

Testing instructions for Intrastat message exchange customers

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1 Definitions of the terms

Agent

A company that completes and submits statistical declarations on behalf of a provider of statistical information. Freight forwarders often serve as agents.

Provider of statistical information (PSI)

A company that Customs Statistics has obliged to provide statistical information about intra-EU trade – arrivals (acquisitions) or dispatches (sales).

Software supplier

A company that sells software required for statistical declarations. The software solutions are based on message definitions designed by Customs and tested in cooperation with Customs.

Direct message exchange

Message transfer over the Internet to Customs. Companies can transmit messages to Customs over the so-called web service interface and retrieve reply messages generated by Customs' systems.

Direct message declarant

A company that creates and transmits messages to Customs' direct message interface. A direct message declarant can also use a service provider for creating and transmitting messages.

Service provider

A company that, on behalf of another company, builds (builder) and/or transmits (intermediary) messages to Customs' direct message interface.

Certificate

Customs authenticates the message builder and the intermediary with a certificate granted by the Digital and Population Data Services Agency (DVV). The builder needs the certificate for the XML signature and the intermediary for the connections.

Customer testing

The phase preceding the authorisation for message exchange customer status, where a company sends declarations in message format to Customs' testing environment. After successful testing, the customer will be granted the message exchange authorisation and will be able to submit error-free messages to the Customs system.

Declaration number

Unique reference number for the declaration.

The identification is generated in the following fashion:

YYCODDDREGNNN

The code consists of the following parts:

YY = Two last digits of the year

CO = Identification of the Intrastat service point as issued by Customs, always 11 for new traders

DDD = Serial number of the day (eg. February 1 = 032)

REG = Serial number of sender as issued by Customs.

NNN = Serial number, generated daily, starting from 001.

Each statistical declaration receives a number that is determined by the sending date. The serial number is a rule to start from 001 and increase by one for each subsequent declaration. On demand a number can be omitted. The declarant is to see that each number is used only once.

When a declarant received an error message from Customs, the message is amended in such a way that a new serial number is issued by date of sending.

Serial number

A unique three-digit code identifying the sender. The serial number is needed during both testing and production and it is included in the transaction identifier of a statistical declaration. In the Intrastat system, the serial number is also referred to as a work station ID. The serial number is in the declaration number.

Electronic Service Centre

The customs office to where message-format declarations are directed when they have been selected for manual processing.

Technical testing with application messages

One of the phases of testing Intrastat message exchange applicants. An applicant company's own Intrastat declarations will be used in the testing, and the communications and the accuracy of the message structures will be checked.

2 Message exchange customer status for Intrastat

These instructions are meant for customers of Finnish Customs who are applying to become Intrastat message exchange customers. The instructions describe the application process for becoming a message exchange customer, as well as the testing process from technical testing to starting message exchange.

2.1 Direct message transaction channels for Intrastat message exchange

In direct message exchange, the provider of statistical information (PSI), i.e. the direct message declarant, sends XML messages to Customs via a public message interface by connecting to a public network (Internet).

3 Applying for message exchange customer status for Intrastat

3.1 Requirements for direct message exchange via Intrastat

The company must have access to software that can generate the required messages in accordance with Customs' declaration standards. 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, there is a list of the software suppliers for direct message exchange on the Customs website:

[Software suppliers for direct message exchange](#)

The list contains information on those software suppliers who have given Customs permission to publish their information on the website.

Descriptions for the message exchange and the message data content can be found on the Customs website under [Message descriptions](#).

In direct message exchange, companies must acquire a certificate granted by the Digital and Population Data Services Agency (DVV) for creating a connection and relaying messages.

- 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.
- For the connection, the intermediary needs a certificate. If the builder and the intermediary are one and the same, one certificate is sufficient.
- More information about acquiring a certificate is available in the document "Message exchange with Finnish Customs: Technical guidebook".

In order to be approved as an Intrastat message declarant, 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. The testing is described in more detail in Chapter 4.

