



e-Invoicing with the European Commission and EU Institutions

Kick-off meeting

DIGIT.B4

The e-PRIOR team

*Directorate-General for Informatics,
European Commission*

What is *e*PRIOR ?



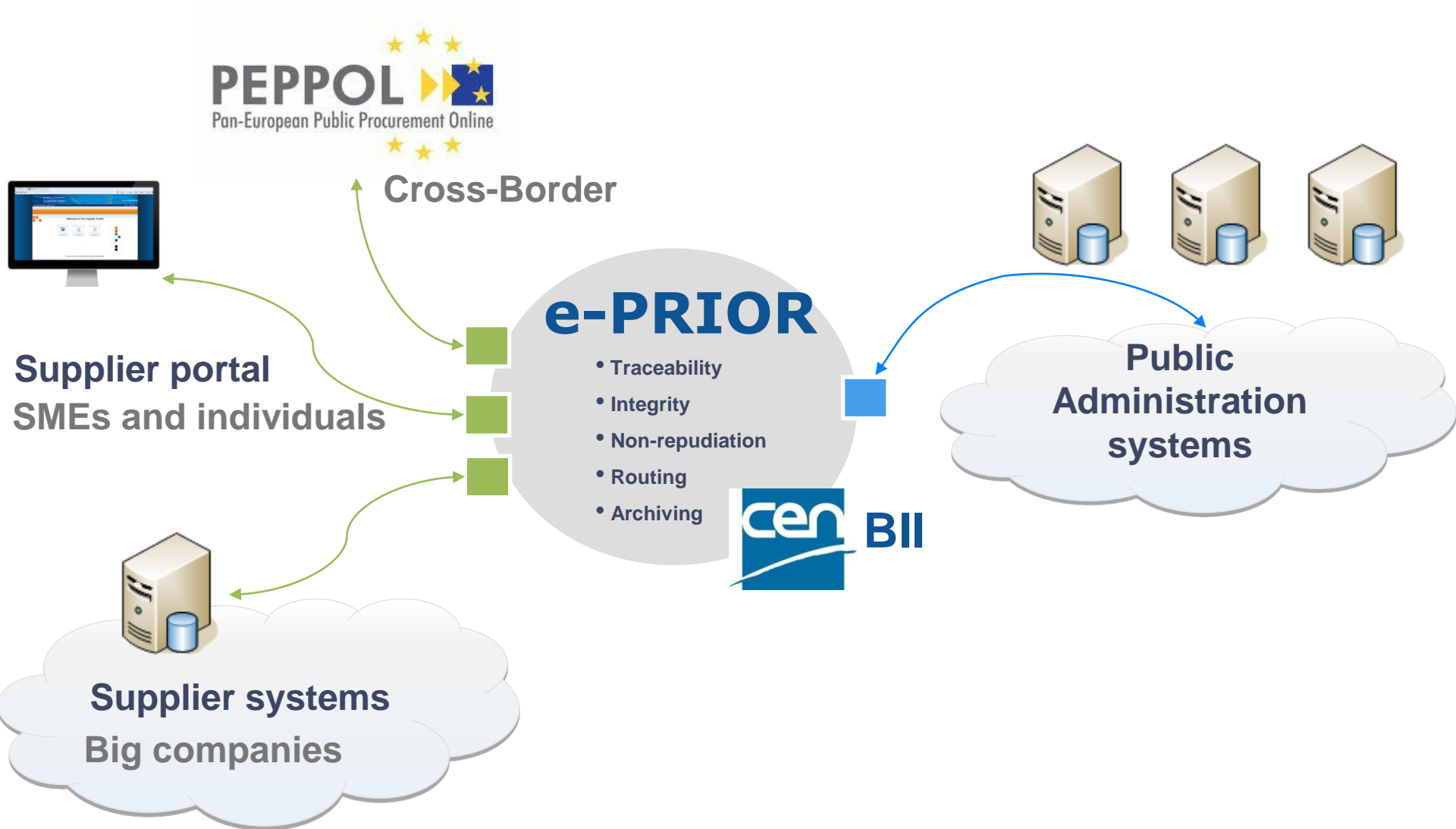
Promoting the take-up of pan-European electronic procurement



e-PRIOR electronic procurement platform

Action 1.7

The e-PRIOR platform



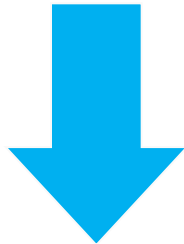
Standardised solution

- ***e-PRIOR is using standards: Electronic Business Documents as specified by the CEN's WS/BII***



European Committee for Standardization
Comité Européen de Normalisation

e PRIOR



*European Commission, Agencies
and Institutions*

open
e PRIOR



*Open-source version of e-PRIOR
for Public Administrations in the
Member States*

[Available on Joinup.eu](https://joinup.eu)

Electronic Acquisition Process

Pre-Awarding

Notification

Submission

Awarding

Framework
Contract

Post-Awarding

Customer [Purchase to Pay Business Process]

Selection of
Goods or
Services

Request for
Availability
and Price

Contractual
Document

Delivery
Confirmation

Invoice
Clearing
and
Payment

Request

Order

Receipt

Invoice

Catalogue

Quotation

Catalogue

Quotation/
Offer/ Bid

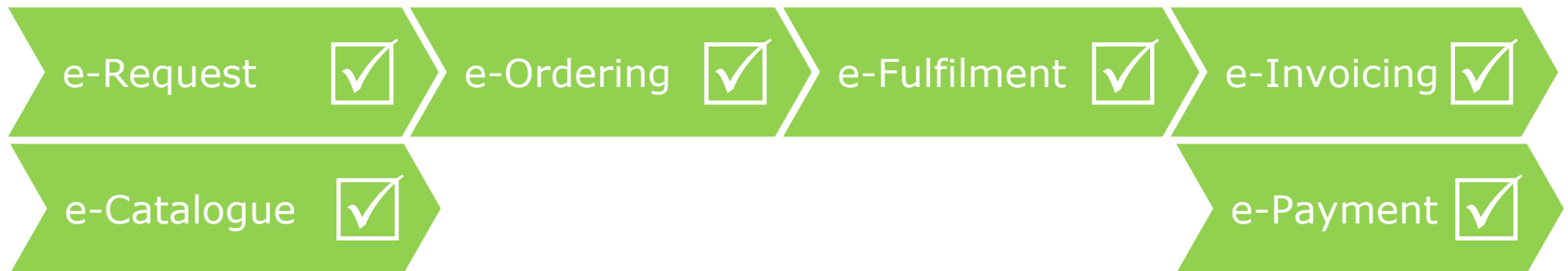
Order
Processing

Billing

Supplier [Order to Cash Business Process]

e-Procurement modules

Post-Award modules operational



Pre-Award modules currently being developed



e-Invoicing users – EU Customers

EU Institutions are adopting e-PRIOR

e-Invoicing adopted in 46 Directorate-Generals and Executive Agencies of the European Commission as well as in Regulatory Agencies and other EU Institutions.

