Message "SOS - Service Not Activated" in instrument cluster

Topic number	LI82.85-P-067581
Version	1
Function group	82.85 Navigation and Communication system (CNS, ICS, COMAND, FleetBoard)
Date	01-11-2018
Validity	MODEL 117, 156, 166, 172, 176, 190, 205, 207, 213, 217, 218, 222, 231, 238, 242, 246, 253, 292 with SA code 362 (HERMES LTE communication module)
Reason for change	
Reason for block	

Complaint:

"SOS - Service not activated" message in instrument cluster.

MB Apps, Internet Radio, LiveTraffic Information, iCall/S24h-Call nonfunctional.

Note: In the N112/9 control unit for telematics services (HERMES) the event code B15CE00 is active and stored.

Cause:

The vehicle's backend "over-the-air" registration (OTAR) has failed or was not completed successfully.

This complaint can have several causes.

Note: The attachment includes a simplified depiction of the OTAR process.

The basic requirements can be checked using the control unit log from the N112/9 control unit for the telematics services (HERMES).

--

1.) The basic requirements are not given when:

1.a) Comparison of control unit log and Vedoc: Required SIM card values (ICCID, IMEI, IMSI, SNR HU) are not documented in VeDoc or documented incorrectly. (See attachments "SIM Card Data" and "SIM Card Data in Vedoc")

1.b) "Operating Mode" is not in "Provisioning Mode". (See attachment "SIM Card Data")

1.c) The signal strength of the mobile network is 0%. (See attachment of "GPS Data and Mobile Network Information")

1.d) No visible GPS values in control unit log (empty values for date and time). (See "GPS Data and Mobile Network Information")

1.e) Invalid/incorrect GPS values visible in control unit log (values present, for date and time, but they are incorrect). (See "GPS Data and Mobile Network Information")

1.f) Initial authorization certificate invalid. (See attachment "SIM Card Data")

--

If all basic requirements are given, the cause can be further restricted by reading out the "Status of registration". (See attachment "Status of registration in XENTRY Diagnosis")

2.) Registration errors at mobile phone service provider's (DC.20- DC.27)

3.) Error when replacing certificate (CEP.30 - CEP.3C)

4.) Error in final registration (TOC.40 - TOC.47)

Attachments	
File	Description
SIM Card Data.JPG	SIM card data for comparison with Vedoc data
GPS Data and Mobile Network information.jpg	GPS data and mobile network information
Status of registration in XENTRY Diagnosis.jpg	Status of registration via "Actual Values"
Over the air Registration.pdf	Simplified process overview of OTAR
SIM Card Data in Vedoc.jpg	SIM card data in Vedoc

Remedy:

Note: For registration with the Backend, it must be ensured that the vehicle has adequate GSM and GPS reception.

--

1.a) Perform new initial startup of N112/9 control unit for telematics services (HERMES) and head unit (A26/17 or A40/3 oder A2) using XENTRY Diagnosis.

1.b) "Transport Mode", "Supplier Mode" or "Out of Service Mode": Perform new initial startup of N112/9 control unit for telematics services (HERMES) using XENTRY Diagnosis.

Extra work for "Out of Service Mode": If the new initial startup is not productive, please contact Verizon Dealer Support and make sure that they have activated the SIM card. Following this, repeat the initial startup procedure for the N112/9 control unit for the telematics services (HERMES) using XENTRY Diagnosis to switch the "Operating Mode" into the "Provisioning Mode".

1.c) Perform a short test drive (approx. 10 min), while doing so make sure that the GSM and GPS reception level is sufficiently high.

1.d) Check the head unit (A26/17 or A40/3 or A2) for GPS antenna fault codes and process them if necessary. If there are no faults, perform a short test drive (approx. 10 min). While doing so make sure that the GSM and GPS reception level is sufficiently high.

1.e) Creation of a PTSS case. Attach a control unit log of the N112/9 control unit for the telematics services (HERMES) and the head unit (A26/17 or A40/3 or A2) to the PTSS case.

1.f) Reset the initial authorization certificate of the N112/9 control unit for the telematics services (HERMES). (See attachment "Reset initial authorization certificate of HERMES")

--

2.) Please contact Verizon Dealer Support and notify them of the registration status. The following information for the control unit N112/9 in question requires: ICCID, IMEI, IMSI, IMSISDN, serial number. Support will contact Verizon Wireless to rectify the complaint.

