



Member State Test Procedure VAT

EUCARIS Operations (EUCOP)

Author:	Arnold Woltman	Status:	Final version
Owner:	EUCARIS Operations	Version:	4.0
Filename:	EUCARIS-VAT MS tests 4.0.doc	Date:	08-01-2019

Version history

date	version	author	Remarks
06-06-2019	0.1	Judith Sterenberg	First draft
12-06-2019	0.11	Jouke de Jong	Review
17-06-2019	0.2	Judith Sterenberg	Modifications due to review
18-06-2019	1.0	Judith Sterenberg	Final version
02-10-2019	2.0	Jouke de Jong	Changes due to new Lifecycle services
11-11-2019	3.0	Arnold Woltman	Changes due to new Hit – No Hit services
09-01-2019	4.0	Arnold Woltman	Changes due to new VATAI/VHOH services

Distribution list v2.0

Name	function / role
Roelof de Graaf	Operational Manager EUCARIS
VAT EUCARIS Member States	Member states using EUCARIS for VAT Exchange

Document references

No.	Title	Author	Version / status / date
DOC-1	EUCARIS XML Message Specification VAT.doc	Sjaak Kempe	2.0.2/Final/07-01-2020
DOC-2	EUCARIS VAT data overview.xls	EUCARIS Operations	4.0/final/08-01-2020
DOC-3	EUCARIS VAT test data MS.xls	EUCARIS Operations	4.0/final/08-01-2019
DOC-4	EUCARIS test data EUCOP	EUCARIS Operations	4.7/final/09-01-2019

Abbreviations

Abbreviation	Description	Explanation
EUCARIS	European Car and Driving Licence Information System	EUCARIS is the EUROpean CAR and driving license Information System. EUCARIS is a unique system that provides opportunities to countries to share their car and driving licence registration information, helping to fight car theft and registration fraud.
VAT	Value Added Tax	A value-added tax (VAT) is a consumption tax placed on a product whenever value is added at each stage of the supply chain, from production to the point of sale.
XML	Extensible Mark-up Language	Language for message exchange
MS	Member State	In this document MS refers to Member States participating in VAT exchange
EUCOP	EUCARIS Operations	Responsible for executing test activities for EUCARIS application and member state tests
NCP	National Contact Point	A designated competent authority for the exchange of vehicle-owner-holder information, for VAT related purposes.

Contents

1.	Introduction	44
2.	Prerequisites	55
3.	Test Data	66
3.1	Test Data EUCOP	66
3.2	Test Data MS.....	66
4.	VAT Requests	77
4.1	Default EUCARIS webclient.....	77
4.2	Customized webclient	77
5.	VAT Responses	99
5.1	Single case Response	99
5.2	Multiple case Response	99
6	Exit Criteria	1010

1. Introduction

Before a VAT member state (MS) using EUCARIS can connect to other VAT member states using EUCARIS, the MS has to pass an acceptance test executed in cooperation with EUCARIS Operations (EUCOP).

This document describes the activities and contents of the acceptance test procedure of EUCOP. During this acceptance test the exchange of VAT messages between EUCARIS countries is tested.

During the acceptance test the following email address will be used:

Eucaris2help@rdw.nl

At this moment the VAT services VATVHOH, VATVHOH Lifecycle, VATVHHitNoHit and VATAIIVHOH are available. This procedure describes the acceptance tests for these available VAT services. If other VAT services are available, they will be included in this procedure.

2. Prerequisites

- The MS has informed eucaris2help (eucaris2help@rdw.nl) that an acceptance test for VAT can be started. Please inform eucaris2help at least two weeks in advance. When informing us, please mention:
 - whether you will be using the default EUCARIS WebClient or your own customized client application(s)
 - what VAT-service(s) will be used
 - whether you will be using the EUCARIS batch processor for multiple case inquiries or your own developed gateway
 - whether you will send only single inquiries, only multiple inquiries or both single and multiple inquiries
 - whether the acceptance test is performed by the National Contact Point (NCP) of the MS or is performed by another local organisation. In general only the NCP has to execute an acceptance test for a MS. The only exception is when local organisations have developed an own customised client, in this case the local organisation also has to pass the acceptance procedure.
- A connection has been established between EUCOP and the MS. This item is fulfilled once it is possible to send and receive VAT requests.
- The MS has received, filled out and returned the following document:
 - EUCARIS VAT Data Overview [DOC-2]
 - EUCARIS VAT Test Data MS [DOC-3]For more information on this document, see chapter 3.
- The data mentioned in the above document 'EUCARIS VAT Test Data' is available in the local databases on the test/acceptance environment of the MS.
- The MS has successfully completed the internal tests of the local VAT implementation.

