking Comfort shall set VPC\_Status as suspend

###### 18.9.3.49 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416293](#[ISSUE:3416293]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415624](https://vgrts.vinfast.vn/cb/item/3415624) | Pause Conditions During Automatic Maneuvering |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving  
AND  
Slot\_searching is false  
Then  
V-Parking Comfort shall set Reason\_for\_suspend as Req\_SearchingProcess (12)

###### 18.9.3.50 VF\_PF\_SYSRS\_1620

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416294](#[ISSUE:3416294]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415625](https://vgrts.vinfast.vn/cb/item/3415625) | System states in Drive mode |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving  
AND  
Slot\_searching is false  
Then  
V-Parking Comfort shall set VPC\_Status as suspend

###### 18.9.3.51 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416295](#[ISSUE:3416295]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415624](https://vgrts.vinfast.vn/cb/item/3415624) | Pause Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving  
AND  
EPB\_Brake\_State is Applied  
Then  
V-Parking Comfort shall set Reason\_for\_suspend as Req\_Recover\_Press\_brake (4)

###### 18.9.3.52 VF\_PF\_SYSRS\_1621

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416296](#[ISSUE:3416296]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving  
AND  
EPB\_Brake\_State is Applied  
Then  
V-Parking Comfort shall set VPC\_Status as suspend

#### 18.10 Finished:

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415727](#[ISSUE:3415727]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

##### 18.10.1 Descrption

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415843](#[ISSUE:3415843]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

VPC ensures the vehicle is properly aligned and centered in the parking slot, applies final safety actions, and completes the maneuver only when all conditions are met.

##### 18.10.2 Input Signals

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415844](#[ISSUE:3415844]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

MHU\_Maneuver\_Command  
C-App\_Maneuver\_Command   
Keyfob\_Maneuver\_Command  
DMS\_Occupancy  
BCM\_Doors\_Lock\_Status  
MHU\_Selected\_ Slot\_ID

##### 18.10.3 Output Signals

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415845](#[ISSUE:3415845]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

VPC\_EPS\_Steering\_Cmd  
VPC\_EPB\_Cmd  
VPC\_VCU\_Gear\_Cmd

##### 18.10.4 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415846](#[ISSUE:3415846]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415589](https://vgrts.vinfast.vn/cb/item/3415589) | Park-In Completion Activities: Remote driver |

**Downstream References (2)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

When   
VPC\_Status is Finished  
AND  
TCU\_Current\_Veh\_Posn equals Target\_Coordinate.  
AND  
Cancel\_pressed is false  
Then  
VPC\_EPS\_Steering\_Cmd as Center to return steering wheel to neutral

##### 18.10.5 VF\_PF\_SYSRS\_1622

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415847](#[ISSUE:3415847]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (3)**

|  |  |
| --- | --- |
| [APAVPC-3415589](https://vgrts.vinfast.vn/cb/item/3415589) | Park-In Completion Activities: Remote driver |
| [AVPCSR-3416558](https://vgrts.vinfast.vn/cb/item/3416558) | -- |
| [AVPCSR-3416569](https://vgrts.vinfast.vn/cb/item/3416569) | -- |

**No Downstream References**

**No Associations**

**Description**

When   
VPC\_Status is Finished  
AND  
TCU\_Current\_Veh\_Posn equals Target\_Coordinate  
AND  
Cancel\_pressed is false  
Then  
set VPC\_EPB\_Cmd as Applied

##### 18.10.6 VF\_PF\_SYSRS\_1623

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415848](#[ISSUE:3415848]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (3)**

|  |  |
| --- | --- |
| [AVPCSR-3416569](https://vgrts.vinfast.vn/cb/item/3416569) | -- |
| [AVPCSR-3416558](https://vgrts.vinfast.vn/cb/item/3416558) | -- |
| [APAVPC-3415589](https://vgrts.vinfast.vn/cb/item/3415589) | Park-In Completion Activities: Remote driver |

**No Downstream References**

**No Associations**

**Description**

When   
VPC\_Status is Finished  
AND  
TCU\_Current\_Veh\_Posn equals Target\_Coordinate  
AND  
Cancel\_pressed is false  
Then  
VPC\_VCU\_Gear\_Cmd as Park

##### 18.10.7 VF\_PF\_SYSRS\_1624

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415849](#[ISSUE:3415849]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (3)**

|  |  |
| --- | --- |
| [AVPCSR-3416569](https://vgrts.vinfast.vn/cb/item/3416569) | -- |
| [AVPCSR-3416558](https://vgrts.vinfast.vn/cb/item/3416558) | -- |
| [APAVPC-3415589](https://vgrts.vinfast.vn/cb/item/3415589) | Park-In Completion Activities: Remote driver |

**No Downstream References**

**No Associations**

**Description**

When   
VPC\_Status is Finished  
AND  
TCU\_Current\_Veh\_Posn equals Target\_Coordinate  
Then  
set VPC\_OccupancyCheck\_Req as True

##### 18.10.8 VF\_PF\_SYSRS\_1625

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415850](#[ISSUE:3415850]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415589](https://vgrts.vinfast.vn/cb/item/3415589) | Park-In Completion Activities: Remote driver |

**No Downstream References**

**No Associations**

**Description**

When   
VPC\_Status is Finished  
AND  
TCU\_Current\_Veh\_Posn equals Target\_Coordinate  
Then  
V-parking Comfort shall set BCM\_Doors\_Lock\_Status as True

##### 18.10.9 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415851](#[ISSUE:3415851]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415589](https://vgrts.vinfast.vn/cb/item/3415589) | Park-In Completion Activities: Remote driver |

**Downstream References (2)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

When  
VPC\_Status is Finished  
AND  
Park\_Type is Park in  
AND  
MHU\_Maneuver\_Command is True  
AND  
VPC\_EPS\_Steering\_Cmd is Center   
AND  
VPC\_EPB\_Cmd is Applied  
AND   
VPC\_VCU\_Gear\_Cmd is Park  
AND   
VPC\_BCM\_Light\_Status is OFF  
AND  
VPC\_BCM\_Window\_Status is Closed  
AND  
BCM\_Doors\_Lock\_Status as True  
Then  
V-Parking Comfort shall set VPC\_Park in\_Finished\_Status as success

##### 18.10.10 VF\_PF\_SYSRS\_1626

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415852](#[ISSUE:3415852]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (3)**

|  |  |
| --- | --- |
| [APAVPC-3415589](https://vgrts.vinfast.vn/cb/item/3415589) | Park-In Completion Activities: Remote driver |
| [AVPCSR-3416551](https://vgrts.vinfast.vn/cb/item/3416551) | -- |
| [AVPCSR-3416558](https://vgrts.vinfast.vn/cb/item/3416558) | -- |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Finished  
AND  
Park\_Type is Park in  
AND  
C-App\_Maneuver\_Command is True   
OR   
Keyfob\_Maneuver\_Command is True  
AND  
VPC\_EPS\_Steering\_Cmd as Center   
AND  
VPC\_EPB\_Cmd as Applied  
AND   
VPC\_VCU\_Gear\_Cmd as Park  
AND   
VPC\_BCM\_Light\_Status is OFF  
AND  
DMS\_Occupancy is False  
AND  
VPC\_BCM\_Window\_Status is Closed  
AND  
BCM\_Doors\_Lock\_Status is Lock  
Then  
V-Parking Comfort shall set VPC\_Park in\_Finished\_Status as success

##### 18.10.11 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415853](#[ISSUE:3415853]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415587](https://vgrts.vinfast.vn/cb/item/3415587) | Park-In Completion: Alignment Check |

**Downstream References (2)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

When   
VPC\_Status is Finished,  
Then   
V-Select Comfort shall ensure the vehicle is centered within the parking slot, with equal distance on both sides.

##### 18.10.12 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415854](#[ISSUE:3415854]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415587](https://vgrts.vinfast.vn/cb/item/3415587) | Park-In Completion: Alignment Check |

**Downstream References (2)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

When   
VPC\_Status is Finished,  
AND  
Park\_type is Park in  
AND  
Slot\_markings\_identified is true  
Then   
V-Parking Comfort shall ensure vehicle positioned the within the marked boundaries of the selected slot (MHU\_Selected\_ Slot\_ID).

##### 18.10.13 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415855](#[ISSUE:3415855]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415587](https://vgrts.vinfast.vn/cb/item/3415587) | Park-In Completion: Alignment Check |

**Downstream References (2)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

When   
VPC\_Status is Finished  
AND  
Park\_type is Park in  
AND  
Slot\_markings\_identified is false  
Then   
V-Parking Comfort shall ensure the vehicle oriented with selected slot (MHU\_Selected\_ Slot\_ID) to aligned with adjacent parked vehicle

##### 18.10.14 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415856](#[ISSUE:3415856]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415587](https://vgrts.vinfast.vn/cb/item/3415587) | Park-In Completion: Alignment Check |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

When   
VPC\_Status is Finished  
AND  
Park\_type is Park in  
AND  
VPC\_Park in\_Finished\_Status is False  
AND  
EPS\_Steering\_Override is True  
OR  
VCU\_Throttle\_Override is True  
Then   
V-Parking Comfort shall set VPC\_status as abort and inform driver

##### 18.10.15 VF\_PF\_SYSRS\_1627

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415857](#[ISSUE:3415857]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (4)**

|  |  |
| --- | --- |
| [AVPCSR-3416559](https://vgrts.vinfast.vn/cb/item/3416559) | -- |
| [AVPCSR-3417045](https://vgrts.vinfast.vn/cb/item/3417045) | -- |
| [AVPCSR-3417046](https://vgrts.vinfast.vn/cb/item/3417046) | -- |
| [APAVPC-3415587](https://vgrts.vinfast.vn/cb/item/3415587) | Park-In Completion: Alignment Check |

**No Downstream References**

**No Associations**

**Description**

When   
VPC\_Status is Finished  
AND  
Park\_type is Park in  
AND  
VPC\_Park in\_Finished\_Status is False  
AND  
EPS\_Steering\_Override is True  
OR  
VCU\_Throttle\_Override is True  
Then  
The V-Parking Comfort shall send VPC\_VCU\_Gear\_Ctrl\_Req as False to VCU --> to release control of the gear selector

##### 18.10.16 VF\_PF\_SYSRS\_1628

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415858](#[ISSUE:3415858]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (4)**

|  |  |
| --- | --- |
| [APAVPC-3415587](https://vgrts.vinfast.vn/cb/item/3415587) | Park-In Completion: Alignment Check |
| [AVPCSR-3416559](https://vgrts.vinfast.vn/cb/item/3416559) | -- |
| [AVPCSR-3417045](https://vgrts.vinfast.vn/cb/item/3417045) | -- |
| [AVPCSR-3417046](https://vgrts.vinfast.vn/cb/item/3417046) | -- |

**No Downstream References**

**No Associations**

**Description**

When   
VPC\_Status is Finished  
AND  
Park\_type is Park in  
AND  
VPC\_Park in\_Finished\_Status is False  
AND  
EPS\_Steering\_Override is True  
OR  
VCU\_Throttle\_Override is True  
Then  
V-Parking Comfort shall send VPC\_EPB\_Ctrl\_Req as False to EPB --> to release the control of park brake

##### 18.10.17 VF\_PF\_SYSRS\_1629

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415859](#[ISSUE:3415859]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (4)**

|  |  |
| --- | --- |
| [APAVPC-3415587](https://vgrts.vinfast.vn/cb/item/3415587) | Park-In Completion: Alignment Check |
| [AVPCSR-3416559](https://vgrts.vinfast.vn/cb/item/3416559) | -- |
| [AVPCSR-3417046](https://vgrts.vinfast.vn/cb/item/3417046) | -- |
| [AVPCSR-3417045](https://vgrts.vinfast.vn/cb/item/3417045) | -- |

**No Downstream References**

**No Associations**

**Description**

When   
VPC\_Status is Finished  
AND  
Park\_type is Park in  
AND  
VPC\_Park in\_Finished\_Status is False  
AND  
EPS\_Steering\_Override is True  
OR  
VCU\_Throttle\_Override is True  
Then  
The V-Parking Comfort shall send VPC\_IDB\_Ctrl\_Req as False to IDB --> to release the control of the brake

##### 18.10.18 VF\_PF\_SYSRS\_1630

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415860](#[ISSUE:3415860]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (4)**

|  |  |
| --- | --- |
| [AVPCSR-3416559](https://vgrts.vinfast.vn/cb/item/3416559) | -- |
| [APAVPC-3415587](https://vgrts.vinfast.vn/cb/item/3415587) | Park-In Completion: Alignment Check |
| [AVPCSR-3417045](https://vgrts.vinfast.vn/cb/item/3417045) | -- |
| [AVPCSR-3417046](https://vgrts.vinfast.vn/cb/item/3417046) | -- |

**No Downstream References**

**No Associations**

**Description**

When   
VPC\_Status is Finished  
AND  
Park\_type is Park in  
AND  
VPC\_Park in\_Finished\_Status is False  
AND  
EPS\_Steering\_Override is True  
OR  
VCU\_Throttle\_Override is True  
Then  
The V-Parking Comfort shall send VPC\_EPS\_Steering\_Ctrl\_Req as False to EPS --> to release the control of the steering

##### 18.10.19 VF\_PF\_SYSRS\_1631

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415861](#[ISSUE:3415861]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (4)**

|  |  |
| --- | --- |
| [AVPCSR-3417046](https://vgrts.vinfast.vn/cb/item/3417046) | -- |
| [AVPCSR-3417045](https://vgrts.vinfast.vn/cb/item/3417045) | -- |
| [AVPCSR-3416559](https://vgrts.vinfast.vn/cb/item/3416559) | -- |
| [APAVPC-3415587](https://vgrts.vinfast.vn/cb/item/3415587) | Park-In Completion: Alignment Check |

**No Downstream References**

**No Associations**

**Description**

When   
VPC\_Status is Finished  
AND  
Park\_type is Park in  
AND  
VPC\_Park in\_Finished\_Status is False  
AND  
EPS\_Steering\_Override is True  
OR  
VCU\_Throttle\_Override is True  
Then  
The V-Parking Comfort shall send VPC\_VCU\_Throttle\_Ctrl\_Req as False to VCU --> to release control of throttle

#### 18.11 Completed:

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415728](#[ISSUE:3415728]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

#### 18.12 Abort/ Safe stop:

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415729](#[ISSUE:3415729]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

##### 18.12.1 Description

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415862](#[ISSUE:3415862]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

VPC\_Status is aborted if activation conditions are not met or a system fault is detected, ensuring safe termination of the maneuver.

