SI B09 02 18
Programming/Coding

November 2018
Technical Service

NEW ECU VALIDATION NEEDED AFTER REPLACING CERTAIN CONTROL MODULES

MODEL

G05 (X5)	G15 (8 Series Coupe)

SITUATION

With introduction of the new Headunit HU-H3 (MGU Media Graphics Unit) we have a new way protection mechanism against tampering.

If one or more of the following components MGU, TCB Telematic Communication Box (ATM-02), RSE Rear Seat Entertainment or KOMBISP18 instrument cluster needs to be replaced the secure connection between them must be re-established.

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

CAUSE

After the replacement of one of the mentioned Modules the Control Module needs a valid certificate in order to communicate with the other Modules.

CORRECTION

With introduction of ISTA 4.14.1x the certificates can be created in manual steps. (See attachment)

PROCEDURE

Refer to attachment.

ATTACHMENTS

View PDF attachment **B090218_Attachment**.

New protection against tampering - control unit encoding

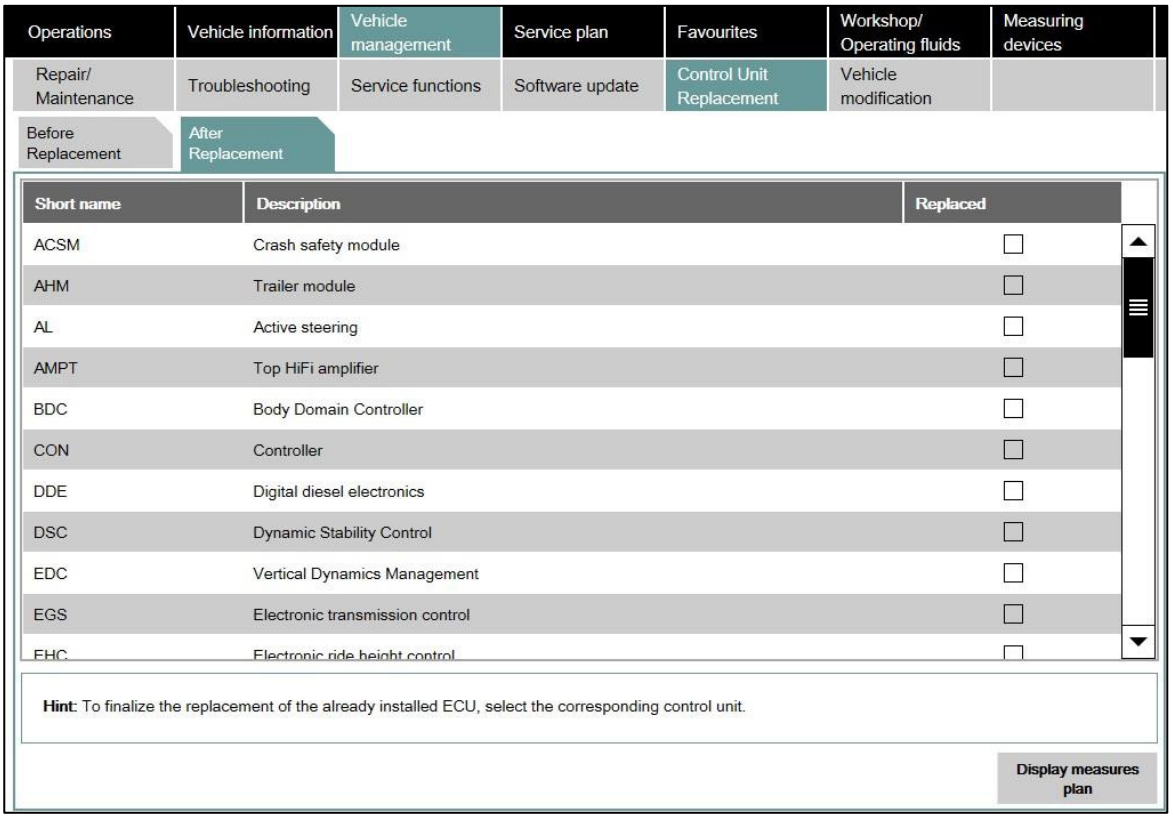
In G05, G15 and subsequent vehicles, the HU-H3 (formerly MGU), TCB, RSE and instrument cluster control units are linked together. This should prevent tampering with vehicles.