3.2 Applying for status as an Intrastat message exchange customer

You can apply for status as an Intrastat message exchange customer through [Customs' e-service](#).

In direct message exchange, a company acting as message declarant and service provider must apply for authorisation to use direct message exchange.

When the application has been processed, the official who sees to customer testing at the Electronic Service Centre will contact the company that has applied to become a message exchange customer to schedule a date for technical testing.

4 Testing for Intrastat message declarants

The aim of customer testing is that the company sends messages that are as free of errors as possible once it has entered the production phase of message exchange.

Testing is carried out individually for each company (one business ID). There will be no separate testing for individual company offices (only the INT code of one office should be given, if available). Testing will be done individually for each data system. The applicant company will have to undertake more than one testing only if it has several data systems in use at multiple offices. In the case of a group of companies, testing will be carried out separately for each company (different business IDs).

Unless otherwise agreed, the applicant company's contact person for testing is the contact person for Intrastat message exchange mentioned in the application.

The software supplier's representative can assist the company in testing, but it is always the responsibility of the statistical declarant or an agent. The company will see to the costs of testing itself.

If the company is planning to use in its production software 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.

Companies operating as message declarants must make sure that its personnel who provide statistical declarations are skilled for sending declaration messages. Company employees who provide message-based statistical declarations must participate in the testing as much as possible.

4.1 Customer testing for direct message exchange

In direct message exchange, the Intrastat declarant, i.e. the direct message declarant, sends XML messages to Customs via a public message interface by connecting to a public network (Internet). Via Customs' public message interface, business customers of Customs can automatically send messages to Customs' data systems and retrieve response messages generated by Customs' systems from the so-called message storage. The direct message declarant can also be the representative of the company using Intrastat. The direct message declarant can, when necessary, use a service provider for building and transmitting messages.

If a new company starts message-based Intrastat transactions, it should complete the possible technical testing of direct message exchange connections, as well as the testing of the Intrastat application.

4.2 Testing the connection for direct message exchange

Going through the test cases for the technical connection helps to ensure that the customer's software is compatible with the Customs web service used for direct message exchange. Since direct message exchange is the transport layer for Intrastat declarations, the aim is to ensure the technical functionality of the connection separately before starting the testing with application messages.

Testing the connection is optional if the company is already using direct message exchange with a Customs system, or if the company uses an intermediary that has already carried out the technical testing of the communications. When the time of testing is agreed on, Customs will also send more specific instructions to the company on testing the technical connection for direct message exchange. At this time, the company can also start using the message notification service for direct message exchange if it so wishes.

4.3 Change from operator-based message exchange to direct message exchange

When the company changes from operator-based message exchange to direct message exchange, the company should submit an application for direct message exchange through Customs' e-service.

Changing over to direct message exchange requires approved customer testing with Customs.

In Intrastat, it is possible to use both operator-based data connections and direct message exchange at the same time during the transitional period. Companies changing over from using an operator to direct message exchange have to make sure that, when necessary, any subsequent response messages to statistical declarations submitted via an operator can still be received via an operator. Customs always submits its response messages to the same transaction channel from where the customer's message has arrived. When a company no longer requires an operator-based message exchange connection, it should notify the Customs testing official about this. The testing official and the customer will then agree on the date when the connections provided by an operator will be closed.

4.4 Testing using the message exchange testing service

Intrastat declarations can be tested using the message exchange testing service (test automation application). This enables the company to carry out direct message exchange testing independently, irrespective of time and place. Message declarants are able to test their own systems in the Customs testing environment and to verify that their systems can correctly produce the messages to be sent to Customs as well as to handle response messages from Customs. When an invalid message is sent, the Customs system automatically sends a rejection notification or an error notification.

A schema validation is performed on messages sent by the message declarant. If the customer's message does not conform to the schema, a schema error notification is sent by Customs to the message declarant, who must correct the message accordingly. Therefore, Customs recommends that message declarants perform the schema validation before sending messages to the Customs system.