##### 18.12.2 Input Signals

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415863](#[ISSUE:3415863]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

MHU\_VPC\_Cancelled\_Req  
Remote\_device\_engagement   
Manual\_override  
Sensor\_malfunction   
Software\_error  
Poor\_visibility  
Number\_of\_moves  
Low\_battery\_conditions

##### 18.12.3 Output Signals

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415864](#[ISSUE:3415864]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

VPC\_EPB\_Ctrl\_Req  
VPC\_Status  
APA\_status  
APA\_system\_failure

##### 18.12.4 Internal Signals

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415865](#[ISSUE:3415865]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415586](https://vgrts.vinfast.vn/cb/item/3415586) | Park-In Alerts for Driver and Surroundings |

**No Downstream References**

**No Associations**

**Description**

Vehicle\_speed

##### 18.12.5 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415866](#[ISSUE:3415866]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415586](https://vgrts.vinfast.vn/cb/item/3415586) | Park-In Alerts for Driver and Surroundings |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |

**No Associations**

**Description**

When  
VPC\_Status is Abort  
Then  
V-Parking System shall set Reason\_for\_abort in C-App for displying the reason for abort.

##### 18.12.6 VF\_PF\_SYSRS\_1632

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415867](#[ISSUE:3415867]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415586](https://vgrts.vinfast.vn/cb/item/3415586) | Park-In Alerts for Driver and Surroundings |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Abort  
Then  
V-Parking Comfort shall set VPC\_EPB\_Ctrl\_Req

##### 18.12.7 VF\_PF\_SYSRS\_1633

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415868](#[ISSUE:3415868]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415586](https://vgrts.vinfast.vn/cb/item/3415586) | Park-In Alerts for Driver and Surroundings |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Abort  
Then  
The V-Parking shall send IDB\_BrakePedal\_State as Apply to IDB --> to bring the vehicle to a stop

##### 18.12.8 VF\_PF\_SYSRS\_1634

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415869](#[ISSUE:3415869]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415586](https://vgrts.vinfast.vn/cb/item/3415586) | Park-In Alerts for Driver and Surroundings |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Abort  
Then  
V-Parking Comfort shall send EPB\_Brake\_State as Apply to EPB --> to bring vehicle to a stop

##### 18.12.9 VF\_PF\_SYSRS\_1635

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415870](#[ISSUE:3415870]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415586](https://vgrts.vinfast.vn/cb/item/3415586) | Park-In Alerts for Driver and Surroundings |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Abort  
AND  
IDB\_BrakePedal\_State is Applied   
AND  
EPB\_Brake\_State is Applied  
AND  
VCU\_Veh\_Spd is 0   
Then  
V-Parking Comfort shall send VPC\_EPB\_Ctrl\_Req as False to EPB --> to release the control of park brake

##### 18.12.10 VF\_PF\_SYSRS\_1636

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415871](#[ISSUE:3415871]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415586](https://vgrts.vinfast.vn/cb/item/3415586) | Park-In Alerts for Driver and Surroundings |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Abort  
AND  
IDB\_BrakePedal\_State is Applied   
AND  
EPB\_Brake\_State is Applied  
AND  
VCU\_Veh\_Spd is 0   
Then  
The V-Parking Comfort shall send VPC\_IDB\_Ctrl\_Req as False to IDB --> to release the control of the brake

##### 18.12.11 VF\_PF\_SYSRS\_1637

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415872](#[ISSUE:3415872]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Abort  
AND  
IDB\_BrakePedal\_State is Applied   
AND  
EPB\_Brake\_State is Applied   
AND  
VCU\_Veh\_Spd is 0   
Then  
The V-Parking Comfort shall send VPC\_EPS\_Steering\_Ctrl\_Req as False to EPS --> to release the control of the steering

##### 18.12.12 VF\_PF\_SYSRS\_1638

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415873](#[ISSUE:3415873]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Abort  
AND  
IDB\_BrakePedal\_State is Applied   
AND  
EPB\_Brake\_State is Applied  
AND  
VCU\_Veh\_Spd is 0   
Then  
The V-Parking Comfort shall send VPC\_VCU\_Throttle\_Ctrl\_Req as False to VCU --> to release control of throttle

##### 18.12.13 VF\_PF\_SYSRS\_1639

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415874](#[ISSUE:3415874]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Abort  
AND  
IDB\_BrakePedal\_State is Applied   
AND  
EPB\_Brake\_State is Applied  
AND  
VCU\_Veh\_Spd is 0   
Then  
The V-Parking Comfort shall send VPC\_VCU\_Gear\_Ctrl\_Req as False to VCU --> to release control of the gear selector

##### 18.12.14 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415875](#[ISSUE:3415875]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415586](https://vgrts.vinfast.vn/cb/item/3415586) | Park-In Alerts for Driver and Surroundings |

**Downstream References (2)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

When   
APA\_status is APA\_Enabled  
AND  
VPC\_Status is other than Reset  
AND  
The user disables APA   
Then   
V-parking Comfort shall set MHU\_VPC\_Cancelled\_Req as true

##### 18.12.15 VF\_PF\_SYSRS\_1640

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415876](#[ISSUE:3415876]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415586](https://vgrts.vinfast.vn/cb/item/3415586) | Park-In Alerts for Driver and Surroundings |

**No Downstream References**

**No Associations**

**Description**

When   
APA\_status is APA\_Enabled  
AND  
VPC\_Status is other than Reset  
AND  
The user disables APA   
Then   
APA system shall set APA\_status as APA\_Disabled

##### 18.12.16 VF\_PF\_SYSRS\_1641

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415877](#[ISSUE:3415877]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415586](https://vgrts.vinfast.vn/cb/item/3415586) | Park-In Alerts for Driver and Surroundings |

**No Downstream References**

**No Associations**

**Description**

When   
APA\_status is APA\_Enabled  
AND  
VPC\_Status is other than Reset  
AND  
The user disables APA   
Then   
inform the driver in C-app

##### 18.12.17 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415878](#[ISSUE:3415878]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415590](https://vgrts.vinfast.vn/cb/item/3415590) | Park-In Maneuver terminated by Driver seated |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |

**No Associations**

**Description**

When  
The user press cancel option in C-App  
Then  
V-parking Comfort shall set VPC\_canceled as true

##### 18.12.18 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415879](#[ISSUE:3415879]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415491](https://vgrts.vinfast.vn/cb/item/3415491) | Precise Parking Completion with KPI and Environmental Adaptation |

**No Downstream References**

**No Associations**

**Description**

The APA system shall perform parking maneuvers with a minimum target KPI of [APA\_MIN\_TARGET\_KPI\_PARKING\_COMPLETION], while maintaining a positioning tolerance of [APA\_TOLERANCE\_X] cm in X direction, [APA\_TOLERANCE\_Y] cm in Y direction, and [ANGULAR\_DEVIATION] angular deviation for increased precision.

##### 18.12.19 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415880](#[ISSUE:3415880]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415491](https://vgrts.vinfast.vn/cb/item/3415491) | Precise Parking Completion with KPI and Environmental Adaptation |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

The APA system shall actively adapt to real-world constraints while ensuring a successful parking maneuver.  
  
Note: Example would be narrow spaces, uneven surfaces

##### 18.12.20 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415881](#[ISSUE:3415881]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving or suspend or finished  
AND  
Presence of moving object/Person/Animal for more than the threshold time is true  
Then  
V-parking Comfort shall set VPC\_Status as Abort

##### 18.12.21 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415882](#[ISSUE:3415882]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**Downstream References (2)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving or suspend or finished  
AND  
Remote\_device\_engagement is false  
Then  
V-parking Comfort shall set VPC\_Status as Abort

##### 18.12.22 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415883](#[ISSUE:3415883]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving or suspend or finished  
AND  
Manual\_override is true  
Then  
V-parking Comfort shall set VPC\_Status as Abort

##### 18.12.23 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415884](#[ISSUE:3415884]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving or suspend or finished  
AND  
Sensor\_malfunction is true  
Then  
V-parking Comfort shall set VPC\_Status as Abort

##### 18.12.24 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415885](#[ISSUE:3415885]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving or suspend or finished  
AND  
Software\_error is true  
Then  
V-parking Comfort shall set VPC\_Status as Abort

##### 18.12.25 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415886](#[ISSUE:3415886]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving or suspend or finished  
AND  
Poor\_visibility is true  
Then  
V-parking Comfort shall set VPC\_Status as Abort

##### 18.12.26 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415887](#[ISSUE:3415887]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving or suspend or finished  
AND  
Slot\_constraints is true  
Then  
V-parking Comfort shall set VPC\_Status as Abort

##### 18.12.27 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415888](#[ISSUE:3415888]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving or suspend or finished  
AND  
Number\_of\_moves is greater than MAX\_MOVE\_TIMES  
Then  
V-Parking Comfort set VPC\_Status as Abort

##### 18.12.28 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415889](#[ISSUE:3415889]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving or suspend or finished  
AND  
Low\_battery\_conditions is true  
Then  
V-parking Comfort shall set VPC\_Status as Abort

##### 18.12.29 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415890](#[ISSUE:3415890]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving or suspend or finished  
AND  
Mechanical\_or\_electronic\_failure is true  
Then  
V-parking Comfort shall set VPC\_Status as Abort

##### 18.12.30 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415891](#[ISSUE:3415891]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving or suspend or finished  
AND  
Vehicle\_speed is greater than MAX\_AUTO\_MANEUVERING\_SPEED  
Then  
V-parking Comfort shall set VPC\_Status as Abort

##### 18.12.31 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415892](#[ISSUE:3415892]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving or suspend or finished  
AND  
Improper\_calibration is true  
Then  
V-Parking Comfort shall set VPC\_Status as Abort

##### 18.12.32 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415893](#[ISSUE:3415893]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving or suspend or finished  
AND  
Parking\_process\_time is greater than THRESHOLD\_TIME  
Then  
V-Parking Comfort shall set VPC\_Status as Abort

##### 18.12.33 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415894](#[ISSUE:3415894]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving or suspend or finished  
AND  
APA\_system\_failure is true  
Then  
V-Parking Comfort shall set VPC\_Status as Abort

##### 18.12.34 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415895](#[ISSUE:3415895]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving or suspend or finished  
AND  
Remote\_connection\_timeout is true  
Then  
V-Parking Comfort shall set VPC\_Status as Abort

##### 18.12.35 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415896](#[ISSUE:3415896]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving or suspend or finished  
AND  
ACC\_requested is true  
Then  
V-Parking Comfort shall set Reason\_for\_abort as Req\_Quit\_ACC (8)

##### 18.12.36 VF\_PF\_SYSRS\_1642

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415897](#[ISSUE:3415897]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving or suspend or finished  
AND  
ACC\_requested is true  
Then  
V-Parking Comfort shall set VPC\_Status as Abort

##### 18.12.37 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415898](#[ISSUE:3415898]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving or suspend or finished  
AND  
HWA\_requested is true  
Then  
V-Parking Comfort shall set VPC\_Status as Abort

##### 18.12.38 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415899](#[ISSUE:3415899]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**Downstream References (2)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving or suspend or finished  
AND  
Deactivation\_button\_pressed is true  
Then  
V-Parking Comfort shall set VPC\_Status as Abort

##### 18.12.39 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415900](#[ISSUE:3415900]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving or suspend or finished  
AND  
Vehicle\_blocked is true  
Then  
V-Parking Comfort shall set VPC\_Status as Abort

##### 18.12.40 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415901](#[ISSUE:3415901]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving or suspend or finished  
AND  
PAS\_failure is true  
Then  
V-Parking Comfort shall set VPC\_Status as Abort

##### 18.12.41 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415902](#[ISSUE:3415902]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving or suspend or finished  
AND  
External\_ECU\_failure is true  
Then  
V-Parking Comfort shall set VPC\_Status as Abort

##### 18.12.42 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415903](#[ISSUE:3415903]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving or suspend or finished  
AND  
RD\_offline is true  
Then  
V-Parking Comfort shall set VPC\_Status as Abort

##### 18.12.43 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415904](#[ISSUE:3415904]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving or suspend or finished  
AND  
RPA\_page\_off is true  
Then  
V-Parking Comfort shall set VPC\_Status as Abort

##### 18.12.44 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415905](#[ISSUE:3415905]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving or suspend or finished  
AND  
RD\_failure is true  
Then  
V-Parking Comfort shall set VPC\_Status as Abort

