



**TULLI**

TULL · CUSTOMS

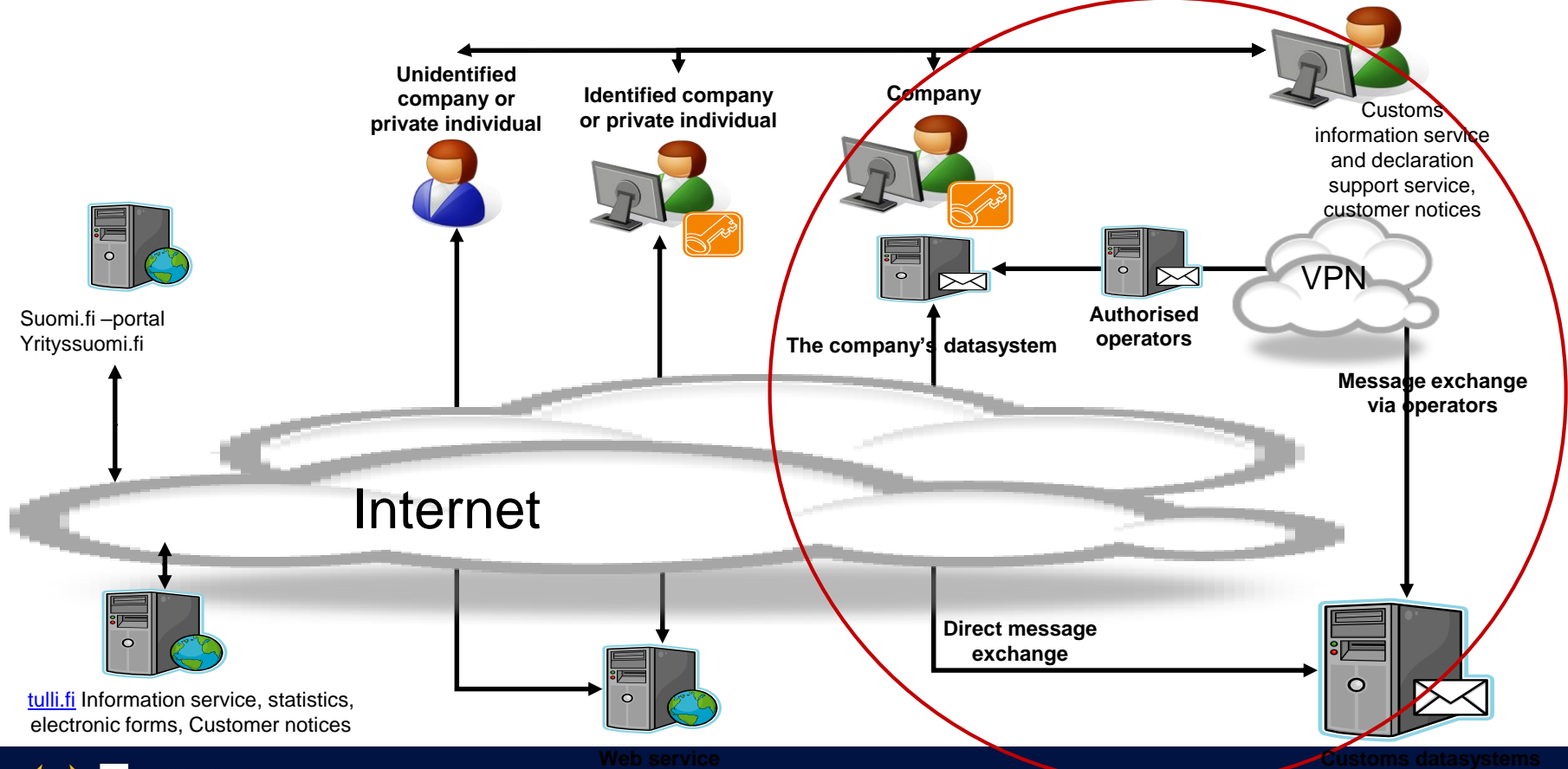
# Customs electronic services

Message Exchange Support

# The electronic service channels

- Message exchange
  - Electronic transfer of standard formatted data in the form of messages between Customs and the customer
- Web service
  - Filling in a declaration with a web form
- All customers may use an agent if they wish to do so

# Customs electronic service channels



# Factors that affect the choice of service channel (1)

- Quantity of customs transactions
  - A large number of declarations supports the use of message exchange
- The contents of customs declarations
  - Diverse (many different customs procedures) supports the use of message exchange
  - Several consignments (goods items). Saving a declaration with many items is arduous with a web declaration
- Customs know-how
  - Using message exchange requires a greater knowledge of customs procedures
  - Declaring on the web has been made as simple as possible → meant for random declarants.