--

3.a) CEP.30, CEP.31, CEP.32, CEP.35, CEP.37, CEP.38, CEP.39, CEP.3A: Creation of a PTSS case. Attach a control unit log of the N112/9 control unit for the telematics services (HERMES) to the PTSS case.

3.b) CEP.33: Temporary backend malfunction. Wait for 24 hours then assess the complaint again.

3.c) CEP.34, CEP.36, CEP.3B, CEP.3C: Use XENTRY Diagnosis to perform a new initial startup of the N112/9 control unit for the telematics services (HERMES) and the head unit (A26/17 or A40/3 or A2). Then reset the initial authorization certificate of the N112/9 control unit for the telematics services (HERMES) (see attachment "Reset initial authorization certificate of HERMES"). A memory in the Daimler Vehicle Backend enables the registration process to be delayed by 24h. Please wait 24 hours and perform a test drive. If, after this, registration is still not successful please create a PTSS case. Attach a current quick test along with an up-to-date control unit log of the N112/9 control unit for the telematics services (HERMES) to the PTSS case.

--

4.a) TOC.40 to TOC.46: Creation of a PTSS case. Attach a control unit log of the N112/9 control unit for the telematics services (HERMES) to the PTSS case.

4.b) TOC.47: Using XENTRY Diagnosis perform a new initial startup of the N112/9 control unit for the telematics services (HERMES). Then reset the initial authorization certificate of the N112/9 control unit for the telematics services (HERMES) (see attachment "Reset initial authorization certificate of HERMES"). A memory in the Daimler Vehicle Backend enables the registration process to be delayed by 24h. After 24h perform a brief test drive. If, after this, registration is still not successful please create a PTSS case. Attach a current quick test along with an up-to-date control unit log of the N112/9 control unit for the telematics services (HERMES) to the PTSS case.

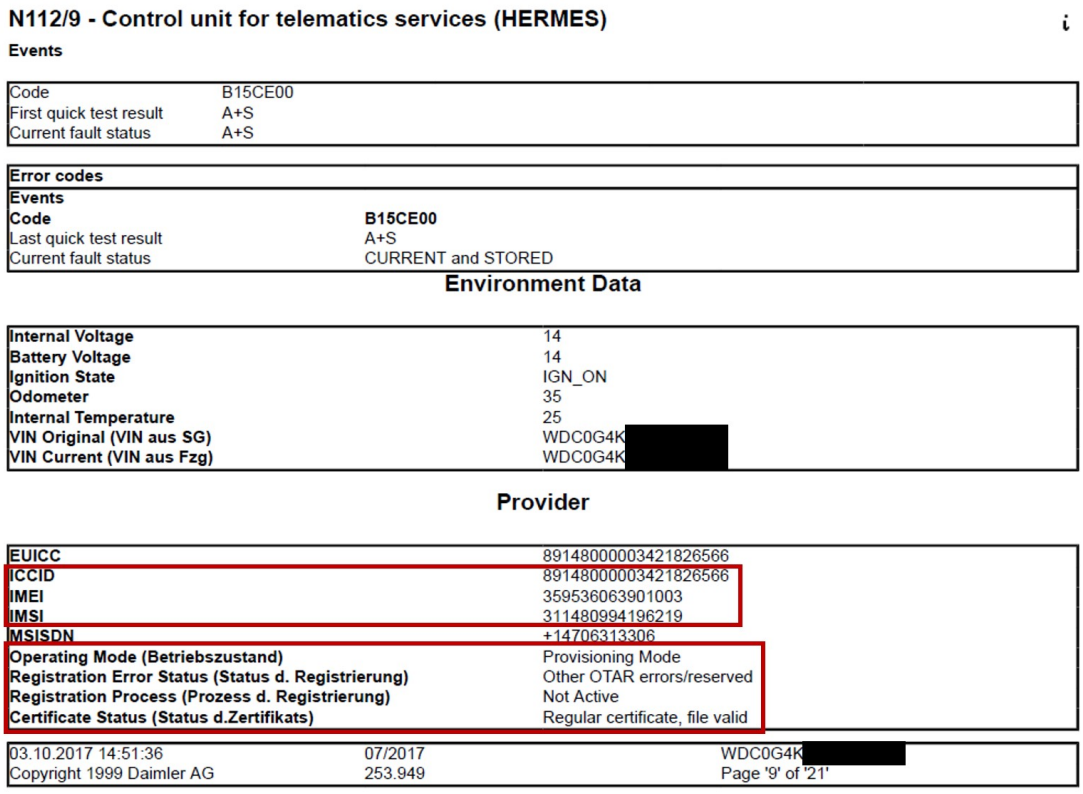
Attachments	
File	Description
reset initial authorization certificate of HERMES.jpg	Reset of initial authorization certificate of HERMES

