Release Notes Programming

Passenger Cars

ISTA	4.28.1x
ISTA Service Data	4.28.12
ISTA/P	3.68.0

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1 General notes

With the launch of ISTA 4, the functionality for programming has been integrated in ISTA.

The following series can be dealt with using ISTA/P:

- E Series

The following series can be dealt with using ISTA 4:

- F, G and I Series

These Release Notes contain information for both programming systems.

The Release Notes list all known faults and faults that are currently still unresolved, with possible workarounds which are important for the Retailer Organisation. Please contact Technical Support if additional faults occur on the vehicle. In particular in the following cases:

- vehicle-related programming faults / encoding faults and activation faults
- functional faults on the vehicle

With ISTA 4, it is now also possible to send feedback relating to programming directly to BMW AG. Selecting the "Feedback" symbol (envelope symbol) displays the feedback screen with input boxes.

i	If a new fault pattern is included in a release, this is indicated in the heading with *** NEW ***. This is no longer indicated in the follow-up release.

2 Overview of the I levels contained

I levels newly added or updated in this ISTA version are marked in **BOLD**.

F, G, I series (ISTA 4)

Series group	I level
F001 (F0x, RR4, RR5, RR6)	**ISTA 4 - F001-21-03-520** ISTA/P - F001-20-11-540
F010 (F06, F1x)	**F010-21-03-520**
F020 (F2x, F3x, F80, F82, F83, F87)	**F020-21-03-520**
F025 (F15, F16, F25, F26, F85, F86)	**F025-21-03-520**
F056 (F39, F4x, F5x, F6x)	**F056-21-03-520**
S15A (G01, G02, G1x, G3x, RR1x, RR31, F90, F97, F98)	**S15A-21-03-520**
S15C (G08, G38)	**S15C-21-03-520**
S18A (G05, G06, G07, G14, G15, G16, G20, G21, G22, G28, G29, F40, F44, F91, F92, F93, F95, F96)	**S18A-21-03-525**
I001 (I01, I12, I15)	**I001-21-03-520**
RR21 (RR21, RR22)	**RR21-21-03-520**

I levels correspond to the ISTA Service Data version on the front page.

E Series (ISTA/P)

Series group	I level
E065 (E65, E66)	E065-17-11-545
E060 (E60, E61, E63, E64)	E060-16-11-500
E070 (E70, E71, E72)	E070-16-11-500
E89x (E81, E82, E84, E87, E88, E89, E90, E91, E92, E93)	**E89x-18-07-520**
R056 (R55, R56, R57, R58, R59, R60, R61)	**R056-17-03-504**
RR01 (RR1, RR2, RR3)	**RR01-20-11-500**

Info on the integration levels

i	PuMA measures or similar documents sometimes refer to an I level for the solution to a problem. In this case it is important to know which ISTA release contains the I level.

The name of the I level indicates, if it

1. is contained in the current ISTA release,

2. was already contained in a previous ISTA release or

3. will be provided in a future ISTA release.

Series group e.g. **F020** - year **2017** - month (**3, 7 or 11**) - version (**>= 500**)

Assuming the current release contains:	S15A-17-03-506
Then the following I level is not available yet:	S15A-17-07-501
Then this I level was already contained in an older ISTA release:	S15A-16-11-503
Then this I level was already contained in an older ISTA release:	S15A-17-03-505

3   Innovations

The following interesting innovations are included, amongst others.

ISTA 4

New models can be dealt with

Benefit: The new vehicles G23, G80, G82 can be dealt with.

New protection against tampering - control unit encoding

In G05, G15 and subsequent vehicles, the HU-H3 (formerly MGU), TCB, RSE and instrument cluster control units are linked together. This should prevent tampering with vehicles.

If one or more of the components are exchanged, the connection must then be re-established.

In order to re-establish the connection, an electronic certificate must be created in a BMW backend and imported into the vehicle.

i	The control unit validation can only be performed after the component protection has been deblocked.