# Factors that affect the choice of service channel (2)

- The company's own systems
  - Declaring on the web does not require a separate data system, but data cannot be transferred directly to a web form from the company's own systems
  - The message based exchange systems can be integrated directly into the company's own systems. Data in these systems can be transferred electronically into the declaration faster and with less mistakes than when inputting manually. In addition, customs clearance software can contain registers of changing data (such as exchange rates, commodity codes, etc.) managed by the software supplier.
- More information on the service channels is available on the Customs website:  
[e-Service of Finnish Customs](#)

# Customs electronic services for companies

## Message exchange

## Web services

Electronic declaration methods for companies	Message exchange			Web services	
	Operator Edifact	Operator XML	Direct message-exchange XML	Web form	E-mail
Import clearance (ITU)	X		X	X	
Export clearance (ELEX)		X	X	X	
Transit (NCTS)	X		X	X	
Entry and exit summary declarations (AREX)		X	X	X	
Customs warehousing (UTU)			X	X	
Åland tax border (ALA)			X	X	
Attachment delivery service			X	X	
Message exchange testing Service			X		
Statistical declarations (Intrastat)	X		X	X (ext.)	X (ascii)
Shipping dues Vessel declarations (PortNet)	X (ext.)			X (ext.)	

**X = operational, ext = external service provider**

# Message exchange

The customs systems receive the declarations as XML- or EDIFACT-messages.

## **XML** (eXtensible Markup Language, W3C)

- XML is a so called metalanguage, which means that it is used to describe data about the information. XML saves the actual data as well as information about the data, e.g. the name, properties and data type
- Offers an unified base for processing different data structures and for saving them in text format.

## **EDI** (Electronic Data Interchange)

- EDI/OVT is the electronic and automatic transfer of standard formatted data between information systems of businesses and public authorities
  - **EDIFACT** (Electronic Data Interchange for Administration, Commerce and Transport, YK)  
The EDIFACT-syntax is made up of message descriptions, i.e. messages, which contain instructions on which format the data in the document should have when transferred electronically. The message consists of elements and each elements value is a certain piece of data.

# Message exchange connection for message based exchange

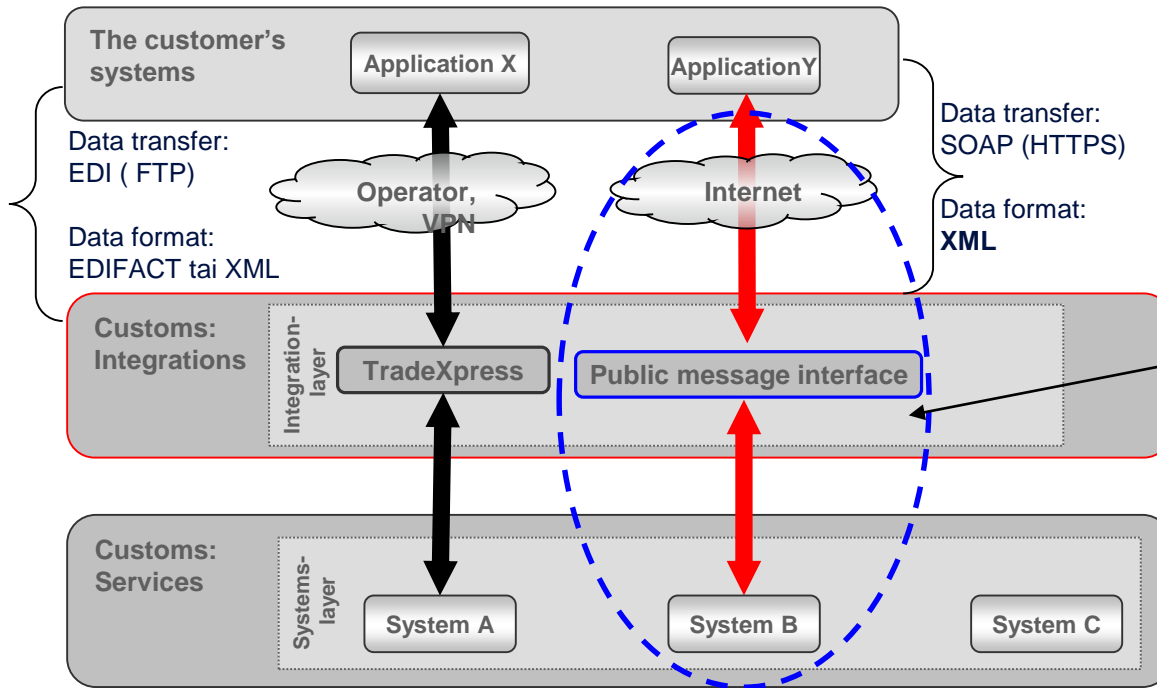
- **Direct message exchange** for companies that works on the internet is a web service provided by Customs. The service makes it possible to send messages in XML-format without a data communications operator.
- **Operator-based message exchange** via reliable data communications operators authorised by Customs
- Operator-based message exchange with Customs will end in 2020.