Symptoms
Communication/information / Communication / Telematics service / Customer hotline / MB info nonfunctional
Communication/information / Communication / Telematics service / Vehicle status and configuration / Remote door unlocking/locking / Nonfunctional
Communication/information / Communication / Telematics service / Accident and breakdown management / Cannot connect call
Communication/information / Communication / Telematics service / Customer hotline / Cannot connect call
Communication/information / Communication / Internet/email / Internet function / No connection possible
Communication/information / Communication / Internet/email / Internet services / Service unavailable
Communication/information / Communication / Internet/email / Internet services / Surfing the Internet is unavailable
Communication/information / Communication / Telematics service / Activation/deactivation / Control unit cannot be activated/deactivated
Communication/information / Communication / Telematics service / Activation/deactivation / Telematics service cannot be activated/deactivated
Communication/information / Communication / Telematics service / Activation/deactivation / SIM card disabled
Communication/information / Communication / Telematics service / Activation/deactivation / SIM card is not detected
Communication/information / Communication / Telematics service / Vehicle status and configuration / Vehicle homepage / Nonfunctional
Communication/information / Communication / Telematics service / Locating services / Vehicle position/vehicle locating / Nonfunctional
Communication/information / Communication / Telematics service / Activation/deactivation / No connection possible
Communication/information / Communication / Telematics service / Activation/deactivation / MB-App cannot be activated/deactivated
Communication/information / Communication / Telematics service / Vehicle status and configuration / Remote vehicle status query / No display/message
Communication/information / Communication / Telematics service / Vehicle status and configuration / Vehicle function programming / Programming not possible

Control unit/fault code		
Control unit	Fault code	Fault text
N112/9 - Control unit for telematics services (HERMES)	B15CE00	Registration on the server for telematics services has failed. _

Attachments

SIM Card Data.JPG:



N112/9 - Control unit for telematics services (HERMES)

Events

Code	B15CE00
First quick test result	A+S
Current fault status	A+S

Error codes	
Events	
Code	**B15CE00**
Last quick test result	A+S
Current fault status	CURRENT and STORED

Environment Data

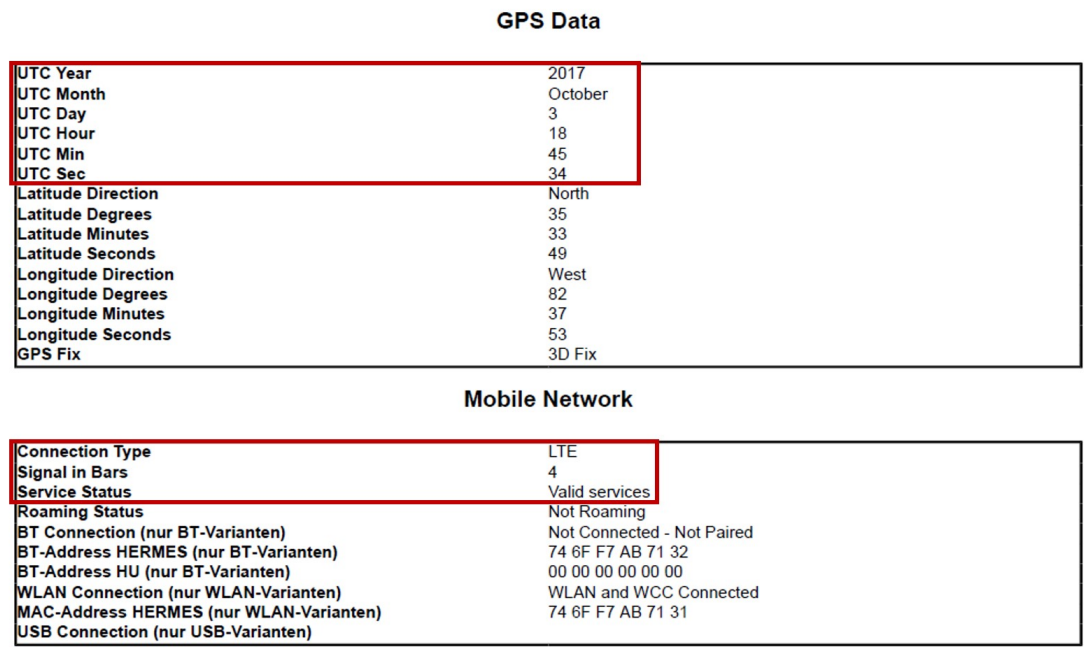
Internal Voltage	14
Battery Voltage	14
Ignition State	IGN_ON
Odometer	35
Internal Temperature	25
VIN Original (VIN aus SG)	WDC0G4K[redacted]
VIN Current (VIN aus Fzg)	WDC0G4K[redacted]

