

# Message exchange with Finnish Customs

## Introduction to message exchange with Finnish Customs

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# 1 Introduction

This guide deals with how to apply for authorisation for message exchange with Finnish Customs. The guide presents the electronic services of Finnish Customs and describes the two alternatives of message exchange: direct message exchange and operator-based message exchange.

The guide is outlined so that it can be used as a basis for decision making when choosing a service channel. More detailed technical instructions for message exchange are available in the guidebook **Direct message exchange with Finnish Customs: Technical guidebook** on the Finnish Customs website.

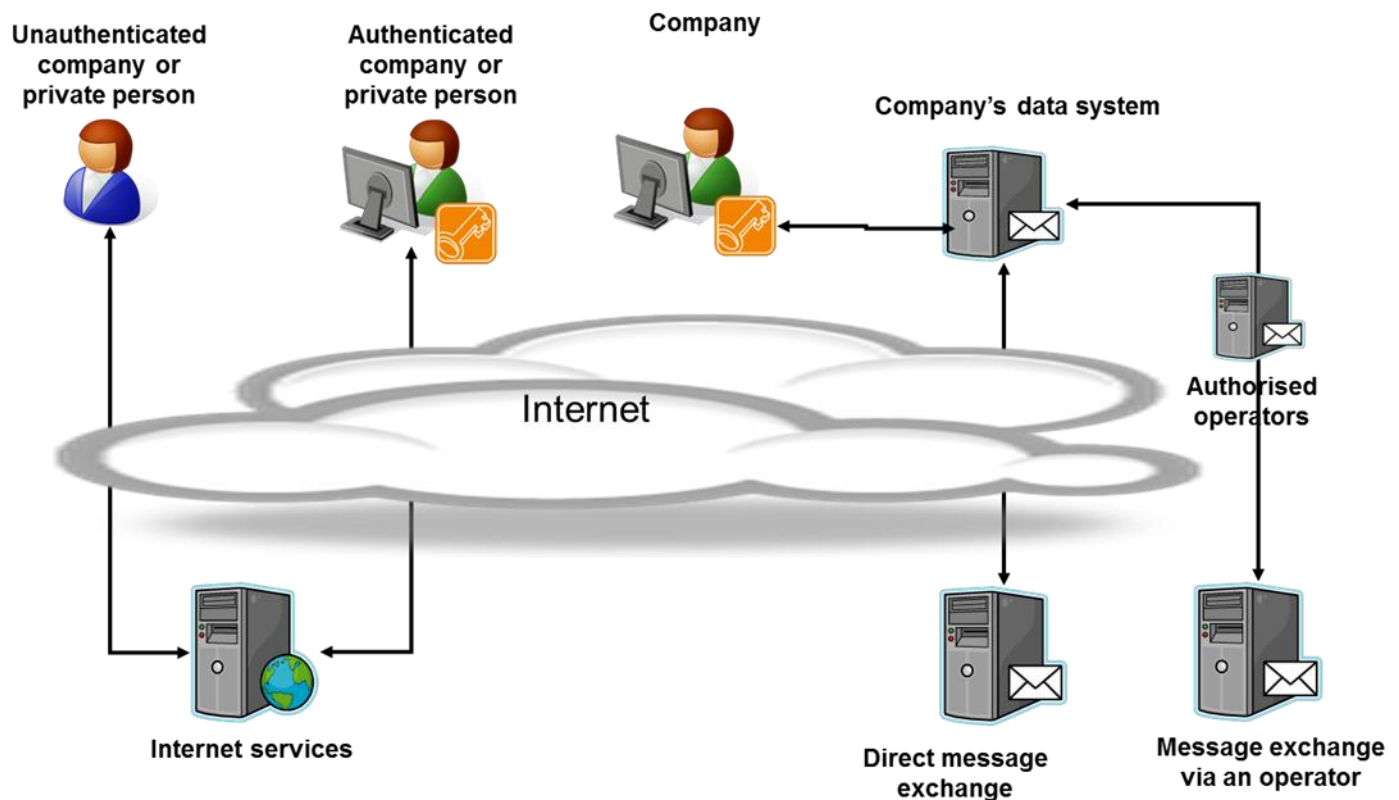
The recent changes / additions are highlighted in yellow.

## 2 Electronic services of Finnish Customs

In recent years, Finnish Customs has concentrated heavily on developing electronic transactions. Customs can process the electronically obtained data faster than paper-based data, and it is also faster and easier for the customer to submit an electronic declaration. It is easier to guarantee the quality and accuracy of the data within electronic services.

### 2.1 The electronic service channels

The customer can use the electronic services of Customs either via online services or via message exchange. Message exchange between the company and Customs means electronic transfer of standard formatted data with messages (Electronic Data Interchange). The messages used by Customs are either in XML (eXtensible Mark-up Language) or EDIFACT (Electronic Data Interchange for Administration, Commerce and Transport) format. In the message exchange, the data systems of the customer (or the customer's service provider) send the messages electronically to the Customs data systems.



**Figure 1: The electronic service channels**

The choice of the service channel depends on the customer's needs and capability to use IT systems.

It is usually well worth investing in **message exchange** when the company has many transactions with Customs. In the assessment, it is advisable to consider the overall number of transactions (import, export etc.). It is faster to process a message customer's declarations, as the files and registers of the company can be utilized directly. In addition, message exchange has procedure-specific advantages, for example related to guarantees.

All message exchange is subject to authorisation and the authorisation requires software testing with Customs.

In direct message exchange, the company's data system can send messages to Customs data systems via the internet as well as retrieve response notifications from the so-called message archive. In operator-based message exchange, the company receives all the amendment requests and requests for additional information, rejection messages, decisions and accompanying documents, which are related to the declarations, directly to his or her own data system as PDF files via the operator. When starting the export procedure, the company does not have to visit the Customs office. A customs visit is not necessary, except when an original document must be presented or needs to be supplemented with entries by Customs.

Presently, message exchange is available for import (import declarations), export (export declarations), entry and exit declarations; declarations to be submitted into the system for control movements of excise goods in temporary duty suspension (EMCS) and for transit, (T1 and T2 transit declarations and electronic copies of TIR carnets) as well as for customs warehousing. Åland Islands tax border declarations and statistical reports of internal trade can be submitted through message exchange. Customs' message specifications to be used in message transactions are available in Finnish, Swedish and partly in English on the Customs website

under the system-specific message descriptions: Tulli > en > e-services > services > message-exchange > message-descriptions

**Declaring online** is free of charge and does not require a specific authorisation or specific software.

A few of Customs' services can be used by unidentified users. In such cases, submitting a declaration starts with a blank application form. An unidentified online declarant must always visit the customs office of the place of dispatch of the goods when the goods are placed under the customs procedure.

Companies can also use Customs services as identified users. The identification requires using a **Suomi.fi ID** or a Katso ID issued free of charge by the Finnish Tax Administration. For private persons, online bank IDs can be used for identification to the Web Export service.

Declarations which an identified user has submitted earlier can be used as templates for new declarations. Declarations by an identified user can be seen and used during a given time limit after they have been submitted.

Customers can submit declarations by using the following online declaration services:

- import
- export
- transit
- entry and exit declarations
- customs warehousing
- Intrastat declarations for intra-EU trade
- Åland tax border declarations

**More information** about Customs' online services can be found at the Finnish Customs website (only available in Finnish and Swedish)

[Tulli - Internetasiointi](#)

[Tulli - Internettjänster](#)

## 2.2 Factors affecting the choice of service channel

### Volume of customs transactions

When choosing the service channel, the volume of transactions with Customs is a significant factor. A rule of thumb is that a large number of Customs declarations tilts the balance in favour of message exchange. It is, however, impossible to define any exact numbers of declarations

### Contents of customs declarations

The more diverse the Customs declarations by the company are, the more likely message exchange is to be worthwhile. Submitting a Customs declaration containing several consignments online is burdensome.