This process can **take place automatically** with ISTA 4.16.1x once the affected workshop systems (ISPI Admin Client) are correctly configured and there is an online connection to the BMW backend.

The required settings for the ISPI Admin Client are described in the ISPI Administrator Manual (Application: ISPI Admin Client (administration area) / ISPI Admin Client: Functions / ISPI Admin Client: Certification management).

If the prerequisites for the automatic process do not exist, technical support can help to manually validate the control units.

The process is documented in the ISTA user guide.

The user guide can be opened in ISTA using the "?" button.

3.1 Innovations – Locking Configuration Switch

With the launch of the BMW iX3 (G08 Battery Electric Vehicle), control units are introduced that meet increased security requirements with regard to manipulation (SME, EME, CCU).

With the following vehicle models in 2021, the number of control units will increase further.

The Locking Configuration Switch (LCS) will become relevant when an affected control unit is replaced. As in the past, the software functions of a new part control unit will be adjusted to the vehicle, national-market version and existing optional equipment, etc. by means of the encoding. In future, some of the software functions will be protected by the Locking Configuration Switch.

To adapt the new part control unit in case of Locking Configuration Switch, a kind of activation code, the so-called Secure Token, is required. This token is requested by a BMW back end and written into the control unit by ISTA.

Automatic process

This process is performed **automatically** by ISTA once the affected workshop systems (ISPI Admin Client) are correctly configured and there is an online connection to the BMW back end.

Operations	Vehicle information	Vehicle management	Service plan	Favourites	Workshop/ Operating fluids	Measuring devices
Repair/ Maintenance	Troubleshooting	Service functions	Software update	Control Unit Replacement	Vehicle modification	

Before Replacement	After Replacement		

Short name	Description	Replaced	
ACSM	Crash safety module	☐	▲
AHM	Trailer module	☐	
AL	Active steering	☐	
AMPT	Top HiFi amplifier	☐	
BDC	Body Domain Controller	☐	
CON	Controller	☐	
DDE	Digital diesel electronics	☐	
DSC	Dynamic Stability Control	☐	
EDC	Vertical Dynamics Management	☐	
EGS	Electronic transmission control	☐	
EHC	Electronic ride height control	☐	▼

Hint: To finalize the replacement of the already installed ECU, select the corresponding control unit.

Display measures plan

To do so, select the corresponding control unit in the "After Replacement" tab and then execute the measures plan.

	To retrieve Secure Token, ISTA must be enabled for the application of vehicle certificates.
i	The required settings for the ISPI Admin Client are described in the ISPI Administrator Manual (Application: ISPI Admin Client (administration area) / ISPI Admin Client: Functions / ISPI Admin Client: Certification management).

Manual process

If the prerequisites for the automatic process do not exist, the secure token must be inserted with the assistance of technical support.

The process is similar to the control unit validation.