# Data communications between the companies and Customs

Message exchange between customers and Customs will to an ever-increasing extent be XML-based in the future.

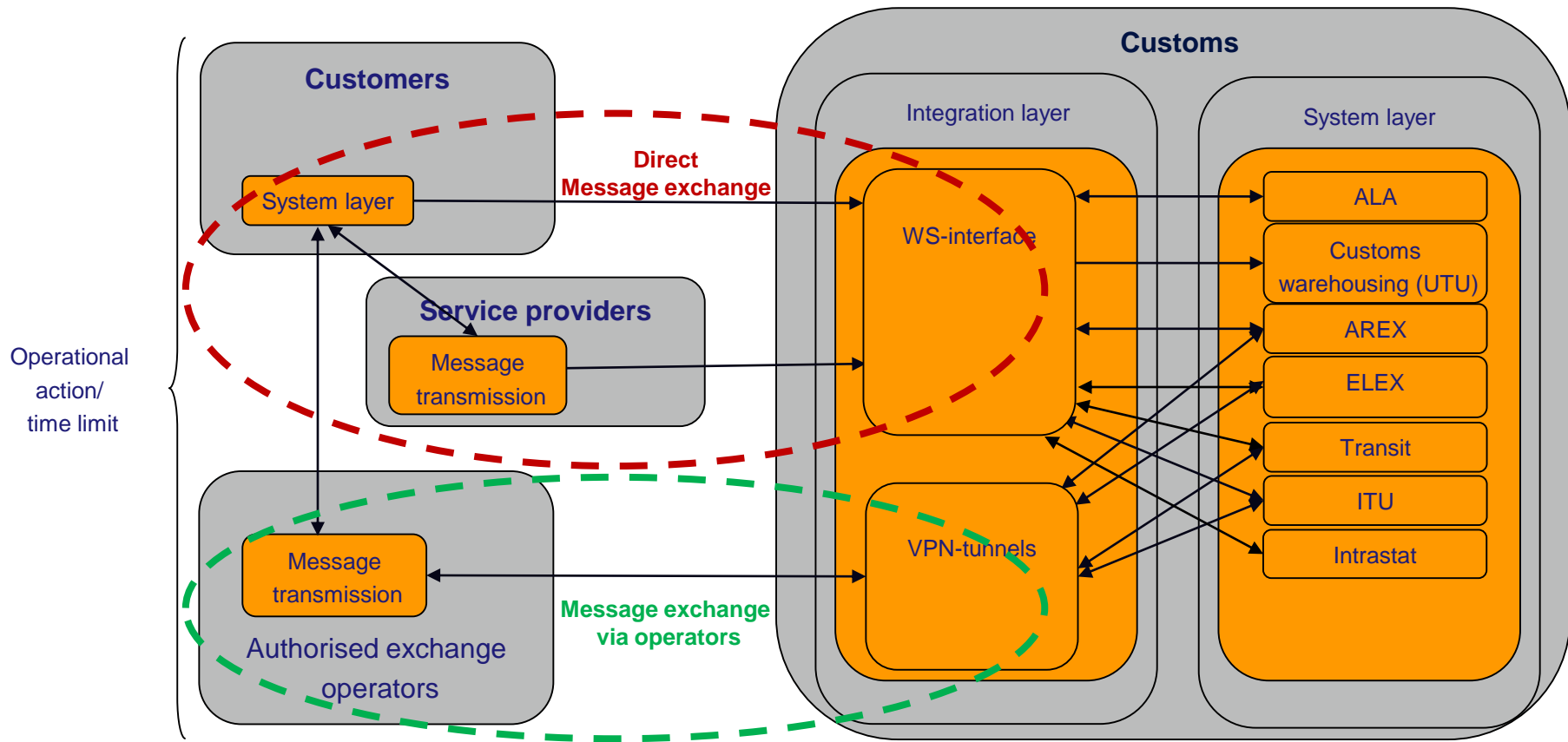
**Operator based exchange** is based on an integration network, build on a TradeXpress-product base