### Customs know-how

Customs know-how here refers to the competence level of the employees of the company in transactions with Customs. The aim has been to make online declarations as simple as possible, as online declarations are also meant for occasional declarants. Message exchange requires a broader competence in transactions with Customs.

### Data systems of the company

A separate data system is not required for online declarations. Data cannot be transferred directly from the data system of the company (e.g. ERP) to the online form.

Message exchange systems can be integrated directly into the data systems of the company, in which case already existing data can be transferred electronically to the Customs declaration faster and more correctly than when entered manually. In addition, customs clearance software can contain registers of changing data (such as exchange rates, commodity codes, import and export restrictions) managed by the software supplier.

More information about Customs service channels can be found at the Finnish Customs website:

[Customs – Choose appropriate service channel](#)

The Finnish version of the web page also contains a link to a table comparing the qualities of different service channels. With the table, the customer can consider which would be the most suitable way of dealing with the service.

### 3 Message exchange

Message exchange with Customs is only possible through direct message exchange or via operators authorised by Customs or through direct message exchange.

Direct message exchange can be used in all Customs' systems and in the new customs clearance system (UTU) under development; only direct message exchange can be used.

Operator-based message exchange will remain as a supported service channel, but Customs will stop using it in the following years.

Use of both service channels at the same time is also possible: The company can declare via certain Customs systems using direct message exchange and to others using operator-based message exchange. However, only one service channel can be used in one single system. For example, if direct message exchange is used in the export system ELEX, then message exchange via an operator cannot be used at the same time.

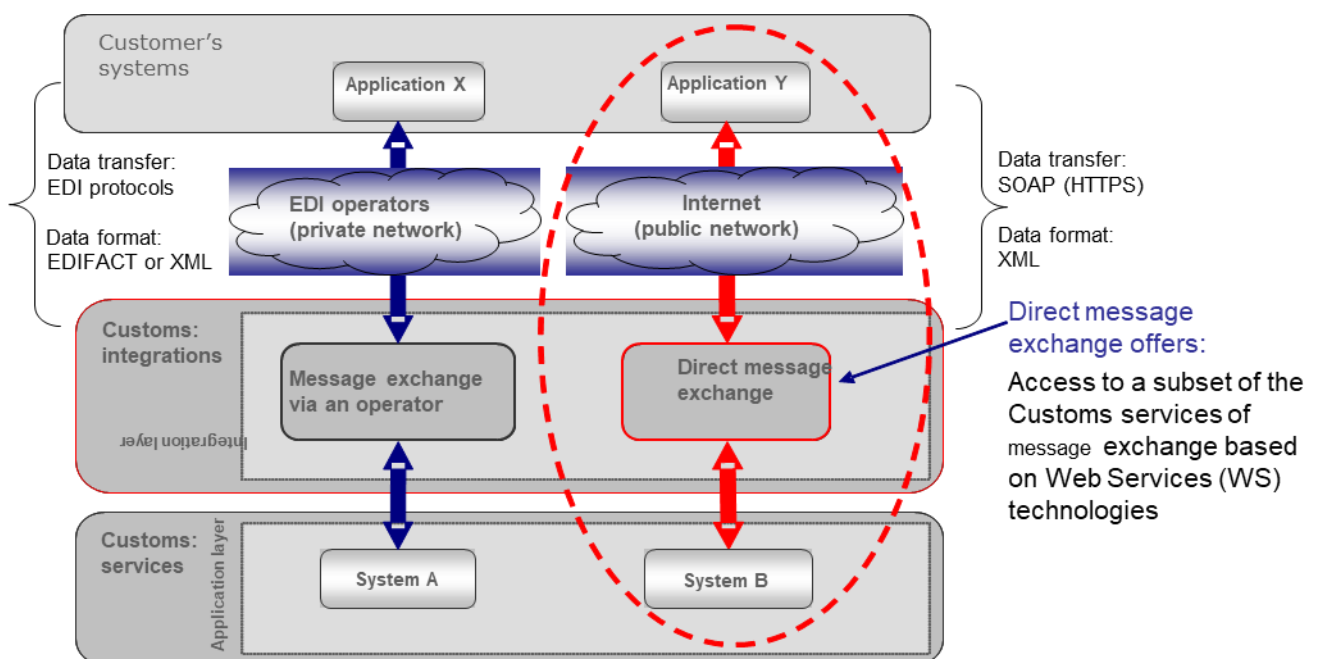


Figure 2: Operator-based message exchange and direct message exchange

#### 3.1 Direct message exchange (web service)

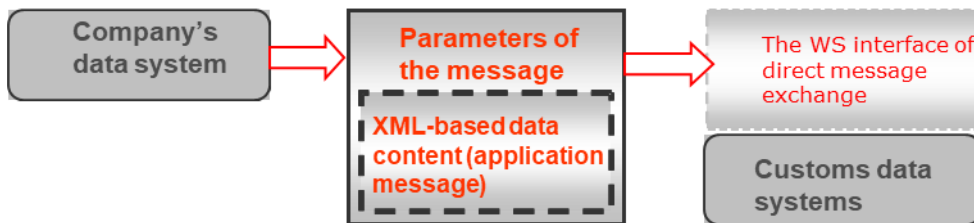
In direct message exchange, the data system of the customer can send messages to the Customs systems over the Internet and retrieve response messages produced by Customs systems. The customer can also start using the Message Notification Service for nearly real-time message exchange.

Direct message exchange with Customs is based on general international standards, which are referred to as web service. The standards provide a possibility of implementing integration between the data systems in a manner that complies with data security. The technical standards of direct message exchange are listed in the technical guidebook for direct message exchange.



### 3.1.1 Message content

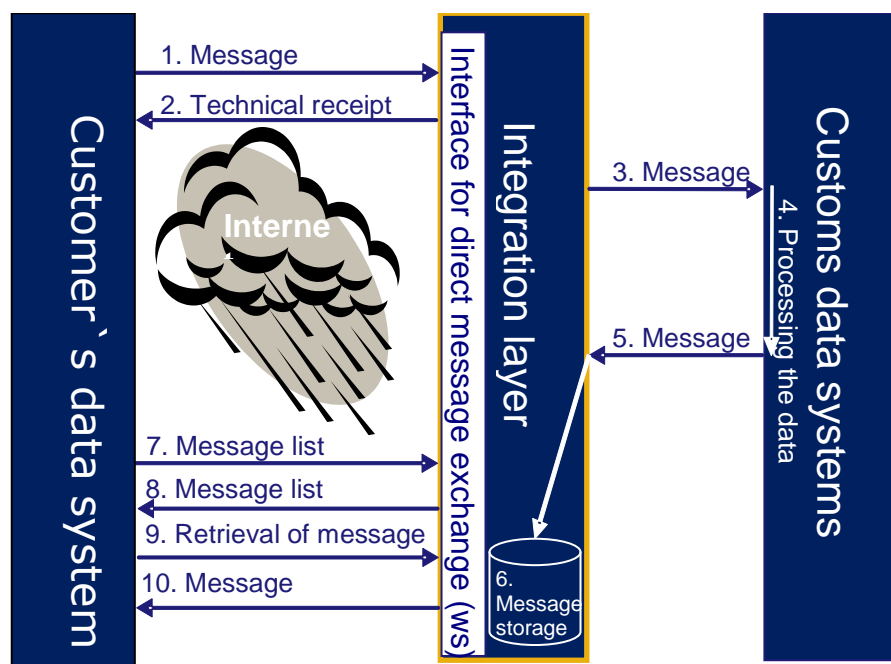
Direct message exchange is used as a transport layer for different XML-based data contents. The data content (for example an export declaration addressed to the ELEX system of Customs) is included in a general-purpose frame message, which is transmitted to the web service (WS) of direct message exchange.