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

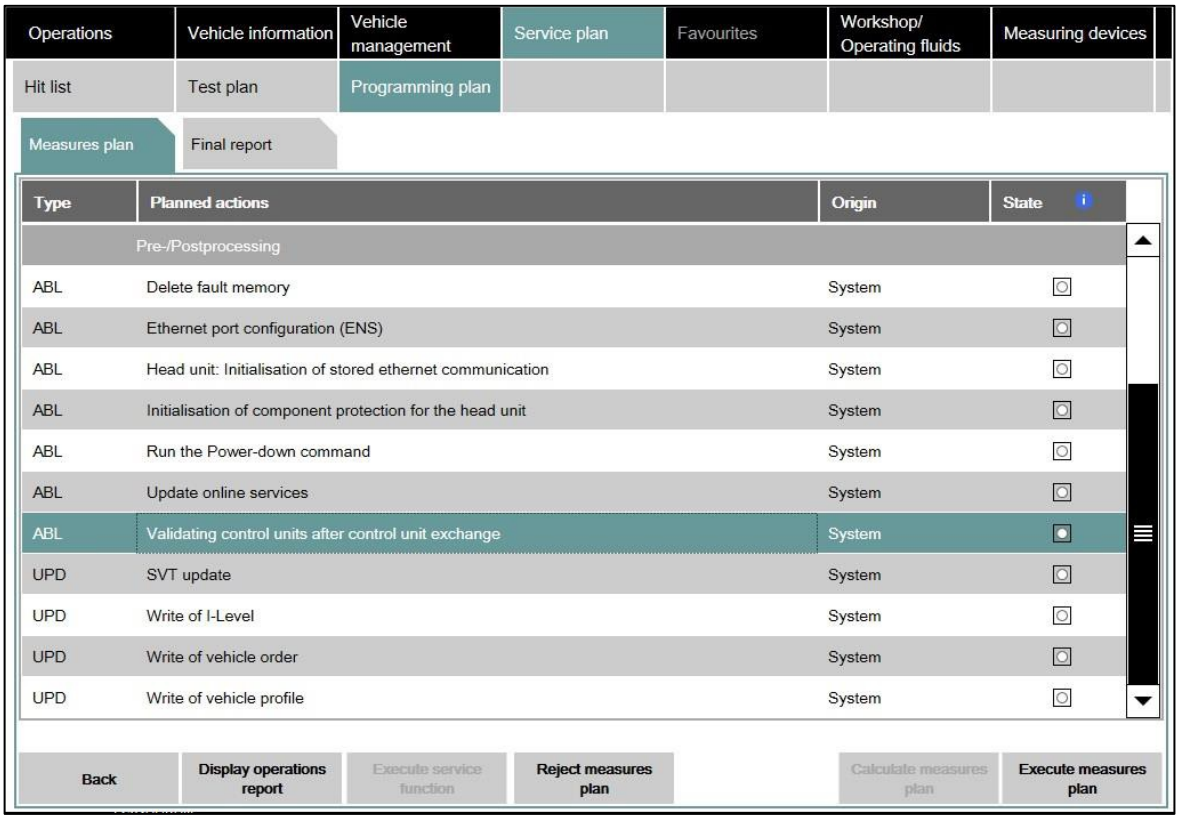
In order to re-establish the connection, an electronic certificate must be created in a BMW backend and imported into the vehicle.

The manual process is described below:

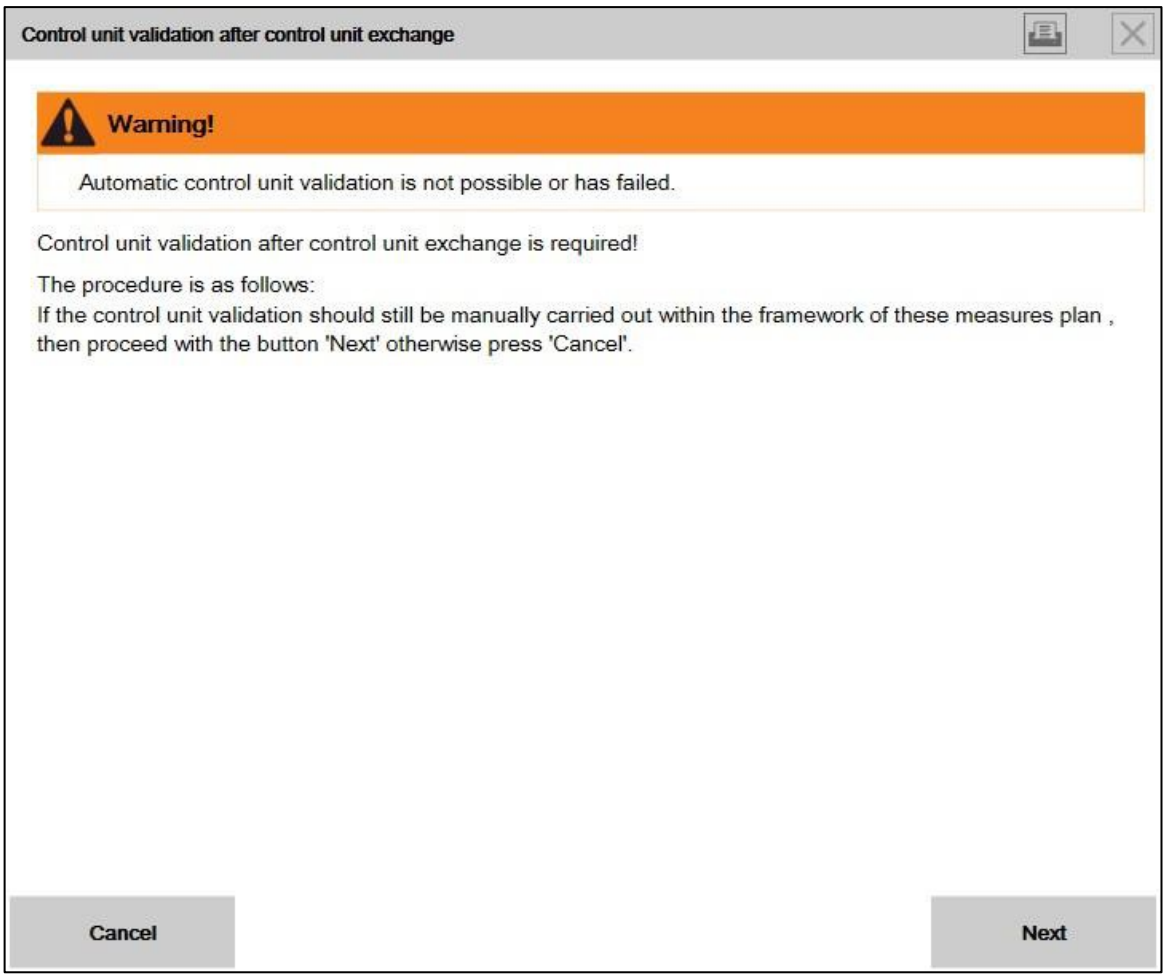
1. Select the exchanged control unit in the "After Replacement" tab and then calculate the measures plan.