##### 18.12.45 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415906](#[ISSUE:3415906]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving or suspend or finished  
AND  
RD\_deactivation\_request is true  
Then  
V-Parking Comfort shall set VPC\_Status as Abort

##### 18.12.46 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415907](#[ISSUE:3415907]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving or suspend or finished  
AND  
Number of moves is greater than MAX\_MOVE\_TIMES  
Then  
V-Parking Comfort shall set VPC\_Status as Abort

##### 18.12.47 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415908](#[ISSUE:3415908]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving or suspend or finished  
AND  
Number of interruptions is greater than MAX\_INTERRUPT\_TIMES  
Then  
V-Parking Comfort shall set VPC\_Status as Abort

##### 18.12.48 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415909](#[ISSUE:3415909]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving or suspend or finished  
AND  
Moving\_control\_timeout is true  
Then  
V-Parking Comfort shall set VPC\_Status as Abort

##### 18.12.49 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415910](#[ISSUE:3415910]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving or suspend or finished  
AND  
Excessive\_pauses\_detected is true  
Then  
V-Parking Comfort shall set VPC\_Status as Abort

##### 18.12.50 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415911](#[ISSUE:3415911]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving or suspend or finished  
AND  
PAS\_internal\_failure is true  
Then  
V-Parking Comfort shall set VPC\_Status as Abort

##### 18.12.51 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415912](#[ISSUE:3415912]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving or suspend or finished  
AND  
External\_ECU\_failure is true  
Then  
V-Parking Comfort shall set VPC\_Status as Abort

##### 18.12.52 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415913](#[ISSUE:3415913]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving or suspend or finished  
AND  
Function\_conflict is true  
Then  
V-Parking Comfort shall set PAS\_APA\_ReqInfoDispTxt1 as Conflict with other functions (3)

##### 18.12.53 VF\_PF\_SYSRS\_1643

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415914](#[ISSUE:3415914]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving or suspend or finished  
AND  
Function\_conflict is true  
Then  
V-Parking Comfort shall set VPC\_Status as Abort

##### 18.12.54 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415915](#[ISSUE:3415915]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving or suspend or finished  
AND  
Vehicle\_speed is greater than MAX\_AUTO\_MANEUVERING\_SPEED  
Then  
V-Parking Comfort shall set PAS\_APA\_ReqInfoDispTxt1 as Vehicle speed is higher than the limit (4)

##### 18.12.55 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415916](#[ISSUE:3415916]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving or suspend or finished  
AND  
Powertrain\_system\_not\_ready is true  
Then  
V-Parking Comfort shall set PAS\_APA\_ReqInfoDispTxt1 as The Powertrain system is not ready (5)

##### 18.12.56 VF\_PF\_SYSRS\_1644

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415917](#[ISSUE:3415917]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving or suspend or finished  
AND  
Powertrain\_system\_not\_ready is true  
Then  
V-Parking Comfort shall set VPC\_Status as Abort

##### 18.12.57 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415918](#[ISSUE:3415918]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving or suspend or finished  
AND  
Vehicle\_in\_towing\_mode is true  
Then  
V-Parking Comfort shall set PAS\_APA\_ReqInfoDispTxt1 as Vehicle is in towing mode (6)

##### 18.12.58 VF\_PF\_SYSRS\_1645

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415919](#[ISSUE:3415919]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving or suspend or finished  
AND  
Vehicle\_in\_towing\_mode is true  
Then  
V-Parking Comfort shall set VPC\_Status as Abort

##### 18.12.59 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415920](#[ISSUE:3415920]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving or suspend or finished  
AND  
Pause\_timeout is true  
Then  
V-Parking Comfort shall set Reason\_for\_abort as Req\_Quit\_Pause\_Timeout (3)

##### 18.12.60 VF\_PF\_SYSRS\_1646

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415921](#[ISSUE:3415921]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving or suspend or finished  
AND  
Pause\_timeout is true  
Then  
V-Parking Comfort shall set VPC\_Status as Abort

##### 18.12.61 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415922](#[ISSUE:3415922]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving or suspend or finished  
AND  
Trajectory\_deviation\_detected is true  
Then  
V-Parking Comfort shall set Reason\_for\_abort as Req\_Quit\_Trajectory (4)

##### 18.12.62 VF\_PF\_SYSRS\_1647

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415923](#[ISSUE:3415923]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving or suspend or finished  
AND  
Trajectory\_deviation\_detected is true  
Then  
V-Parking Comfort shall set VPC\_Status as Abort

##### 18.12.63 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415924](#[ISSUE:3415924]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving or suspend or finished  
AND  
No\_valid\_trajectory\_found is true  
Then  
V-Parking Comfort shall set Reason\_for\_abort as Req\_Quit\_Trajectory (4)

##### 18.12.64 VF\_PF\_SYSRS\_1648

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415925](#[ISSUE:3415925]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving or suspend or finished  
AND  
No\_valid\_trajectory\_found is true  
Then  
V-Parking Comfort shall set VPC\_Status as Abort

##### 18.12.65 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415926](#[ISSUE:3415926]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving or suspend or finished  
AND  
Space\_limit\_exceeded is true  
Then  
V-Parking Comfort shall set Reason\_for\_abort as Req\_Quit\_Space\_Limit (5)

##### 18.12.66 VF\_PF\_SYSRS\_1649

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415927](#[ISSUE:3415927]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving or suspend or finished  
AND  
Space\_limit\_exceeded is true  
Then  
V-Parking Comfort shall set VPC\_Status as Abort

##### 18.12.67 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415928](#[ISSUE:3415928]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving or suspend or finished  
AND  
Slope\_exceeds\_limitation is true  
Then  
V-Parking Comfort shall set VPC\_Status as Abort

##### 18.12.68 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415929](#[ISSUE:3415929]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving or suspend or finished  
AND  
Unsafe\_behavior\_detected is true  
Then  
V-Parking Comfort shall set VPC\_Status as Abort

##### 18.12.69 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415930](#[ISSUE:3415930]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving or suspend or finished  
AND  
Remote\_connection\_timeout is true  
Then  
V-Parking Comfort shall set Reason\_for\_abort as Req\_Quit\_Remote\_Connection\_Timeout (1E)

##### 18.12.70 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415931](#[ISSUE:3415931]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving or suspend or finished  
AND  
RD\_low\_battery is true  
Then  
V-Parking Comfort shall set Reason\_for\_abort as Req\_Quit\_RD\_Low\_Batt (19)

##### 18.12.71 VF\_PF\_SYSRS\_1650

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415932](#[ISSUE:3415932]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving or suspend or finished  
AND  
RD\_low\_battery is true  
Then  
V-Parking Comfort shall set VPC\_Status as Abort

##### 18.12.72 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415933](#[ISSUE:3415933]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving or suspend or finished  
AND  
BCM\_STAT\_BonnetAjar is Open  
Then  
V-Parking Comfort shall set Reason\_for\_abort as Req\_Quit\_Engine\_Front\_Door\_Open (15)

##### 18.12.73 VF\_PF\_SYSRS\_1651

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415934](#[ISSUE:3415934]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving or suspend or finished  
AND  
BCM\_STAT\_BonnetAjar is Open  
Then  
V-Parking Comfort shall set VPC\_Status as Abort

##### 18.12.74 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415935](#[ISSUE:3415935]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving or suspend or finished  
AND  
Steering\_wheel\_intervention is true  
Then  
V-Parking Comfort shall set Reason\_for\_abort as Req\_Quit\_Steering\_Wheel\_Intervention (11)

##### 18.12.75 VF\_PF\_SYSRS\_1652

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415936](#[ISSUE:3415936]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering /moving or suspend or finished  
AND  
Steering\_wheel\_intervention is true  
Then  
V-Parking Comfort shall set VPC\_Status as Abort

#### 18.13 Reset:

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415730](#[ISSUE:3415730]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

##### 18.13.1 Description

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415937](#[ISSUE:3415937]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

VPC will enter Reset state and apply default settings if user preferences are not selected or if a reset fault occurs, ensuring safe and consistent operation.

##### 18.13.2 Input Signals

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415938](#[ISSUE:3415938]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

##### 18.13.3 Output Signals

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415939](#[ISSUE:3415939]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

##### 18.13.4 Internal Signals

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415940](#[ISSUE:3415940]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

##### 18.13.5 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415941](#[ISSUE:3415941]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Reset  
Then  
V-Parking Comfort shall reset all user requests to default values.

#### 18.14 Emergency Stop/Take Back Control:

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415731](#[ISSUE:3415731]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

##### 18.14.1 Description

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415942](#[ISSUE:3415942]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

If an obstacle persists beyond the allowed time or unexpected conditions arise during park-out, the system shall abort the maneuver and allow the driver to take back control for safety.

##### 18.14.2 Input Signals

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415943](#[ISSUE:3415943]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

##### 18.14.3 Output Signals

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415944](#[ISSUE:3415944]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

##### 18.14.4 Internal Signals

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415945](#[ISSUE:3415945]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

##### 18.14.5 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415946](#[ISSUE:3415946]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |

**No Associations**

**Description**

When  
VPC\_Status is path maneuvering/moving  
AND  
Obstcl\_Identified is true for more than MAX\_OBSTACLE\_WAIT\_TIME  
Then  
V-Parking Comfort shall set VPC\_Status as abort and inform driver

##### 18.14.6 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415947](#[ISSUE:3415947]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (2)**

|  |  |
| --- | --- |
| [APAVPC-3415598](https://vgrts.vinfast.vn/cb/item/3415598) | Low-speed navigation: Initiation via MHU |
| [APAVPC-3415597](https://vgrts.vinfast.vn/cb/item/3415597) | Park-In Maneuver terminated by Remote Driver |

**Downstream References (2)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

When  
VPC\_Parking\_Active is active  
AND  
Park\_type is Park out  
Then  
V-Parking Comfort shall plan the path with the recorded data and real time input

##### 18.14.7 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415948](#[ISSUE:3415948]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415597](https://vgrts.vinfast.vn/cb/item/3415597) | Park-In Maneuver terminated by Remote Driver |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

When  
VPC\_Parking\_Active is active  
AND  
Park\_type is Park out  
Then  
V-Parking Comfort shall display the planned trajectory in C-App (VPC\_C-App\_Park-out\_Trajectory) and MHU (VPC\_MHU\_Park-out\_Trajectory) and arrival time

##### 18.14.8 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415949](#[ISSUE:3415949]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415597](https://vgrts.vinfast.vn/cb/item/3415597) | Park-In Maneuver terminated by Remote Driver |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

When  
VPC\_Parking\_Active is active  
AND  
Park\_type is Park out  
Then  
V-Parking Comfort shall display the progress bar with respect to current position in C-App

##### 18.14.9 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415950](#[ISSUE:3415950]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415593](https://vgrts.vinfast.vn/cb/item/3415593) | V\_Comfort Park Out Suggestion |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

The APA system shall permit automatic Park out maneuvers only if the vehicle was previously parked using VPC Park in

#### 18.15 Path-Planning and selection:

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415732](#[ISSUE:3415732]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

##### 18.15.1 Description

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415951](#[ISSUE:3415951]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

The system shall compute and display feasible trajectories based on user input, parking type, and real-time conditions, ensuring only valid paths are planned and shown when all preconditions are met.

##### 18.15.2 Input Signals

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415952](#[ISSUE:3415952]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

MHU\_Selected\_ Slot\_ID  
VCU\_Veh\_Spd  
VCU\_Gear\_State  
C-App\_Selected\_ Slot\_ID  
MHU\_Selected\_Trajectory  
C-App\_Selected\_Park-out\_Dir  
Keyfob\_Auto\_Park-out

##### 18.15.3 Output Signals

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415953](#[ISSUE:3415953]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

VPC\_Parking\_Active  
VPC\_MHU\_Nose-out\_feasible  
VPC\_MHU\_Nose-in\_feasible

##### 18.15.4 Internal Signals

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415954](#[ISSUE:3415954]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

Trace\_Path   
Nose-in\_feasible  
Nose-out\_feasible

##### 18.15.5 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415955](#[ISSUE:3415955]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415580](https://vgrts.vinfast.vn/cb/item/3415580) | Trajectory Calculation Based on Driver’s Slot and Direction Selection |

**Downstream References (2)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

When  
VPC\_Parking\_Active is True  
AND  
Park\_type is Park in  
AND  
VPC\_Status is Path-planning and selection  
AND  
MHU\_Selected\_ Slot\_ID value is received from MHU  
AND  
VCU\_Veh\_Spd is 0  
AND  
VCU\_Gear\_State is Park  
Then  
V-Parking Comfort shall set Target\_Coordinate as MHU\_Selected\_ Slot\_ID.Slot\_Coordinate.

##### 18.15.6 VF\_PF\_SYSRS\_1653

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415956](#[ISSUE:3415956]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415580](https://vgrts.vinfast.vn/cb/item/3415580) | Trajectory Calculation Based on Driver’s Slot and Direction Selection |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Parking\_Active is True  
AND  
Park\_type is Park in  
AND  
VPC\_Status is Path-planning and selection  
AND  
C-App\_Selected\_ Slot\_ID value is received from C-App  
AND  
VCU\_Veh\_Spd is 0  
AND  
VCU\_Gear\_State is Park  
Then  
V-Parking Comfort shall set Target\_Coordinate as C-App\_Selected\_ Slot\_ID.Slot\_Coordinate.