**Figure 3: Message content in direct message exchange**

The structure of an application message submitted through direct message exchange to Customs (e.g. an export declaration to the ELEX system) is identical with the structure of an application message in operator-based message exchange.

### 3.1.2 Operations and process when not using the Message Notification Service



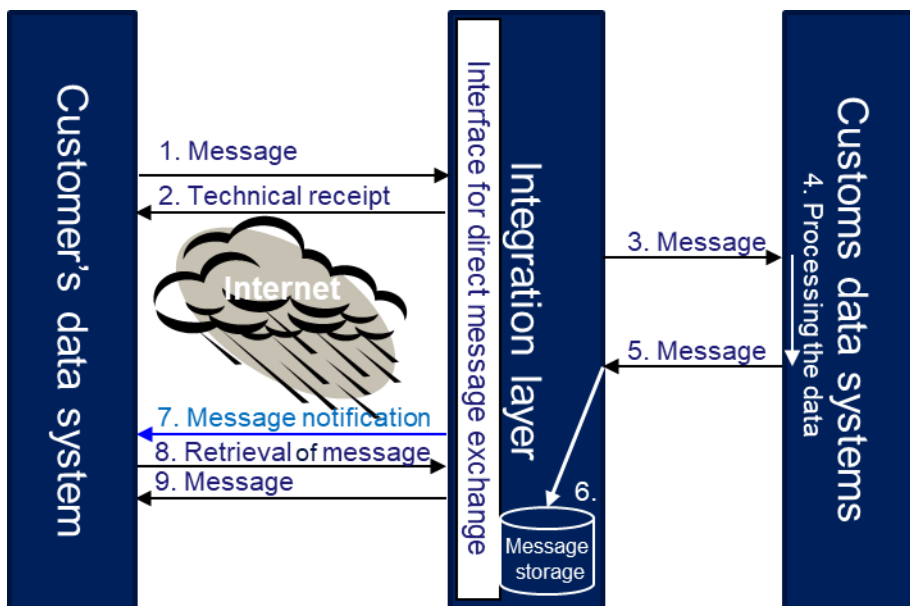
**Figure 4: Process of direct message exchange when not using the Message Notification Service**

1. The data system of the customer builds and transmits the message to Customs web service for direct message exchange.

2. Customs performs security audits on incoming service requests. If the customer's message is accepted, the integration layer of Customs reports the technical receipt of the message. A technical acknowledgement of receipt will end the customer's service request.
3. The integration layer of Customs converts the parameters of the message into the internal format of Customs and routes the message to the relevant Customs system.
4. The Customs system processes the data in the message and builds a response message.
5. The Customs system sends a response message to the Customs integration layer.
6. The message transmitted by the integration layer of Customs will not reach the customer directly. Instead, the message is recorded in the message storage. The customer must retrieve the response messages addressed to him or her from the message storage.
7. The data system of the customer requests a list of messages that are to be retrieved from the message storage.
8. As a response, the customer receives the message list.
9. The customer requests an individual message from the message storage.
10. The customer receives the requested message as a response.

The customer repeats the two previous stages of operation for each message that is to be retrieved.

### 3.1.3 Operations and process when using the Message Notification Service



**Figure 5: Direct message exchange process when using the Message Notification Service**

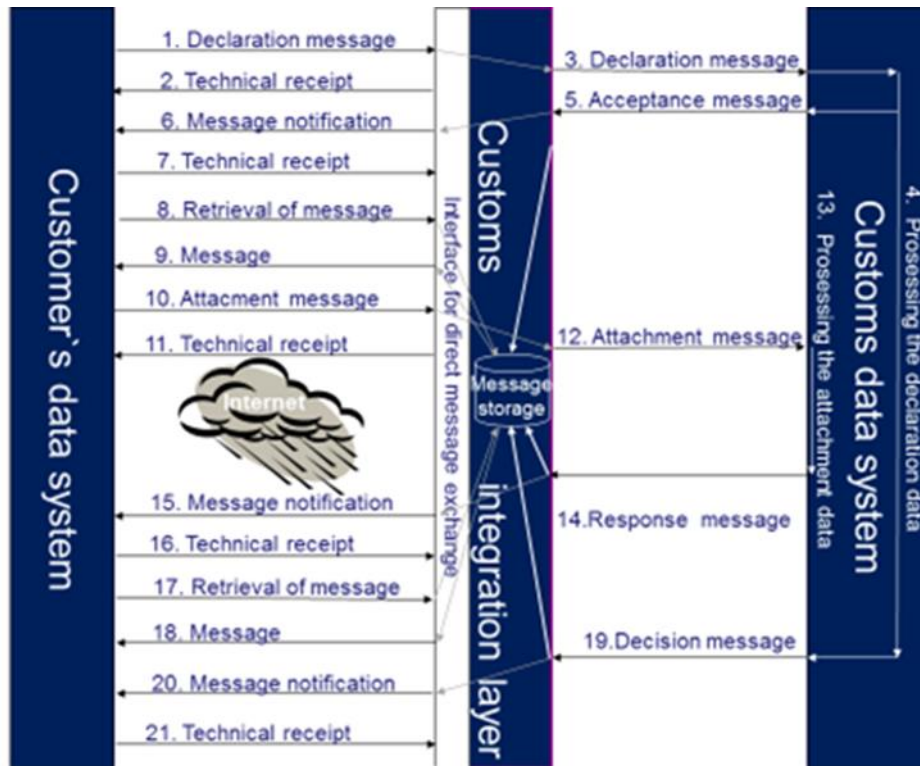
1. The data system of the customer builds and transmits the message to Customs' web service for direct message exchange.
2. Customs performs security audits on incoming service requests. If the customer's message is accepted, Customs' integration layer reports the technical receipt of the message. A technical acknowledgement of receipt will end the customer's service request.

3. The integration layer of Customs converts the parameters of the message into the internal format of Customs and routes the message to the relevant Customs system.
4. The Customs system processes the data in the message and builds a response message
5. The Customs system sends a response message to Customs' integration layer.
6. The message transmitted by the integration layer of Customs will not reach the customer directly. Instead, the message is recorded in the message storage. The customer must retrieve the response messages addressed to him or her from the message storage.
7. The web service for direct message exchange sends the customer a notification on a new message that is to be retrieved from the message storage. The customer receives a notification on a new message that is to be retrieved when the message has been stored. This requires that the customer uses the Message Notification Service.
8. The customer reports the technical receipt of the message notification.
9. The customer retrieves an individual message from the message storage using the message ID.
10. The customer receives the requested message as a response.

**Please note:** In case of disruptions, e.g. if message notifications cannot be successfully received, the customer can send a DownloadList request like before, as shown in Figure 4.

### 3.1.4 Operations and process when using the attachment file message service

By using the attachment file message service, attachments relating to export, import and customs warehousing, can be sent to Customs through direct message exchange. Customs only tests this functionality with software suppliers.