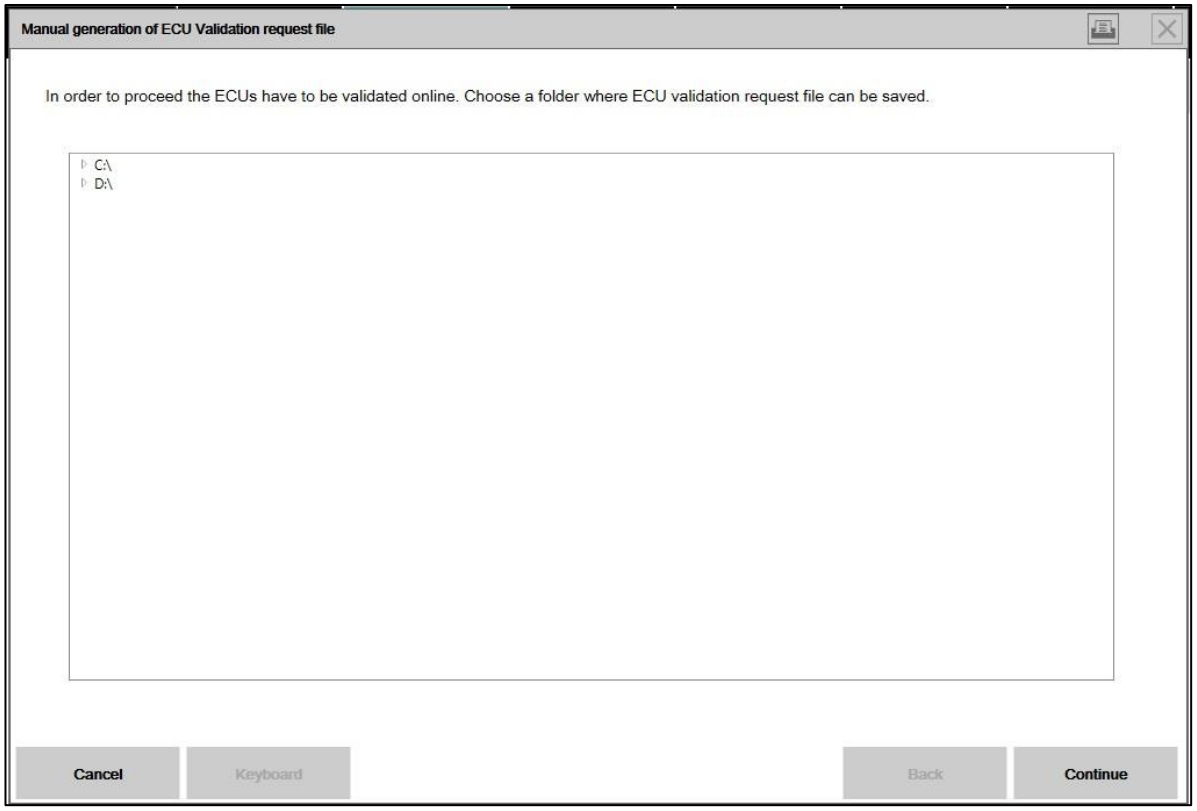
Then ISTA will automatically include the control unit validation in the measures plan.



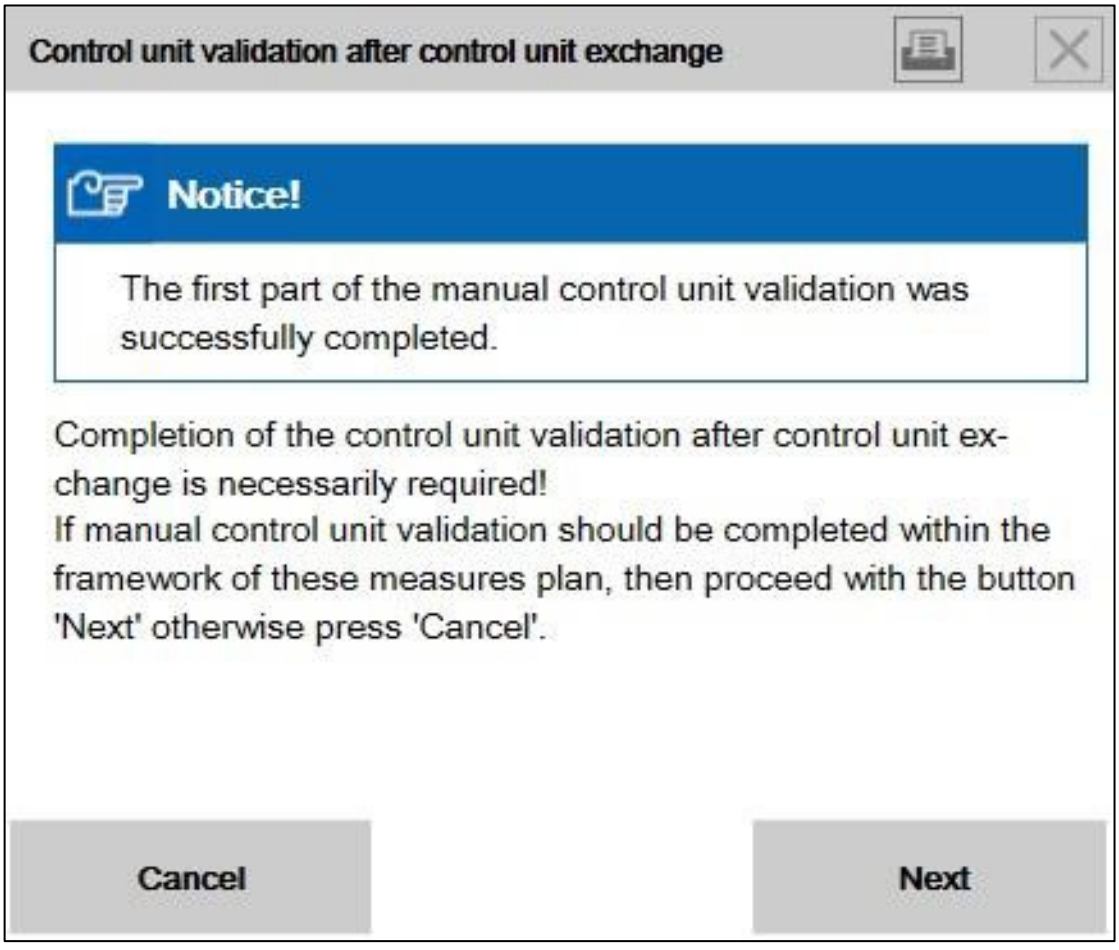
2. If ISTA cannot carry out automatic validation, a warning about the absence of control unit validation is displayed.