##### 18.15.7 VF\_PF\_SYSRS\_1654

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415957](#[ISSUE:3415957]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**Upstream References (2)**

|  |  |
| --- | --- |
| [APAVPC-3415583](https://vgrts.vinfast.vn/cb/item/3415583) | Display Park-In Trajectory and progress |
| [APAVPC-3415580](https://vgrts.vinfast.vn/cb/item/3415580) | Trajectory Calculation Based on Driver’s Slot and Direction Selection |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Parking\_Active is True  
AND  
Park\_type is Park in  
AND  
MHU\_Selected\_ Slot\_ID value is received from MHU  
OR  
C-App\_Selected\_ Slot\_ID value is received from C-App  
AND  
VPC\_Status is Path-planning and selection  
Then  
V-Parking Comfort shall invoke Path-Planning Module for Nose-out with current vehicle position(TCU\_Current\_Veh\_Posn) and Target\_Coordinate to receive Trajectory\_Info

##### 18.15.8 VF\_PF\_SYSRS\_1655

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415958](#[ISSUE:3415958]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (2)**

|  |  |
| --- | --- |
| [APAVPC-3415583](https://vgrts.vinfast.vn/cb/item/3415583) | Display Park-In Trajectory and progress |
| [APAVPC-3415580](https://vgrts.vinfast.vn/cb/item/3415580) | Trajectory Calculation Based on Driver’s Slot and Direction Selection |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Parking\_Active is True  
AND  
Park\_type is Park in  
AND  
VPC\_Status is Path Planning and Selection  
AND  
Trajectory\_Info.direction = Nose-out  
AND  
Trajectory\_Info.feasibility\_flag is True  
Then  
V-Parking Comfort shall set Nose-out\_feasible to True

##### 18.15.9 VF\_PF\_SYSRS\_1656

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415959](#[ISSUE:3415959]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (2)**

|  |  |
| --- | --- |
| [APAVPC-3415583](https://vgrts.vinfast.vn/cb/item/3415583) | Display Park-In Trajectory and progress |
| [APAVPC-3415580](https://vgrts.vinfast.vn/cb/item/3415580) | Trajectory Calculation Based on Driver’s Slot and Direction Selection |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Parking\_Active is True  
AND  
Park\_type is Park in  
AND  
VPC\_Status is Path Planning and Selection  
AND  
MHU\_Selected\_ Slot\_ID value is received from MHU  
OR  
C-App\_Selected\_ Slot\_ID value is received from C-App  
Then  
V-Parking Comfort shall invoke Path-Planning Module for Nose-in with current vehicle position(TCU\_Current\_Veh\_Posn) and Target\_Coordinate to receive Trajectory\_Info   
  
Note: Path Planning Module will calculate the possible trajectories and arrival time for Nose-out and Nose-in.

##### 18.15.10 VF\_PF\_SYSRS\_1657

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415960](#[ISSUE:3415960]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (2)**

|  |  |
| --- | --- |
| [APAVPC-3415583](https://vgrts.vinfast.vn/cb/item/3415583) | Display Park-In Trajectory and progress |
| [APAVPC-3415580](https://vgrts.vinfast.vn/cb/item/3415580) | Trajectory Calculation Based on Driver’s Slot and Direction Selection |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Parking\_Active is True  
AND  
Park\_type is Park in  
AND  
VPC\_Status is Path Planning and Selection  
AND  
Trajectory\_Info.direction = Nose-in  
AND  
Trajectory\_Info.feasibility\_flag is True  
Then  
V-Parking Comfort shall set Nose-in\_feasible to True

##### 18.15.11 VF\_PF\_SYSRS\_1658

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415961](#[ISSUE:3415961]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (2)**

|  |  |
| --- | --- |
| [APAVPC-3415580](https://vgrts.vinfast.vn/cb/item/3415580) | Trajectory Calculation Based on Driver’s Slot and Direction Selection |
| [APAVPC-3415583](https://vgrts.vinfast.vn/cb/item/3415583) | Display Park-In Trajectory and progress |

**No Downstream References**

**No Associations**

**Description**

Path Planning and Selection to Slot Selection  
When  
Park\_Type is Park-in  
AND  
VPC\_Status is Path Planning and Selection  
AND  
Nose-in\_feasible is False (Nose in Parking is not feasible)  
AND   
Nose-out\_feasible is False (Nose out Parking is not feasible)  
Then  
V-Parking Selec shall send VPC\_Parking\_NotFeasibleTxt to inform the driver that no feasible path exists to reach the selected slot and to select another slot.

##### 18.15.12 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415962](#[ISSUE:3415962]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (2)**

|  |  |
| --- | --- |
| [APAVPC-3415580](https://vgrts.vinfast.vn/cb/item/3415580) | Trajectory Calculation Based on Driver’s Slot and Direction Selection |
| [APAVPC-3415583](https://vgrts.vinfast.vn/cb/item/3415583) | Display Park-In Trajectory and progress |

**Downstream References (2)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

When  
VPC\_Parking\_Active is True  
AND  
Park\_type is Park in  
AND  
MHU\_Selected\_ Slot\_ID is received from MHU  
AND  
VPC\_Status is Path-planning and selection  
AND  
Nose-in\_feasible is True (Nose in Parking is feasible )  
AND  
Nose-out\_feasible is True (Nose out Parking is feasible)   
Then  
V-Parking Comfort shall set VPC\_MHU\_Nose-out\_feasible as True and VPC\_MHU\_Nose-in\_feasible as True  
e

##### 18.15.13 VF\_PF\_SYSRS\_1659

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415963](#[ISSUE:3415963]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Parking\_Active is True  
AND  
Park\_type is Park in  
AND  
MHU\_Selected\_ Slot\_ID is received from MHU  
AND  
VPC\_Status is Path-planning and selection  
AND  
Nose-in\_feasible is True (Nose in Parking is feasible )  
AND  
Nose-out\_feasible is True (Nose out Parking is feasible)   
Then  
The V-Parking Comfort shall set (Trajectory\_Info.Details to VPC\_MHU\_Nose-out\_Trajectory and Trajectory\_Info.CompltnTime to VPC\_MHU\_Nose-out\_CompltnTime for the selected slot(MHU\_Selected\_ Slot\_ID) and Trajectory\_Info.Direction = Nose-out) for MHU display.

##### 18.15.14 VF\_PF\_SYSRS\_1660

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415964](#[ISSUE:3415964]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Parking\_Active is True  
AND  
Park\_type is Park in  
AND  
C-App\_Selected\_ Slot\_ID is received from C-App  
AND  
VPC\_Status is Path-planning and selection  
AND  
Nose-in\_feasible is True (Nose in Parking is feasible )  
AND  
Nose-out\_feasible is True (Nose out Parking is feasible)   
Then  
V-Parking Comfort shall set VPC\_C-App\_Nose-out\_feasible as True and VPC\_C-App\_Nose-in\_feasible as True

##### 18.15.15 VF\_PF\_SYSRS\_1661

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415965](#[ISSUE:3415965]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Parking\_Active is True  
AND  
Park\_type is Park in  
AND  
C-App\_Selected\_ Slot\_ID is received from C-App  
AND  
VPC\_Status is Path-planning and selection  
AND  
Nose-in\_feasible is True (Nose in Parking is feasible )  
AND  
Nose-out\_feasible is True (Nose out Parking is feasible)   
Then  
The V-Parking Comfort shall set (Trajectory\_Info.Details to VPC\_C-App\_Nose-out\_Trajectory and Trajectory\_Info.CompltnTime to VPC\_C-App\_Nose-out\_CompltnTime for the selected slot(C-App\_Selected\_ Slot\_ID) and Trajectory\_Info.Direction = Nose-out) for C-App display.

##### 18.15.16 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415966](#[ISSUE:3415966]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415580](https://vgrts.vinfast.vn/cb/item/3415580) | Trajectory Calculation Based on Driver’s Slot and Direction Selection |

**Downstream References (2)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

When  
VPC\_Parking\_Active is True  
AND  
Park\_type is Park in  
AND  
MHU\_Selected\_ Slot\_ID value is received from MHU  
AND  
VPC\_Status is Path Planning and Selection  
AND  
Nose-out\_feasible is True  
AND  
Nose-in\_feasible is True   
AND  
MHU\_Nose-in\_Req is True   
Then  
The V-Parking Comfort shall set (Trajectory\_Info.Details to VPC\_MHU\_Nose-in\_Trajectory and Trajectory\_Info.CompltnTime to VPC\_MHU\_Nose-out\_CompltnTime for the selected slot(MHU\_Selected\_ Slot\_ID) and Trajectory\_Info.Direction = Nose-in) for MHU display.

##### 18.15.17 VF\_PF\_SYSRS\_1662

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415967](#[ISSUE:3415967]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Parking\_Active is True  
AND  
Park\_type is Park in  
AND  
C-App\_Selected\_ Slot\_ID value is received from C-App  
AND  
VPC\_Status is Path Planning and Selection  
AND  
Nose-out\_feasible is True  
AND  
Nose-in\_feasible is True   
AND  
C-App\_Nose-in\_Req is True   
Then  
The V-Parking Comfort shall set (Trajectory\_Info.Details to VPC\_C-App\_Nose-in\_Trajectory and Trajectory\_Info.CompltnTime to VPC\_C-App\_Nose-out\_CompltnTime for the selected slot(C-App\_Selected\_ Slot\_ID) and Trajectory\_Info.Direction = Nose-in) for C-App display.

##### 18.15.18 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415968](#[ISSUE:3415968]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (2)**

|  |  |
| --- | --- |
| [APAVPC-3415580](https://vgrts.vinfast.vn/cb/item/3415580) | Trajectory Calculation Based on Driver’s Slot and Direction Selection |
| [APAVPC-3415583](https://vgrts.vinfast.vn/cb/item/3415583) | Display Park-In Trajectory and progress |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

When  
VPC\_Parking\_Active is True  
AND  
Park\_type is Park in  
AND  
MHU\_Selected\_ Slot\_ID value is received from MHU  
AND  
VPC\_Status is Path-planning and selection  
AND  
Nose-out\_feasible is True (Nose out Parking is feasible)  
AND  
Nose-in\_feasible is False (Nose in Parking is not feasible)  
Then  
V-Parking Comfort shall set VPC\_MHU\_Nose-out\_feasible as True and VPC\_MHU\_Nose-in\_feasible as False

##### 18.15.19 VF\_PF\_SYSRS\_1663

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415969](#[ISSUE:3415969]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Parking\_Active is True  
AND  
Park\_type is Park in  
AND   
MHU\_Selected\_ Slot\_ID value is received from MHU  
AND  
VPC\_Status is Path Planning and Selection  
AND  
Nose-out\_feasible is True  
AND  
Nose-in\_feasible is False   
Then  
V-Parking Comfort shall set (Trajectory\_Info.Details to VPC\_MHU\_Nose-out\_Trajectory and Trajectory\_Info.CompltnTime to VPC\_MHU\_Nose-out\_CompltnTime for the selected slot(MHU\_Selected\_ Slot\_ID) and Trajectory\_Info.Direction = Nose-out) for MHU display

##### 18.15.20 VF\_PF\_SYSRS\_1664

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415970](#[ISSUE:3415970]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Parking\_Active is True  
AND  
Park\_type is Park in  
AND  
C-App\_Selected\_ Slot\_ID value is received from MHU  
AND  
VPC\_Status is Path-planning and selection  
AND  
Nose-out\_feasible is True (Nose out Parking is feasible)  
AND  
Nose-in\_feasible is False (Nose in Parking is not feasible)  
Then  
V-Parking Comfort shall set VPC\_C-App\_Nose-out\_feasible as True and VPC\_C-APP\_Nose-in\_feasible as False

##### 18.15.21 VF\_PF\_SYSRS\_1665

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415971](#[ISSUE:3415971]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Parking\_Active is True  
AND  
Park\_type is Park in  
AND   
C-App\_Selected\_ Slot\_ID value is received from C-App  
AND  
VPC\_Status is Path Planning and Selection  
AND  
Nose-out\_feasible is True  
AND  
Nose-in\_feasible is False   
Then  
V-Parking Comfort shall set (Trajectory\_Info.Details to VPC\_C-App\_Nose-out\_Trajectory and Trajectory\_Info.CompltnTime to VPC\_C-App\_Nose-out\_CompltnTime for the selected slot(MHU\_Selected\_ Slot\_ID) and Trajectory\_Info.Direction = Nose-out) for C-App display

##### 18.15.22 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415972](#[ISSUE:3415972]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415580](https://vgrts.vinfast.vn/cb/item/3415580) | Trajectory Calculation Based on Driver’s Slot and Direction Selection |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

When  
VPC\_Parking\_Active is True  
AND  
Park\_type is Park in  
AND  
MHU\_Selected\_ Slot\_ID value is received from MHU  
AND  
VPC\_Status is Path Planning and Selection  
AND  
Nose-out\_feasible is False (Nose out Parking is not feasible)  
AND  
Nose-in\_feasible is True (Nose in Parking is feasible)  
Then  
V-Parking Comfort shall set VPC\_MHU\_Nose-out\_feasible as False and VPC\_MHU\_Nose-in\_feasible as True

##### 18.15.23 VF\_PF\_SYSRS\_1666

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415973](#[ISSUE:3415973]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (3)**

|  |  |
| --- | --- |
| [APAVPC-3415581](https://vgrts.vinfast.vn/cb/item/3415581) | Persistent Obstacle: Abort maneuver by System |
| [APAVPC-3415582](https://vgrts.vinfast.vn/cb/item/3415582) | Prompt Driver for Slot reselection on Trajectory failure |
| [APAVPC-3415580](https://vgrts.vinfast.vn/cb/item/3415580) | Trajectory Calculation Based on Driver’s Slot and Direction Selection |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Parking\_Active is True  
AND  
Park\_type is Park in  
AND  
MHU\_Selected\_ Slot\_ID value is received from MHU  
AND  
VPC\_Status is Path Planning and Selection  
AND  
Nose-out\_feasible is False  
AND  
Nose-in\_feasible is True  
Then  
The V-Parking Comfort shall set (Trajectory\_Info.Details to VPC\_MHU\_Nose-in\_Trajectory and Trajectory\_Info.CompltnTime to VPC\_MHU\_Nose-in\_CompltnTime for the selected slot(MHU\_Selected\_ Slot\_ID) and Trajectory\_Info.Direction = Nose-in) for MHU display.