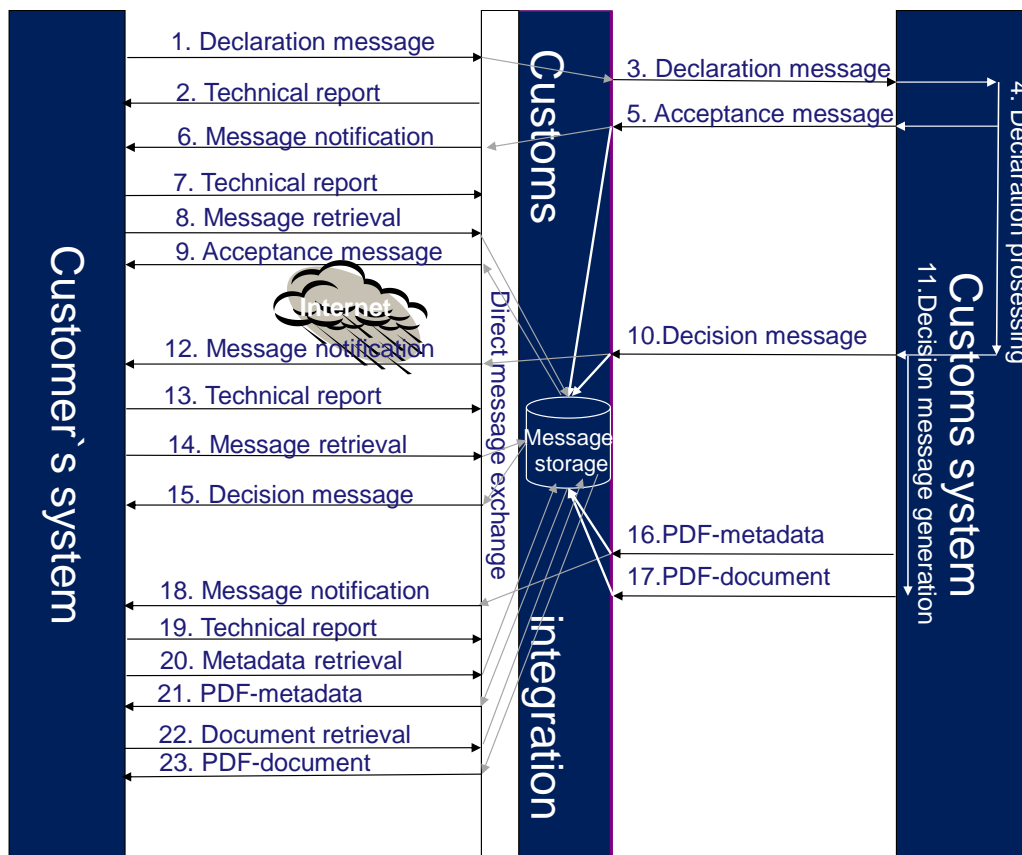
**Figure 6: Process of direct message exchange when using the attachment message service**

1. The data system of the customer builds and transmits the message to Customs online service for direct message exchange.
2. Customs performs security audits on incoming declaration messages. If the customer's message is accepted, the integration layer of Customs reports the technical receipt of the message. A technical acknowledgement of receipt will end the customer's service request.
3. The integration layer transfers the customer's declaration to the relevant Customs system for processing
4. The Customs system begins the processing of the customer's declaration
5. After checking the declaration message, the Customs system generates an acceptance or rejection message and transfers it to the message storage of the integration layer
6. The integration layer of Customs sends a notification to the customer on a new message to be retrieved
7. The customer's system sends a technical report to the message declaration
8. The customer's system requests the message from the message storage
9. The customer receives the requested message

10. In the technical report of the message, the customer receives an individual uploading code from Customs. After receiving the acceptance message regarding the customs declaration, the customer sends the attachments one by one to Customs, providing the uploading code of the original declaration message
11. The integration layer of Customs receives the message containing the attachment. If the customer's message is accepted, the integration layer of Customs reports the technical receipt of the message. A technical acknowledgement of receipt will end the customer's service request.
12. The integration layer of Customs transfers the attachment file with reference data to the Customs system for checking.
13. The integration layer of Customs checks the attachment file with reference data. Once the attachment file has been checked, a response message is formed regarding the results.
14. The response message is transferred to the message storage of the integration layer of Customs.
15. The integration layer of Customs sends a notification to the customer on a new message to be retrieved
16. The customer's system sends a technical report to the message declaration
17. The customer's system sends a retrieval request regarding the response message
18. The customer's system receives the message. The customer's system should check the response message.
19. After checking the declaration message, the Customs' system generates a decision document related to the declaration message and transfers it to the message storage of the integration layer
20. The integration layer of Customs sends a notification to the customer on a new message to be retrieved
21. The customer's system sends a technical report to the message declaration

### 3.1.5 Operations and process when documents are retrieved from Customs' new customs clearance system (UTU) applications

Decisions generated by the old clearance systems (export, import (ITU system), transit, summary declaration system AREX) the customer receives, both in XML and PDF format in the same response message. Decisions in XML and PDF format generated by the new customs clearance system (UTU) applications; the customer retrieves as separate messages from the message storage. Retrieving the decision in PDF format is an optional additional feature, retrieval is not mandatory.



**Figure 7: The retrieval process regarding decisions on Direct Message Exchange as regards the functions of the UTU system**

1. The data system of the customer builds and transmits the message to Customs web service for direct message exchange.
2. Customs performs security audits on incoming declaration messages. If the customer's message is accepted, the integration layer of Customs reports the technical receipt of the message. A technical acknowledgement of receipt will end the customer's service request.
3. The integration layer transfers the customer's declaration message to the Customs UTU-system for processing
4. The Customs clearance system begins the processing of the customer's declaration
5. After checking the declaration message, the Customs system generates an acceptance or rejection message and transfers it to the message storage of the integration layer

6. The integration layer of Customs sends a notification to the customer on a new message to be retrieved
7. The customer's system sends a technical report to the message notification
8. The customer's system requests the message from the message storage
9. The customer receives the requested message
10. The customs system generates a decision message in XML format based on the information provided by the customer in the declaration message and send it to the message storage in the integration layer
11. The customs system generates a decision message in PDF format identical to the decision message in XML format.
12. The integration layer of Customs sends a message notification in XML format on a new message to be retrieved by the customer
13. The customer's system sends a technical report to the message notification
14. The customer's system requests the message from the message storage
15. The customer receives the requested message
16. The customs system sends the metadata of the generated PDF document of the decision to the message storage in the integration layer
17. The customs system sends document in PDF format to the message storage in the integration layer
18. The customs integration layer sends a message notification of the PDF document's metadata message to the customer
19. The customer's system sends a technical report to the message notification
20. The customer's system requests the message containing the metadata of the PDF document (Dme-DocumentInfoMessage) from the message storage
21. The customer receives the requested metadata message
22. The customer's system requests the PDF document from the message storage
23. The customer receives the requested decision message

### 3.1.6 Parties and roles

Two different parties can utilise direct message exchange with Customs: the **message declarant** and, when used, the **service provider** of the message declarant.

- The **message declarant** is the party who has the responsibility to provide declaration data or similar data to Customs and who does this by using message exchange. The message declarant can be a principal, a representative (for example a forwarding agency) or other. If it is a question of, for example, customs declarations, the decisions made by Customs apply to the message declarant. If the message declarant is a representative, the decisions also apply to the principal of the message declarant.
- The applicant can see to all the technical measures connected to direct message declarations, generate and transmit the required messages himself. A direct message declarant can also use a service provider for creating and transmitting messages.
- **The service provider** is a party who can take over certain technical roles related to direct message exchange, render and transmit the required messages on another company's behalf.

