CUSTOMER GUIDE

AREX MESSAGE EXCHANGE CUSTOMERS

GUIDE FOR APPLYING FOR SUMMARY DECLARATION CUSTOMER STATUS

CONTENTS

1. MESSAGE DECLARANTS SUBMITTING SUMMARY DECLARATIONS (AREX)

An AREX EDI sender (message declarant) is a customer of Customs who submits their own summary declarations or those of a client as XML standard messages.

1.1. Transaction channels used in message exchange for AREX

- In direct message exchange, the message declarant sends messages in XML format to Customs via a public message interface by connecting to a public network (Internet).
- In operator-based message exchange, a company uses the services of data communications operators approved by Customs to submit messages.

2. APPLYING FOR AN AUTHORISATION TO USE MESSAGE EXCHANGE

2.1. Requirements for message exchange

- An AREX message declarant must have an EORI registration. If the business has already registered as a customs clearance customer with Finnish Customs, it will automatically have been registered as an EORI trader based on its business ID (format: FI1234567-8). If the message declarant operates as an agent on behalf of another trader responsible for submitting AREX declarations, the principal must also be registered for EORI. EORI customer authorisation is required of both the message declarant and the principal whose cases are used as test material in the parallel testing. The validity of the EORI number can be checked from the EORI database managed by the Commission.

- The business must have access to the use of software that can generate the required messages in accordance with the declaration standards provided by Customs. Customs does not provide the required software, but instead companies should contact their own software suppliers. If a company has not selected a software supplier, a list (in Finnish) is available on the website of Tieke Ry at
  http://www.tieke.fi/display/Logistiikka/Tullausohjelmistolista.
  Descriptions of the message exchange procedure and required data content are available on the Customs website (businesses - eServices –message exchange).

- In direct message exchange, companies must acquire a certificate granted by the Population Register Centre for creating a connection.
  - o Customs authenticates the message builder and the intermediary with the certificates. An XML format message created by the message builder is signed

digitally using the certificate. Customs identifies the business ID of the message builder from the certificate in the XML signature.

o The server certificate is acquired by the company that builds and transmits messages to Customs' direct message interface. If the message declarant carries out these phases, the server certificate is to be acquired for the message declarant. If a service provider is used for building and transmitting messages on behalf of the message declarant, the server certificate is to be acquired by the service provider.

More information about acquiring a certificate is available in the document "Message exchange with Finnish Customs: Technical guidebook" at
www.tulli.fi

- In operator-based message exchange, the applicant company must also sign a contract with an operator providing network connections required for message exchange. Customs-approved operators are listed in the document "Message exchange with Finnish Customs: Introduction to message exchange with Finnish Customs" which is available on the Finnish Customs website at
www.tulli.fi

- In order to be approved as a message declarant for export, the applicant company must test its customs clearance software and network connections with Customs. Customs will also conduct testing with the software suppliers that provide customs clearance software. Testing is described in more detail in chapters 3 and 4.

2.2. *Applying for a message exchange authorisation*

Authorisation to act as a message declarant is applied for using customs form No. 934e_14, "Application for message exchange with Finnish Customs". The applicants must indicate in their application which channel they are going to use; operator-based message exchange or direct message exchange.

In direct message exchange, a company acting as message declarant and service provider must apply for authorisation to use direct message exchange. The application form is available on the Finnish Customs website at
www.tulli.fi

3. ADVICE TO BUSINESSES AND AGREEMENTS ON TESTING

After Customs has processed a company's application for message sender status, the testing official at Finnish Customs contacts the company's contact person as indicated in the application, in order to set dates for the testing and for opening the connection. One free consultation visit will be arranged before testing begins. The contact person from Customs will contact the business in order to set a time for the consultation.

The consultation can be provided by phone or in person in the company's or Customs' facilities. For example, the following issues will be dealt with:
- message exchange: which messages the company must be able to send and receive;
- data content of the messages: what issues the company should keep in mind when completing electronic summary declarations and producing XML messages;
- test material; revision of test cases drafted by Customs and to be used in the testing, the XML messages to be formed based on them, and the arriving reply messages;
- questions related to the service channel;
- the company's own questions.

It is recommended that both the summary declaration experts and the message exchange experts of the company participate in the advice session. The number of the participants is not limited.

4. TESTING PROCEDURE FOR AREX DECLARANTS

The objective of testing is that the company sends as error-free messages as possible before the production phase. During testing, the company submits declaration messages with varying data content (for example complete or amended declarations) to which Customs sends reply messages (acceptance, error, request for additional information etc.). The company sends appropriate responses to the reply messages. For example, Customs corrects errors or sends additional information.