##### 18.15.24 VF\_PF\_SYSRS\_1667

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415974](#[ISSUE:3415974]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Parking\_Active is True  
AND  
Park\_type is Park in  
AND  
C-App\_Selected\_ Slot\_ID value is received from C-App  
AND  
VPC\_Status is Path Planning and Selection  
AND  
Nose-out\_feasible is False (Nose out Parking is not feasible)  
AND  
Nose-in\_feasible is True (Nose in Parking is feasible)  
Then  
V-Parking Comfort shall set VPC\_C-App\_Nose-out\_feasible as False and VPC\_C-App\_Nose-in\_feasible as True

##### 18.15.25 VF\_PF\_SYSRS\_1668

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415975](#[ISSUE:3415975]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Parking\_Active is True  
AND  
Park\_type is Park in  
AND  
C-App\_Selected\_ Slot\_ID value is received from C-App  
AND  
VPC\_Status is Path Planning and Selection  
AND  
Nose-out\_feasible is False  
AND  
Nose-in\_feasible is True  
Then  
The V-Parking Comfort shall set (Trajectory\_Info.Details to VPC\_C-App\_Nose-in\_Trajectory and Trajectory\_Info.CompltnTime to VPC\_C-App\_Nose-in\_CompltnTime for the selected slot(C-App\_Selected\_ Slot\_ID) and Trajectory\_Info.Direction = Nose-in) for C-App display.

##### 18.15.26 VF\_PF\_SYSRS\_1669

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415976](#[ISSUE:3415976]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (3)**

|  |  |
| --- | --- |
| [APAVPC-3415581](https://vgrts.vinfast.vn/cb/item/3415581) | Persistent Obstacle: Abort maneuver by System |
| [APAVPC-3415584](https://vgrts.vinfast.vn/cb/item/3415584) | Park-In Maneuver Initiation: Control mode change |
| [APAVPC-3415580](https://vgrts.vinfast.vn/cb/item/3415580) | Trajectory Calculation Based on Driver’s Slot and Direction Selection |

**No Downstream References**

**No Associations**

**Description**

When  
Park\_type is Park in  
AND  
VPC\_Status is Path-planning and selection  
AND  
MHU\_Selected\_Trajectory is received from MHU   
Then  
The V-Parking shall set Trace\_Path as MHU\_Selected\_Trajectory

##### 18.15.27 VF\_PF\_SYSRS\_1670

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415977](#[ISSUE:3415977]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (3)**

|  |  |
| --- | --- |
| [APAVPC-3415584](https://vgrts.vinfast.vn/cb/item/3415584) | Park-In Maneuver Initiation: Control mode change |
| [APAVPC-3415580](https://vgrts.vinfast.vn/cb/item/3415580) | Trajectory Calculation Based on Driver’s Slot and Direction Selection |
| [APAVPC-3415581](https://vgrts.vinfast.vn/cb/item/3415581) | Persistent Obstacle: Abort maneuver by System |

**No Downstream References**

**No Associations**

**Description**

When  
Park\_type is Park in  
AND  
VPC\_Status is Path-planning and selection  
AND  
C-App\_Selected\_Trajectory is received from C-App  
Then  
The V-Parking shall set Trace\_Path as C-App\_Selected\_Trajectory

##### 18.15.28 VF\_PF\_SYSRS\_1671

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415978](#[ISSUE:3415978]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415583](https://vgrts.vinfast.vn/cb/item/3415583) | Display Park-In Trajectory and progress |

**No Downstream References**

**No Associations**

**Description**

When  
Park\_type is Park in  
AND  
VPC\_Status is Path Planning and Selection  
AND  
MHU\_Selected\_Trajectory is received from MHU   
Then  
The V-Parking shall set VPC\_ParkIn\_Trajectory\_Selected as True

##### 18.15.29 VF\_PF\_SYSRS\_1672

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415979](#[ISSUE:3415979]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415583](https://vgrts.vinfast.vn/cb/item/3415583) | Display Park-In Trajectory and progress |

**No Downstream References**

**No Associations**

**Description**

When  
Park\_type is Park in  
AND  
VPC\_Status is Path Planning and Selection  
AND  
C-App\_Selected\_Trajectory is received from C-App  
Then  
The V-Parking shall set VPC\_ParkIn\_Trajectory\_Selected as True

##### 18.15.30 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415980](#[ISSUE:3415980]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (2)**

|  |  |
| --- | --- |
| [APAVPC-3415597](https://vgrts.vinfast.vn/cb/item/3415597) | Park-In Maneuver terminated by Remote Driver |
| [APAVPC-3415598](https://vgrts.vinfast.vn/cb/item/3415598) | Low-speed navigation: Initiation via MHU |

**Downstream References (2)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

When  
VPC\_Parking\_Active is True  
AND  
C-App\_Selected\_Park-out\_Dir is received from C-App  
AND  
VPC\_Status is Path-planning and selection  
AND  
C-App\_Selected\_Park-out\_Dir is received from C-App  
Then  
V-Parking Comfort shall invoke Path-Planning Module for park-out with current vehicle position(TCU\_Current\_Veh\_Posn) and C-App\_Selected\_Park-out\_Dir to generate Trajectory\_Info   
  
Note: Path Planning Module will calculate the possible trajectory and arrival time for bringing the vehicle out of the parking lot and place along the driving side of the road .   
Trajectory\_Info (Trajectory\_Info.Details, Trajectory\_Info.direction, Trajectory\_Info.Feasibility\_flag, Trajectory\_Info.CompltnTime)

##### 18.15.31 VF\_PF\_SYSRS\_1673

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415981](#[ISSUE:3415981]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (3)**

|  |  |
| --- | --- |
| [APAVPC-3415597](https://vgrts.vinfast.vn/cb/item/3415597) | Park-In Maneuver terminated by Remote Driver |
| [APAVPC-3415598](https://vgrts.vinfast.vn/cb/item/3415598) | Low-speed navigation: Initiation via MHU |
| [APAVPC-3415583](https://vgrts.vinfast.vn/cb/item/3415583) | Display Park-In Trajectory and progress |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Parking\_Active is True  
AND  
C-App\_Park\_Type\_Req is Park-out  
AND  
VPC\_Status is Path Planning and Selection  
AND  
C-App\_Selected\_Park-out\_Dir is received from C-App  
Then  
The V-Parking Comfort shall set (Trajectory\_Info.Details to VPC\_ParkOut\_Trajectory and Trajectory\_Info.CompltnTime to VPC\_ParkOut\_CompltnTime for the selected slot(C-App\_Selected\_ Slot\_ID) and Trajectory\_Info.Direction = C-App\_Selected\_Park-out\_Dir) for C-App display.

##### 18.15.32 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415982](#[ISSUE:3415982]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415597](https://vgrts.vinfast.vn/cb/item/3415597) | Park-In Maneuver terminated by Remote Driver |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

When  
Keyfob\_Auto\_Park-out is True  
AND  
VPC\_Parking\_Active is True  
AND  
Park\_type is Park out  
AND  
VPC\_Status is Path-planning and selection  
Then  
V-Parking Comfort shall set the Trace\_Path as default trajectory\_0  
  
Note: If default\_trajectory\_0 is selected, V-Parking Comfort shall decide on an ideal park-out direction (which ever is lower in complexity and completion time) and generate the trajectory.

#### 18.16 Statistics Reporting:

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415733](#[ISSUE:3415733]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

##### 18.16.1 Descrption

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415983](#[ISSUE:3415983]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

The APA system shall securely collect, transmit, and store maneuver data—including difficulty, success rate, and duration—for real-time insights and long-term analysis.

##### 18.16.2 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415984](#[ISSUE:3415984]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415616](https://vgrts.vinfast.vn/cb/item/3415616) | Deactivation: Driver Cancel |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |

**No Associations**

**Description**

The system shall integrate with telematics systems to capture detailed statistics including maneuver difficulty (categorized by predefined levels), success rate (percentage of successful maneuvers), and time taken (measured in seconds).

##### 18.16.3 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415985](#[ISSUE:3415985]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415616](https://vgrts.vinfast.vn/cb/item/3415616) | Deactivation: Driver Cancel |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |

**No Associations**

**Description**

Data shall be encrypted and securely transmitted to VinFast and other stakeholders using industry-standard protocols (e.g., TLS/SSL).

##### 18.16.4 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415986](#[ISSUE:3415986]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415616](https://vgrts.vinfast.vn/cb/item/3415616) | Deactivation: Driver Cancel |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |

**No Associations**

**Description**

The system shall provide real-time reporting capabilities and store historical data for a minimum of MAX\_VALIDITY\_PERIOD for trend analysis.

#### 18.17 Request Validation:

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415734](#[ISSUE:3415734]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

##### 18.17.1 Descrption

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415987](#[ISSUE:3415987]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

The system shall ensure parking requests are authenticated, protected against malicious actions, and securely logged in the cloud without storing personal user data.

##### 18.17.2 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415988](#[ISSUE:3415988]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415619](https://vgrts.vinfast.vn/cb/item/3415619) | Driver Request Validation and Fault/Malicious Trigger Prevention |

**No Downstream References**

**No Associations**

**Description**

The APA system shall implement multi-factor authentication (MFA) to ensure all parking requests are driver-initiated.

##### 18.17.3 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415989](#[ISSUE:3415989]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415619](https://vgrts.vinfast.vn/cb/item/3415619) | Driver Request Validation and Fault/Malicious Trigger Prevention |

**No Downstream References**

**No Associations**

**Description**

The APA system shall include diagnostic checks to detect and mitigate MHU faults and employ intrusion detection systems (IDS) to identify and block malicious third-party attacks.

##### 18.17.4 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415990](#[ISSUE:3415990]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415619](https://vgrts.vinfast.vn/cb/item/3415619) | Driver Request Validation and Fault/Malicious Trigger Prevention |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |

**No Associations**

**Description**

Logs of all parking requests and validation results shall be maintained for audit purposes.

#### 18.18 Firewall and Security:

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415735](#[ISSUE:3415735]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

##### 18.18.1 Descrption

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415991](#[ISSUE:3415991]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

The system shall actively prevent unauthorized commands and cyber-attacks, immediately deactivate functions upon detection, and alert the user to ensure secure operation.

##### 18.18.2 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415992](#[ISSUE:3415992]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415620](https://vgrts.vinfast.vn/cb/item/3415620) | Firewall Protection for Secure Driver Command Handling » |

**No Downstream References**

**No Associations**

**Description**

The APA system shall incorporate a firewall with deep packet inspection (DPI) capabilities to block unauthorized commands from external sources via Bluetooth or Wi-Fi.

##### 18.18.3 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415993](#[ISSUE:3415993]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415620](https://vgrts.vinfast.vn/cb/item/3415620) | Firewall Protection for Secure Driver Command Handling » |

**No Downstream References**

**No Associations**

**Description**

The Automated Parking Assistance (APA) system shall automatically deactivate and alert the driver in the event of a detected cyber attack

##### 18.18.4 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415994](#[ISSUE:3415994]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415620](https://vgrts.vinfast.vn/cb/item/3415620) | Firewall Protection for Secure Driver Command Handling » |

**No Downstream References**

**No Associations**

**Description**

Regular security audits and penetration testing shall be conducted to ensure the firewall's effectiveness.

#### 18.19 OTA Updates:

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415736](#[ISSUE:3415736]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

##### 18.19.1 Descrption

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415995](#[ISSUE:3415995]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

The system shall support secure OTA updates for features and security patches, initiated only with user confirmation and when all preconditions are met, without affecting core functionalities.

##### 18.19.2 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415996](#[ISSUE:3415996]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415621](https://vgrts.vinfast.vn/cb/item/3415621) | Support OTA Updates |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |

**No Associations**

**Description**

The APA system shall support over-the-air (OTA) updates for patching vulnerabilities, enhancing security features, and performing software upgrades.

##### 18.19.3 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415997](#[ISSUE:3415997]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415621](https://vgrts.vinfast.vn/cb/item/3415621) | Support OTA Updates |

**No Downstream References**

**No Associations**

**Description**

The APA system shall ensure minimal disruption to vehicle operations during updates by scheduling them during non-peak hours or when the vehicle is not in use.

##### 18.19.4 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415998](#[ISSUE:3415998]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415621](https://vgrts.vinfast.vn/cb/item/3415621) | Support OTA Updates |

**No Downstream References**

**No Associations**

**Description**

APA system shall notify users of available updates and provide the option to defer installation if desired.