The testing service automatically performs the steps that the Customs testing official would perform manually. Finally, the customer confirms that all the mandatory test cases have been completed and the testing official approves the automated testing. The customer can contact the testing official in matters concerning the automation, but otherwise, the testing official does not participate in the testing.

Test material

The testing service contains test cases 1–4 for standard Intrastat declarations, drawn up by Customs. Each test case contains instructions on the details to be declared and the measures to be taken by the tester. The test cases 3 and 4 are mandatory only for data providers who declare dispatches and for all service providers.

Testing period

The testing official will set the testing time (1–3 weeks) in the testing service, during which time the testing must be successfully performed. The manual test cases must also be performed within the testing time. For software suppliers and service providers the testing time is three weeks at most, and for companies who themselves create and transmit their messages, the testing time is one week. If the specified time limit is exceeded, the testing is stopped and the company must reserve a new time for testing.

Passing the testing

The testing official checks the testing performed by the company via the testing service and will either approve the testing or ask the company to correct any errors found in it. Further information about the testing service, user instructions for the testing service and how to log in are available on the Customs website.

4.5 Manual testing

The testing is carried out by using the customer's own test material. The test cases are sent to Customs' customer testing environment and the testing official is provided with the statistical number of the test case. The testing official checks the test case and transmits the related responses. During testing, the Customs testing official ensures that the data connections are working and that the messages sent by the company comply with the requirements, and that the customer can retrieve Customs' response notifications from the message storage. A total period of three weeks should be reserved for the testing. This period includes the testing carried out in the testing service. If the time limit is exceeded, the testing will be stopped and the company must reschedule it. The company should aim to complete the testing during the set time; otherwise, the testing could be moved months ahead.

5 Starting message exchange

When customer testing has been completed acceptably, Customs will send the company the authorisation decision for Intrastat message exchange. The decision will state the starting time of production.

The following measures must be taken prior to starting production:

- The company must make sure that messages are sent to the production environment
- The company will inform the testing official at the Electronic Service Centre of the time when the first statistical declaration will be sent. If the start of message exchange is postponed, the company must inform the testing official at the Electronic Service Centre of the new start date. When necessary, the Customs testing official monitors the production message exchange when the first messages are exchanged.

6 Change of the company's Intrastat software

When the company wishes to change the Intrastat software used or upgrade its version, or change the service provider, it should complete a new application for authorisation in order to establish any need for testing. New software, a new software version or message exchange connection cannot be used before obtaining the approval of Customs.

7 Cancellation of an authorisation

An authorisation for direct message exchange may be cancelled either for a period of time or permanently. Grounds for cancellation can be, for example:

- deliberate or negligent misuse;
- frequent mistakes which are left uncorrected;
- violation of the terms of authorisation for direct message exchange;
- cancellation request from the company.

8 Rejection of an application

Customs will inform the applicant company of the rejection with a decision, which explains the reasons for the rejection, instructions for appeal and contact details for acquiring additional information.

9 Further information

Further information is available in the following guides:

[Direct message exchange with Finnish Customs Technical guidebook](#) and

[Introduction to message exchange with Finnish Customs](#)

The guides can be found on the Customs website.

[Message exchange](#)

[Message Implementing Guidelines - Intrastat \(finnishcustoms-suomentulli.github.io\)](#)

Questions on how to apply for message exchange customer status can be sent to EDI-luvat@Tulli.fi.