▶ [Full list available here](#)

e-Invoicing users - Suppliers

More than 30 connected Suppliers



and others...

e-Invoicing users – Service providers

5 service providers interfacing with e-PRIOR



basware

inOVIS™

PAGERO

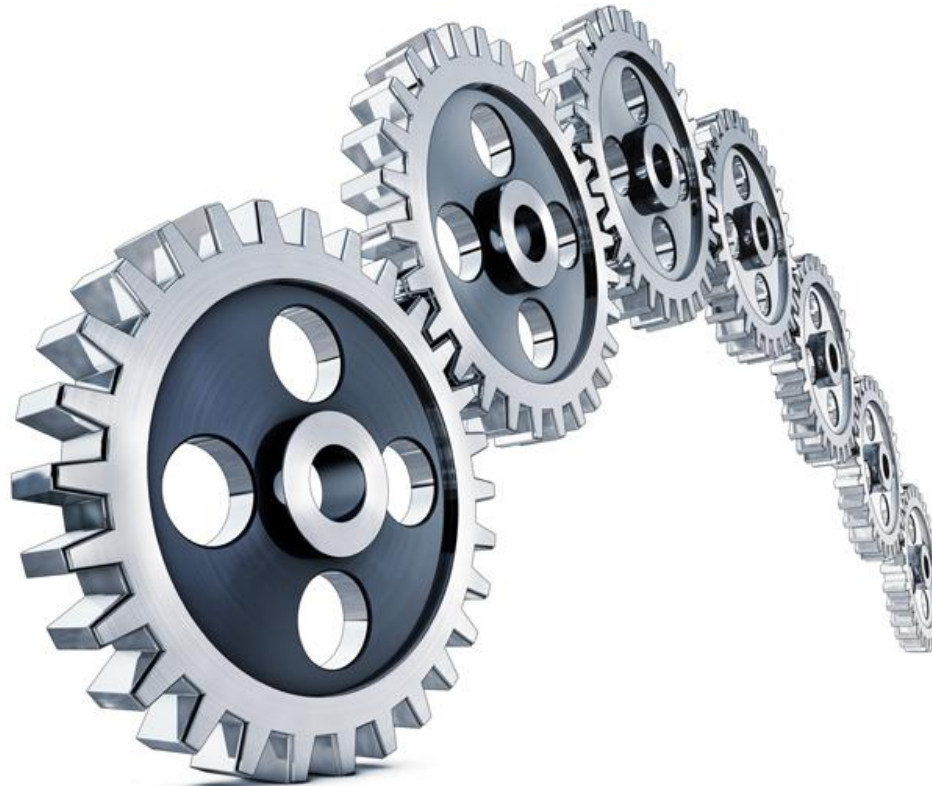
Collaboration with Member States

- ✓ *Interoperability with **PEPPOL***
- ✓ *Cooperation with universities*
- ✓ *Deployed in **Greece, Portugal, Ireland** (pilot with 7 Service Providers), **Norway, Croatia, ...***
- ✓ *Adoption by the **Belgian Federal Government***
- ✓ *Interoperability with other Member State standards (e.g. DIFI)*
- ✓ *Other Member States interested to implement Open e-PRIOR :*
 - **Spain**
 - **Malta**
 - **...**

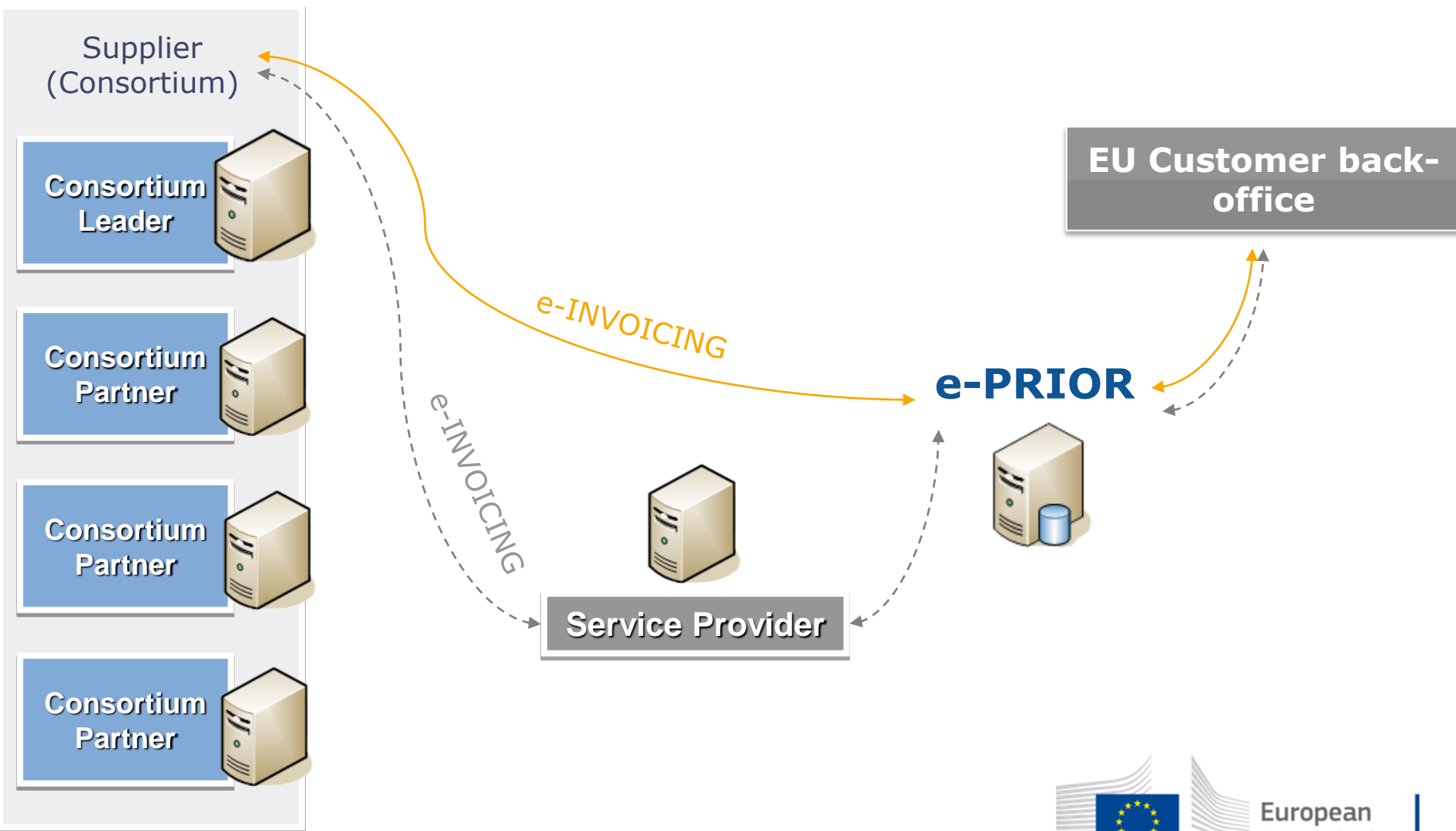


<https://joinup.ec.europa.eu/software/openeprior/home>

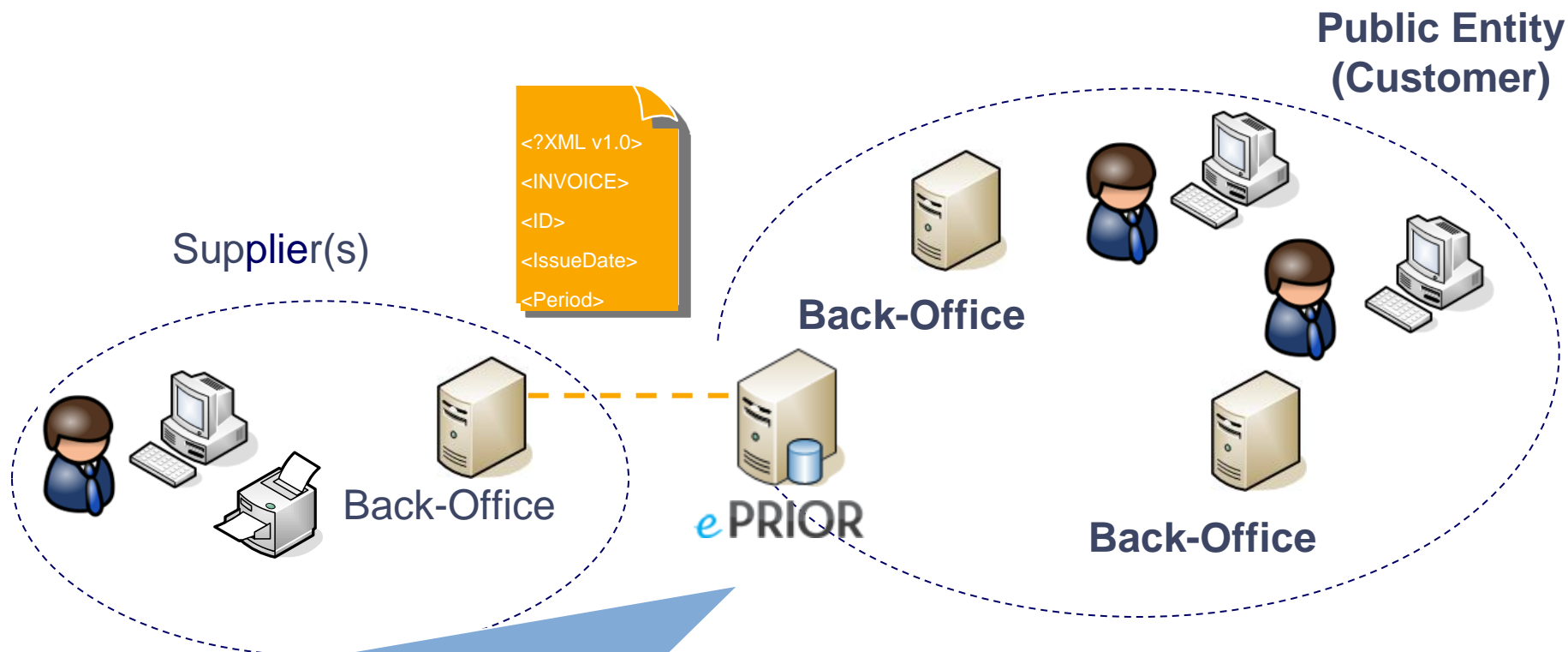
How does it work?