3. By clicking on the "Next" button, ISTA generates the required **ValidationRequest_VIN_xxx.json** file and opens a file dialogue to save it. The file will be loaded via DCSnet later.



4. ISTA displays a note confirming that the file was successfully saved. At this point, you can exit the process using the "Cancel" button. After processing the measures plan, the session can be closed.

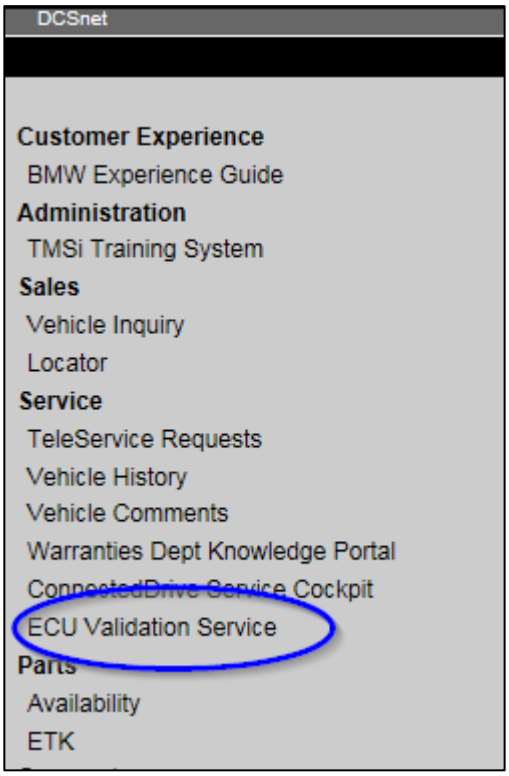


The vehicle must not be handed over to the customer without successful control unit validation.

Various vehicle functions are not available without control unit validation, corresponding fault memories are set.