AREX customer testing is company-specific. In the case of a group of companies, the testing will be carried out separately for each company (different business IDs). Separate testing for each company office will not be carried out. Only in cases where the offices of the company use different software for submitting AREX declarations will office-specific testing be allowed.

Unless otherwise agreed, the applicant company's contact person for testing is the contact person for AREX message exchange mentioned in the application. The software supplier's representative may assist the company in the testing, but the testing is always the responsibility of the message declarant. The company will see to the costs of testing itself. If the company is planning to use in its AREX software for production such automated functionalities that have not become apparent during testing, these must be reported to the testing official. The company should reserve enough resources for carrying out customer testing within the agreed schedule.

A company acting as a message declarant is responsible for ensuring that the personnel completing AREX declarations know how to submit messages. Employees completing electronic AREX declarations must participate in the testing to the maximum extent possible.

The AREX customer testing involves two phases: technical and parallel testing. The technical testing is carried out using the standard format Customs test cases. Parallel testing is done using the company's own material. The sooner the technical testing is completed, the more time will be allowed for the parallel testing. The time reserved for AREX customer testing usually amounts to three to five weeks depending on the type of declarations the business will lodge and the modes of transport involved. The company must commit to the agreed testing schedule. If the business does not adhere to the agreed schedule, the testing will be interrupted and a new schedule for subsequent testing must be agreed upon.

4.1. Technical testing of the connection for direct message exchange

The aim of the test cases for testing the technical connection (3+1 for the Message Notification Service) is to ensure that the customer's software and the Customs web service for direct message exchange are compatible. As the web service acts as a transport layer for export declarations, the aim is to ensure the technical functionality of the connection before the testing with summary export declaration messages is started.

If the company is using for message transmission a party already acting via direct message exchange, the technical testing of the connection is optional. More specific instructions for testing the technical connection are sent to the company in connection with agreeing on the testing time. The company may also start using the message notification service for direct message exchange.

You will find more information on direct message exchange in the document "Message exchange with Finnish Customs: Technical guidebook".

4.1.1. AREX message declarants changing over from operator-based message exchange to direct message exchange

- **Technical testing of the connection for direct message exchange.** The testing of the connection is optional if the company is already using direct message exchange with a Customs system, or if the company uses a service provider that has already carried out the technical testing of the communications.
- **AREX message testing:**
  - Using some of the test cases prepared by Customs (the number of test cases is to be agreed with the testing official).

4.2. Opening the connection between the company and Customs in operator-based message exchange

The contact details of EDI operator companies approved by Customs can be found in appendix 1 of the guide "Message exchange with Finnish Customs: Introduction to message exchange with Finnish Customs." The protocol mainly used for data transfer between the operator and Customs is ftp/VPN. Customs has no requirements for the data transfer mode used between the company and the operator. In message exchange via an operator, the company provides the name and the contact information of the operator in the application form. The Customs contact person will forward the contact details and the start date of the testing to Customs' own operator. The operator of Finnish Customs will inform the company's operator of this in advance, and the company's operator will open a connection with the customer testing environment address of Customs.

4.3. The purpose and course of the technical testing

The purpose of the technical testing is to ensure that the communications are working and that the messages sent by the customer comply with Customs' specifications. The testing aims to ascertain that the customer is able to receive all the reply messages sent by Customs and understands what the messages mean.

The Customs testing official at the Electronic Service Centre carries out the customer testing in cooperation with the customer who is applying for message exchange status. The testing is conducted in the customer testing environment of the AREX application.

The testing official will e-mail the company the test cases drawn up by Customs that will be used in the testing. The number of cases to be tested depends on the type of messages submitted by the customer and on the modes of transport involved. The company's tester sends the messages corresponding to test cases in the prescribed order to the customer testing

environment in accordance with the testing schedule agreed with Customs. The testing official ensures that the communications are working and that the messages sent by the company comply with the message specifications of Customs. The testing official will inform the company's contact person of any errors that have emerged during the testing, after which the company's tester corrects the errors.

4.4. Passing the technical testing phase

The technical testing is completed when all the prescribed test cases have been carried out in a satisfactory manner, when the response messages sent by Customs have been tested and when the errors and deficiencies that have emerged during testing have been rectified. The testing official will inform the company's contact person by e-mail of the successful completion of testing and of the transition to the second stage, parallel testing. Parallel testing is conducted at least for summary declarations (IE315, IE344 and IE615).

