Car-Pass certification for DMS software

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Car-Pass attaches the utmost importance to the quality of the data communicated by the enterprises in the car sector in the context of their legal obligations imposed by the Information Provision Accompanying the Sale of Second-hand Vehicles Act of Belgium of 11 June 2004. After all, any errors will later end up on the Car-Pass certificate for the vehicle and will cast doubt on the correct kilometre reading with a potential buyer. In the worst case, this could result in a sale falling through.

Correcting errors years after the entry is a difficult task, both for Car-Pass and for the enterprise that has communicated the incorrect odometer reading. Prevention is therefore better than cure. In practice, it appears that many errors can be avoided at the source if the software used by the enterprise is based on a sound design. That is why Car-Pass has set a number of criteria that DMS software must meet in order to guide the user as much as possible when transferring odometer readings, thereby helping the avoidance of errors. If the software meets these requirements, it may carry the "Car-Pass approved DMS" label.

Request for certification

Software developers of DMS software can request certification of their software via email to supportIT@car-pass.be. The following information must be included with this application:

- Company details of the software developer including company number
- Name and contact details of the manager
- Commercial name of the software
- Brief description of the functionalities and operation of the software
- Version of the software for which certification is requested
- Current list of enterprise numbers and Car-Pass user codes of the companies from the automotive sector that already use the software (including older versions).

Necessary requirements for performing the tests

In order to be able to carry out the tests, the requirements set out in Appendix 1 must be met.

Pre-requisites for success

In order to pass the certification process, a favourable result must be obtained after completing the test procedure described in Appendix 2.Car-Pass vzw is at liberty to change these criteria. The existing certifications will then remain valid, but new applications will always have to meet the most current criteria.

Once DMS software has successfully completed the certification process, Car-Pass will inform the software developer about this.

Duration of the certification

The certification is granted for a period of 3 years.3 months before expiry of the validity period, the software developer can request an extension. In doing so, another test will be carried out to verify whether the software meets the criteria applicable at that time.

If the software developer no longer supports the certified software or if the developer makes changes that it suspects will affect the criteria listed in Appendix 2, it will immediately inform Car-Pass of this. Car-Pass reserves the right to withdraw the certification in such cases or to carry out re-tests if necessary in order to maintain the certification.

If Car-Pass suspects that the software that has been distributed does not in practice conform with the tested version or no longer satisfies the tests carried out at the time of certification, Car-Pass will inform the software developer accordingly. The software developer then has 2 weeks to send its response together with its reasons. In the absence of an adequate response, Car-Pass has the right to withdraw the certification or to demand new tests to maintain the certification. Car-Pass will inform the software developer about this.

Use and mention of the title "Car-Pass approved DMS"

The software developer of the certified software may use the term "Car-Pass approved DMS" in its (commercial) communication. When using the Car-Pass logo, it may only display the official Car-Pass logo as stated in appendix 3, but may not display any variants or other colour combinations.

Car-Pass will present a list of all certified DMS on its website, stating the commercial name, version, name of the software developer and expiry date of the certification. After the expiry date has passed, then the DMS will be taken off the list.

Appendix 1 - Requirements for performing the tests

The certification process consists of 2 steps:

1.   Testing the application in the test environment:

The DMS vendor preferably provides Car-Pass with a link to their test environment with a test user account so that they can already thoroughly test the test application.

The DMS vendor demonstrates the execution of the tests below. This can be done in a team meeting or on the premises of Car-Pass. Car-Pass can arrange for the DMS vendor to set up a VPN tunnel on our premises.