**In direct message exchange**, the connection is formed from the company's systems via a public network (the Internet). The connection is encrypted.

The **public message interface** offers access to Customs' message exchange services via the internet.

# Message exchange between Customs and customers



# Direct message exchange

- Direct message exchange (web service) is used as a transmission layer for different XML-based data contents
- Direct message exchange with Customs is based on general international standards, which provide a possibility of implementing integration between the data systems in a manner that complies with data security
- In direct message exchange, the data system of the company can send messages to the Customs' systems over the Internet and retrieve response messages produced by Customs' systems from the message storage.
- The structure of an application message transmitted through direct message exchange with Customs (e.g. an ELEX export declaration) is identical with the structure of an application message in message exchange via an operator.

# Operations enabled by the direct message exchange web service(1):

- Sending a message data entity, e.g. a declaration to Customs' systems
- Retrieving a data entity, e.g. a response message to a customs declaration message sent earlier by the company
- Retrieving a message list that contains response messages that are waiting to be retrieved by the company
  - Messages that are sent by the Customs data system to the business customer are saved in Customs message storage waiting for retrieval. The customer can request retrieval of the response message from the list of messages waiting to be retrieved, by using the DownloadList-function and then retrieve the messages with the DownLoad-function.
  - The message list request frequency has been limited, which means that the customer can only make a request every five minutes.

# Operations enabled by the direct message exchange web service (2):

- The function - Message Notification in direct message exchange
  - With the message notification service, the customer is informed of messages that are waiting to be retrieved from the Customs' service
  - When the customer starts using the message notification service, the message exchange happens virtually in real-time
  - The customer is informed of a message waiting to be retrieved as soon as the response message is ready.
  - The DownloadList-function remains for customers who do not implement the message notification-function.
  - The occasional use of the DownLoadList-function is also recommended for users who have implemented the message notification service, in case of disruptions.
- The attachment message service
  - The service makes it possible to send declaration attachments in message format to Customs.

# Direct message exchange requirements

The direct message exchange requires the following from the company

- An authorisation for direct message exchange
- Connections (Internet connection) for transmitting messages
- A server certificate by the Population Register Centre (VRK) for building and transmitting messages ([varmennemyynti@vrk.fi](mailto:varmennemyynti@vrk.fi))
- 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
  - Customs provides a complementary model implementation of the direct message exchange to the company's software implementer
- Software for the different Customs' systems
  - Customs does not provide the necessary software; the company can acquire them through their own software provider
- Functionality testing of the direct message exchange with Customs.

# Operator-based message exchange

- Customs uses message exchange connections provided by operator companies authorised by Customs
- The operator is responsible for making sure that the data transferred via the connection is secure
- Ftp/VPN-protocol is used for the data transmission between the operator and Customs. There are no requirements placed by Customs in regards to the way data is transferred between the company and the operator
- In operator-based message exchange, the messages can be either in EDIFACT-format or XML-format. Messages in EDIFACT-format can only be transferred to Customs through an operator (not by using direct message exchange)
- In operator-based message exchange, the response messages from Customs are sent via the operator to the sender of the declarations.