#### 18.20 Connectivity:

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415737](#[ISSUE:3415737]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

##### 18.20.1 Descrption

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415999](#[ISSUE:3415999]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

VPC shall ensure seamless and resilient communication with remote devices by maintaining stable Wi-Fi and Bluetooth links, enabling rapid reconnection within MAX\_RECNT\_TIME (5) seconds and leveraging redundant channels for uninterrupted operation.

##### 18.20.2 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416000](#[ISSUE:3416000]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415617](https://vgrts.vinfast.vn/cb/item/3415617) | Remote Interface Connectivity |

**No Downstream References**

**No Associations**

**Description**

The APA system shall maintain continuous connectivity with remote devices using Wi-Fi (802.11ac or higher) and Bluetooth (version 5.0 or higher) technologies.

##### 18.20.3 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416001](#[ISSUE:3416001]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415617](https://vgrts.vinfast.vn/cb/item/3415617) | Remote Interface Connectivity |

**No Downstream References**

**No Associations**

**Description**

The APA system shall prioritize quick reconnection in case of connectivity loss, with a maximum reconnection time of MAX\_RECONNCT\_TIME (5) seconds.

##### 18.20.4 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416002](#[ISSUE:3416002]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415617](https://vgrts.vinfast.vn/cb/item/3415617) | Remote Interface Connectivity |

**No Downstream References**

**No Associations**

**Description**

Redundant communication channels shall be implemented to ensure reliability.

#### 18.21 Communication Control:

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415738](#[ISSUE:3415738]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

##### 18.21.1 Descrption

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416003](#[ISSUE:3416003]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

To ensure distraction-free parking, the system shall temporarily manage incoming calls and alerts, inform the driver through clear notifications, and automatically restore communication once the maneuver is complete.

##### 18.21.2 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416004](#[ISSUE:3416004]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415618](https://vgrts.vinfast.vn/cb/item/3415618) | Low-speed navigation: Initiation via C-App |

**No Downstream References**

**No Associations**

**Description**

During automatic parking, V-Parking Comfort shall have the capability to temporarily control incoming calls and communications with remote devices.

##### 18.21.3 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416005](#[ISSUE:3416005]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415618](https://vgrts.vinfast.vn/cb/item/3415618) | Low-speed navigation: Initiation via C-App |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |

**No Associations**

**Description**

The V-Parking Comfort shall provide visual and auditory notifications to the driver about the temporary control of communications.

##### 18.21.4 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416006](#[ISSUE:3416006]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415618](https://vgrts.vinfast.vn/cb/item/3415618) | Low-speed navigation: Initiation via C-App |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |

**No Associations**

**Description**

Normal communication functions shall resume automatically once parking is complete, with a confirmation notification to the driver. [!ebe5aa6597ba8a5eab2f64a4807bdc81.png!] [!1244d91748f66b45030c73942b7217d4.png!] [!fe382ded91ea2ac2342635655915dd93.png!]

#### 18.22 Occupancy Monitoring:

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415739](#[ISSUE:3415739]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

null [!ebe5aa6597ba8a5eab2f64a4807bdc81.png!] [!1244d91748f66b45030c73942b7217d4.png!] [!fe382ded91ea2ac2342635655915dd93.png!]

##### 18.22.1 Descrption

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416007](#[ISSUE:3416007]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

The system shall use anonymized cabin data to adapt parking maneuvers in real time, ensuring safety and efficiency based on vehicle occupancy during automated operations.

##### 18.22.2 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416008](#[ISSUE:3416008]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415622](https://vgrts.vinfast.vn/cb/item/3415622) | Low-speed navigation: Initiation |

**No Downstream References**

**No Associations**

**Description**

The V-Parking Comfort shall adjust parking maneuvers based on occupancy data to ensure safety, such as avoiding sudden stops or sharp turns if passengers are detected.

##### 18.22.3 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416009](#[ISSUE:3416009]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (2)**

|  |  |
| --- | --- |
| [APAVPC-3415622](https://vgrts.vinfast.vn/cb/item/3415622) | Low-speed navigation: Initiation |
| [APAVPC-3415589](https://vgrts.vinfast.vn/cb/item/3415589) | Park-In Completion Activities: Remote driver |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |

**No Associations**

**Description**

V-Parking Comfort shall anonymize occupancy data and use it solely to enhance parking safety and efficiency.

##### 18.22.4 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416010](#[ISSUE:3416010]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415622](https://vgrts.vinfast.vn/cb/item/3415622) | Low-speed navigation: Initiation |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |

**No Associations**

**Description**

The V-Parking Comfort shall utilize the Cabin Monitoring System to monitor vehicle occupancy during automatic parking.

##### 18.22.5 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416011](#[ISSUE:3416011]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

TBD (This section will be enhanced further in the reverse engineering phase)

#### 18.23 Safety Mechanism related to detection, indication and control of faults in the system

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415740](#[ISSUE:3415740]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

##### 18.23.1 Descrption

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416012](#[ISSUE:3416012]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415616](https://vgrts.vinfast.vn/cb/item/3415616) | Deactivation: Driver Cancel |

**No Downstream References**

**No Associations**

**Description**

--

###### 18.23.1.1 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416297](#[ISSUE:3416297]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

TBD, the section will be updated once the information is available

#### 18.24 Safety Mechanism related to detection, indication and control of faults in external systems interacting with the system

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415741](#[ISSUE:3415741]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

##### 18.24.1 Descrption

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416013](#[ISSUE:3416013]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415619](https://vgrts.vinfast.vn/cb/item/3415619) | Driver Request Validation and Fault/Malicious Trigger Prevention |

**No Downstream References**

**No Associations**

**Description**

--

#### 18.25 Safety Mechanism for the measures that enable system to achieve / maintain safe state

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415742](#[ISSUE:3415742]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

##### 18.25.1 Descrption

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416014](#[ISSUE:3416014]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415620](https://vgrts.vinfast.vn/cb/item/3415620) | Firewall Protection for Secure Driver Command Handling » |

**No Downstream References**

**No Associations**

**Description**

--

#### 18.26 Safety Mechanism for measures to detail and implement the warning and degradation concept

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415743](#[ISSUE:3415743]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

##### 18.26.1 Descrption

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416015](#[ISSUE:3416015]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415621](https://vgrts.vinfast.vn/cb/item/3415621) | Support OTA Updates |

**No Downstream References**

**No Associations**

**Description**

--

##### 18.26.2 Safety Mechanism for avoiding Latent fault

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416016](#[ISSUE:3416016]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

###### 18.26.2.1 Descrption

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416298](#[ISSUE:3416298]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415617](https://vgrts.vinfast.vn/cb/item/3415617) | Remote Interface Connectivity |

**No Downstream References**

**No Associations**

**Description**

--

#### 18.27 Requirements for production, operation, service and decommissioning

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415744](#[ISSUE:3415744]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

##### 18.27.1 Descrption

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416017](#[ISSUE:3416017]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415618](https://vgrts.vinfast.vn/cb/item/3415618) | Low-speed navigation: Initiation via C-App |

**No Downstream References**

**No Associations**

**Description**

--

##### 18.27.2 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416018](#[ISSUE:3416018]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

should be done from ADAS ECU perspective not feature specific

### 19 Non Functional Requirements

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415653](#[ISSUE:3415653]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

#### 19.1 Performance Requirements

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415745](#[ISSUE:3415745]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

##### 19.1.1 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416019](#[ISSUE:3416019]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

To be updated once System KPI Pre-sys activity is completed

##### 19.1.2 VF\_PF\_SYSRS\_1675

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416020](#[ISSUE:3416020]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

The system shall determine whether the user's mobile device is within the MAX\_CONNECT\_RANGE when the user request is received

##### 19.1.3 VF\_PF\_SYSRS\_1676

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416021](#[ISSUE:3416021]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

The system shall determine whether the key fob is within the MAX\_CONNECT\_RANGE when the user request is received

##### 19.1.4 VF\_PF\_SYSRS\_1677

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416022](#[ISSUE:3416022]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

V-Parking Comfort shall display messages in MHU to keep the driver updated on relevant status in INFO\_DISPLAY\_TIME (100 milliseconds)

##### 19.1.5 VF\_PF\_SYSRS\_1678

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416023](#[ISSUE:3416023]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

APA system shall update the APA status within APA\_STS\_RESP\_TIME

##### 19.1.6 VF\_PF\_SYSRS\_1679

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416024](#[ISSUE:3416024]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

The system shall process and record telematics data with a latency of no more than 2 seconds

##### 19.1.7 VF\_PF\_SYSRS\_1680

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416025](#[ISSUE:3416025]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

The V-Parking Comfort shall display the detected parking slot on MHU within the SLOT\_DISPLAY\_TIME sec.

##### 19.1.8 VF\_PF\_SYSRS\_1681

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416026](#[ISSUE:3416026]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

V-Parking Comfort shall display messages in C-app to keep the driver updated on relevant status.

##### 19.1.9 VF\_PF\_SYSRS\_1682

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416027](#[ISSUE:3416027]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

V-Parking Comfort shall display messages in C-app to keep the driver updated on relevant status within CAPP\_STS\_RESP\_TIME <TBD>, rephrase

##### 19.1.10 VF\_PF\_SYSRS\_1683

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416028](#[ISSUE:3416028]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

VPC system shall update the VPC status within VPC\_STS\_RESP\_TIME

##### 19.1.11 VF\_PF\_SYSRS\_1684

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416029](#[ISSUE:3416029]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

VPC system shall update the the target coordinates to the selected slot coordinates within 500milliseconds to ensure smooth and uninterrupted path planning and execution.

##### 19.1.12 VF\_PF\_SYSRS\_1685

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416030](#[ISSUE:3416030]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

V-Parking Comfort module shall compute all feasible trajectories from the current vehicle position to the target parking slot within 100 milliseconds under standard operating conditions.

##### 19.1.13 VF\_PF\_SYSRS\_1686

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416031](#[ISSUE:3416031]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

V-Parking Comfort module shall set the Nose-in and Nose- out feasibility within 100milliseconds

##### 19.1.14 VF\_PF\_SYSRS\_1687

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416032](#[ISSUE:3416032]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

The V-Parking Comfort shall display the detected parking slot on C-app within the SLOT\_DISPLAY\_TIME sec.

#### 19.2 Ergonomic Requirements

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415746](#[ISSUE:3415746]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

##### 19.2.1 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416033](#[ISSUE:3416033]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

NA

#### 19.3 Environmental Requirements

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415747](#[ISSUE:3415747]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

##### 19.3.1 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416034](#[ISSUE:3416034]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [AVPCSR-3416600](https://vgrts.vinfast.vn/cb/item/3416600) | -- |

**No Downstream References**

**No Associations**

**Description**

The V-Parking Comfort shall operate in the following conditions:  
-Extreme Sub-zero ambient temperatures (Ambient temperature < -20 )  
-Moderate Sub-zero ambient temperatures ( -20 <= Ambient temperature <= 0)  
- Moderate ambient temperatures (0<Ambient temperature<=45)  
-High ambient temperatures ( Ambient temperature > 45 °C)

##### 19.3.2 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416035](#[ISSUE:3416035]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [AVPCSR-3416600](https://vgrts.vinfast.vn/cb/item/3416600) | -- |

**No Downstream References**

**No Associations**

**Description**

The V-Parking Comfort shall operate in the following conditions:  
- Sunny  
- Light Rain  
- Moderate Rain

##### 19.3.3 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416036](#[ISSUE:3416036]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [AVPCSR-3416600](https://vgrts.vinfast.vn/cb/item/3416600) | -- |

**No Downstream References**

**No Associations**

**Description**

The V-Parking Comfort shall operate in the following conditions:  
- Drizzle  
<0.8 Raindrop diameter mm or 0.5~0.9 Rainfall l/m2/h or 0~3 Raindrop Speed (m/s)  
- Light rain  
<4 Raindrop diameter mm or 2~4 Rainfall l/m2/h or 2~5 Raindrop Speed (m/s)  
- Moderate rain  
<6 Raindrop diameter mm or 8~12 Raindrop Speed (m/s) or 4~6 Raindrop Speed (m/s)

##### 19.3.4 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416037](#[ISSUE:3416037]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (2)**

|  |  |
| --- | --- |
| [AVPCSR-3416638](https://vgrts.vinfast.vn/cb/item/3416638) | -- |
| [AVPCSR-3416600](https://vgrts.vinfast.vn/cb/item/3416600) | -- |

**No Downstream References**

**No Associations**

**Description**

The V-Parking Comfort shall classify illumination based on sensor data and operate in the following conditions:  
  
- Good Illumination Between 100 - 100000 lx Lowest level is: Very dark overcast day  
- Moderate Illumination Between 5 and 100 lx Examples for 10 lx are twilight, street lighting  
- Poor Illumination Between 1 and 5 lx Lowest level is Deep Twilight

##### 19.3.5 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416038](#[ISSUE:3416038]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [AVPCSR-3416600](https://vgrts.vinfast.vn/cb/item/3416600) | -- |

**No Downstream References**

**No Associations**

**Description**

The V-Parking Comfort shall classify the visibility range based on sensor data to operate in the following conditions:  
- Good Visibility (during rainfall / snowfall / fog / smoke / smog / sleet) more than 300m  
- Moderate Visibility (during rainfall / snowfall / fog / smoke / smog /sleet) between 75 and 300m  
- Poor Visibility (during rainfall / snowfall / fog / smoke / smog/sleet) between 25 and 75m

##### 19.3.6 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416039](#[ISSUE:3416039]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [AVPCSR-3416600](https://vgrts.vinfast.vn/cb/item/3416600) | -- |

**No Downstream References**

**No Associations**

**Description**

The V-Parking Comfort shall operate in the following conditions based on the sensor data:  
- Light wind (Wind speed is lesser than 11 km/h)  
- Moderate wind (Wind speed is between 12-28 km/h)

##### 19.3.7 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416040](#[ISSUE:3416040]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

The V-Parking Comfort shall function effectively under conditions of electromagnetic interference (EMI)

#### 19.4 Statutory and Regulatory Requirements

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415748](#[ISSUE:3415748]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

##### 19.4.1 Descrption

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416041](#[ISSUE:3416041]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

V-Comfort complies with regulations and standards, ensuring safe operation, user override capability, and consistent system behavior under all conditions."