If ISTA could not automatically import the LCS, a warning message will be displayed.
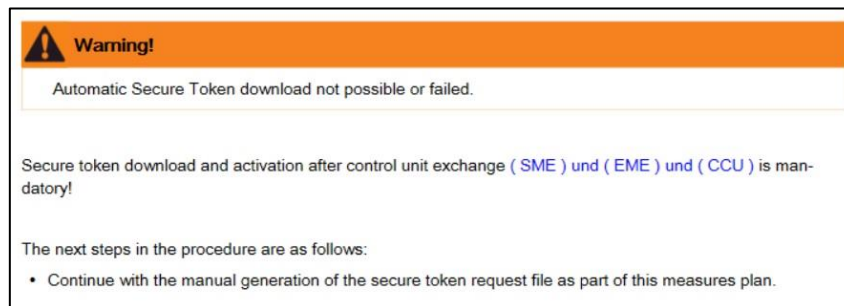
By clicking on the "OK" button, ISTA generates the required TokenRequest_VIN_xxx.json file and opens a file dialogue to save it. The file must be sent to technical support later via PuMA or TSARA.
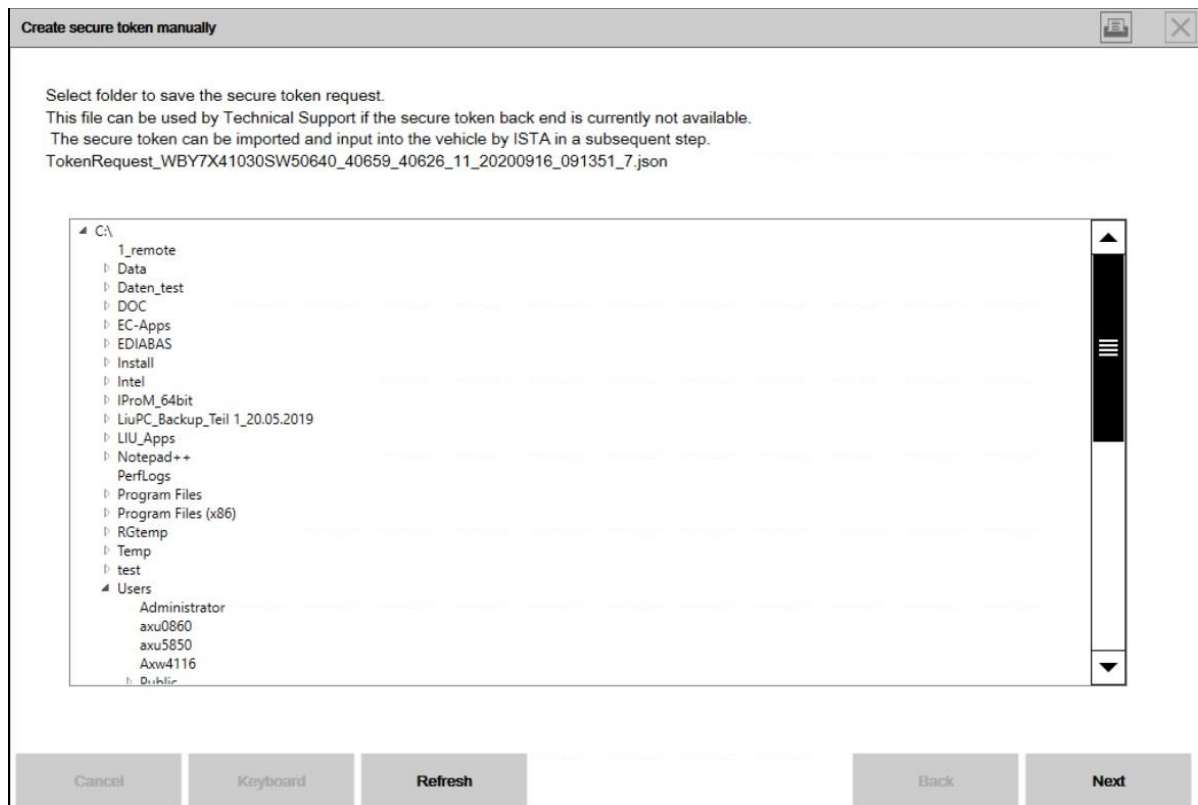
The session can be terminated if necessary.

PuMA/TSARA

Please send the saved json file to Technical Support attached to a PuMA/TSARA message.

Technical Support will send you back a validated version of the file as file type json for the affected vehicle. This is subsequently required by ISTA.

i	For transmission via PuMA, the json file must be archived in a ZIP file.
	The validated file from Technical Support must be unpacked again before importing it into ISTA.