10 Test cases

10.1 Test I

Send a declaration for import, which includes the following data:

The header of the declaration:

- Give the statistical number including the serial number issued by Customs
Unique reference number for the declaration.
The identification is generated in the following fashion:
YCODDDREGNNN
The code consists of the following parts:
YY = Two last digits of the year
CO = Identification of the Intrastat service point as issued by Customs, always 11 for new traders
DDD = Serial number of the day (eg. February 1 = 032)
REG = Serial number of sender as issued by Customs.
NNN = Serial number, generated daily, starting from 001.
Each statistical declaration receives a number that is determined by the sending date. The serial number is a rule to start from 001 and increase by one for each subsequent declaration. On demand a number can be omitted. The declarant is to check that each number is used only once.
- Provider of the statistical information format **FI99999999**
- Flow of goods, import **A**
- Statistical month, current month eg. **202111**

Position I:

- Country of consignment the Netherlands **NL**
- Country of origin China **CN**
- Commodity code **85234910**
- Supplementary unit 30 (pieces) **30**
- Net weight **25**
- Invoicing value (euro) **259**
- Transaction code **11**
- Transportation **1**

Follow the step-by-step instructions of the test automation.

10.2 Test 2

Send a declaration for import, which includes the following data:

The header of the declaration:

- Give the statistical number including the serial number issued by Customs Unique reference number for the declaration.

The identification is generated in the following fashion:

YYCDDDDREGNNN

The code consists of the following parts:

YY = Two last digits of the year

CO = Identification of the Intrastat service point as issued by Customs, always 11 for new traders

DDD = Serial number of the day (eg. February 1 = 032)

REG = Serial number of sender as issued by Customs.

NNN = Serial number, generated daily, starting from 001.

Each statistical declaration receives a number that is determined by the sending date. The serial number is a rule to start from 001 and increase by one for each subsequent declaration. On demand a number can be omitted. The declarant is to check that each number is used only once.

- Provider of the statistical information format **FI99999999**
- Flow of goods, import **A**
- Statistical month, current month eg. **202111**
- NIL declaration **N**

Follow the step-by-step instructions of the test automation.

Position 2:

- Country of consignment Denmark DK
- Country of origin Finland FI
- Net weight 30
- Commodity code 07031019
- Invoicing value (euro) 390
- Trading partner DK44023911
- Transaction code 11
- Transportation 1

Position 3:

- Country of consignment Austria AT
- Country of origin the Netherlands NL
- Net weight 410
- Commodity code 07142010
- Invoicing value (euro) 5900
- Trading partner ATU66889218
- Transaction code 11
- Transportation 1

Position 4:

- Country of consignment Estonia EE
- Country of origin Finland FI
- Net weight 10
- Commodity code 21050099
- Invoicing value (euro) 45
- Trading partner QN99999999999999
- Transaction code 11
- Transportation 1

Position 5:

- Country of consignment Estonia EE
- Country of origin Italy IT
- Net weight 0
- Supplementary unit (liter) 300
- Commodity code 22041091
- Invoicing value (euro) 4200
- Trading partner EE100067066
- Transaction code 11
- Transportation 1

Position 6:

- Country of consignment Estonia EE
- Country of origin Finland FI
- Net weight 3600
- Supplementary unit (pieces) 10
- Commodity code 85011099
- Invoicing value (euro) 38200
- Trading partner, triangulation with Sweden SE999999999999
- Transaction code 11
- Transportation 1

Position 7:

- Country of consignment Estonia EE
- Country of origin Finland FI
- Net weight 1
- Supplementary unit (pieces) 2
- Commodity code 42022210
- Invoicing value (euro) 450
- Trading partner EE101259750
- Transaction code 11
- Transportation 1

Position 8:

- Country of consignment Portugal PT
- Country of origin China CH
- Net weight 70000
- Commodity code 48111090
- Invoicing value (euro) 8900000
- Trading partner PT500967768
- Transaction code 11
- Transportation 1

Position 9:

- Country of consignment Poland PL
- Country of origin Sweden SE
- Net weight 300
- Supplementary unit (pieces) 2
- Commodity code 85021120
- Invoicing value (euro) 6000
- Trading partner PL5222897588
- Transaction code 11
- Transportation 1

Position 10:

- Country of consignment France FR
- Country of origin Japan JP
- Net weight 28
- Supplementary unit (pieces) 30
- Commodity code 85076000
- Invoicing value (euro) 3086
- Trading partner FR71383076817
- Transaction code 11
- Transportation 1

Position 11:

- Country of consignment Latvia LT
- Country of origin Taiwan TW
- Net weight 80
- Supplementary unit (pieces) 150
- Commodity code 85176930
- Invoicing value (euro) 7200
- Trading partner (unknown) QV999999999999
- Transaction code 11
- Transportation 1

Follow the step-by-step instructions of the test automation.