3. Test Data

In order to be able to execute tests, there should be test data available in both the MS and EUCOP.

3.1 Test Data EUCOP

In order to have a standard and flexible set of test data necessary to perform the acceptance test of all MS, EUCOP will make use of stubs. These stubs are tested and checked conform the necessary specifications. When a MS sends a request towards EUCOP, the response will come from the stub messages.

In document 'EUCARIS test data EUCOP' [DOC-4] there is an overview of all the stub data available in country EUCOP. This document does not only include data sets of VAT but also for all other EUCARIS treaties. As this document contains test data of all EUCARIS treaties, this document is not included in the VAT Test Pack. The document can be found on www.eucaris.net.

3.2 Test Data MS

While EUCOP uses stubs, it is expected from all MS to use real backend services with production-like data during the acceptance test procedure.

Prior to the acceptance procedure the MS supplies information on what data EUCOP can use during the tests via document 'EUCARIS VAT Test Data' [DOC-3].

In this document there is a list of test scenarios that EUCOP would like to be executed. For each of the scenarios, the MS is able to indicate if the scenario is applicable. If a scenario is applicable, the MS will have to supply test data for that scenario. If a scenario is not applicable, please mention the reason for this. It is important to mention that this test data should under no circumstance, in respect to privacy laws, be a copy of production environment data.

The MS is also required to fill in document 'EUCARIS VAT Data Overview' [DOC-2]. This document will help EUCOP and other MS to better understand the VAT implementation of the MS. This information may result in extra test scenarios or it may result in skipping test scenarios.

4. VAT Requests

This chapter describes what services will be tested and what checks will be performed concerning request messages sent by the MS.

4.1 Default EUCARIS webclient

The default EUCARIS webclient has been thoroughly tested before being released to other MS. Therefore no extensive checks concerning the contents/structure of these request messages will be performed if the MS uses the default EUCARIS webclient.

This check will consist of the MS sending EUCOP at least one request message per VAT service, checking whether EUCOP received these messages and checking whether the MS received the expected responses. If this is the case, this test can be considered as successfully completed.

The MS will be asked to send the following messages using the EUCARIS webclient:

EUCARIS VAT webclient menu item	Resulting message	Expected response
Search on Vehicle Identification Number	VATVHOHByRegNumAndDate	VATVHOHResponse
Search on Licence Plate Number	VATVHOHByVINAndDate	VATVHOHResponse
Multiple Search Owner Holder by Licence Number	VATVHOHMultipleByRegNumAndDate	VATVHOHMultipleResponse
Multiple Search Owner Holder by VIN	VATVHOHMultipleByVINAndDate	VATVHOHMultipleResponse
Lifecycle search on Vehicle Identification Number	VATVHOHLifecycleByVIN	VATVHOHLifecycleResponse
Multiple Lifecycle Search by VIN	VATVHOHMultipleLifecycleByVIN	VATVHOHMultipleLifecycleResponse
Hit – No Hit Multiple by VIN	VATVHMultipleHitNoHitRequest	VATVHMultipleHitNoHitResponse
Multiple by Name-No	VATAIIVHOHMultipleRequest	VATAIIVHOHMultipleResponse
Single by Name-No	VATAIIVHOHRequest	VATAIIVHOHResponse

4.2 Customized webclient

This chapter is only applicable if the MS has developed, or is planning to develop a customized (web)client for VAT. The request messages that are generated by the customized (web)client(s) developed by the MS will have to be tested in more detail. In the table below are listed the requests that have to be sent. Please inform EUCOP when the MS has sent these messages to the EUCOP acceptance environment and inform EUCOP about the time (in UTC) when this was done.

Message	Characteristics
VATVHOHByRegNumAndDate	MileageInfoRequested = true, ExtendedVehicleDataRequired = false, ReferenceDateTime is present
VATVHOHByRegNumAndDate	MileageInfoRequested = false, ExtendedVehicleDataRequired = true, ReferenceDateTime is absent
VATVHOHByVINAndDate	MileageInfoRequested = true, ExtendedVehicleDataRequired = true, ReferenceDateTime is absent
VATVHOHByVINAndDate	MileageInfoRequested = false, ExtendedVehicleDataRequired = false, ReferenceDateTime is present
VATVHOHLifecycleByVIN	ExtendedVehicleDataRequired = true, FullMileageHistoryRequired =