**The technical roles** are related to message building and transmission.

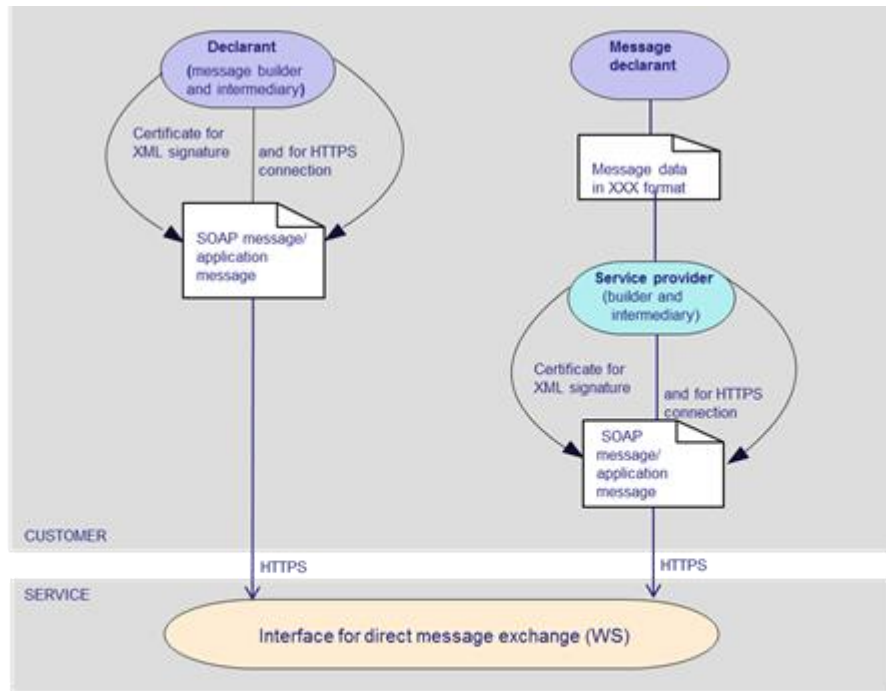
- Declarations are to be submitted in the XML message format. In direct message exchange, the XML message is embedded in a specific frame message, which is marked with an electronic XML signature. The company whose data system builds messages in a prescribed format required by Customs and signs messages with an electronic XML signature has the role of **builder**.
- The customer's service requests are transmitted to Customs using the HTTPS connection, and marked with the transfer frames required by the web service of direct message exchange.

The company whose data system is connected to the web service of the Customs direct message exchange over the internet has the role of **intermediary**.

The roles refer to the actors in a purely technical sense. The terms do not refer to the actors in the data content of the messages. Therefore, the intermediary does not mean, for example, the intermediary of goods or transport.

In direct message exchange, the technical roles between the message declarant and the service provider can be divided as follows:





**Figure 8: Parties and roles in direct message exchange**

1. The message declarant can act alone without particular service providers. (On the left in the figure.)  
This option describes the simplest way of using the web service of direct message exchange. The software of the message declarant performs all of the following operations:
  - Builds an application-specific message according to the specifications set by Customs, signs it and places the signed message in the data element according to the rules.
  - Creates a SOAP message, into which the data element created in the previous phase is entered.
  - Transmits the SOAP message to Customs web service for direct message exchange using the HTTPS protocol.
  - A part of the message transmission is that the message declarant retrieves messages addressed to it from Customs' web service for direct message exchange.
2. Alternatively, the message declarant can hand over the task of transmitting messages to another company. (On the right in the figure.)

In this case, the message declarant doesn't produce an application-specific message according to the specifications set by Customs, but provides the service provider with the data required for building the messages in its own internal format. In this case, the XML message cannot be electronically signed in the software of the message declarant either.

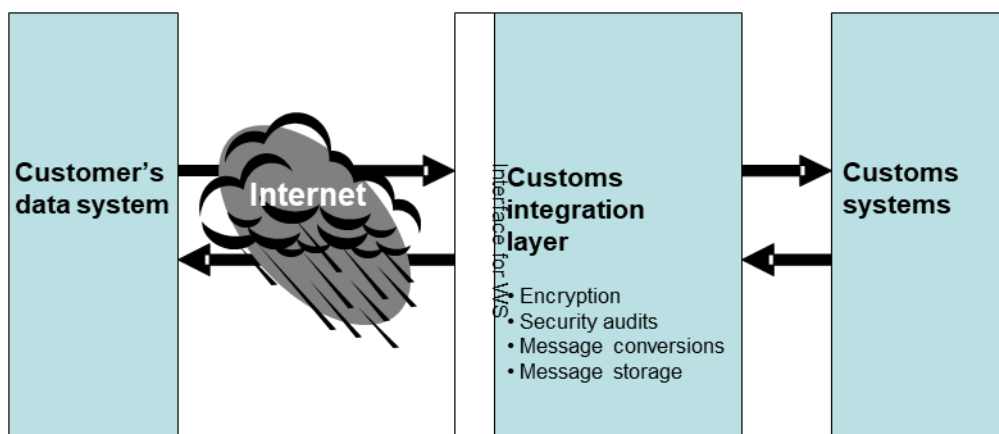
The service provider converts the messages into an electronic data format, builds (and signs with an XML signature) the message declarant's application-specific messages according to the specifications set by Customs and transmits them to Customs web service for direct message exchange.

In direct message exchange, the technical roles must be the same regardless of what system is being used. Therefore, it is not possible for a company to use, for example, a service provider for the ELEX system for submitting messages and to submit messages itself through the AREX system. In a customer testing environment, it is possible to use a different service provider than in the production environment.

In addition to message sending, a part of the message transmission is that the service provider retrieves messages addressed to the message declarant from Customs web service for direct message exchange.

### 3.1.7 Data security and server certificates

Direct message exchange is carried out over a secure HTTPS connection. The web service which enables direct message exchange with Customs has been realized with a specific configuration, which acts as a security boundary in the Internet direction (Customs integration layer in the figure). The encryption algorithms in use and the lengths of the encryption keys increase the data security.

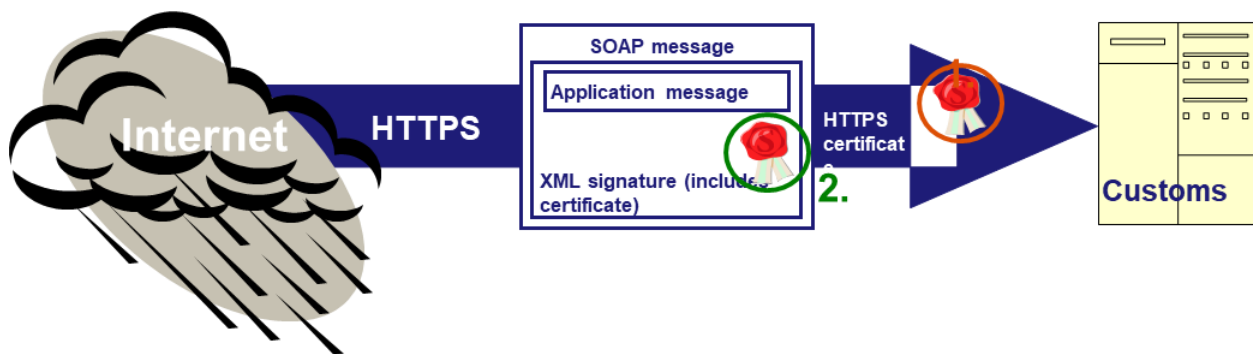


**Figure 9: The web service for direct message exchange**

The Customs integration layer identifies the actors in direct message exchange with the help of server certificates.

1. When forming a HTTPS connection to the web service for direct message exchange, the customer (intermediary) is authenticated by the server certificate.
2. When building a message, the message is signed with a server certificate, which is saved in the frame message around the application message. Data on the customer (builder) is transmitted to Customs.

For transactions with Customs, the server certificates granted by the Digital and Population Data Services Agency (The Finnish Digital Agency / FDA) are used. The customer has to acquire the server certificates itself. Detailed information on server certificates is available in the technical guide.



**Figure 10: Authentication of the operators in direct message exchange**

The operators and the roles in direct message exchange have been presented in the previous section. From the options above it follows that:

- If the data system of the message declarant builds and transmits the message, only one server certificate for the customer is in use. The server certificate is used for the authentication of the builder and the intermediary and for generating an electronic signature. Only the message declarant needs a server certificate.
- If the message declarant sends the data required for building the messages to the service provider, who builds and signs the message declarant's application-specific messages with an XML signature as well as transmits the messages, one server certificate is enough: the service provider needs one server certificate, the message declarant does not need any.

### 3.1.8 What direct message exchange requires from the customer

From the customer, direct message exchange requires

- Approved declaration-specific customer testing
- An authorisation issued by Customs for message exchange.
- Communications (Internet connection) for transmitting messages.
- The acquisition of a server certificate by the Digital and Population Data Services Agency for building and transmitting messages.
- Software with which the customer builds the right kind of application and frame message and is connected to the web service of the Customs direct message exchange.