5. PARALLEL TESTING

5.1. Material used in parallel testing

The company should provide the Customs testing official with their proposed parallel testing material before the start of the technical testing. The parallel testing material consists of the company's transport documents used in the AREX declaration messages, e.g. bills of lading or air waybills. How many parallel test cases are required depends on the number of messages to be submitted and the number of transport modes to be used. As a rule, there should be at least three parallel test cases passed without errors or failures per each submitted message type and each transport mode. The parallel test material should contain as comprehensive an account as possible of the messages to be lodged by the company, and of any foreseeable exceptional situations that are likely to occur on a regular basis. If the suggested number and scope of the parallel test cases are such that the tests cannot be carried out in the allotted time, the number and content of the parallel test cases can be restricted by Customs.

5.2. The purpose and course of the parallel testing

The objective of testing is for the company to send messages that are as free of errors as possible once it has moved on to the production phase. The parallel testing aims to ensure that the AREX messages conform to the parallel testing material provided by the company and meet the requirements as to their content. The testing official will inform the company's contact person about any errors which have emerged during the testing and which the company's tester needs to rectify. The parallel testing can be approved when a sufficient number of test cases have been completed and the errors and deficiencies have been rectified.

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6. CHANGING OVER TO MESSAGE EXCHANGE

After the testing has been successfully completed, Customs will send to the company the decision on message exchange authorisation and the accompanying test report containing information about the test phases and problems that occurred during the testing. The date when the production can be started is given in the decision.

In direct message exchange, the message declarants must see to that the messages are sent to the production environment.

In message exchange via an operator, Customs' operator switches the company with message declarant status from the testing environment to the production environment. Message declarants must themselves arrange for the switch from the testing environment to the production environment with their operators.

The company can start message declaration on the date specified in the authorisation. The company must notify the testing official when the first customs declaration is sent. If the first message exchange is postponed, the company must inform the testing official of the new start date. Accordingly, Customs will inform the company if the start is delayed due to a technical or other problem caused by the software of Customs. At the beginning of the message declaration production phase, the processing official at the Electronic Service Centre may request the company to provide copies of the export declarations and accompanying documents.

6.1. Changing over from communications via an operator to direct message exchange

The AREX system can use only one of two data transmission methods; communications via an operator or direct message exchange. The customer tester agrees the transfer date and time with the customer.

6.2. Responsibility for message follow-up

Message declarants for export must see to message follow-up, i.e. make sure that responses are received for each sent message. A response message from Customs must be replied to as requested, for example with a corrected message, if Customs sends an error message as response message.

6.3. Problem situations

In case of problems with production, the company should first contact their own software supplier and operator or possibly their service provider and, if necessary, the Electronic Service Centre.

7. CHANGE OF CUSTOMS CLEARANCE SOFTWARE

If the company changes its customs clearance software or starts using a new version of it or changes their service provider or operator, it must file a notice of change, in order to establish the need for testing. A new version, software or message exchange connection cannot be used prior to approval by Customs.

8. FURTHER INFORMATION

Further information is available in the guides on direct message exchange available on the Customs website:
 Message exchange with Finnish Customs: Technical guidebook, and
 Message exchange with Finnish Customs: Introduction to message exchange with Finnish Customs.
The guides are available on the Customs website at
www.tulli.fi

Queries about how to apply for authorisation to become an AREX message exchange customer, and about what data should be used in the messages according to the data models of the message specifications, can be sent to the address turvatiedot(at)tulli.fi.
Queries concerning the testing and individual test cases should primarily be addressed to the assigned testing official at the Electronic Service Centre or sent to the address arex.testaus(at)tulli.fi.

9. SPECIFICATIONS AND COMPLETION INSTRUCTIONS FOR THE TECHNICAL TEST CASES

9.1. Trader data to be used in testing

The following traders have been used as examples in the technical test cases:

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The following traders have been used as examples in the technical test cases:

- **Huolintatesti Oy** (agent) FI5342687-3, T0001, EORI and AEOC, warehouse R0001, EDI sender

- **Käteishuolintatesti Oy** (transport operator) FI7283476-8, T0001, EORI and AEOS, EDI sender

- **Arexi Oy** (company) FI1251021-9, T0001, EORI and AEOF

- **Areksin Huolinta Oy** (company) FI1659561-9, T0001, neither of the authorisations, no service channel

- **Huolinta Arex Oy FI1211101-5, T0001, neither of the authorisations, EDI declarant**

- **Testiyritys 1 Oy** (declarant) FI2195826-9, T0001, EORI, EDI sender

- **Tuonti Arex Oy** (declarant) FI1200484-2, T0001, EORI and AEOF, EDI sender

- **Testiareksi Ky** (declarant) FI 1191507-0, T0001, neither of the authorisations, not an AREX customer

In technical examples, the company's own information is replaced with the information of example case operators. If the company acts as an agent, the details of the representative will be added to test cases that do not contain such information. If no agent is deployed, there is no need to specify this.