	false
VATVHOHLifecycleByVIN	ExtendedVehicleDataRequired = false, FullMileageHistoryRequired = true
VATVHMultipleHitNoHitRequest	ReferenceDateTime is present
VATVHMultipleHitNoHitRequest	ReferenceDateTime is absent
VATAIIVHOHRequest	LegalEntity = NP, Search on Name, no refinement data, ReferenceDateTime is absent
VATAIIVHOHRequest	LegalEntity = NP, Search on Number, no refinement data, ReferenceDateTime is present
VATAIIVHOHRequest	LegalEntity = NP, Search on Name & Number, no refinement data, ReferenceDateTime is absent
VATAIIVHOHRequest	LegalEntity = O, Search on Name, no refinement data, ReferenceDateTime is present
VATAIIVHOHRequest	LegalEntity = O, Search on Number, no refinement data, ReferenceDateTime is present
VATAIIVHOHRequest	LegalEntity = O, Search on Name & Number, no refinement data, ReferenceDateTime is present
VATAIIVHOHRequest	LegalEntity = NP, Search on Name, Additional personal refinement data, ReferenceDateTime is absent
VATAIIVHOHRequest	LegalEntity = O, Search on Name, Address refinement data, ReferenceDateTime is absent
VATAIIVHOHRequest	LegalEntity = O, Search on Name, Vehicle refinement data, ReferenceDateTime is absent
VATVHOHMultipleByRegNumAndDate	At least 10 single inquiries are included
VATVHOHMultipleByVINAndDate	At least 10 single inquiries are included
VATVHOHMultipleLifecycleByVIN	At least 10 single inquiries are included
VATVHMultipleHitNoHitRequest	At least 10 single inquiries are included
VATAIIVHOHMultipleRequest	At least 10 single inquiries are included

If the MS customized client does not support all of the characteristics described above, please inform EUCOP about it. EUCOP will take this into account during this part of the acceptance test.

When the MS has finished sending these messages to the EUCOP acceptance environment, EUCOP will look up these messages in the servicelog table and analyse them both on content and structure based on the XML specification document [DOC-1]. If all request messages prove to be in accordance with these specifications, this part of the acceptance test can be considered completed successfully. If more than one customized client has been developed, this test has to be executed for all developed customized clients.

If the MS will develop one or more other customized clients after the MS has completed this acceptance test, the MS is obliged to report this to EUCOP, after which the tests described in this section (4.2) will have to be executed for the new customized client before the new customized (web)client can be connected to the EUCARIS production environment.

5. VAT Responses

5.1 Single case Response

This part of the acceptance test focusses on the response messages generated by the MS. The contents of these response messages will reflect the information stored in the VAT databases of the MS. During this test EUCARIS Operations will make inquiries to the acceptance environment of the MS. The returned response messages will be analysed both on content and structure. This analysis will be based on the XML specification document [DOC-1] and the data overview returned by the MS [DOC-2].

The inquiries that EUCARIS Operations will make on the MS's VAT databases will be based upon the contents of the test data sheet the MS supplied to EUCARIS Operations before the start of the acceptance test [DOC-3]. In this data sheet the MS can fill out which described scenarios are applicable for the MS. For all applicable scenarios the MS has to supply EUCARIS Operations with search criteria to perform the test cases for these scenarios. The test data inserted in the MS's local databases should be representative for the data that will be returned by the MS's production environment.

5.2 Multiple case Response

This part of the acceptance test focusses on the response messages generated by the MS. The contents of these response messages will reflect the information stored in the VAT databases of the MS. During this test EUCOP will make inquiries to the MS acceptance environment. The returned response messages will be analysed both on content and structure. This analysis will be based on the XML specification document [DOC-1] and the data overview returned by the MS [DOC-2].

The inquiries that EUCOP will make on the MS VAT databases will be based upon the contents of the test data sheet the MS has supplied to EUCOP before the start of the acceptance test [DOC-4]. In this data sheet the MS can fill out which described scenarios are applicable for the MS. For all applicable scenarios EUCOP expects the MS to provide search criteria to perform the test cases for these scenarios. The test data inserted in the MS local VAT databases should be representative for the data that will be returned by the MS production environment.

For the multiple case inquiries, the EUCARIS batch processor can be used. The EUCARIS batch processor has been thoroughly tested before being released to other MS. If a MS has developed an own customised batch processor, the multiple case response messages will be analysed more detailed.

6 Exit Criteria

The MS has passed the acceptance tests with EUCARIS Operations if the exit criteria below have been met.

- All tests described in Chapter 4, concerning sending request messages by the default webclient and, if applicable, customized (web)clients, have been completed successfully.
- All tests described in Chapter 5, concerning sending response messages, have been completed successfully.

A test can be considered completed successfully when all required test cases have been executed and no blocking issues are observed during the last test round.

When the acceptance test with EUCOP is completed, EUCOP will write a Test Summary Report. This report will be sent to the MS. When this report is accepted by the MS, a go live procedure will be started initiated by EUCOP.