DCSnet

5. Open DCSnet and select “ECU Validation Service” under “Service”.

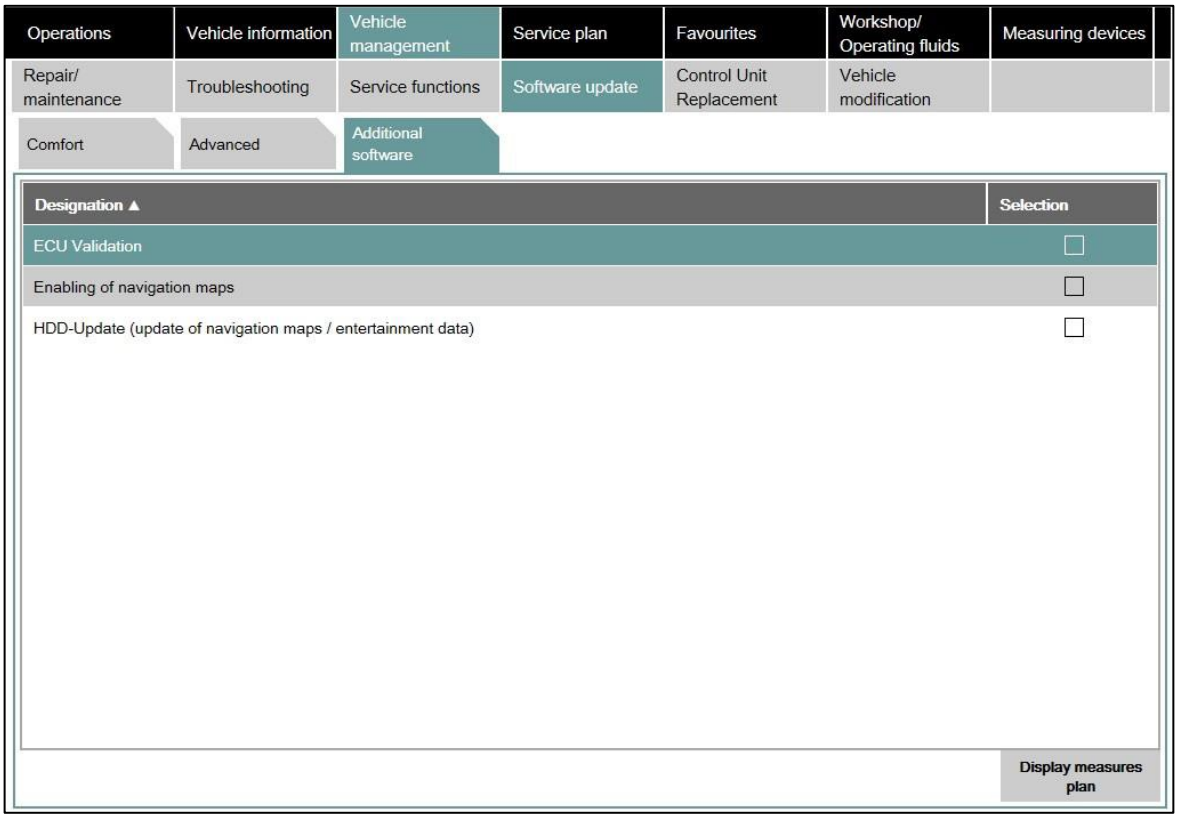


6. Upload the previously downloaded **ValidationRequest_VIN_xxx.json** file

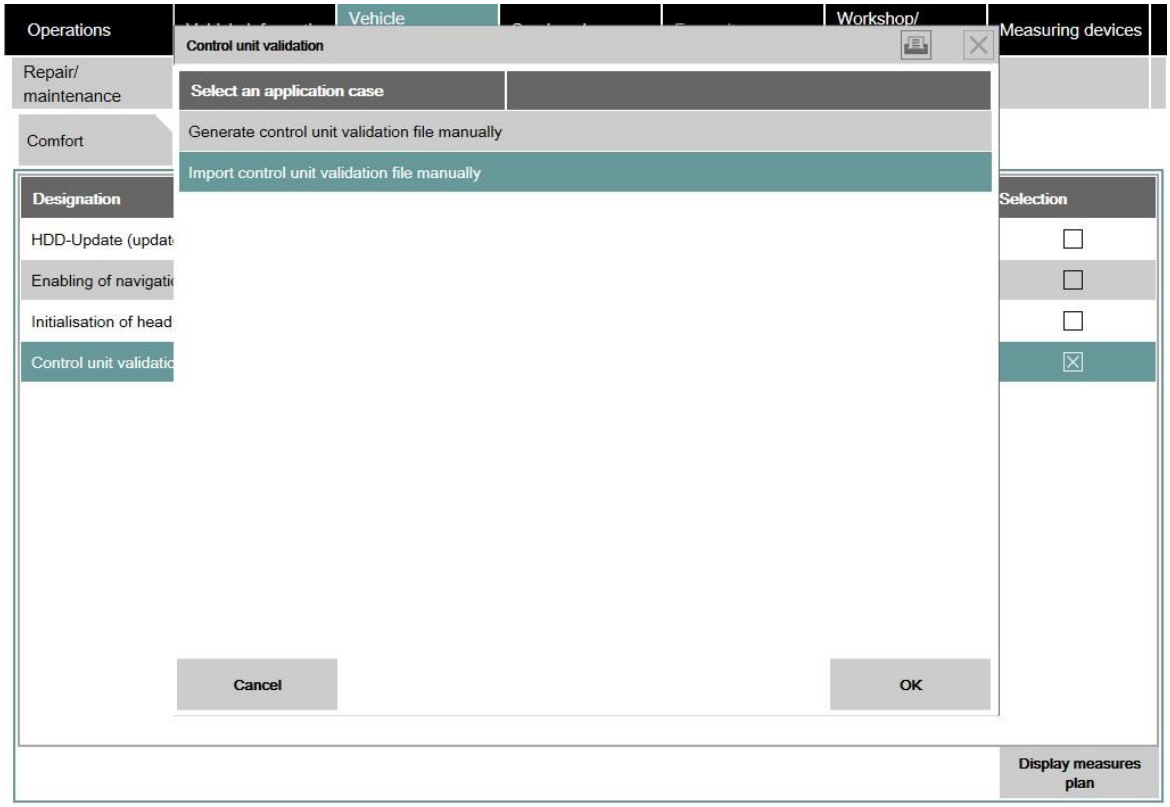
7. After a few seconds, a new **ValidationRequest_VIN_xxx_response.json** file will be offered for downloading. This is subsequently required by ISTA.