Provider

EUICC	89148000003421826566
ICCID	89148000003421826566
IMEI	359536063901003
IMSI	311480994196219
MSISDN	+14706313306
Operating Mode (Betriebszustand)	Provisioning Mode
Registration Error Status (Status d. Registrierung)	Other OTAR errors/reserved
Registration Process (Prozess d. Registrierung)	Not Active
Certificate Status (Status d.Zertifikats)	Regular certificate, file valid

03.10.2017 14:51:36	07/2017	WDC0G4K[redacted]
Copyright 1999 Daimler AG	253.949	Page '9' of '21'

GPS Data and Mobile Network information.jpg:



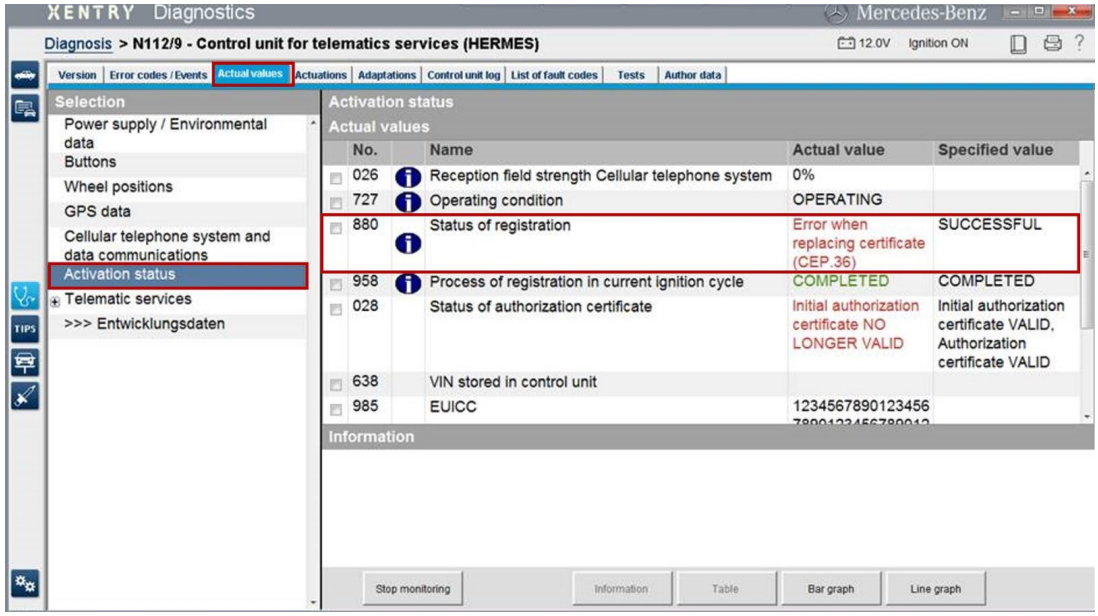
GPS Data

UTC Year	2017
UTC Month	October
UTC Day	3
UTC Hour	18
UTC Min	45
UTC Sec	34
Latitude Direction	North
Latitude Degrees	35
Latitude Minutes	33
Latitude Seconds	49
Longitude Direction	West
Longitude Degrees	82
Longitude Minutes	37
Longitude Seconds	53
GPS Fix	3D Fix