##### 19.4.2 Input Signals

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416042](#[ISSUE:3416042]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

##### 19.4.3 Output Signals

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416043](#[ISSUE:3416043]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

##### 19.4.4 Internal Signals

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416044](#[ISSUE:3416044]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

##### 19.4.5 VF\_PF\_SYSRS\_1674

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416045](#[ISSUE:3416045]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (2)**

|  |  |
| --- | --- |
| [AVPCSR-3416559](https://vgrts.vinfast.vn/cb/item/3416559) | -- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_mode is Path\_Maneuvering/moving  
AND  
user shifts the transmission into Park,   
Then   
V-Parking Comfort shall inform the driver and stop the vehicle.

##### 19.4.6 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416046](#[ISSUE:3416046]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (3)**

|  |  |
| --- | --- |
| [APAVPC-3415600](https://vgrts.vinfast.vn/cb/item/3415600) | V\_Comfort Park-Out Maneuver Controls |
| [APAVPC-3415564](https://vgrts.vinfast.vn/cb/item/3415564) | Low-speed forward navigation Execution |
| [APAVPC-3415584](https://vgrts.vinfast.vn/cb/item/3415584) | Park-In Maneuver Initiation: Control mode change |

**No Downstream References**

**No Associations**

**Description**

When   
Driver is Operating remotely with key-fob/C-App  
Then   
V-Parking comfort shall limit the Vehicle\_speed<=10km/h   
Note: Here Vehicle\_speed tolerance is 2km/h.

##### 19.4.7 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416047](#[ISSUE:3416047]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (2)**

|  |  |
| --- | --- |
| [APAVPC-3415565](https://vgrts.vinfast.vn/cb/item/3415565) | Remote Mode Selection: Continuous Engagement via Mobile App |
| [APAVPC-3415561](https://vgrts.vinfast.vn/cb/item/3415561) | Parking Slot Detection |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

V-Parking Comfort shall present the parking space detection notification before the rearmost part of the SV crosses the termination boundary.

##### 19.4.8 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416048](#[ISSUE:3416048]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (2)**

|  |  |
| --- | --- |
| [APAVPC-3415507](https://vgrts.vinfast.vn/cb/item/3415507) | Driver Feedback During V\_Comfort Operations |
| [APAVPC-3415609](https://vgrts.vinfast.vn/cb/item/3415609) | Visual and Auditory Alerts for Driver Communication |

**No Downstream References**

**No Associations**

**Description**

The V-Parking Comfort system shall prevent the Subject Vehicle (SV) from making contact with any pedestrian at any point during its operation.

##### 19.4.9 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416049](#[ISSUE:3416049]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_Status is Path maneuvering/moving   
AND  
Driver press the brake pedal 5% or less of its fully applied position  
Then  
V-Parking Comfort shall allow manual override by the driver.  
Note: The fully applied brake pedal position is defined as the position achieved When a force of 112 lbf (500 N) is applied to the brake pedal.

##### 19.4.10 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416050](#[ISSUE:3416050]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

V-Parking Comfort system shall comply with all applicable requirements of UN ECE R79 (Steering Equipment), specifically those sections Remote Controlled Parking (RCP), even if the remote control feature itself is not implemented in the system.

##### 19.4.11 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416051](#[ISSUE:3416051]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (7)**

|  |  |
| --- | --- |
| [APAVPC-3415554](https://vgrts.vinfast.vn/cb/item/3415554) | Selection of Control mode for V\_Comfort Operation |
| [APAVPC-3415559](https://vgrts.vinfast.vn/cb/item/3415559) | Pre-Maneuver Condition Check and Status Communication |
| [APAVPC-3415543](https://vgrts.vinfast.vn/cb/item/3415543) | V\_Comfort Park-In Selection via MHU |
| [APAVPC-3415542](https://vgrts.vinfast.vn/cb/item/3415542) | Path and Trajectory Planning: Traffic circulation |
| [APAVPC-3415545](https://vgrts.vinfast.vn/cb/item/3415545) | Remote Mode Selection: Occupancy detection |
| [APAVPC-3415544](https://vgrts.vinfast.vn/cb/item/3415544) | Communicate activation status to driver |
| [APAVPC-3415551](https://vgrts.vinfast.vn/cb/item/3415551) | Reuse |

**Downstream References (2)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

V-Parking Comfort system shall be activated after driver press the start button in the preferred communication device(keyfob/C-App) and provided that all necessary operating conditions are met with proper functioning of all associated functions, such as the brakes, accelerator, steering, and relevant sensor systems (e.g., camera, radar, lidar).

##### 19.4.12 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416052](#[ISSUE:3416052]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |

**No Associations**

**Description**

When  
VPC\_Status is path maneuvering/moving  
AND  
VPC\_cancelled is true  
OR  
APA\_status is APA \_disabled   
Then  
V-parking Comfort shall set the vehicle stationery, Vehicle speed =0 and engage the parking brake.  
Note: Whenever vehicle speed reaches "0 kmph" EPB may or may not engage automatically based on user configuration

##### 19.4.13 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416053](#[ISSUE:3416053]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (2)**

|  |  |
| --- | --- |
| [APAVPC-3415506](https://vgrts.vinfast.vn/cb/item/3415506) | Multi-Interface Support for V\_Comfort User Interaction |
| [APAVPC-3415545](https://vgrts.vinfast.vn/cb/item/3415545) | Remote Mode Selection: Occupancy detection |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

V-Parking Comfort shall support only one type of Parking assist based on the scenarios   
1. Controlled/supervised remotely by a driver who is not necessarily located in the driver's seat

##### 19.4.14 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416054](#[ISSUE:3416054]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**Downstream References (2)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

When   
The remote driver switch off power in remote device   
Then   
V-parking Comfort shall set VPC\_cancelled as true and VPC\_status as Abort  
AND  
inform the driver in C-App

##### 19.4.15 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416055](#[ISSUE:3416055]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
VPC\_mode is Path\_Maneuvering/moving  
AND  
user shifts the transmission into Park,   
Then   
V-Parking Comfort shall set VPC\_status as abort and cancel the parking maneuver  
AND  
informs the driver and stop the vehicle.

##### 19.4.16 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416056](#[ISSUE:3416056]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When the conventional driver performs other gear shift operations, then the V-Parking Comfort shall stop the vehicle and inform the driver.

##### 19.4.17 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416057](#[ISSUE:3416057]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When the conventional driver applies braking, then the V-Parking Comfort shall operate according to the amount of braking applied by the driver if it exceeds the V-Parking Comfort-generated braking.

##### 19.4.18 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416058](#[ISSUE:3416058]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |

**No Associations**

**Description**

When the remote driver turns the Ignition OFF, then the V-Parking Comfort shall stop the vehicle and cancel the automatic control of the V-Parking Comfort.

##### 19.4.19 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416059](#[ISSUE:3416059]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (2)**

|  |  |
| --- | --- |
| [APAVPC-3415571](https://vgrts.vinfast.vn/cb/item/3415571) | Parking Feasibility Check |
| [APAVPC-3415492](https://vgrts.vinfast.vn/cb/item/3415492) | Slot Detection Capability |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412216](https://vgrts.vinfast.vn/cb/item/3412216) | Sequence Diagram |

**No Associations**

**Description**

When the parking maneuver is performed within a parallel parking space defined by two bordering vehicles and optionally a kerb as a lateral reference, then the V-Parking Comfort shall calculate the parking space width (W) and depth (D) based on the vehicle's length and a correction factor (Δy) and shall be capable of detecting the kerb present.

##### 19.4.20 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416060](#[ISSUE:3416060]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415492](https://vgrts.vinfast.vn/cb/item/3415492) | Slot Detection Capability |

**No Downstream References**

**No Associations**

**Description**

When the APS vehicle length is between 4m and 6m, then the V-Parking Comfort shall set Δy as 0.25 times the APS vehicle length.

##### 19.4.21 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416061](#[ISSUE:3416061]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415492](https://vgrts.vinfast.vn/cb/item/3415492) | Slot Detection Capability |

**No Downstream References**

**No Associations**

**Description**

When the APS vehicle length is <= 4m, then the V-Parking Comfort shall set Δy to 1.0m (4m x 0.25).

##### 19.4.22 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416062](#[ISSUE:3416062]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415492](https://vgrts.vinfast.vn/cb/item/3415492) | Slot Detection Capability |

**No Downstream References**

**No Associations**

**Description**

When the APS vehicle length is >= 6m, then the V-Parking Comfortshall set Δy to 1.5m (6m x 0.25).

##### 19.4.23 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416063](#[ISSUE:3416063]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

When the APS-controlled vehicle is in motion, then the V-Parking Comfort shall ensure it remains within the area where APS control is permitted.

##### 19.4.24 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416064](#[ISSUE:3416064]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

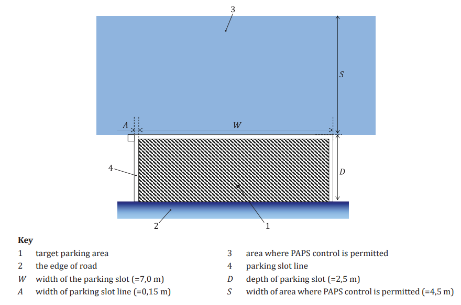
**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

When the parking maneuver is performed within a parking slot defined by contrastive markings on the ground surface, then the V-Parking Comfort shall ensure that the markings have a minimum contrast ratio of 5 and that the APA-controlled vehicle remains within the area where PAPS control is permitted, as shown in the below figure :



##### 19.4.25 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416065](#[ISSUE:3416065]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

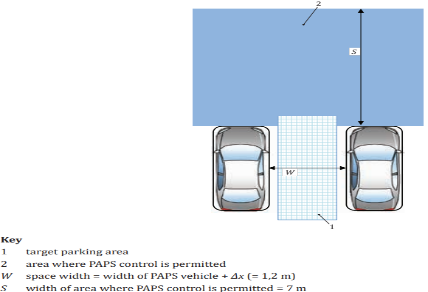
**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

When the parking or leaving maneuver is performed within a parking space defined by two bordering vehicles, then the V-Parking Comfort shall ensure that the parking space width (W) is the width of the PAPS vehicle, including side-view mirrors, plus Δx (=1.2 m), and the PAPS-controlled vehicle shall remain within the area where PAPS control is permitted, as indicated in the figure below:



##### 19.4.26 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416066](#[ISSUE:3416066]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

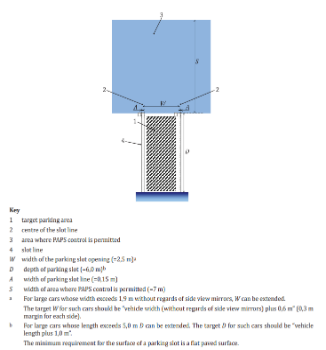
**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

When the parking or leaving manoeurve is performed within a perpendicular parking slot, then the V-Parking Comfort shall ensure that the slot is defined by constrastive markings on the ground surface with a minimum contrast ratio of 5, and the APS controlled vehicle shall remain within the area ehere PAPS control is permitted, as shown in the below figure:



##### 19.4.27 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416067](#[ISSUE:3416067]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

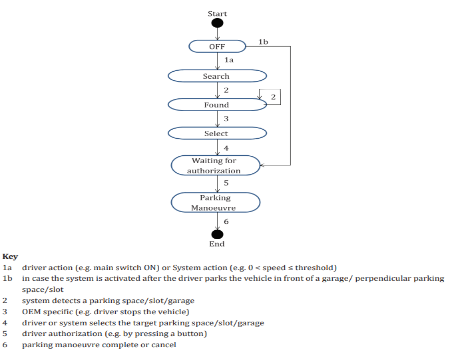
**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

When the parking maneuver is in progress, then the V-Parking Comfort shall advance to the next operating state only after the driver has completed the specified action.



##### 19.4.28 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416068](#[ISSUE:3416068]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

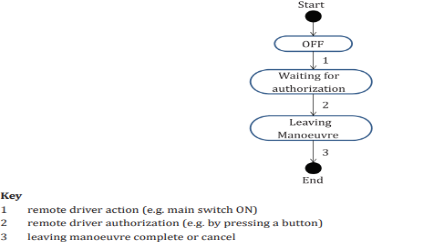
**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

When the system is in the process of leaving the maneuver, then the V-Parking Comfort shall advance the next operating state only after the driver has completed the described activity.



##### 19.4.29 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416069](#[ISSUE:3416069]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415623](https://vgrts.vinfast.vn/cb/item/3415623) | Abort Conditions During Automatic Maneuvering |

**No Downstream References**

**No Associations**

**Description**

When  
The vehicle exceeds the speed limit for the assisted parking mode.   
Then  
V-Parking Comfort shall set VPC\_Status as abort during assisted parking mode

#### 19.5 Audible Information:

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415749](#[ISSUE:3415749]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

##### 19.5.1 Descrption

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416070](#[ISSUE:3416070]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

##### 19.5.2 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416071](#[ISSUE:3416071]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415507](https://vgrts.vinfast.vn/cb/item/3415507) | Driver Feedback During V\_Comfort Operations |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |

**No Associations**

**Description**

When presenting audible information, then the system shall ensure it is in accordance with ISO 15006.