Start a new ISTA session

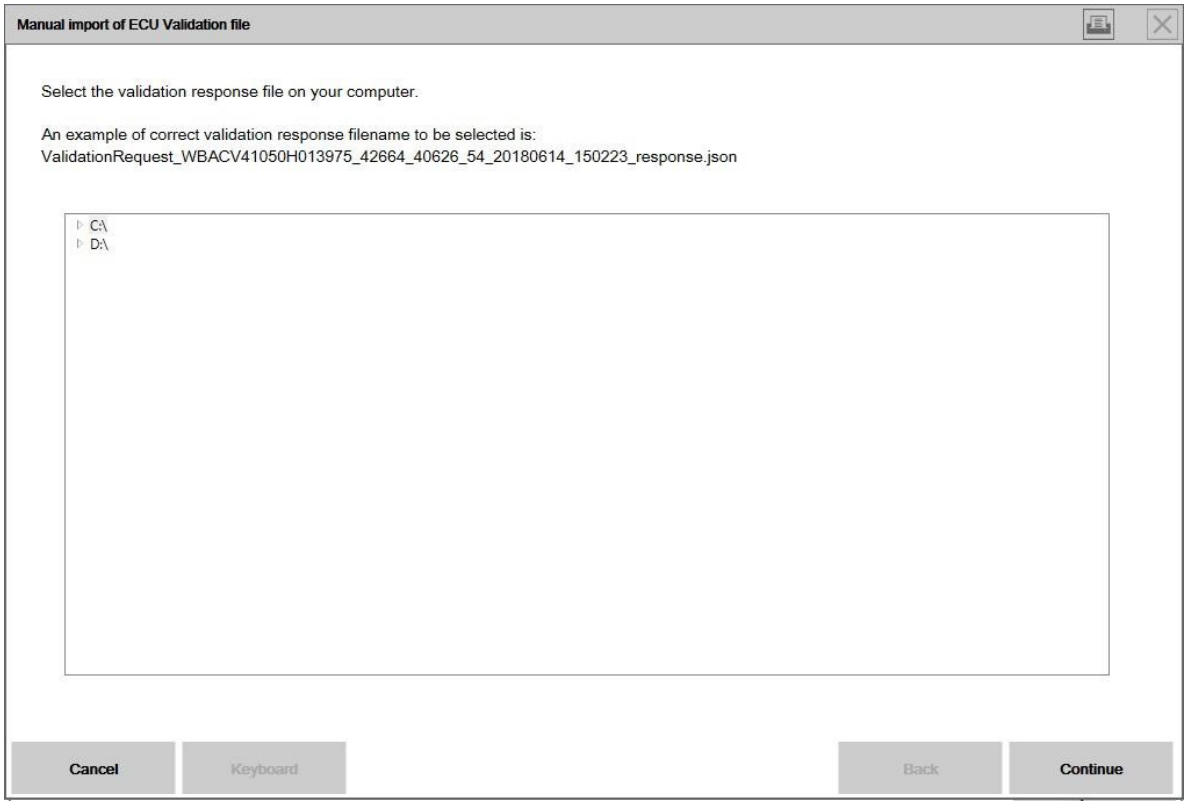
8. In order to import the json file, select "ECU Validation" in the "Additional Software" tab.



9. In order to import the validated file, select "Import control unit validation file manually" and confirm with "OK".



10. Select the file ValidationRequest_VIN_xxx_**response**.json in the file dialogue and confirm with "Continue".



11. The file is written into the vehicle and checked.

	Finally calculate the diagnosis test plan and work through the detected service functions.