Connection via web services



e-Invoicing scenario

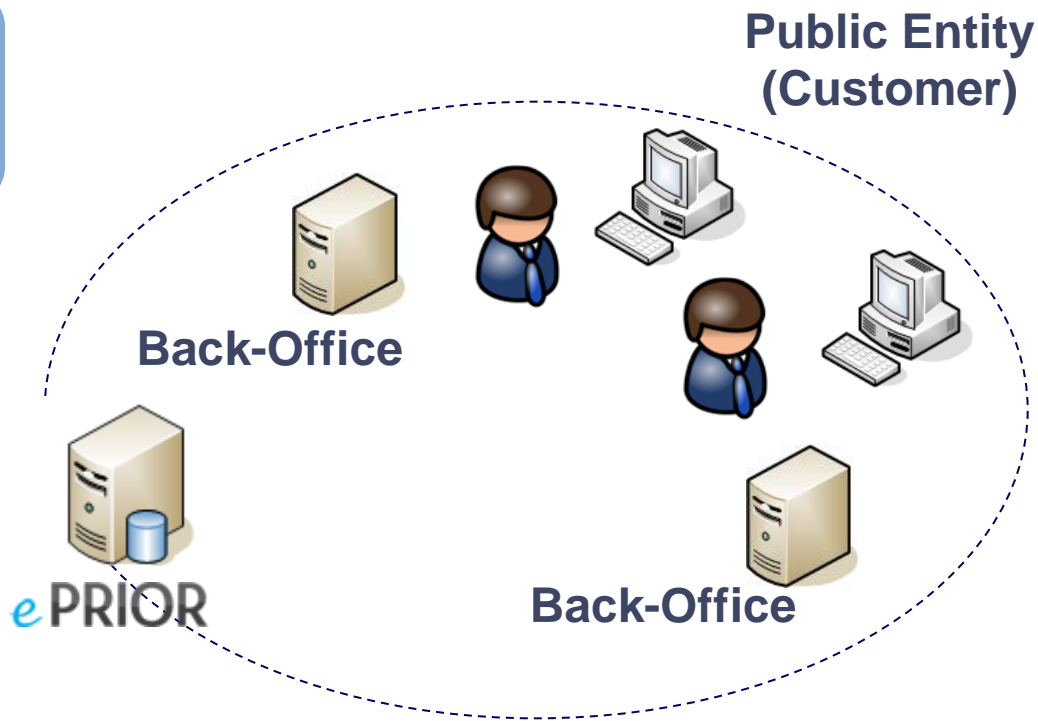
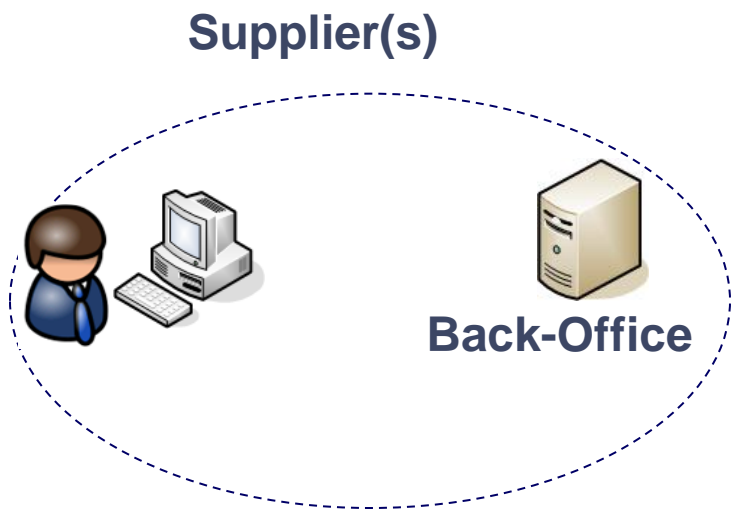


The e-PRIOR platform:

- exposes interfaces based on standards that offer reliable and interoperable e-collaboration
- exchanges electronic documents via machine to machine communication

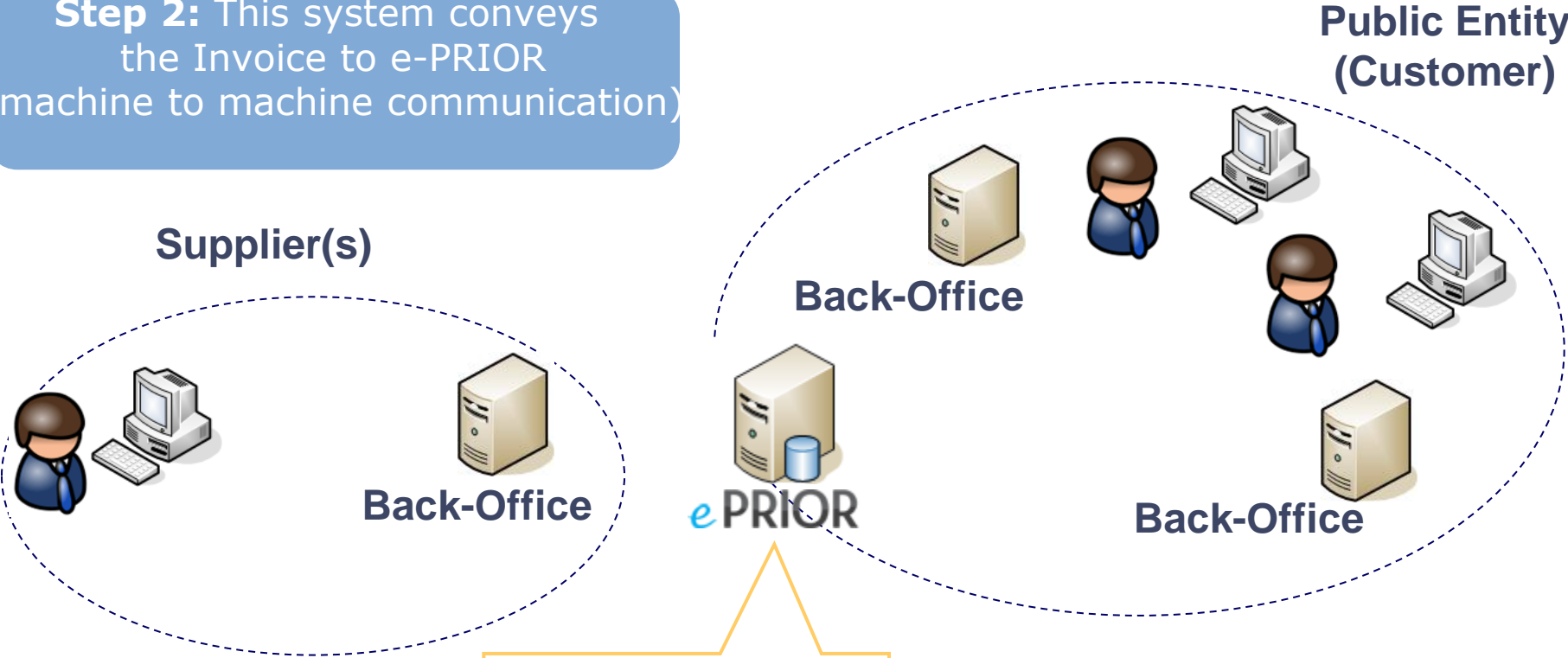
e-Invoicing scenario

Step 1: The Supplier creates the Invoice in his own system (e.g. ERP) – manual encoding and supplier workflow



e-Invoicing scenario

Step 2: This system conveys the Invoice to e-PRIOR (machine to machine communication)