**The customer can use a service provider for building and transmitting messages. Customs is not liable for the quality of the service provided by the possible service provider chosen by the message declarant. The customer must make sure that the service level is described accurately enough in the agreement that the customer signs with the service provider.**

**Direct message exchange does not require that the customer of Customs (the message declarant) uses a service provider**

If the customer already uses operator-based message exchange and wishes to start direct message exchange, changes are to be made in the data systems in use. The changes are necessary so that the customer's data systems form the right kind of frame message around the application message. The actual application message remains unchanged.

More detailed technical information on the web service of direct message exchange can be found in the technical guidebook.

## 3.2 Operator-based message exchange

Operator-based message exchange will be completely phased out by the end of 2021 in declarations and notifications for export, transit, entry, exit, import and Intra-EU trade (Intrastat). No new customers will be accepted for operator-based message exchange in the systems for intra-EU trade and customs clearance. Only direct message exchange is available in the new customs clearance system (UTU).

### 3.2.1 Role of data communications operators in direct message exchange

For the time being, Customs uses reliable communications in message exchange provided by operator companies authorised by Customs. Only companies that are approved by Customs and whose line of business includes message exchange and conversion services can act as data communications operators. The contact information of the operators authorised by Customs can be found in appendix I.

The operator is responsible for the reliability of both the data security and the availability of the message exchange. The operator shall identify the customer and check that the customer has an authorisation for message exchange with Customs.

**Customs is not liable for the quality of the service provided by the operator. The customer must make sure that the service level is described accurately enough in the agreement that the customer signs with the operator.**

## 3.3 Customer's software

In direct message exchange, the company needs to use declaration-specific software. With the software, the customer builds and sends messages that are to be delivered to Customs and receives notifications sent by Customs.

### 3.3.1 Suppliers of customs clearance software

Customs does not provide the required software; companies should instead contact their own software suppliers. The list of software suppliers who provide the necessary customs clearance software for direct message exchange, can be found at [Companies who provide message services](#)

## 4 Applying for an authorisation for message exchange

### 4.1 General information on applying for an authorisation for message exchange

Message exchange between a company and Customs requires authorisation.

The company has to apply for authorisation for message exchange and to complete customer testing successfully for each Customs system.

The company should be prepared for the fact that it is not possible to start customer testing with Customs' testing official or in the direct message service immediately after the sending of the application. The testing time is determined according to which system/systems is used for the testing. Determining of the time depends e.g., whether several companies have applied for testing at the same time as well as on the extent of the testing.

In order to ensure problem-free message exchange, Customs requires that companies seeking authorisation for message exchange have competence in the procedure in question and in customs clearance.

Before customer testing, Customs' business advisors will provide consultation to the company.

A company authorised to use message exchange is responsible for ensuring that the employees who send messages to Customs have extensive competence in sending and follow-up of messages during testing and in the production environment.

Apply for an authorisation to use message exchange

- through the service “Applying for a message exchange authorisation” in Customs’ online services. Using the service requires identification.
  - Through the service, you can apply to become a direct message customer (UTU system):
    - for customs warehousing
    - for import
    - for the presentation notification (entry)
- with form no 943e, “Application for message exchange with Finnish Customs”. The application form and completion instructions are available on the Customs website. With the application, you can apply to become a direct message exchange customer:
  - Import system ITU (when submitting import declarations that cannot yet be submitted to the new customs clearance system)
  - Export system ELEX
  - Transit system
  - Summary declaration system AREX
  - Excise taxation system EMCS
  - Åland Tax Border System ALA
  - Intrastat System for Intra-Community Trade Statistics

More information for customers who wish to register for direct message exchange regarding car taxation (in Finnish and Swedish):

[Autoverotuksen rekisteröity asiamies](#)

The requirements for authorisation for message exchange are procedure-specific and system-specific. For example, message exchange customer status in import requires an authorisation for deferred payment, and message exchange in export requires Customs' registered export customer status.

### Additional information related to direct message exchange

To use direct message exchange, both the message declarant and the service provider have to apply for authorisation for message exchange.

In the application for direct message exchange, the applicant should state if it wishes to use the Message Notification Service for direct message exchange.

The software suppliers can introduce to their direct message exchange software an attachment file message service, through which required attachments relating to export, import and customs warehousing can be sent to Customs via direct message exchange. Customs only tests this functionality with software suppliers.

## 4.2 Decisions on authorisation for message exchange

The decisions on authorisation for message exchange with customs are system-specific.

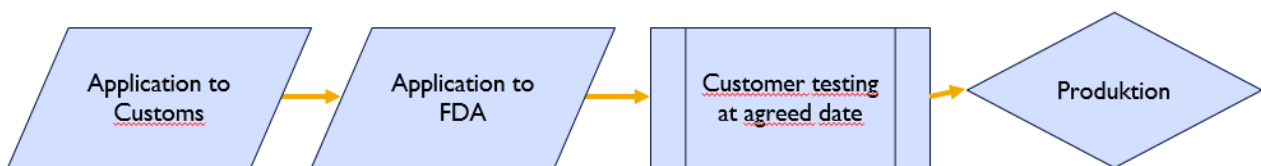
The authorisation enables the declarations (or similar) concerning the authorisation holder to be submitted electronically as messages, according to the specifications set by Customs.

### Direct message exchange:

The authorisation of the service provider is not tied to a single Customs system but to the use of the web service for direct message exchange.

When processing applications for authorisation, the applications for authorisation of the message declarant and the service provider, if any, are connected so that it is technically possible for the service provider to transmit messages on behalf of the message declarant.

Both the message declarant and the service provider agree to adhere to the conditions of the authorisation mentioned in the authorisation application form. Customs is not liable for the quality of the service provided by the service provider chosen by the message declarant. Furthermore, using a service provider will not affect the message declarant's responsibilities in relation to Customs.



**Figure 11: Applying for customer authorisation for direct message exchange.**

The customer should first send the application for message exchange to Customs and then apply for a server certificate from FDA.

## 5 Testing

A message customer has to test the functionality of the software and that it produces messages in accordance with the specifications. The data communications are also tested with Customs. Customs also recommends that the testing of the message exchange shall be carried out again if the customer's software is updated after an accepted case of testing.

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 or additional information), in reply to which Customs sends messages (acceptance, error, request for additional information etc.). The company sends appropriate responses to the reply messages; e. g. corrects the errors or sends additional information.

### 5.1 Parties in testing

Message customer testing is company specific. Separate testing for each company office will not be carried out. If different offices of a company use separate IT systems, then the test is carried out in each IT system. In the case of a consolidated corporation with several business ID numbers, it is necessary to test all ID numbers separately. On the other hand, if one of these companies sends messages on behalf of all companies, only the sending company has to pass the testing.

The contact person for testing is the same as the message exchange contact person mentioned in the application for authorisation for message exchange, unless agreed otherwise. The software supplier's representative may assist the company in testing, but the company submitting the application is always responsible for the testing.

#### 5.1.1 Direct message exchange operator

In direct message exchange, each message declarant has to go through the Customs customer testing. The testing is customer-specific regardless of whether the service provider used by the message declarant has other message declarants in production.

The service provider must test the declaration-specific direct message exchange solution and its functionalities as well as the software with Customs. This also applies to the customers who act as message declarants and who use the service provider's software. In the new customs clearance system (UTU), only the service providers test their software; their customers do not have participate in customer testing.

#### 5.1.2 Technical message sender in message exchange

In message exchange, the company may use a technical sender for sending messages. A message sender approved by Customs may also act as a technical sender, i.e. convert company's declaration messages and send them to Customs. The technical sender is not allowed to make any changes in the data content of the messages. Customs will always send response messages to the technical sender, who is obliged to pass the messages on to the trader on whose behalf the declaration was submitted.