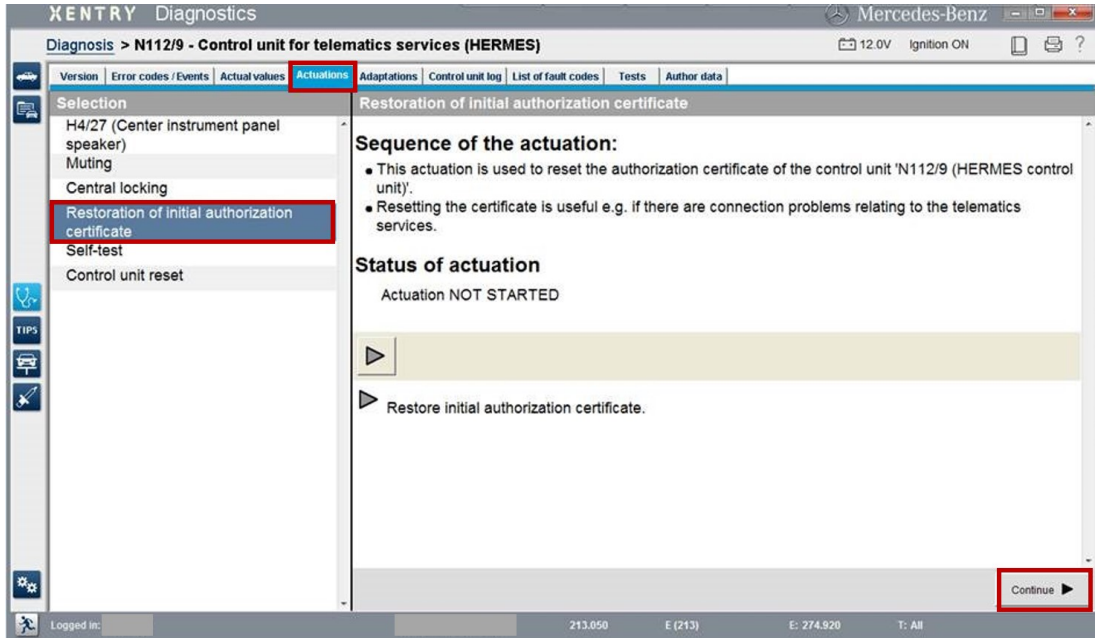
Mobile Network

Connection Type	LTE
Signal in Bars	4
Service Status	Valid services
Roaming Status	Not Roaming
BT Connection (nur BT-Varianten)	Not Connected - Not Paired
BT-Address HERMES (nur BT-Varianten)	74 6F F7 AB 71 32
BT-Address HU (nur BT-Varianten)	00 00 00 00 00 00
WLAN Connection (nur WLAN-Varianten)	WLAN and WCC Connected
MAC-Address HERMES (nur WLAN-Varianten)	74 6F F7 AB 71 31
USB Connection (nur USB-Varianten)	

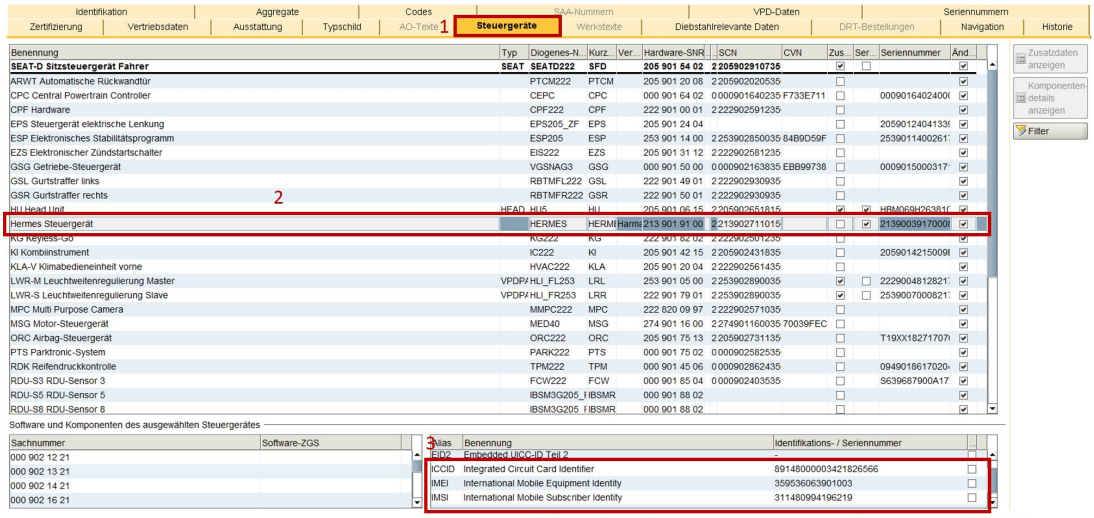
Status of registration in XENTRY Diagnosis.jpg:



reset initial authorization certificate of HERMES. jpg:



SIM Card Data in Vedoc.
jpg:



„Over the air Registration“ (OTAR) Process Overview

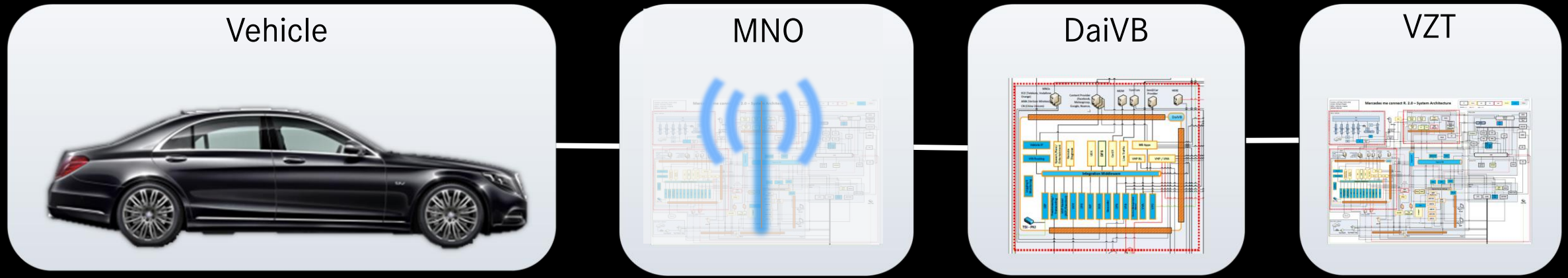
Simplified representation of the OTAR process
MB USA/CE, Jacksonville, October 4th, 2017

Mercedes-Benz
Das Beste oder nichts.

OTAR process overview

Preconditions	Registration at MNO	Certificate Exchange Protocol	Final Registration

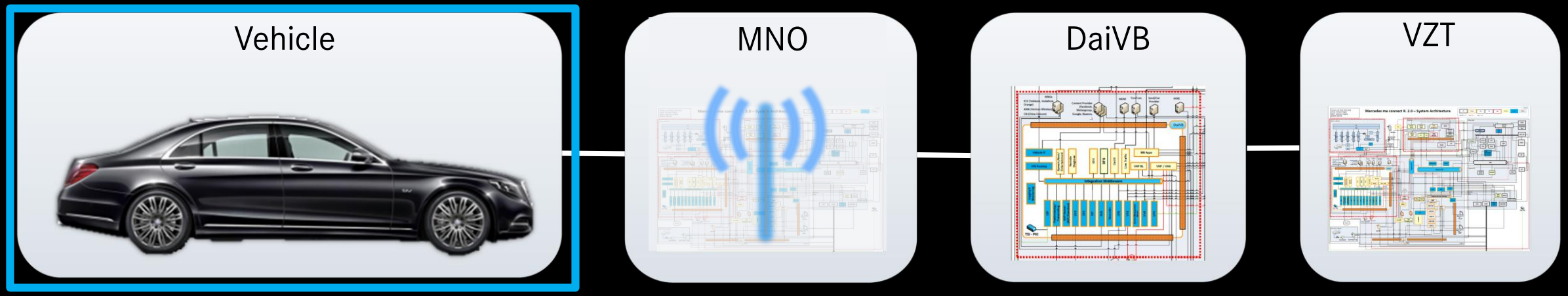
- There are several steps required for a successful OTAR
- The key players are the vehicle (Preconditions), the MNO (Mobile Network Operator - Verizon Wireless), DaiVB (Daimler Vehicle Backend) and VZT (Verizon Telematics)
- OTAR will start at VPC for new vehicles or after a change of HERMES
- OTAR attempts are always triggered by a key cycle (3 Retries within ~10 minutes)