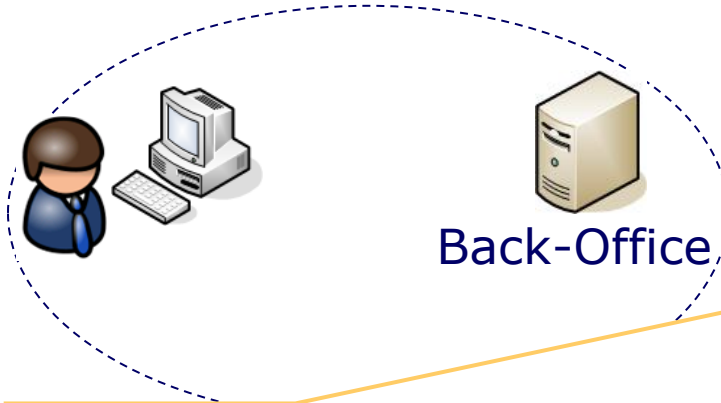


Send Technical Ack to Supplier

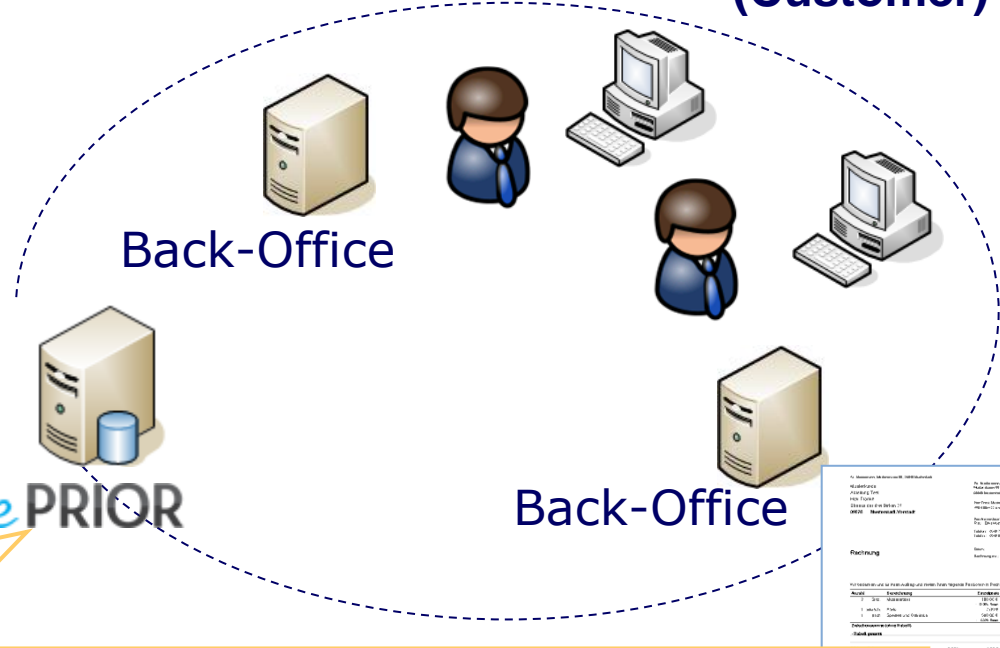
e-Invoicing scenario

Step 3: e-PRIOR
pre-processes the Invoice

Supplier(s)



Public Entity (Customer)



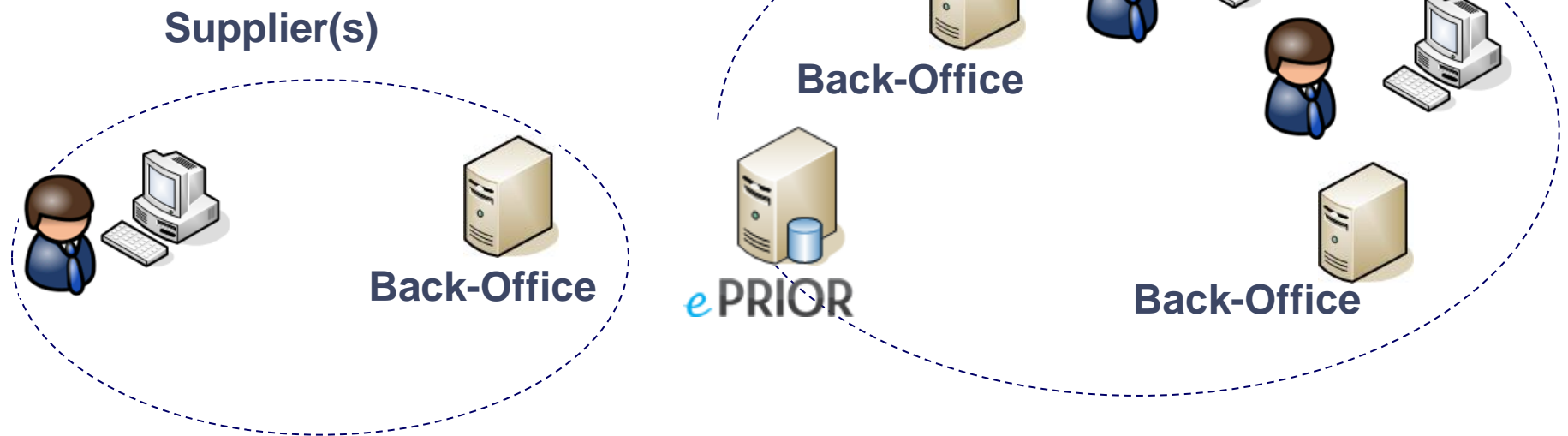
Thumbnail of an invoice document with various fields and a table.

Account	Quantity	Unit	Price	Total
1	100	kg	1000	100000
2	50	kg	500	25000
3	20	kg	200	4000