Acting as a technical sender always requires an authorisation from Customs and appropriate testing with Customs. For the time being, using a technical sender is only possible when sending messages related to import, export and summary declarations.

No separate technical sender will be used in the new customs clearance system UTU. In the UTU system, the roles of message declarant and service provider will be used in direct message exchange.

## 5.2 Agreement to start testing and business advice

After Customs has processed a company's application for message exchange, the Customs contact person for customer testing contacts the applicant in order to agree on the testing schedule and the date when the network connection is opened.

One free consultation visit will be arranged before testing begins. A Customs business advisor will contact the business in order to set a time for the consultation. The consultation can be provided by phone, by email or in person in the company's or Customs' facilities. The consultation meeting covers the following:

- message exchange: which messages the company must be able to send and receive
- data content of the messages: what the company needs to consider when completing electronic declarations and producing messages.
- material for technical testing: declarations defined by Customs for testing and messages built from the declarations as well as arriving response messages.
- if necessary, the identifying serial number and control reference number of the company, which are used in both testing and production phases.
- the company's own questions

It is desirable, that both a declaration expert and a message exchange expert of the company take part in the consultation meeting. Consultation is free of charge.

## 5.3 Testing stages and schedule

The testing consists of one or two parts, depending on the procedure.

### UTU system, customs warehousing

1. Technical testing, partly in the message exchange testing service

### UTU system, import

1. Technical testing, partly in the message exchange testing service

### UTU system, presentation notification (entry)

1. Technical testing

### Summary declaration system AREX

1. Technical testing
2. Parallel testing

### Import system ITU

1. Technical testing
3. Testing with own declaration material (changing over from message exchange via an operator to direct message exchange)
4. Testing the attachment message service with the message exchange testing service (software suppliers)



### **Transit system NCTS**

1. Technical testing
2. Parallel testing
3. Testing using the company's own material (direct message exchange operators)

### **Export system ELEX**

1. Testing with the message exchange testing service
2. Testing the attachment message service with the message exchange testing service (software suppliers)
3. Testing the amendment and invalidation message with the company's own declaration material

### **ELEX export system, "Arrival at exit" message**

1. Technical testing

### **Intrastat System for Intra-Community Trade Statistics**

1. Testing using the company's own material

The performing of the test cases in the message exchange testing service is controlled by a test automation application. The test cases have been created by Customs and the company performs them independently.

The technical and parallel testing, as well as the testing using the company's own material, is carried out with the Customs testing official. The communication is conducted mainly by e-mail.

The general testing schedule is defined separately for each Customs system according to the situation. The testing material is system-specific.

#### **5.3.1 Technical testing of communications for direct message exchange**

The technical testing of the communications ensures that the company's software and the Customs web service for direct message exchange are compatible. As the web service acts as a transport layer for declarations sent to Customs through direct message exchange, the technical functioning of the communications is ensured before the testing with system-specific messages is started. This testing is always carried out before the actual customer testing starts.

The testing of the communications is mandatory, unless the company is already using direct message exchange with a Customs system or uses an intermediary that has already carried out the technical testing of the communications.

The technical testing of the communications for direct message exchange consists of three test cases (four if the customer starts using the Message Notification Service). The communications are working if the web service of the direct message exchange reports the receipt of the message. In addition, the customer has to be able to retrieve the reply message from the Customs message storage. The content of the reply message (acceptance, rejection etc.) is not significant for the testing of the communications.

A company that already uses direct message exchange and wishes to use the Message Notification Service is to submit an amendment application and test the Service before taking it into use.

#### **5.3.2 Testing using the message exchange testing service**

Customers of direct message exchange can partly do their customer testing with a test automation application, independently and irrespective of time and place. The customers are able to test their own systems against the Customs interface and to verify that their systems can correctly produce the declarations messages to be sent to Customs and handle the response messages from Customs.

The testing service will automatically perform the steps that the testing official performs manually in the technical testing (the measures are described in chapter 5.3.3 of this manual). **The Customs testing official provides support during office hours in problem situations that occur during the scheduled testing.**

In the testing service, the test cases for the declarations can be found in individual groups. The Customs testing official enters the test cases to be tested by the companies in the testing service as well as the period in which the test has to be conducted successfully. Each test case contains instructions on the details to be declared and the measures to be taken by the company.

When the company has confirmed that all test cases have been completed, Customs' testing official approves the test done by the company in the testing service and confirms the test report, and the company's testing is approved.

The testing service requires identification as well as an application for authorisation to use direct message exchange with Customs.

The user manual for the test service is available on the tullifi website:  
[Testing](#)

### 5.3.3 Technical testing

During the technical testing, the Customs testing official ensures that the connections work and that the messages sent by the company comply with the message descriptions of Customs.

In the technical testing, the test material prepared by Customs is used. The number of test cases depends on the company's line of business and the character of its transactions. The test cases are agreed on with the Customs testing official at the same time as the testing schedule.

When starting the technical testing of messages, the company sends a message to the Customs system and notifies the Customs testing official of the message by email.

After the message has arrived at the Customs system, the Customs testing system checks that the structure of the declaration message complies with the MIG. If there are errors in the structure, the testing system informs the company of it. The company or the software supplier used by the company must fix the errors in the application.

When the message structure is correct, the testing official checks the message data. If the message contains errors, the testing official notifies the company of it and the company corrects the errors and sends a corrected message.

This process is repeated for each test case.

After all test case messages have been carried out in a satisfactory manner, the testing official informs the company by e-mail of the successful completion of the technical testing.

### 5.3.4 Parallel testing

Parallel testing is conducted to ensure that the company's employees know how to complete the declaration messages correctly. The testing material used in the test cases are based on previous declarations submitted by the customer and if necessary, procedure-specific additional documents. The company delivers the numbered test cases to the testing official before the testing starts.

When starting the parallel testing, the company sends a message and notifies the testing official about it by e-mail.

The testing official compares the content of the message to the content of the numbered test case. If the message contains errors, the testing official notifies the company of it and the company corrects the errors and sends a corrected message.

This process is repeated for each test case. When the company has sent all the messages successfully, the testing official informs the company by e-mail that the parallel testing has been completed successfully. The testing official and the company also agree on the date for launching production.

It is desirable that as many as possible of the employees who will be submitting electronic declarations in the production phase participate in the parallel testing.

The names of the employees participating in the parallel testing should either be listed in the “Application for message exchange with Finnish Customs” under “Further information”, or sent later to the testing official.

The technical guide contains more detailed descriptions of the technical data concerning testing and production. More detailed system-specific instructions for testing are available on the Customs website.

### 5.3.5 Testing with the company’s own material

The company can choose whether to use Customs’ technical test cases or its own declaration material for testing. If the company chooses testing with its own material, no parallel testing to ensure procedural competence is required.

When testing with its own material, the company chooses, as agreed with the Customs’ testing official, a number of its customs clearances that have already been carried out in the production environment and sends them in XML format to the customer testing environment. The test cases have to cover the technical requirements for the testing. The company has to see to that when testing with own material, the data content of the material covers the normal product scope of the company as well as the regularly occurring exceptional situations.

Testing with own material is possible in the export system ELEX. In the import system ITU and in the transit system, this testing is possible for a so-called old message exchange customer only when the company changes over from operator-based message exchange to direct message exchange.

## 6 Launching the production

### 6.1 Launch of message exchange

After the testing has been successfully completed, Customs will send to the company the decision on 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. The company may start sending messages on the date specified in the decision. The company and the Customs testing official will agree on the date and time when the first declaration message will be sent. The clearance officials of the Electronic Service Centre may request the company to provide copies of the customs declaration and accompanying documents at the start of the message exchange production phase.

### 6.2 Follow-up messages, acknowledgements and keeping log file

The customer is responsible for the reception of the messages, i.e. that the messages are received by Customs within the given time limit. Message customers must see to the follow-up and flow of messages, i.e. make sure that replies 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.