OTAR process overview

Preconditions | Registration at MNO | Certificate Exchange Protocol | Final Registration

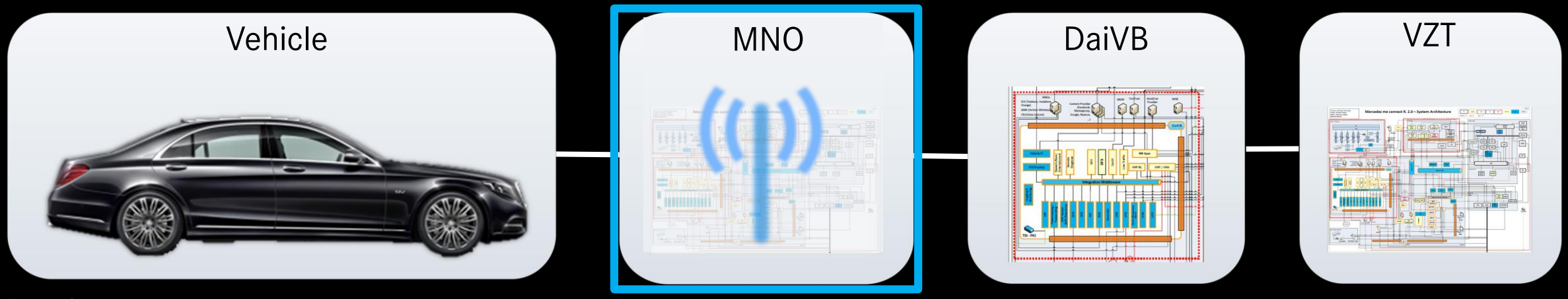
- HERMES control unit is in status “provisioning mode”
- Vehicle has proper GPS reception
- Vehicle has proper 3G/4G reception



OTAR process overview

Preconditions | Registration at MNO | Certificate Exchange Protocol | Final Registration

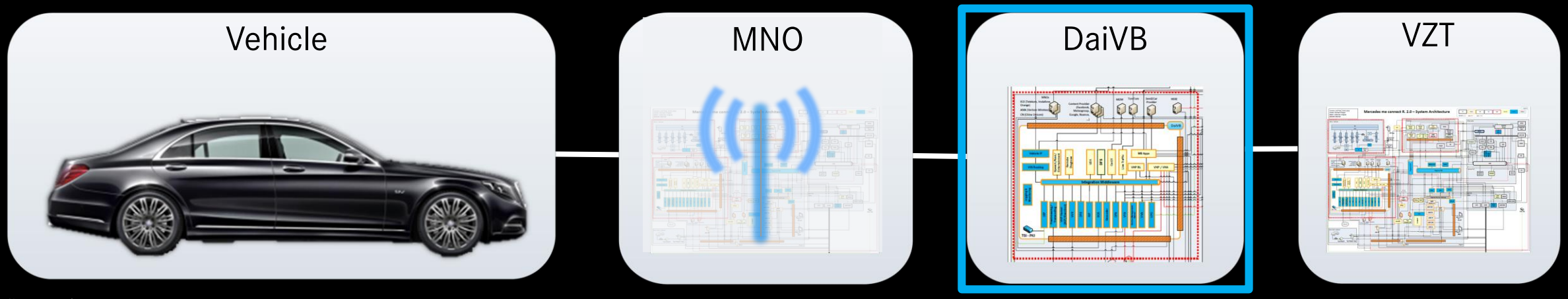
- Activate the internal SIM card
- Configure the right APN (Access Point Name)
- Assign and activate the MSISDN (telephone number)



OTAR process overview

Preconditions | Registration at MNO | **Certificate Exchange Protocol** | Final Registration

- Vehicle requests a valid certificate for communicating with the DaiVB
- DaiVB will check all necessary values in VeDoc (IMSI, ICCID, IMEI, Serial Number of Head-Unit)
- Only if the vehicle is known the vehicle will receive a valid authorization certificate



OTAR process overview

Preconditions | Registration at MNO | Certificate Exchange Protocol | Final Registration

- Add vehicle data to Daimler backend systems
- Activate “In-Service mode” in HERMES control unit
- Configure (activate / deactivate) mbrace services