In parallel testing, actual information on the company's customers is used. However, information on the AEO status of companies is not stored separately for the testing. The afore-mentioned information on example case companies can be used also in parallel testing.

9.2. General completion instructions for test cases

If a company uses direct message exchange, the EORI number is used as sender identification. When a company uses an operator, the message sender should be specified using the company's EDI ID in the "message" block. In testing, the customer always enters test indicator "1" in the message block. Prior to the testing being started, the testing official will give the customer a string of five letters to use both in the tests and in production. The character string used in the example cases of the customer testing and defined in the "message identification" of

the message block is "AREXI", and the company replaces this with the character string that it has been assigned.

In test cases where MRNs for summary declaration, export or transit are to be entered, the Customs testing official will e-mail the necessary MRNs to the company.**9.3. *Specifications for technical test cases***

The table below shows a list of simplified descriptions of test cases. The testing official will send test cases that suit the company's needs in PDF format and the company sends XML messages to Customs that correspond to the data content provided.

Test cases for technical customer testing

Short descriptions

ARRIVAL		
Test 1 sea	IE315	A vessel from Boston to Vuosaari
	IE313	Correct gross mass to 3 500 000 kgm
	IE323	Change first customs office from FI009801 to Estonia EE1110EE
Test 2 sea	IE315	Two goods items to Vuosaari, subsequent customs office Kotka
	IE347	Arrival notification and presentation to Vuosaari, unloaded to a warehouse
	IE347	Arrival notification and presentation to Vuosaari, goods item continues to Kotka
	IE344	Subsequent arrival notification to Kotka (only items unloaded in Kotka)
	IE344	Correct gross mass 120000 -> 125000
	IE347	Arrival notification and presentation to Kotka (only the goods item which will be unloaded in Kotka)
Test 3 sea	IE315	Many goods items, the first has notify party
Test 4 sea	IE315	Traders have AEO status, special circumstance indicator E
	IE347	Arrival notification and presentation
	IE347	Correct warehouse FI0680042-0 -> FI5342687-3
Test 5 sea	IE344	Goods are transferred from other vessels in Hamburg
		Includes several MRN items, which include several goods items
	IE347	Arrival notification and presentation, unloading indicator
	IE347	Arrival notification and presentation, warehouse, date and time of arrival is given
Test 6 sea	IE344	Same vessel continues from Gothenburg to Vuosaari. Subsequent arrival notification includes many manifest items.
Test 7 sea	IE315	A Vessel from Gothenburg to St. Petersburg and to Kotka, second item is loaded in Gothenburg, Community goods (status C), the permit for article 324 e (2YMM)
Test 8 sea	IE315	A vessel from St. Petersburg to Vuosaari, (entry carrier) trader is different from person lodging
		the summary declaration many containers and seals
Test 9 sea	IE344	From Gothenburg to Vuosaari, art.448, 7MYP simplified transit permit
		status C (community goods), many containers and seals
Test 10 sea	IE315a	One goods item, stainless steel
	IE315b	Two goods items, aluminium plates and pipes
	IE347	Arrival notification and presentation of both IE315 messages

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	IE347	Amend unloading indicator 1 --> unloaded to a warehouse FI5342687-3 R0001
Test 11 sea	IE315	A vessel from St. Petersburg to Kotka, subsequent customs office Helsinki, two goods items
	IE3470	Arrival notification with Entry Key data
	IE347	Presentation of the goods item that is to be unloaded in Kotka
Test 12 sea	IE315	FIXEV (fallback procedure) and IE399
Test 13 sea	IE344	FIXEV (fall back procedure) and IE399
Test 1 air	IE315	A flight from Delhi to Helsinki, several consignees and consignors
	IE313	Correct packaging from 1500 to 1400, first item from 500 to 400
	IE323	Change the first customs office from FI015300 to Estonia EE1110EE
Test 2 air	IE315	Includes subsequent customs office Tampere
	IE347	Arrival notification and presentation to Helsinki, not unloaded, items continue to Tampere
	IE347	Arrival notification and presentation to Helsinki, items are unloaded in a warehouse
	IE344	Subsequent arrival notification, items 3 and 4 continue to Tampere
	IE347	Arrival notification and presentation to Tampere, items 3 and 4 will be unloaded
Test 3 air	IE315	Air traffic, many goods items, FIXEV and IE399
Test 4 air	IE315	Traders have AEO status, specific circumstance indicator E
	IE347	Arrival notification and presentation
Test 5 air	IE344	Two MRN items, first MRN item has several consignees and consignors on item level
		in second MRN item the traders are given on MRN level
		The same plane continues from Germany to Helsinki
	IE344	Correct first MRN item, first goods item's consignor
	IE347	Arrival notification and presentation, unloaded to a warehouse
	IE347	Amended, items will be unloaded, but not to a warehouse
Test 6 air	IE344	Community goods, status C and T1, art.445 simplified transit permit
Test 7 air	IE344	Low value declaration (7VTI)
Test 8 air	IE344	FIXEV (Fallback procedure) and IE399
Test 1 road	IE315	Traders are given on goods item level, two goods items
Test 2 road	IE315	Traders are given on header level, one goods item
Test 3 road	IE315	Traders have AEO status, specific circumstance indicator E, seals
Test 4 road	IE315	(entry carrier) trader is different from person lodging the summary declaration,
		name continuation, container, seal, UNDG, transport charges/ method of payment H
Test 1 rail	IE315	One goods item, traders on header level, many wagons