Establish connection to the vehicle. In order to import the json file, select "Import secure token" in the "Immediate actions" tab.
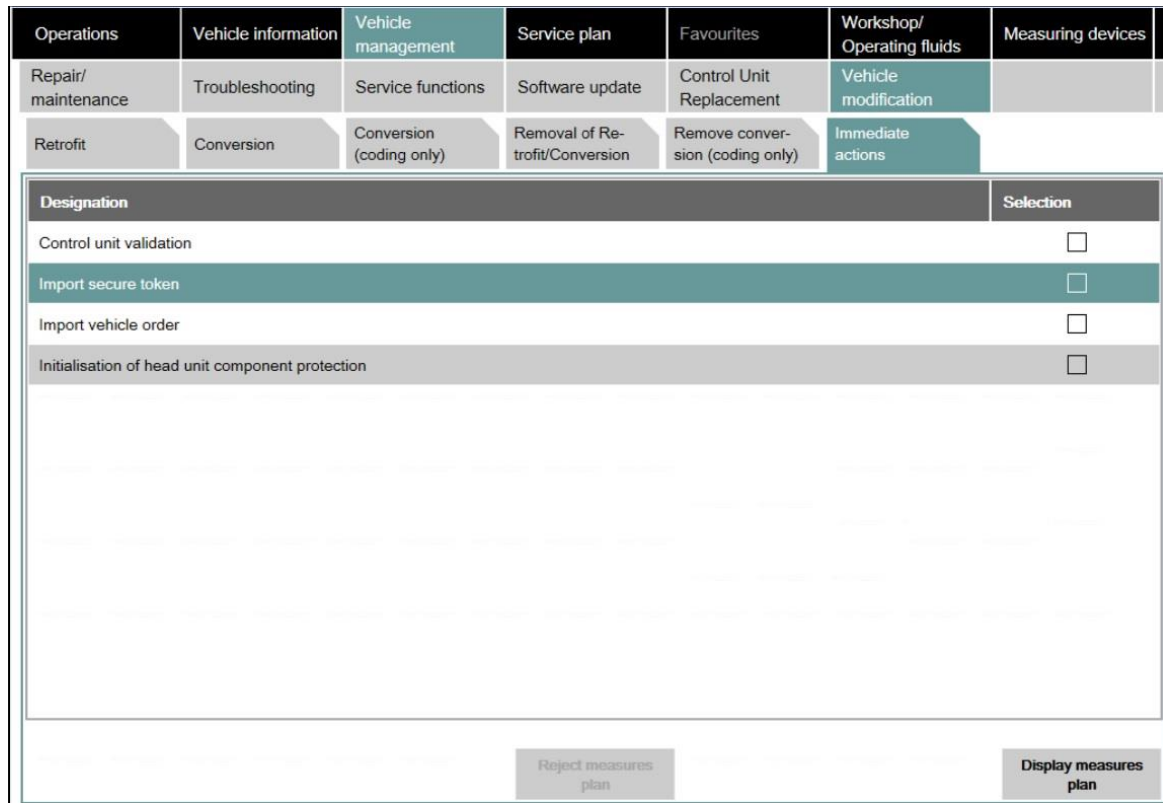
Select the TokenRequest_VIN_xxx_response.json file in the file dialogue and confirm.
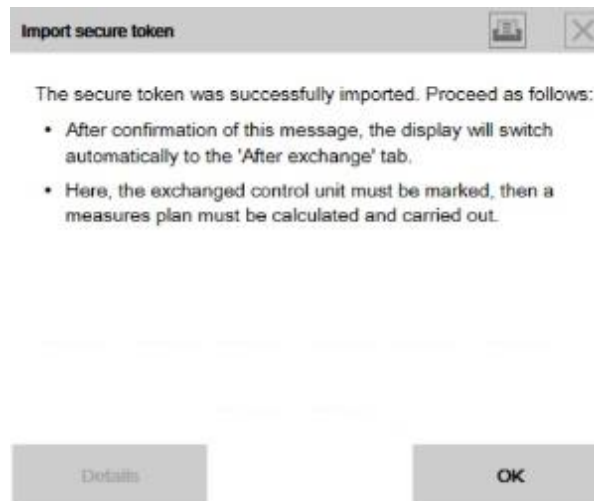
If the TokenRequest_VIN_xxx_response.json file has been read successfully, ISTA automatically switches to the control unit exchange / after exchange tab.