# Requirements for operator-based message exchange

- Customs' authorisation for message exchange
  - Customs will no longer accept new customers for the operator-based message exchange (AREX summary declaration system, ELEX export system, ITU import system, Transit system, Intra-Community trade statistics system Intrastat)
- Data communications connection for transmitting messages
- An agreement between the transmitting company and the data communications operator
- Software for systems that Customs uses
  - The company should have software that produces the necessary messages according to Customs' message standards. Customs does not provide the necessary software. The company can acquire them through its own software supplier.
- System-specific testing of the software's functionality together with Customs.



# Additional information on message based exchange

- Guidebooks on message based exchange with Customs:
  - Introduction to message exchange with Finnish Customs
  - Direct message exchange technical book

<https://tulli.fi/sv/elektroniska-tjanster/tjanster/meddelandedeklarering>

# Web Service

## Conditions for web service:

- Computer and Internet connection
- Identification
  - Companies can identify themselves in Customs' services with a Katso identification code, which can be acquired free of charge from the Finnish Tax Administration
  - Private persons can identify themselves using their online bank IDs, if they have an online banking agreement with their own bank.
  - A identified declarant filling in export declarations can usually avoid having to personally visit Customs when starting an export procedure and can retrieve personal information on decisions on release and accompanying documents from the Customs electronic decisions archive. However, a transit web declarant always has to visit Customs when starting a transit procedure
  - An identified user can, in most of Customs' services, use templates of previously lodged declarations for new declarations. Declarations by an identified user can be seen and used during a given time limit after they have been submitted.

# Katso identifiers and roles in Customs' e-services

- **Intrastat Declaration Service**  
Master user ID, Setting up a parallel-Master user ID, Katso ID + CUSTOMS Intrastat role, Katso sub-ID (company representative)
- **Safety and Security Declaration Service (AREX)** Master user ID, Katso ID + CUSTOMS Customs clearance role
- **Export Declaration Service**  
Master user ID, Katso ID + CUSTOMS Customs clearance role
- **Import Declaration Service**  
Master user ID, Katso ID + CUSTOMS Customs clearance role
- **Transit Declaration Service**  
Master user ID, Katso ID + CUSTOMS Customs clearance role
- **Customs Warehousing Declaration Service**  
Master user ID, Katso ID + CUSTOMS Customs clearance role
- **Åland Tax Border Declaration Service (ALA)**  
Master user ID, Katso ID + CUSTOMS Customs clearance role
- **Attachment Delivery Service**  
Master user ID, Katso ID + CUSTOMS Customs clearance role
- **Message Exchange Testing Service**  
Master user ID, Service provider role

# Two ways of obtaining a Katso-ID

1. A personal online banking ID or an electronic identity card (HST)
  - Setting up a Katso-ID (<http://yritystunnistus.fi/en.jsp>).
  - The identity is determined in the service with the previously mentioned ID's.
  - The service checks if the user has powers of procuration from the company.
2. If none of the mentioned IDs are available, then
  - A Katso-ID is set up (<http://yritystunnistus.fi/en.jsp>)
  - After this, the user has to go to the Tax Administration office with an ID
  - At the same time, a check is also carried out to determine whether the operator has powers of procuration from the company.

In both cases, a message is sent to the operator's e-mail address when the Katso-ID is ready to use.