2.   A representative sample of the tests will be repeated at a garage that uses the software at production level.

Requirements for carrying out step 1

1) Fast internet connection
2) Ability of Car-Pass employees to set up a VPN connection (if the test must be carried out on location, by way of exception)
3) User code, password of the test environment must be known
4) Availability in the local system of a number of VIN, which are sent in advance by Car-Pass
5) Test vehicles and certain kilometre readings must be created in the system by the person applying for certification
6) The source code must be available to Car-Pass, who must be able to consult it
7) Presence of IT professional from the DMS supplier
8) Tests are followed live by Car-Pass employee(s)
9) The version number of the software must be unambiguously stated

Requirements for carrying out step 2

1) Fast internet connection and setting up VPN connection should be possible.
2) User code, password of the user must be known
3) In the local system a number of VIN must be available, which can be used to send data to Car-Pass.
4) Presence of IT professional from the DMS supplier
5) Tests are followed live by Car-Pass employee (s)
6) The version number of the software must be unambiguously stated

Appendix 2: Testing

In order to succeed, the DMS must comply with all the criteria except for the optional ones. However, if the DMS contains an optional functionality, it has also to comply with the criteria listed under this item. If a test cannot be performed, this is equivalent to a failed test on the criterion.

Documentation is available at https://www.car-pass.be/nl/professioneel - section technical specifications

- Inflow process specification (latest version at the time of testing)

- Requirements "Car-Pass approved DMS"

1) Transfer of the data

The DMS must, as stipulated by law, be able to send the data to Car-Pass when the vehicle is still in the company, regardless of the final closing of the file or the invoicing.
The DMS supplier must be able to demonstrate that the data is transferred in one of the following ways
a) Automatic transfer (automatically after entering data on, for example, a work order and without the user having to explicitly press a button).
b) Manually, with installation of the necessary guarantees (warnings, reminders, etc.) that the data is being sent before the vehicle file is closed or before the vehicle leaves the repairshop.

If the data can be kept as a batch until the user presses a button for the data to be sent = FAIL
Batch transfer as primary option = FAIL

2) Checks to ensure correct transfer and subsequent receipt by Car-Pass

The DMS system must contain the necessary checks to verify whether the data has actually been sent to Car-Pass and whether Car-Pass has received it properly.

(see Chapter 5 – Web Services van de Inflow Process Specifications (IPS))

It must be possible to demonstrate the following elements (test and in case of doubt check source code)

1) In the first phase of the web service, Car-Pass sends back a requestID.
   Is this requestID captured and stored, so that this requestID can be used even after restarting the PC/server?
2) Before launching the requestOdometerReadingStatus, is there a delay time of at least 1 second?
3) Is there an adequate strategy to retrieve the data when the requestOdometerReadingStatusResponse is equal to 'ONGOING' (see IPS 3.4)?

4) Has the requestOdometerReadingStatusResponse been captured so that any issues can be corrected? (see point 4 corrections)

5) In case the data cannot be sent for a certain period of time due to e.g. technical reasons, it has to be saved and the user has to receive a warning. After resolving the issues, the user and/or the DMS vendor should be able to send all overdue data with the correct date of operation.

3) The DMS displays the error messages with the correct problem number, issue type and description

See list errors IPS 6.1

Test: The DMS vendor must enter a number of pre-set data that will generate a number of representative issues or problems. These will be used to evaluate the following criteria. This is checked on the basis of existing error messages in the system and by entering a pre-set dataset.

In the DMS system, the outstanding problems must be visible, showing the correct problem number (issue ID), the error code (issue type) and the description of the problem.

4) The DMS allows corrections to be made

See IPS 5.2.1.2

The system captures the issue ID's and allows corrections to be made.

Corrections shall be understood to mean

- Modifying the original km, VIN and/or date based on issue_ID with dataTypeId=120 or 121.
- Confirming as correct the original entry that did cause an issue, based on issue_ID and dataTypeId =080.
- Closing open issues without modification based on issue_ID and dataTypeId=80

If the input data has caused more than one issue, then all related issues will be closed when one of them is corrected. If the garage sends a correction to Car-Pass, the company's local database must be updated accordingly. The feedback on this correction will be loaded correctly.

The non-correctable issue types (see IPS 6.2) will be shown but must be closed automatically.

Corrections with dataTypeId=120 or 121 where the same data is repeated as the original data are not allowed. The DMS shows all issues and which ones still need to be corrected.