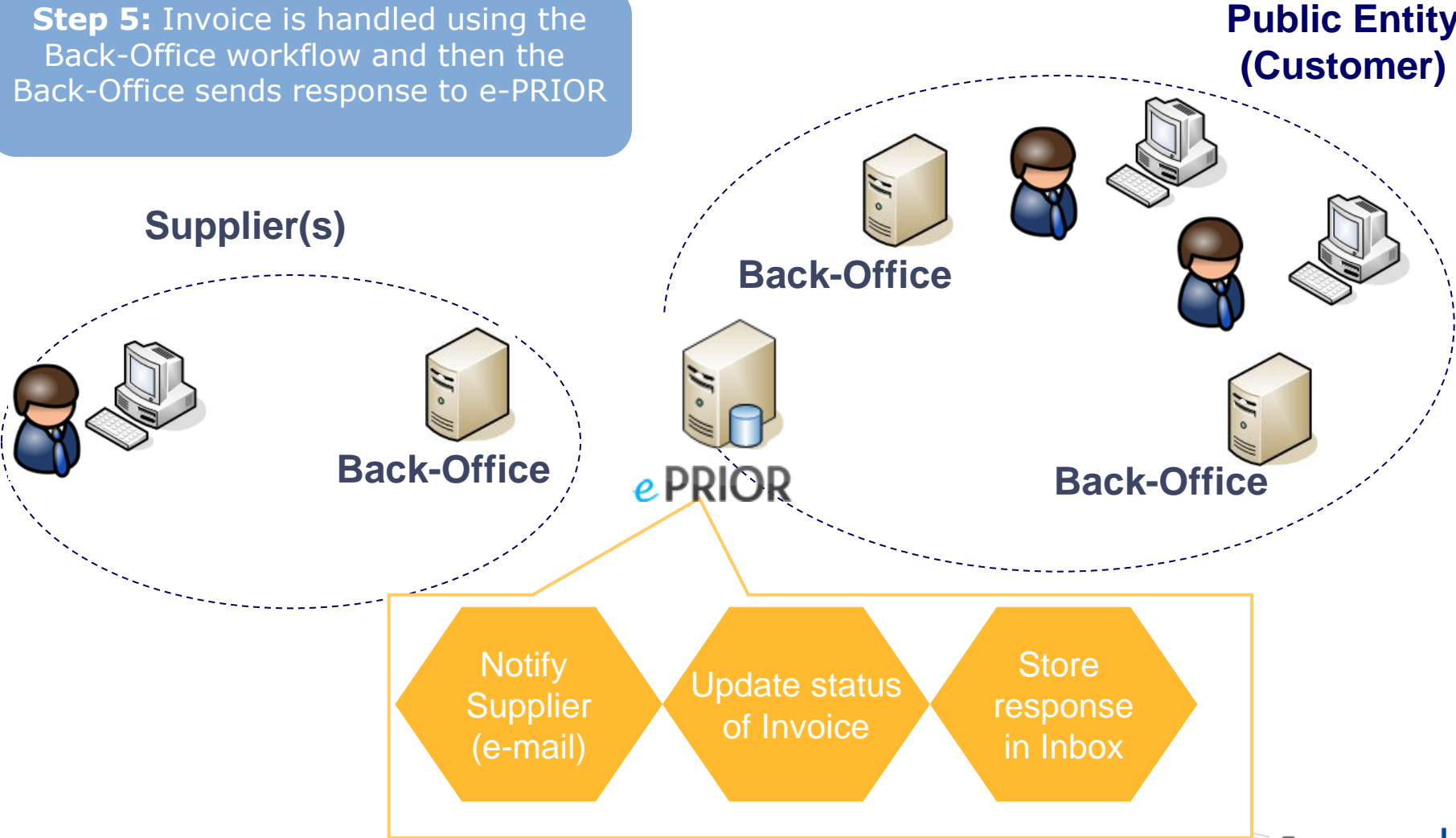
e-Invoicing scenario

Step 4: e-PRIOR routes the Invoice to the appropriate Back-Office of the Customer



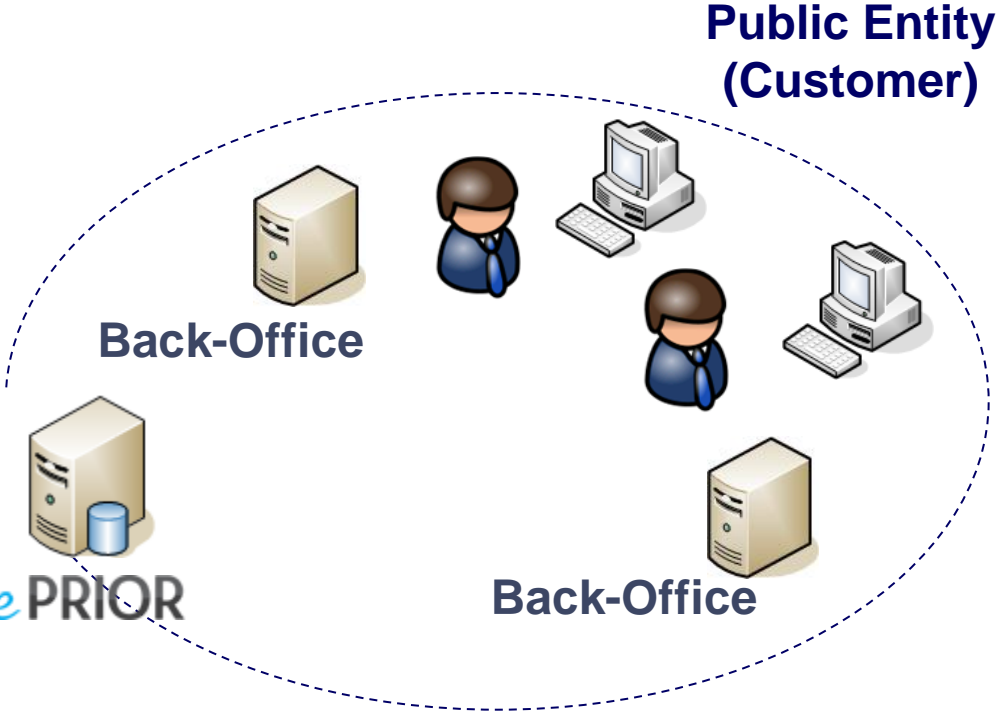
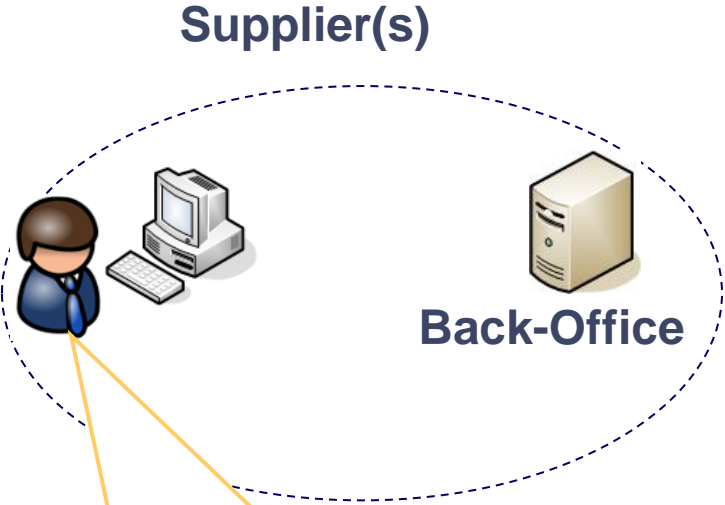
e-Invoicing scenario

Step 5: Invoice is handled using the Back-Office workflow and then the Back-Office sends response to e-PRIOR