10.4 Test 4

Send a declaration for export, which includes the following data:

The header of the declaration:

- Give the statistical number including the serial number issued by Customs Unique reference number for the declaration.
The identification is generated in the following fashion:
YYCDDDDREGNNN
The code consists of the following parts:
YY = Two last digits of the year
CO = Identification of the Intrastat service point as issued by Customs, always 11 for new traders
DDD = Serial number of the day (eg. February 1 = 032)
REG = Serial number of sender as issued by Customs.
NNN = Serial number, generated daily, starting from 001.
Each statistical declaration receives a number that is determined by the sending date. The serial number is a rule to start from 001 and increase by one for each subsequent declaration. On demand a number can be omitted. The declarant is to check that each number is used only once.
- Provider of the statistical information format **FI999999999**
- Flow of goods, export **D**
- Statistical month, current month eg. **202111**

Position 1:

- Country of consignment Sweden **SE**
- Country of origin United States **US**
- Net weight **0**
- Supplementary unit (pieces) **300**
- Commodity code **85234910**
- Invoicing value (euro) **45900**
- Trading partner **SE802426540001**
- Transaction code **11**
- Transportation **1**

Position 2:

- Country of consignment Austria AT
- Country of origin Finland FI
- Net weight 580
- Commodity code 04069023
- Invoicing value (euro) 7000
- Trading partner ATU6688921
- Transaction code 11
- Transportation 1

Position 3:

- Country of consignment Denmark DK
- Country of origin Estonia EE
- Net weight 1000
- Commodity code 07031010
- Invoicing value (euro) 560
- Trading partner DK44023911
- Transaction code 11
- Transportation 1

Position 4:

- Country of consignment Germany DE
- Country of origin Sweden SE
- Net weight 500
- Commodity code 21050099
- Invoicing value (euro) 410
- Trading partner DE82741168
- Transaction code 11
- Transportation 1

Position 5:

- Country of consignment the Netherlands NL
- Country of origin Russia RU
- Net weight 15700
- Commodity code 07142010
- Invoicing value (euro) 8650
- Trading partner NL818152011B01
- Transaction code 11
- Transportation 1

Position 6:

- Country of consignment Greece GR
- Country of origin China CN
- Net weight 100
- Supplementary unit (pieces) 25
- Commodity code 42022210
- Invoicing value (euro) 9300
- Trading partner EL098062736
- Transaction code 11
- Transportation 1

Position 7:

- Country of consignment Estonia EE
- Country of origin Finland FI
- Net weight 56000
- Commodity code 48211090
- Invoicing value (euro) 145000
- Trading partner, triangular trade with Sweden SE999999999999
- Transaction code 11
- Transportation 1

Position 8:

- Country of consignment Estonia EE
- Country of origin Vietnam VN
- Net weight 0
- Commodity code 85076000
- Invoicing value (euro) 100
- Trading partner, private consumer QN999999999999
- Transaction code 11
- Transportation 1

Position 9:

- Country of consignment Northern Ireland XI
- Country of origin Finland FI
- Net weight 4500
- Supplementary unit (pieces) 2
- Commodity code 85011099
- Invoicing value (euro) 47800
- Trading partner XI895878826
- Transaction code 11
- Transportation 1

Position 10:

- Country of consignment Germany DE
- Country of origin United Kingdom GB
- Net weight 60
- Supplementary unit (pieces) 2
- Commodity code 85176930
- Invoicing value (euro) 780
- Trading partner DE813232162
- Transaction code 11
- Transportation 1

Follow the step-by-step instructions of the test automation.