5) Built-in checks to avoid system-based errors

The DMS carries out a check to ensure if the entered kilometre reading is possible (precheck of data in the own system)

   a. The DMS sysem gives a warning if the kilometre reading that is entered is lower than the previous odometer reading in the garage database (local issue 001)
   b. The DMS gives a warning if the kilometre reading that is entered is excessively high compared to the previous odometer reading in the garage database .(local issue 209)
   c. The DMS gives a warning if the kilometre reading that is entered is the same as a previous odometer reading in the garage database
   d. The DMS gives a warning system if the date for the works is in the future
   e. The DMS gives a warning if the date for the garage works is in the past.
   f. The input field with the mileage data (km) may only allow numerical values and no special characters, nor blanks
   g. When the data has already been processed by Car-Pass, the DMS prevents the same source from sending the identical data (same VIN, km and date) multiple times. (DMS should therefore not cause an issue_type 150).

6) Checks to ensure the correct data type

   a. Transfer of the odometer reading: dataTypeId 120 (or 121)
   b. Transfer of the correction: dataTypeId 120 (or 121) + issue_id
   c. Closing the problem without correction: dataTypeId 080
   d. If the garage repairs or replaces the odometer, this must be reported to Car-Pass via dataTypeId 121

7) Check to ensure that 17 characters are entered for VIN

If a chassis number is entered with less than 17 characters, the user receives a warning. It should still be possible to send the data to Car-Pass.

When a chassis number with more than 17 characters is entered, the user receives an error message. It should not be possible to send the data to Car-Pass.

An empty or impossible chassis number (00000000000000000) is not allowed. Only alphanumeric values are allowed.

8) **The DMS makes it possible to exclude operations that are not mandatory to report (e.g. till sales, etc.) and certain categories of vehicles from being transferred to CAR-PASS (trucks, foreign number plates, etc.)**

The user must have the option of excluding these operations/vehicles from being transferred to Car-Pass.

9) **The DMS transfers the correct combination of date of works/odometer reading = exclusion criterion**

The DMS links the correct date to the correct kilometre reading, i.e. the date when the vehicle was present in the repair shop and the odometer reading was read off.

Possible errors that give rise to failure on this criterion (not exhaustive list):

- Using the invoice date
- Linking the date of the odometer reading from the expertise to the date of works
- Date of the appointment
- Re-sending the odometer reading when creating a credit note / re-invoicing
- Claims under guarantee: cut-off date
- Etc.

10) **The user must be able to check his user codes and password**

Test: The DMS must provide with a screen showing the contact details that were entered at the time of activating the Car-Pass user account. These are at the minimum the following:

- The user code
- The user's VAT number (enterprise code)
- The password
- The email address
- Optionally: telephone number of the Car-Pass helpdesk and link to the contact form.

If the enterprise changes its password and/or user code locally in the DMS system, at least a warning must appear to the user making it clear that the changes need also to be introduced on the Car-Pass website.

11) Vehicle History Request (optional)

The DMS allows the vehicle history to be consulted in accordance with IPS 5.2.1.3 and the PublicUrl to be saved and associated issues to be processed. The DMS system opens the pdf document that was sent and allows to print the vehicle history.

Automatic or manual forwarding after ANY entry of the odometer reading of the vehicle for sale. As long as this odometer reading is not adjusted, no new VHR may be requested by the DMS.

It is not intended that the requests are stored locally and later queried in batch.

In order to create a VHR, Car-Pass has to contact several third parties (e.g. car manufacturers, DIV,...). Car-Pass waits a maximum of 1 minute for a response. Meanwhile the response status remains ONGOING. Thus, the DMS program may not repeat the RequestOdometerReadingStatus more frequently than 1 time per 10 seconds as long as the response status is ONGOING and should not abort the RequestOdometerReadingStatus query within 90 seconds.

Appendix 3: Car-Pass logo

Car-Pass Web Services Protocol

Participants:

Location and date:

Result:

Signatures