e-Invoicing scenario

Step 6: Supplier consults its e-PRIOR Inbox



- List of responses
- Each response is correlated to its parent

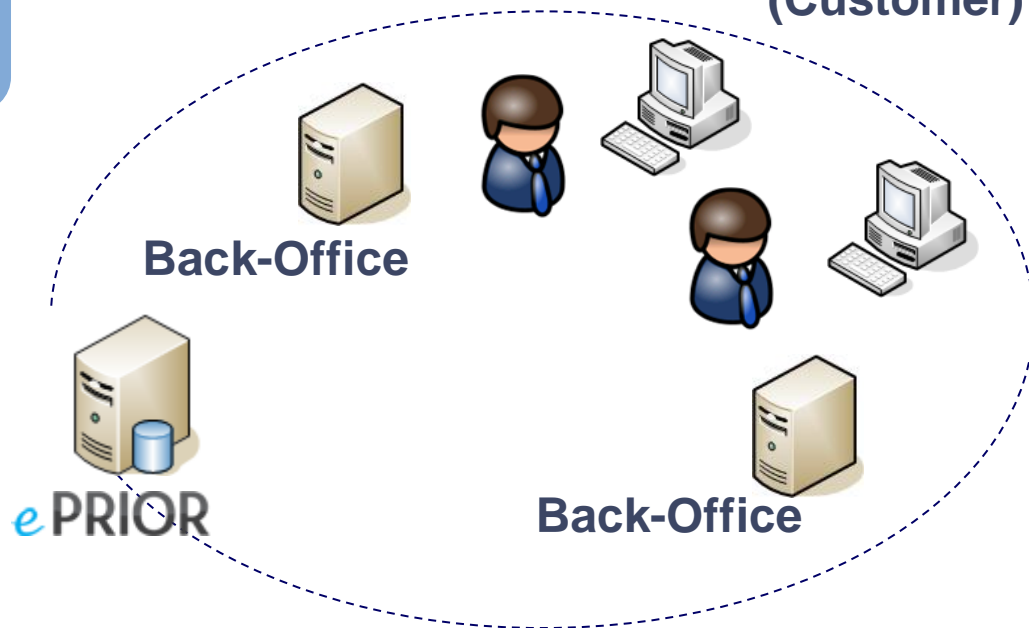
e-Invoicing scenario

Step 7: Supplier retrieves the response

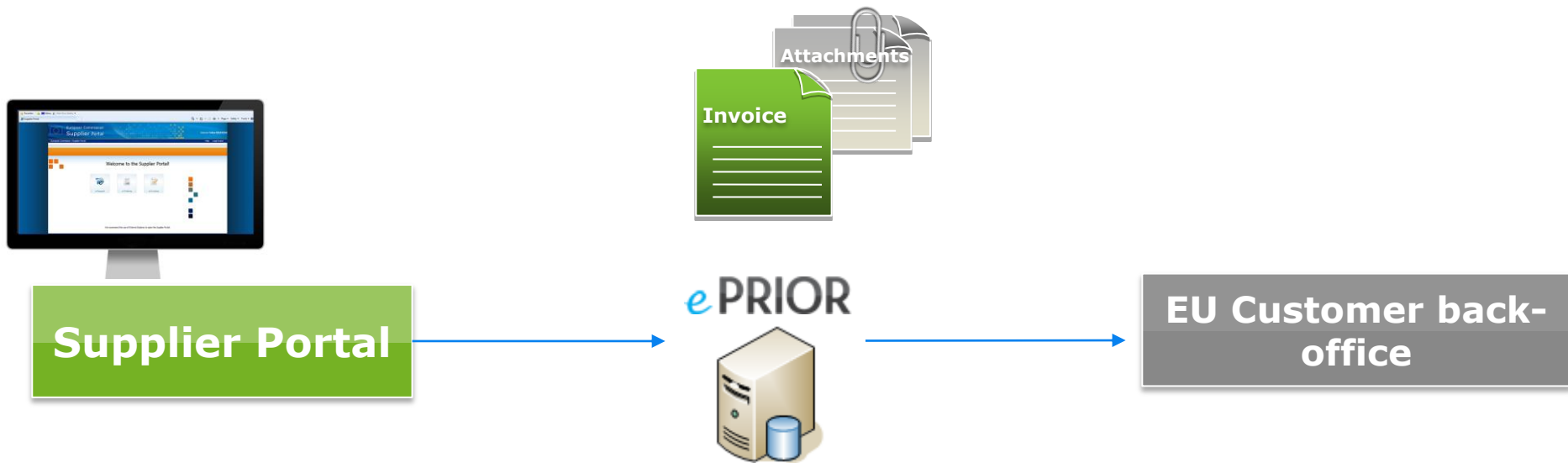
Supplier(s)



Public Entity
(Customer)



Connection via the Supplier Portal



e-Invoicing via the Supplier Portal

European Commission
Supplier Portal

Welcome **Martine BORTIER**
[Log out](#)

European Commission > Supplier Portal [Help](#) [Legal notice](#)

Wednesday, 14 September 2011

Welcome to the Supplier Portal!

e-Invoicing

e-Request e-Ordering e-Invoicing

We recommend the use of Internet Explorer to open the Supplier Portal.

Sending an invoice

via the Supplier Portal

Invoice creation by the Supplier

The screenshot shows the European Commission Supplier Portal e-Invoicing interface. The header includes the European Commission logo, the text 'Supplier Portal', and 'e-Invoicing'. A user is logged in as Martine BORTIERI. The main navigation area has buttons for 'Inbox', 'Sent', and 'In preparation', with a 'Create Invoice' button circled in red. Below this is a table of documents with columns for Supplier, Customer, Document ID, Document Type, Date, and Status. The table lists several invoices from 'Traiteur Lebrun' to 'European Railway Agency'.

Supplier	Customer	Document ID	Document Type	Date	Status	
Traiteur Lebrun	European Railway Agency	20110852	Invoice	19/10/2011	Received By The Customer	Copy
Traiteur Lebrun	European Railway Agency	1101234	Invoice	17/10/2011	Received By The Customer	Copy
Traiteur Lebrun	European Railway Agency	INV-2011-10-14-001	Invoice	14/10/2011	Received By The Customer	Copy
Traiteur Lebrun	European Railway Agency	INV-2011-10-12-001	Invoice	13/10/2011	Received By The Customer	Copy
Traiteur Lebrun	European Railway Agency	INV-2011-10-10-001	Invoice	11/10/2011	Received By The Customer	Copy
Traiteur Lebrun	European Railway Agency	INV-2011-10-07-002	Invoice	07/10/2011	Received By The Customer	Copy
Traiteur Lebrun	European Railway Agency	INV-2011-10-07-001	Invoice	07/10/2011	Received By The Customer	Copy
Traiteur Lebrun	European Railway Agency	INV-2011-10-06-002	Invoice	06/10/2011	Received By The Customer	Copy
Traiteur Lebrun	European Railway Agency	INV-2011-10-06-001	Invoice	06/10/2011	Received By The Customer	Copy
Traiteur Lebrun	European Railway Agency	INV-2011-09-26-123	Invoice	04/10/2011	Received By The Customer	Copy
Traiteur Lebrun	European Railway Agency	1109874	Invoice	04/10/2011	Received By The Customer	Copy

Sending an invoice via the Supplier Portal

Step 1: Supplier information

1. Select Supplier | 2. Select Customer | 3. Invoice Form | 4. Confirmation Close x

Supplier Company Details

Select the supplier who will create the invoice:

Company name*: SOCIETE D'EXPLOITATION DES ETABLISSEMENTS LEBRUN SARL *AU PIED DE COCHON J P LEBRUN TRAITEL

Street: RUE KOENIG 27

Postal Code, City: 59136 WAVRIN

County / State, Country: FRANCE

Company ID*: 6000336282

Company GLN*: FR31338412992

VAT*: FR31338412992

Supplier Contact

Last name, First name*: BORTIER Martine

Phone: 93667

Email: Martine.BORTIER@ext.ec.europa.eu

Payment information

Payment means*: Payment to bank account

IBAN*, BIC/SWIFT*: FR7630076029771368170020012 FBBCE

Close Save Next

Select the
supplier



Sending an invoice

via the Supplier Portal

Step 2: Customer Information

1. Select Supplier | 2. **Select Customer** | 3. Invoice Form | 4. Confirmation

Close x

Customer Accounting Details

Select the customer who will receive the invoice: European Railway Agency ▼

Name*:

ERA European Railway Agency

Street:

160 BOULEVARD HARPIGNIES

Postal Code, City:

F-89657

VALENCIENNES

Country:

FRANCE ▼

Customer Identifier*:

European Railway Agency

Select
Customer

Customer Accounting Contact

Last name, First name*:

ZARKOSKI Tristan

Phone:

Email:

Close

Save

Previous

Next



European
Commission

Sending an invoice


via the Supplier Portal

Step 3: Invoice header creation

1. Select Supplier | 2. Select Customer | 3. Invoice Form | 4. Confirmation

Close x

Invoice Details

Invoice #*, Date*:	<input type="text" value="2011-256"/>	<input type="text" value="14/09/2011"/>
Invoice Period (from-to)*:	<input type="text" value="01/08/2011"/>	<input type="text" value="31/08/2011"/>
Currency*:	<input type="text" value="Euro"/>	
Payment Delay		
<input checked="" type="radio"/> Payment Due Date	<input type="text" value="30/09/2011"/>	
<input type="radio"/> Payment Terms	<input type="text"/>	
Payment Reference (Bank Transfer):	<input type="text"/>	
Contract #:	<input type="text" value="CS 2569"/>	
Comments:	<input type="text"/>	
Attachments	<input type="button" value="Add"/>	
<input type="button" value="Remove"/>	 2011-01-labels-SA.pdf (Travel Documents)	

Sending an invoice

via the Supplier Portal

Attachment types

Attachments Add

No attachments

Add attachments

Only PDF and TIFF attachments are supported

File Name: U:\COMMON\SYSLOGSHARE\ABAC ASSETS CVS\81 Training\ABAC A; Browse...