	IE313	Correct gross mass 25000 -> 230000 kgm
	IE347	Arrival notification and presentation, unloaded to a warehouse
Test 2 rail	IE315	Several goods items, traders on item level, UNDG, Transport charges/method of payment are given on item level
	IE347	Arrival notification and presentation, items 1 and 3, unloaded, but not to a warehouse
	IE347	Arrival notification and presentation, item 2, not unloaded
Test 3 rail	IE315	Traders have AEO status, specific circumstance indicator E, name continuation
EXIT		
Test 1 sea	IE615	Two goods items, traders given on goods item level, additional document 2YVP
	IE613	Correct gross mass 11850 -> 11550 kgm
Test 2 sea	IE615	One goods item
	IE547	Export manifest presentation on test 1 ja test 2
	IE590	Exit notification
Test 3 sea	IE547	Export manifest presentation, ELEX MRN numbers, final and partial export
	IE590	Exit notification
Test 4 sea	IE547	Arex- and Elex-MRN, final export, number of packages and gross mass given
	IE547	Correct identity of means of transport crossing border 01010122 → 01010133
	IE590	Exit notification
Test 5 sea	IE547	Export MRN, number of pieces given
Test 6 sea	IE615	635T as previous administrative reference
Test 7 sea	IE547	Other export reference
Test 1 air	IE615	Two goods items, traders on item level, 2YVP (declaration is used as an exit summary declaration for terminating temporary warehousing), Location of goods L, warehouse FI5342687-3 R0003
	IE613	Correct packaging from 50 to 60 and gross mass from 500 to 600
	IE547	Export manifest presentation
	IE590	Exit notification
Test 2 air	IE547	Export MRN numbers, includes final or partial shipment flag
	IE547	Correct conveyance reference number AIR024L -> AIR034L
	IE590	Exit notification
Test 3 air	IE615	Electronics from the USA transited through Finland to Russia, location of goods O
	IE547	Export manifest presentation
	IE590	Exit notification

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Test 1 road	IE615	Electronics from the USA transited through Finland to Russia,
		location of goods O, 2YVP (declaration is used as an exit
		summary declaration for terminating temporary warehousing)
	IE613	Correct packaging from 525 to 625, on second goods item from 300 to 400
Test 2 road	IE615	Cylinder locks from the USA transited through Finland to Russia,
		location of goods Z, customs office FI009801
Test 1 rail	IE615	Granite from Canada transited through Finland to Russia, location of goods Z
		customs office FI542700, 2YVP (declaration is used as an exit
		summary declaration for terminating temporary warehousing)
	IE613	Correct gross mass from 8850 to 9850kgm
	IE547	Export manifest presentation
	IE590	Exit notification
Test 2 rail	IE615	Forklifts and cars from the USA through Finland to Russia, location of goods O
		Traders are on goods item level
Test 3 rail	IE547	Export MRN numbers, includes final or partial shipment flag
	IE547	Correct conveyance reference number from 3788 to 3785
TEMPORARY STORAGE		
1	IE007	Two goods items, an agent is used
2	IE007	Two goods items of which another is not in an acceptable condition and the message
		will be rejected
	IE007	Customs testing official gives the correct item number
1	IE044	One MRN, two goods items of which another is OK and another has discrepancies
2	IE044	Two MRN items, no discrepancies, an agent is used, another of the MRN's in incorrect
		and the message will be rejected
3	IE044	Two MRN items, three goods items, two goods items have discrepancies