There, mark the affected control unit as exchanged. Calculate and execute the measures plan.

3.2 New features - automatic deblocking of the component protection

Automatic deblocking of the component protection when replacing the BDC

The activation code required to unlock the component protection is generated when a replacement part BDC is ordered. After installation of the new part BDC and its instruction "after exchange" in ISTA, the activation code is downloaded and activated.

The support of the Technical Support is no longer required.

The automatic process only works for replacement parts BDC ordered via ATLAS (Advanced ParTs Logistics in AfterSales).

This includes the following countries/markets as of 2020:

Austria	Luxembourg
Belgium	Malaysia (end of 2020)
Denmark	Netherlands
Germany	Norway
Finland	Portugal
France	Switzerland
Italy	Spain
Japan	Sweden
Canada	USA

In all other countries, the activation code for deblocking must still be provided by Technical Support.

Process for deblocking component protection

The component protection is extended to the vehicles G11, G12 version as of 07/2015 and F15, F16, F85, F86 with version as of 07/2016.

As well as the HU-H2 (formerly NBT Evo), the component protection is also active since 3/2018 for the HU-B2 (formerly Entry Evo) and also in the HU-H3 MGU since 7/2018.

The manual process is identical for the control units and is documented in the ISTA user guide.

The user guide can be opened in ISTA using the "?" button.

4   Known faults F, G, I Series

4.1 * NEW * Top View (360) - Checking the display in the CID

Fault description:

After programming, a check note appears regarding the display of the parking view.

Model series affected:

Vehicles G01.

Measure / Workaround:

The check is not necessary and can be ignored.

Fault corrected by:

Currently open

Affected application:

ISTA 4

4.2 KAFAS does not respond any more after programming

Fault description:

After programming, the KAFAS control unit no longer responds.

Model series affected:

G05, G07, G14, G15, G20, G29 vehicles with I level 18-11-5xx.

Measure / Workaround:

1) Let vehicle go to sleep. KAFAS then responds again.

2) Start new ISTA session, calculate and carry out measures plan.

Fault corrected by:

Currently open

Affected application:

ISTA 4

4.3 Notes on individual campaigns

Fault description:

If necessary, after vehicle programming, actions to restore individual data are completed with the result Warning, and ISTA reschedules them in the final work.

This behaviour can also occur if no control unit has been replaced.

The background is the update of the programming functions contained in ISTA for future derivatives.

Model series affected:

All series

Measure / Workaround:

The operations relating to the individual data can be ignored.

Fault corrected by:

Currently open

Affected application:

ISTA 4

4.4 RAM - activation code campaign when programming to 20-03 or more recent

Fault description:

When programming to S18A-20-03-5xx or more recent, an activation code campaign for the RAM control unit is scheduled.

Model series affected:

Vehicles G0x, G1x, G2x, F40, F44, F9x.

Measure / Workaround:

Import the activation code into the vehicle

Fault corrected by:

Affects vehicles with build level before March 2020.

Affected application:

ISTA 4

4.5 G05, G06, G07 - activation code campaign when programming to 19-11 or more recent

Fault description:

When programming to S18A-19-11-5xx or more recent, an activation code campaign for the VIP control unit is scheduled.

Model series affected:

G07 and G05, G06 vehicles with special equipment 2VR, 2VW, 2VF.

Measure / Workaround:

Import the activation code into the vehicle

Fault corrected by:

Affects vehicles with version before November 2019.

Affected application:

ISTA 4

4.6 High-beam Assistant - activation code campaign when programming to 19-07 or later

Fault description:

When programming to S18A-19-07-5xx or S15A-19-07-5xx or later, an activation code campaign for the KAFAS control unit is scheduled.

The reason is that the function is activated retrospectively for the customer.

Model series affected:

G05, G07, G14, G15, G20, G29 and G11, G12 vehicles, as of life cycle impulse with special equipment 5AC.