Attachment Type: Travel Documents

File Name: No Conflict of interest Report Browse...

Attachment Type: Confidentiality Report

File Name: Signed Order Form Browse...

Attachment Type: List of eval. projects

File Name: Travel Documents Browse...

Attachment Type: Proof of accommodation

File Name: Reimbursem. Detail sheet Browse...

Attachment Type: No Conflict of interest Rep; Browse...

Ok Cancel

Line ID	Item Name	Order Reference	Ord Lin
Invoice Line(s)			

Add Line

Sending an invoice

via the Supplier Portal

Step 4: Invoice line creation

Invoice Totals								
Total Amount incl discount and excl VAT			0.0000	EUR				
Total Amount incl discount and incl VAT			0.0000	EUR				

Invoice Line(s)								
Line ID	Item Name	Order Reference	Order Line	Quantity (Unit)	Unit Price	Total Amount incl discount and excl VAT	Discount (excl. VAT)	Total Amount incl discount and incl VAT
There were no results found.								

Add Line

Create 1st line

Sending an invoice via the Supplier Portal

Invoice line creation

Line #01 Details

Item Name*:

Description:

Order Reference*, Date:

Order Line, Supplier Item Ref:

Unit Price*: EUR

Quantity*:

Delivery Date:

Discount (excl. VAT):
 In Percent %
 Fixed Amount EUR

Discount Reason:

VAT Category*, VAT Rate*: %

VAT Exemption Reason:

Comments:

Totals			
	Excl VAT	VAT	Total
Item	<input type="text" value="500.0000"/> EUR	<input type="text" value="0.0000"/> EUR	<input type="text" value="500.0000"/> EUR
Discount	<input type="text" value="0.0000"/> EUR	<input type="text" value="0.0000"/> EUR	<input type="text" value="0.0000"/> EUR
Total	<input type="text" value="500.0000"/> EUR	<input type="text" value="0.0000"/> EUR	<input type="text" value="500.0000"/> EUR



Sending an invoice

via the Supplier Portal

Invoice line summary

Invoice Totals

Total Amount incl discount and excl VAT	1025.5000	EUR
VAT 0.00 %	0.0000	EUR
Total Amount incl discount and incl VAT	1025.5000	EUR

Invoice Line(s)

Line ID	Item Name	Order Reference	Order Line	Quantity (Unit)	Unit Price	Total Amount incl discount and excl VAT	Discount (excl. VAT)	Total Amount incl discount and incl VAT	
01	Housing	2011-658	1	5	100	500.0000	0.0000	500.0000	Edit delete
02	Travel expenses	2011-658		1	525.50	525.5000	0.0000	525.5000	Edit delete
03	Study services	2011-658		0	3500	0.0000	0.0000	0.0000	Edit delete

3 item(s) found, displaying 1 to 3.

Add Line

Close

Save

Previous

Next


Sending an invoice

via the Supplier Portal

Step 5: Invoice sending

Comments:

Attachments

 2011-01-labels-SA.pdf (Travel Documents)

Invoice Totals			
Total Amount incl discount and excl VAT	1025.5000	EUR	
VAT 0.00 %	0.0000	EUR	
Total Amount incl discount and incl VAT	1025.5000	EUR	

↓ Invoice Line(s)

Line ID	Item Name	Order Reference	Order Line	Quantity (Unit)	Unit Price	Total Amount incl discount and excl VAT	Discount (excl. VAT)	Total Amount incl discount and incl VAT	
01	Housing	2011-658	1	5	100	500.0000	0.0000	500.0000	view
02	Travel expenses	2011-658		1	525.50	525.5000	0.0000	525.5000	view
03	Study services	2011-658		0	3500	0.0000	0.0000	0.0000	view

3 item(s) found, displaying 1 to 3.

[Close](#) [Save](#) [Previous](#) [Send](#)

Send invoice

Sending an invoice

via the Supplier Portal

Mailbox - Sent

European Commission
Supplier Portal

Welcome **Martine BORTIER!**
[Log out](#)

e-Invoicing

European Commission > Supplier Portal > e-Invoicing Help

[Inbox](#) **Sent** [In preparation](#) **Create Invoice**

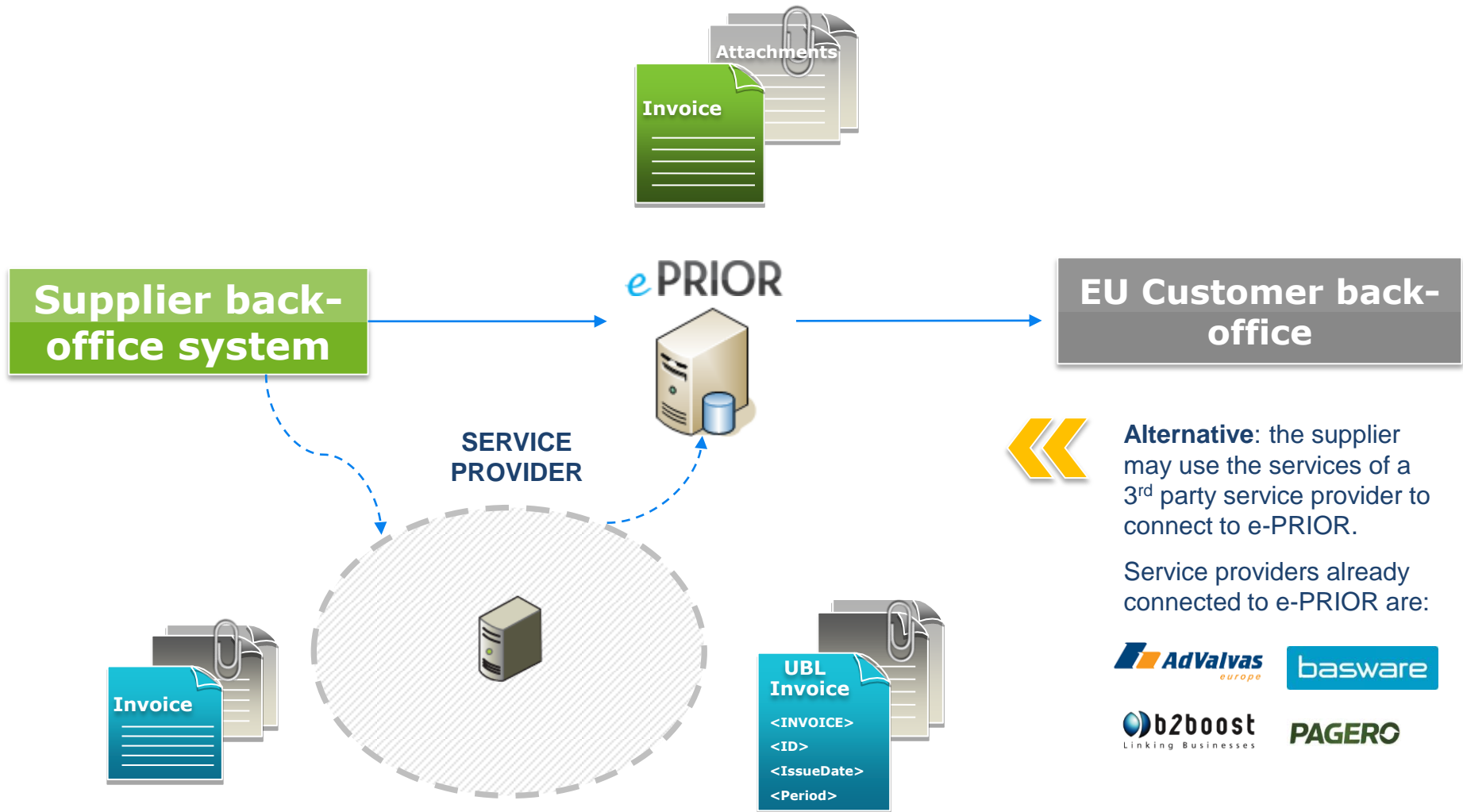
↓ Display more documents

Supplier	Customer	Document ID	Document Type	Date	Status
Reset filters Filter				21/10/2011	
Traiteur Lebrun	European Railway Agency	2011-1125	Invoice	21/10/2011	Received By The Customer Copy