##### 19.5.3 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416072](#[ISSUE:3416072]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415507](https://vgrts.vinfast.vn/cb/item/3415507) | Driver Feedback During V\_Comfort Operations |

**No Downstream References**

**No Associations**

**Description**

When encoding distance information, then the system shall use at least two levels with different repetition rates, where a higher repetition rate or continuous sound corresponds to shorter distances.

##### 19.5.4 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416073](#[ISSUE:3416073]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415507](https://vgrts.vinfast.vn/cb/item/3415507) | Driver Feedback During V\_Comfort Operations |

**No Downstream References**

**No Associations**

**Description**

When distinguishing between areas, then the system shall use a maximum of two different carrier frequencies (e.g., high frequency for the front and low frequency for the rear).

##### 19.5.5 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416074](#[ISSUE:3416074]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415507](https://vgrts.vinfast.vn/cb/item/3415507) | Driver Feedback During V\_Comfort Operations |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |

**No Associations**

**Description**

When providing activation, deactivation, or failure indications, then the system shall use clearly distinguishable audible signals.

#### 19.6 Visual Information:

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415750](#[ISSUE:3415750]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

##### 19.6.1 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416075](#[ISSUE:3416075]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415507](https://vgrts.vinfast.vn/cb/item/3415507) | Driver Feedback During V\_Comfort Operations |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |

**No Associations**

**Description**

When presenting visual information, then the system shall ensure it is in accordance with ISO 15008.

##### 19.6.2 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416076](#[ISSUE:3416076]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415507](https://vgrts.vinfast.vn/cb/item/3415507) | Driver Feedback During V\_Comfort Operations |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |

**No Associations**

**Description**

When using color-coded levels, then the system shall use red for level 1 (imminent collision level) and yellow/green for level 2 (attention level).

##### 19.6.3 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416077](#[ISSUE:3416077]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415507](https://vgrts.vinfast.vn/cb/item/3415507) | Driver Feedback During V\_Comfort Operations |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |

**No Associations**

**Description**

When indicating activation, deactivation, and malfunction, then the system shall use a telltale or a symbol in accordance with ISO 2575

##### 19.6.4 Descrption

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416078](#[ISSUE:3416078]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

#### 19.7 Startup detection delay

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415751](#[ISSUE:3415751]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

##### 19.7.1 Descrption

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416079](#[ISSUE:3416079]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

##### 19.7.2 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416080](#[ISSUE:3416080]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

When the system is activated, then it shall present correct obstacle information within 1.5 seconds, including time for internal system and sensor tests.

##### 19.7.3 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416081](#[ISSUE:3416081]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

When no readiness-for-service indication is provided, then the delay shall be measured from when the ignition is ON and the engine is running, or when battery voltage reaches 90% of its stationary level.

##### 19.7.4 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416082](#[ISSUE:3416082]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

When an audible or visual readiness-for-service indication is provided, then the start-up detection delay shall be measured from when the indication ends and shall not exceed an average of 600ms.

#### 19.8 Monitoring range coverage

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415752](#[ISSUE:3415752]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

##### 19.8.1 Descrption

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416083](#[ISSUE:3416083]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

#### 19.9 Detection and Response Time:

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415753](#[ISSUE:3415753]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

##### 19.9.1 Descrption

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416084](#[ISSUE:3416084]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

##### 19.9.2 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416085](#[ISSUE:3416085]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

The system shall codify distance indications into at least two zones. These zones may be represented by different repetition rates or variable frequencies, with the basic rule that a high repetition rate, continuous sound, or high frequency corresponds to short distances.

##### 19.9.3 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416086](#[ISSUE:3416086]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

When detecting targets, then the system shall detect targets located in the 1.0 m to 5.0 m range behind the vehicle's rear bumper in a region called the zone of regard.

##### 19.9.4 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416087](#[ISSUE:3416087]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

When measuring response time, then the system shall maintain an average response time of no more than 450 milliseconds, ensuring that no individual measurement exceeds 550 milliseconds for systems with no visual or audible readiness-for-service indication.

##### 19.9.5 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416088](#[ISSUE:3416088]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

When the system has only a visual readiness-for-service indication, then the average response time shall not exceed 150 ms, with no single measurement value exceeding 250 ms.

##### 19.9.6 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416089](#[ISSUE:3416089]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

When the system has only an audible readiness-for-service indication, then the increased response time shall allow for a period of silence between the audible sound of the readiness-for-service tone and the audible sound of the azimuth zone of regard.

##### 19.9.7 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416090](#[ISSUE:3416090]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

When the system is active, then the average time delay between the appearance of a relevant obstacle in the zone of regard and the presentation of indications must not exceed 150 milliseconds.  
When measuring time delay, then no single measurement value should exceed 250 milliseconds.

#### 19.10 Description of the azimuth zone of regard - Presence

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415754](#[ISSUE:3415754]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

##### 19.10.1 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416091](#[ISSUE:3416091]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [AVPCSR-3416688](https://vgrts.vinfast.vn/cb/item/3416688) | -- |

**No Downstream References**

**No Associations**

**Description**

The APA System shall define the azimuth area composed of eight smaller zones defined as follows:   
a) Bnear zone: a near backing zone centred on the vehicle's longitudinal centreline. It covers 80 % of the bumper width, extending longitudinally from 1,0 m rearward of the bumper to at least 4,0 m rearward of the bumper, as shown in Figure 2   
b) Bedge zones: two backing edge zones located adjacent to the Bnear and Bfar zones. Each Bedge zone begins at the edge of the Bnear and Bfar zones and extends laterally to 0,25 m past the rear bumper side edge as shown in Figure 1. Each Bedge zone extends longitudinally from 1,0 m rearward of the bumper to at least 5,0 m rearward of the bumper.   
c) Bfar zone: a far backing zone aft of the Bnear zone centred on the vehicle longitudinal centreline. It covers 80 % of the of the bumper width, extending longitudinally from at least 4,0 m (80 % of the required 5,0 m minimum backing range) to at least 5,0 m (100 % of the required 5,0 m minimum backing range) as shown in Figure 2   
d) Bside zones: two backing side zones located adjacent to the Bedge zones. The purpose of the Bside zones is to restrict the detection of Objects (e.g. parallel-parked vehicles) in this region in order to minimize nuisance warnings. Each Bside zone begins at the edge of the Bedge zone and extends laterally 0,25 m beyond the rear bumper lateral (side) edge as shown in Figure 1. Each Bside zone extends longitudinally from 1,0 m rearward of the bumper to at least 5,0 m rearward of the bumper (100 % of the required 5,0 m minimum backing range).   
e) Bout zones: two backing out zones located adjacent to the Bside zones. The purpose of the Bout zones is to restrict the detection of Objects far outside the path of the subject vehicle (e.g. adjacent-lane vehicles) in order to minimize nuisance warnings. Each Bout zone begins at the edge of the Bside zone and extends laterally for 1,0 m as shown in Figure 1. Each Bout zone extends longitudinally from 1,0 m rearward of the bumper to at least 5,0 m rearward of the bumper (100 % of the required 5,0 m minimum backing range).

##### 19.10.2 --

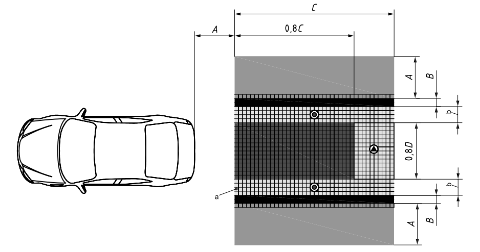
|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416092](#[ISSUE:3416092]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**



##### 19.10.3 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416093](#[ISSUE:3416093]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

Here Key terms:   
  
Bnear: Backing area, near   
  
Bedge : Backing area, edge   
  
Bfar: Backing area, far   
  
Bside: Backing area, side   
  
Bout: Backing area, out   
  
  
  
Dimensions areas:   
  
A = 1.0 m   
  
B = 0.25 m   
  
C =detection range   
  
D = bumper width   
  
a = 10 cm × 10 cm.   
  
b = 0.1 m to 0.25 m beyond.   
  
[!dd80338bf905205a1b5fe8c0c316a864.tmp!]

##### 19.10.4 --

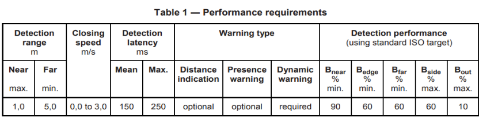
|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416094](#[ISSUE:3416094]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**



#### 19.11 Maintenance/ Support Requirements

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415755](#[ISSUE:3415755]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

##### 19.11.1 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416095](#[ISSUE:3416095]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

TBD

#### 19.12 Quality Requirements

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415756](#[ISSUE:3415756]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

##### 19.12.1 Descrption

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416096](#[ISSUE:3416096]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

##### 19.12.2 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416097](#[ISSUE:3416097]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415534](https://vgrts.vinfast.vn/cb/item/3415534) | Adherence to ASPICE standards for Quality Processes |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |

**No Associations**

**Description**

V-Parking Comfort shall adhere to the ASPICE standards for quality processes.

##### 19.12.3 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416098](#[ISSUE:3416098]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Released |

**Upstream References (1)**

|  |  |
| --- | --- |
| [APAVPC-3415533](https://vgrts.vinfast.vn/cb/item/3415533) | Adherence to INCOSE standards for Systems Engineering. |

**Downstream References (1)**

|  |  |
| --- | --- |
| [APASAD-3412218](https://vgrts.vinfast.vn/cb/item/3412218) | Usecase Diagram |

**No Associations**

**Description**

V-Parking Comfort shall adhere to INCOSE standards for Systems Engineering.

#### 19.13 EMI-EMC requirements

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415757](#[ISSUE:3415757]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

#### 19.14 Sensor Requirement

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415758](#[ISSUE:3415758]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

#### 19.15 Actuators Requirement

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415759](#[ISSUE:3415759]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

#### 19.16 End of Line Requirements

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415760](#[ISSUE:3415760]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

#### 19.17 Re-programming requirements

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415761](#[ISSUE:3415761]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

#### 19.18 Exception Handling

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415762](#[ISSUE:3415762]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

##### 19.18.1 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416099](#[ISSUE:3416099]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

TBD

#### 19.19 Response to Erroneous Conditions

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415763](#[ISSUE:3415763]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

#### 19.20 Recovery From Errors

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415764](#[ISSUE:3415764]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

#### 19.21 Diagnostic Requirements

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415765](#[ISSUE:3415765]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

##### 19.21.1 UDS

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416100](#[ISSUE:3416100]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

###### 19.21.1.1 VF\_PF\_SYSRS\_1688

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416299](#[ISSUE:3416299]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | Ready for QA Review |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

V-Parking Comfort shall enable following parameters access via UDS Services 0x22(Read Data) and 0x2E(Write Data)  
Obstcl\_Identified  
Sensor\_Malfunction  
Moving\_Control\_Timeout  
Trajectory\_deviation\_detected  
Target\_Coordinate  
Nose-in\_feasible  
Nose-out\_feasible  
Park\_type  
User\_Comm\_dev  
Slot\_Detected  
Alternate\_Path\_Planning  
Movable\_object\_in\_path  
Note: Core UDS Services has to be implemented as part of ADECU stack.

#### 19.22 Requirements on the test interface

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415766](#[ISSUE:3415766]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

#### 19.23 Electrical Requirements

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415767](#[ISSUE:3415767]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

#### 19.24 Electrical Characteristics

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415768](#[ISSUE:3415768]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

#### 19.25 Hardware Performance Characteristics

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415769](#[ISSUE:3415769]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

#### 19.26 Mechanical Requirements

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415770](#[ISSUE:3415770]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

#### 19.27 Mechanical characteristics

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415771](#[ISSUE:3415771]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

#### 19.28 Physical Requirements

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415772](#[ISSUE:3415772]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

#### 19.29 Packaging requirements

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415773](#[ISSUE:3415773]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

#### 19.30 Manual Operations Requirements

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415774](#[ISSUE:3415774]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

##### 19.30.1 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3416101](#[ISSUE:3416101]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

TBD

#### 19.31 Mechanical Operation requirements

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415775](#[ISSUE:3415775]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

#### 19.32 Assembly Requirements

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415776](#[ISSUE:3415776]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

#### 19.33 Installation Requirement

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415777](#[ISSUE:3415777]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

#### 19.34 Hardware Platform

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415778](#[ISSUE:3415778]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

#### 19.35 Business/ Organizational Requirements

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415779](#[ISSUE:3415779]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

--

#### 19.36 Reusable system elements

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415780](#[ISSUE:3415780]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

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### 20 References

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415654](#[ISSUE:3415654]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

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#### 20.1 --

|  |  |
| --- | --- |
| **CodeBeamer reference:** | [APAVPCSR-3415781](#[ISSUE:3415781]) |
| **Revision:** | 4 |
| **Priority:** | -- |
| **Severity:** | -- |
| **Status:** | -- |

**No Upstream References**

**No Downstream References**

**No Associations**

**Description**

TE\_VF\_ParkingFunction\_Stakeholder\_Req\_V-Parking\_Comfort.xlsx version: 2.0