In direct message exchange, the customer also has full responsibility when the EDI customer has decided to use a service provider for transmitting or building and transmitting messages.

Some of the Customs systems send a control message about customs declaration messages that have reached the server used by Customs. After receiving a positive control message, the customer has to wait for an application-level message sent by Customs. The Intrastat system does not send an acceptance message. Only an error message is sent, if the declaration contains a major error.

Messages shall not be resent automatically. Instead, the state of the transaction must be confirmed from the company's own service network before resending messages in the following cases:

- the message sender receives a negative control message.
- no control message is received
- after a positive control message, no acceptance/rejection message is received from Customs within a time including the processing time given by Customs and the maximum processing time given by the used networks

It is primarily the customer who has burden of proof

- if the data in the Customs system differs from the data in the customer's system;
- if the declaration is received by Customs after the deadline, even though the customer has sent it in time A log system may be used as proof. If it is a question of proving the integrity of the message content, the log should contain the whole message in a readable form. A log with information on the sender, the recipient, the identification and time of the interchange, is sufficient proof of the sending time. In the statistics on Intra-Community trade (Intrastat) the statistical numbers in the declaration must also be included in the log. However, even if the customer shows proof of the log, a delay or discrepancy of the declaration may cause administrative consequences or other actions by Customs authorities.

Customers are to file the messages they have submitted as well as the corresponding paper documents concerning the procedure in question.

### 6.3 Problem situations

In problems arise related to message exchange, companies should start solving the problem by contacting their own Help Desk and their own operator in operator-based message exchange. If the problem causes an interruption in the message exchange, the instructions for the fallback procedure defined for the system or the procedure should be applied.

If the problem of the message exchange is related to customs clearance, the Electronic Service Centre is to be contacted.

If problems arise regarding the message exchange related to car taxation, contact the Tax Administration.

If the message exchange with Customs is not possible, a fallback procedure will be used. System-specific instructions on the fallback procedures are available.

UTU Customs warehousing [Fallback procedure in customs warehousing](#)

AREX summary declaration system [Fallback procedure](#)

- Safety and security declarations for goods other than export goods exiting the EU: instruction on fallback procedure
- AREX declarations on goods entering the EU: fallback instruction
- Declarations of the exit stage of export goods: fallback instructions

ELEX export system [Export fallback procedure](#)

- Interruption in the message customer's system
- Interruption in Customs' ELEX export system

ITU import system [Import fallback procedure](#)

- Interruption in the message customer's system
- Interruption in Customs' ITU import system

NCTS transit system: [Fallback procedure](#)

EMCS system: [EMCS-palvelun ohjeet](#)

## 6.4 Changes in message exchange

In systems where companies apply for message exchange with Customs (no 934), notifications of changes should be notified by filling in the "Amendment application", and sending it to lupakeskus (at) tull.fi.

The company should use the Amendment application, if the change concerns e.g. the following data:

- change of software
- the company extends the use of message exchange to another system
- change of service provider in direct message exchange (the message declarant must notify Customs of the change of service provider, and the new service provider must have authorisation for direct message exchange)
- the company wishes to end its message exchange customer status due to, for example, corporate arrangements
- the company changes over from operator-based message exchange to direct message exchange

Enter changes to customs warehousing in the field for further information in the service "Applying for a message exchange authorisation".

## 6.5 System changes in message exchange

If the company's system is upgraded or entirely changed, Customs must be contacted in order to discuss the possible need for testing with the Electronic Service Centre. A new version or software cannot be used prior to approval by Customs.

## 6.6 Change of service provider of direct message exchange

If the direct message exchange declarant changes service providers or stops cooperating with a service provider, Customs must be notified of it by submitting a notification of change to Customs.

## Appendix I: Contact information of the EDI operators of operator based message exchange

### Capgemini

Contact in problem situations: HelpDesk Capgemini/Editeam, [editeam.fi@capgemini.com](mailto:editeam.fi@capgemini.com)

Contact person in other matters:

Kari Männistö, [kari.mannisto@capgemini.com](mailto:kari.mannisto@capgemini.com) tel. +358 9 4526 7420 / +358 40 7302495

### IBM Business Consulting Services

Edi Services, As Finland (IBM EDIPalvelu)

Contact in problem situations:: [eai.center@ibm.com](mailto:eai.center@ibm.com)

Contact persons in other matters: Jukka Manner, [jukka.manner@fi.ibm.com](mailto:jukka.manner@fi.ibm.com)

Technical contact person: Matti Alatalo, [matti.alatalo@fi.ibm.com](mailto:matti.alatalo@fi.ibm.com)

### OpusCapita Group Oy

Customer service +358(0) 9 5846 6100, [information.fi@opuscapita.com](mailto:information.fi@opuscapita.com)

### Publishing House

#### Koivuniemi

Customer support, [helpdesk@koivuniemi.com](mailto:helpdesk@koivuniemi.com), tel. (09) 888 2820

Sales: Timo Kujanpää tel. 045 126 1824, Ari Mervelä tel. 040 962 8528

[etunimi.sukunimi@koivuniemi.com](mailto:etunimi.sukunimi@koivuniemi.com)

### Liaison Technologies Oy

Customer Liaison European Support, tel. +358 10 3060 999, [support.europe@liaison.com](mailto:support.europe@liaison.com)

Sales, tel. 010 3060 900, [info.europe@liaison.com](mailto:info.europe@liaison.com)

### CGI Suomi Oy

Customer support: tel. +358 50 3949 330, [tuki.sanomavalitys@cgi.com](mailto:tuki.sanomavalitys@cgi.com)

Sales [sales.bis.fi@cgi.com](mailto:sales.bis.fi@cgi.com)

Contact person in other matters: Jussi Tarvainen, tel. +358 40 535 1845 [jussi.tarvainen@cgi.com](mailto:jussi.tarvainen@cgi.com)

### TeliaSonera Finland Oyj

Problem situations: eCenter tuotanto [ecenter@sonera.com](mailto:ecenter@sonera.com)

Sales: [miika.salo@telisonera.com](mailto:miika.salo@telisonera.com)

### TietoEnator

Customer support: B2B Support / Integration Customer [Support.B2B.support@tieto.com](mailto:Support.B2B.support@tieto.com)

Agreement matters: Nina Juneja, tel. +358 400485695 [nina.juneja@tieto.com](mailto:nina.juneja@tieto.com)

### OneWay sanomavälitys Oy

Customer support: tel. 0201 210 272 [tuki.oneway@rauhala.fi](mailto:tuki.oneway@rauhala.fi)

Contact person in other matters: Jari Lankinen tel. +358 40 842 1355 [jari.lankinen@rauhala.fi](mailto:jari.lankinen@rauhala.fi)

### Trade Connector Oy

Customer support: [helpdesk@tradeconnector.fi](mailto:helpdesk@tradeconnector.fi), [myynti@tradeconnector.fi](mailto:myynti@tradeconnector.fi)

Contact person: Petri Tammelander [petri.tammelander@tradeconnector.fi](mailto:petri.tammelander@tradeconnector.fi)

### Apix Messaging Oy

Customer support: tel. +358 9 4289 1324, [servicedesk@apix.fi](mailto:servicedesk@apix.fi)

Sales: tel. +358 45 140 5545, [myynti@apix.fi](mailto:myynti@apix.fi)

## Appendix 2: Further information

Finnish Customs

[Frontpage](#)

Summary declarations

[Arrival and exit declarations](#)

Export to third countries

[Export](#)

Import from third countries

[Import](#)

Transit

[Transport and warehousing](#)

Intra-Community import and export

[Intrastat](#)

Message exchange in general

[Tieke Ry](#)

EDIFACT

[Unece](#)

XML

[Extensible Markup Language \(XML\)](#)

European Commission

[Taxation and Customs Union](#)

World Customs Organization WCO

[World Customs Organization](#)