# Instructions on obtaining a Katso-ID (1)

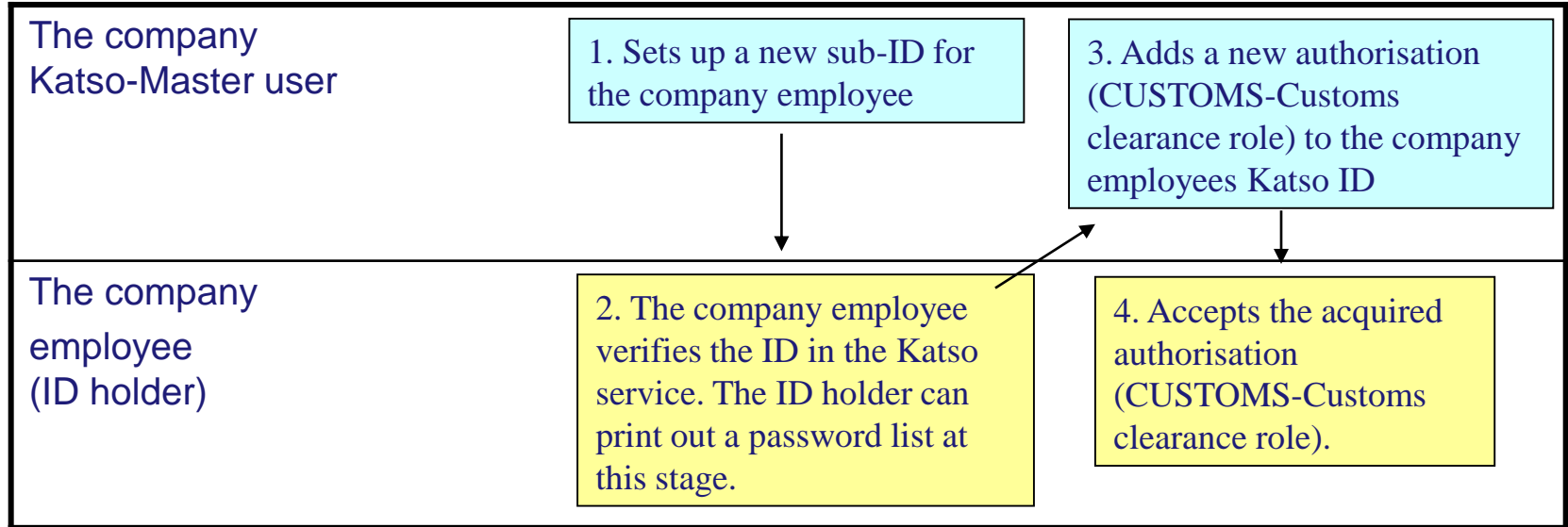
- The Katso-ID is an ID provided free of charge to companies. The ID can be used both when doing business with Customs as well as with the Tax Administration Office
- The company's Master user ID is given to the person/persons given the right to do business on behalf of the company (powers of procuration)
- The Master user can set up sub-IDs with limited authorisation for the other employees of the company
- A trade register entry is not required of entrepreneurs or farmers
- As for associations, the powers of procuration are checked in the Register of Associations.

## Instructions on obtaining a Katso-ID (2)

- The Master user ID is obtained from the Tax Administration. The company's Katso-ID can also be used for dealing with taxation matters
- The company's Master user must be authorised to act on the company's behalf (power of attorney)
- The Master user automatically has the right to access Customs' Web Transit, Web Export, Web Import, the Summary Declaration System Arex, Customs warehousing (UTU), Customs' Authorisations service and Web Liit
- If several people draft messages in the Customs web-service, the Master user can set up sub-IDs for these employees.

# Setting up IDs

## Tasks performed by the Master user and the new ID holder



# Further information on declaring via the web

- [Tulli.fi](https://tulli.fi)
- Web declaration support  
Tel. 0295 5207, Monday – Friday, 8am – 6pm
- Further information on Katso-IDs:
  - <https://yritys.tunnistus.fi/>
  - Katso support by the Tax Administration



# Fallback procedure for electronic transactions (1)

**When an interruption in the use of the data systems of Customs or the customer occurs, goods can be placed under the customs procedure in question through a fallback procedure based on forms.**

**Customs authorisation is always required when using the fallback procedure**

Fallback documents:

- The declarations must be lodged in document form on the fallback forms (SSD) specified by the EU
- OR
- With some other administrative, commercial or transport document
- The form is usually sent by e-mail to the Electronic Service Centre
- In addition to the fallback documents, the declarations are also sent to Customs in electronic form as soon as possible.

# Fallback procedure for electronic transactions (2)

Service interruptions in Customs' systems:

- Authorisation has been granted for direct message exchange
  - when the message declarant has received information by e-mail that the fallback procedure can be used, until a notification is received about the interruption being over
  - an interruptions notice is published regarding web transactions in the system in question.

Interruption in the system used by the declarant:

- Authorisation to use the fallback procedure is applied for from the Electronic Service Centre (SPAKE)

Customs sends a notification when the system is working again, after which using the fallback procedure is no longer allowed. The notification is

- Sent by e-mail to the message declarants, or the interruption notification is removed from the front page of the online user interface

Subscribing to service interruption and disruption notices can be obtained:

<http://tulli.fi/en/e-services/services/disruptions-in-message-exchange>

More detailed information regarding system specific use of the fallback procedure can be obtained on the Customs website:

<http://tulli.fi/en/e-services/services/fallback-procedures>