Measure / Workaround:

Import the activation code into the vehicle

Fault corrected by:

Affects vehicles with version before July 2019.

Affected application:

ISTA 4

4.7 HU-H3 (Head Unit High 3) / RSE control unit cannot be encoded

Fault description:

Encoding the HU-H3 MGU-01 or RSE fails repeatedly.

Model series affected:

G0x, G1x, G2x, F4x, F9x vehicles with MGU-01 control unit

Measure / Workaround:

Assign HU-H3 control unit manually for programming in ISTA.

Fault corrected by:

Currently open

Affected application:

ISTA 4

4.8 F0x - programming not possible, control units are requested for installation

Fault description:

ISTA 4 instructs one or several of the specified control units for installation, although they are already fitted in the vehicle.

Model series affected:

Vehicles F01, F02, F03, F04, F07 with production date until March 2011 and the following control units:

- TEL-ULF260, TEL-ULF2HI, TEL-E15GSM

- MMC-01, MMC-01-FIRMWARE

- AMP-HIFI01, AMP-TOP70

- SDARS-01

- LRR-01

Measure / Workaround:

The vehicle can be dealt with using ISTA/P.

AN IBAC activate code is required for this. This can be requested from technical support.

Fault corrected by:

Currently open

Affected application:

ISTA 4

4.9 ISTA 4 - Information on BDC exchange or programming cancellation gateway control units

i	The exchange of the BDC is again supported with ISTA 4.09.1x.

Fault description:

When carrying out the special measures plan in the event of a BDC exchange, or due to a programming abort of the gateway control unit, the following pop-ups appear repeatedly:

- Requesting that the ignition be switched on

- SYS-0012 Identification Error

- Connection to control unit Unknown interrupted

Model series affected:

Vehicles with the control units FEM or BDC.

Measure / Workaround:

Confirm pop-ups until the special measures plan has been carried out.

Fault corrected by:

Currently still open.

Affected application:

ISTA 4

4.10   Invalid IP address for BN2020Ethernet control units

Fault description:

During vehicle management, one of the following Ethernet-capable control units should be programmed:HU-H, RSE, ATM, KOMBI, ACC, ICAM, KAFAS

At the start of the session, a note appears indicating that the IP address is invalid. The Ethernet programming can fail if the following steps are not followed:

Model series affected:

All F, G, I Series

Measure / Workaround:

1.   End ISTA session

2.   Carry out a battery reset

3.   Restart the session

4.   If fault message still appears: Check the Ethernet wiring in the vehicle using the wiring diagram in ISTA

5.   If fault message still appears: Contact Technical Support

Fault corrected by:

Currently still open

Affected application:

ISTA 4

5 Known faults E Series (ISTA/P)

5.1 Update from version 3.67.1 to a higher version fails

Fault description:

An error occurred while downloading the "BMW_ISPI_ISTA-P_DAT_3.6x.x.xxx.istap" file.

Model series affected:

E series.

Measure / Workaround:

This is a known problem with automatic update.

Proceed as follows:

Copy the ISTA/P installation files for your ISTA/P version from the central data storage to the same local folder on the affected device:
"BMW_ISPI_ISTA-P_SYS_[Version].exe"
"BMW_ISPI_ISTA-P_DAT_[Version].istap"
Start the installation manually: Right-click "BMW_ISPI_ISTA-P_SYS_[Version].exe" and select "Run as administrator".
If this does not solve the problem, submit a support ticket via the ISPI Cockpit.

Source: Compass #8235

Fault corrected by:

Expected 3.68.1

Affected application:

ISTA/P

5.2 Vehicle order import fails due to antivirus software and firewall

IMPORTANT!

In individual cases, the vehicle order-import fails because of installed security software (antivirus software or firewall). After the session starts, the vehicle identification with ISTA/P fails. (BMW-internal locations are not affected by the fault)

Measure / Workaround:

For more details, see ISPI Dealer Self Support entry 51219.

Affected application:

ISTA/P