

## 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 law of 11 June 2004 to combat odometer fraud. 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 customer list of enterprises from the automotive sector that already use the software (including older versions) stating their company number and user code from Car-Pass

### 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 systems 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 system will be taken off the list.

## **Appendix 1 - Requirements for performing the tests**

The certification process consists of 2 steps:

1. Carrying out the tests mentioned below on the developer's test environment. This is preferably done at the premises of Car-Pass. Car-Pass can ensure that a VPN tunnel can be set up by the DMS supplier.
2. A representative sample of the tests will be repeated at a garage using the software.

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
- 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 system must not fail on the criteria that constitute an exclusion condition; the system is allowed to fail no more than a maximum of 2 of the other criteria. If a test cannot be performed, this is equivalent to a failed test on the criterion.

References (available at <https://www.car-pass.be/en/professional>):

- Inflow process specification
- Issue types

### 1) Transfer of the data = exclusion criterion

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 = exclusion criterion

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.

It must be possible to demonstrate the following elements (in case of doubt, test + any 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 0.5 seconds as minimum?
- 3) Is a record kept of the status having returned an OK, so that the status is only retrieved once after a positive message?
- 4) Has the user been warned if a message is returned = ERROR?
- 5) Has the requestOdometerReadingStatusResponse been captured so that any issues can be improved?

- 6) Is the system capable of sending corrections?
- 7) Is an attempt made to resend the messages after an ERROR OR UNKNOWN message?

These 7 elements must be answered positively.

### **3) The DMS system displays the error messages with the correct problem number, issue type and description = exclusion criterion**

Test: The DMS supplier 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.

Which tests:

- Insertion of a double observation Issue number 150
- Insertion of an unknown fin Issue No. 131
- Insertion of an 'unexpected high' Issue Number 209
- Insertion of a 'lower than previous' Issue number 001

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

### **4) The DMS system allows problems to be improved = exclusion criterion**

The system allows corrections to be made. It should be possible to confirm problems as correct or to remove them from the list of outstanding issues without correction.

The DMS system will show those issues that cannot be corrected, but ensures that they cannot be corrected.

These corrections will be implemented in the local database as well as in the database of Car-Pass. The feedback on these improvements will be correctly loaded.

The issue will disappear from the list of outstanding problems.

### **5) Multithreading is not allowed = exclusion criterion**

To be derived from the software documentation to be delivered

The maximum number of threads is limited to 1 in the communication to Car-Pass; this is to prevent everything being blocked by 1 user.

## 6) Built-in checks to avoid system-based errors

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

- a. The DMS system 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 system 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 system 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 system gives a warning system if the date for the works is in the future
- e. The DMS system gives a warning if the date for the garage works is in the past.

## 7) Checks to ensure the correct data type = exclusion criterion

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

## 8) Check to ensure that 17 characters are entered for VIN = exclusion criterion

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 (000000000000000000) is not allowed. Only alphanumeric values are allowed.

## 9) The system 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.

## 10) The system transfers the correct combination of date of works/odometer reading = exclusion criterion

The system 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
- Using the date of the odometer reading from the expertise linked 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.

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

Test: The DMS system must have 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 one warning must appear warning that it must also be changed on the Car-Pass website.

### **12) The system generates a correction form in order to ensure that a double error (issue type 129) can be corrected by Car-Pass or alternatively, the garage can retrieve this document via the website = exclusion criterion**

The user will be able to generate a correction request form in which at least the following details have been pre-filled:

- name of the enterprise
- user code
- problem number
- issue type
- data that was originally sent: km, chassis number and date
- improved data: km, chassis number and date
- a check whether the data has also been improved locally.

This document should be sent by email to [info@car-pass.be](mailto:info@car-pass.be)

### **13) History request**

The system allows you to consult the history via web services.

Test: retrieval of the history for a random chassis number.

The DMS system opens the submitted pdf document and allows you to print the history.

Appendix 3: Car-Pass logo



# Car-Pass Web Services Protocol

Participants:

Location and date:

Result:

Signatures