1 item(s) found, displaying 1 to 1. | Page(s): «Prev | 1 | Next»

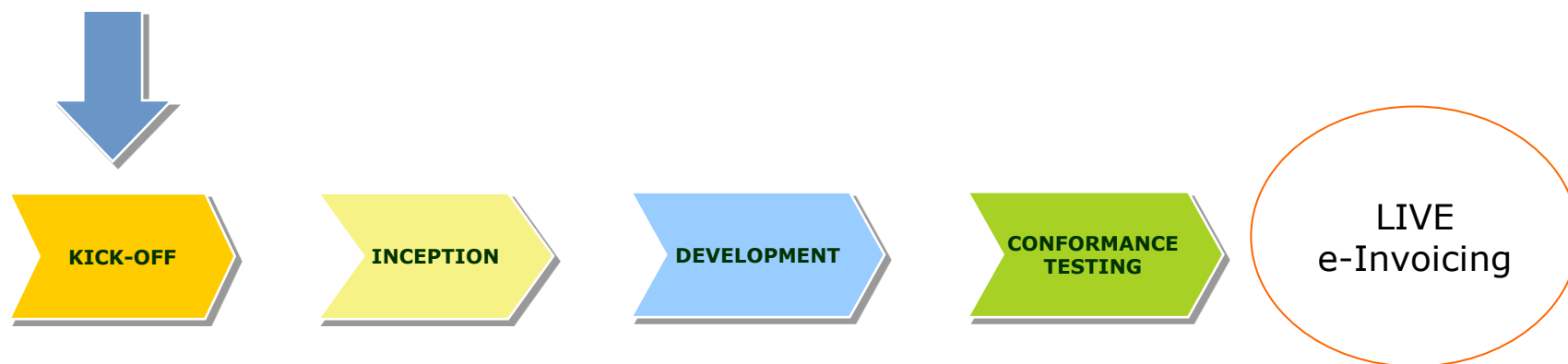
How to start with e-Invoicing?

When connecting via web services



e-Invoicing Suppliers Planning

Project phases summary



KICK-OFF	INCEPTION	DEVELOPMENT	CONFORMANCE TESTING	LIVE e-Invoicing
Align stakeholders' understanding of the project objectives, procedures and documentation. High-level planning of the project.	Plan the overall development work to accommodate e-PRIOR requirements while executing the administrative pre-requisites (ICA, GLN).	Implement the business logic to allow product deployment to test environment.	Prove compliance to e-PRIOR Specification (ICD) by executing a test protocol (CTP).	Deploy the final product to the e-PRIOR production environment.



In Practice

- **What is expected now from suppliers (or their service providers)?**

1. **Appoint and communicate a project manager to the e-PRIOR team**
2. **Establish timing for progress review meetings/calls**
3. **You can download the documentation from CIRCABC – Document Management Tool**
4. **Read the latest version of the Interface Control Document and its annexes**
 - ✓ Data dictionary
 - ✓ XML Schema definition
 - ✓ XML Sample files
 - ✓ Web Services definition
 - ✓ Business rules
 - ✓ Validation tool
 - ✓ Conformance Testing Protocol
 - ✓ Operations manual
 - ✓ Guidelines & FAQ
5. **Obtain and communicate your Global Location Number (GLN) or your VAT n°**

ICD Walkthrough

- e-PRIOR_Interface_Control_Document.doc
- Annexes
 - ✓ 001_Suppliers_Meeting
 - ✓ 002_Data_Dictionary
 - ✓ 003_XML_Schema_Definition
 - ✓ 004_XML_Instances
 - ✓ 005_WSDL
 - ✓ 006_Schematron
 - ✓ 007_Tools
 - ✓ 008_FAQ
 - ✓ 009_Conformance_Protocol
 - ✓ 010_Operational_Documentation

EUROPA > European Commission > CIRCABC > Informatics > einvord

e-PRIOR: Facilitating interoperable electronic procurement

Library

Search

Rozšířené Vyhledávání

Schránka

Main Menu

- Browse categories
- Login
- Help

Library > interface_document > ICD v3.300

ICD v3.300
Knihovna je prostor obsahující materiál,

Spaces

Titul

Annexes

Content

Titul

- e-PRIOR_Interface_Control_Document.doc
- Release Notes v2.300.doc
- Release Notes v2.200.doc
- Release Notes v3.300.doc
- Release Notes v2.100.doc
- Release Notes v3.200.doc
- Release Notes v2.400.doc
- Release Notes v3.000.doc
- Release Notes v3.100.doc



CIRCABC is Open Source

V.3.4.0

Guidelines are available to help you

ICD\Annexes\008 FAQ

- ✓ FAQ01_Invoice_Mapping.doc
- ✓ FAQ02_WSDL_Location.doc
- ✓ FAQ03_Preemptive_Authentication.doc
- ✓ FAQ04_Business_Rules_Severity.doc
- ✓ FAQ05_Invoice_ID_Reuse.doc
- ✓ FAQ06_DIGIT_CompanyID.doc
- ✓ FAQ07_DIGIT_ValidAttachmentTypes.doc
- ✓ FAQ09_Percent.doc
- ✓ FAQ10_Measures_Quantities_and_Prices.doc
- ✓ FAQ11_Dates_and_Periods.doc
- ✓ FAQ12_Amount.doc
- ✓ FAQ13_Payment_Means_Guideline.doc
- ✓ FAQ14_Tax_Information_Guideline.doc
- ✓ FAQ15_Calculations.doc
- ✓ FAQ16_Allowances_and_Charges.doc
- ✓ FAQ17_Invoice_Dispute_Resolution.doc
- ✓ FAQ18_Contract_References.doc
- ✓ FAQ19_Invoice_vs_CreditNote.doc
- ✓ FAQ20_Application_Response.doc
- ✓ FAQ21_Conformance_Test_Scenarios.doc
- ✓ FAQ22_Code_Lists.doc
- ✓ FAQ23_Delivery_Terms.doc
- ✓ FAQ24_GLN_Code.doc
- ✓ FAQ25_Using_Read_Services_inProduction.doc

Library > interface_document > ICD v3.300 > Annexes



Annexes

Knihovna je prostor obsahující **materiál**, který se

▼ Spaces

Titul ▼

- 001_Suppliers_Meeting
- 002_Data_Dictionary
- 003_XML_Schema_Definition
- 004_XML_Instances
- 005_WSDL
- 006_Schematron
- 007_Tools
- 008_FAQ
- 009_Conformance_Protocol
- 010_Operational_Documentation

- **What is expected from suppliers (or their service providers)?**
 1. **Map your data format to the EC format (based on UBL 2.0)**
 - ✓ Get the XSDs available in the ICD annex 003
 - ✓ Read the FAQs available in the ICD annex 008 and look at ICD annex 004 for some examples
 - ✓ Read the business rules in the ICD annex 006
 - ✓ Validate your message with the validation tool, available in the ICD annex 007
 2. **Connect to the web services of e-PRIOR**
 - ✓ Use the WSDLs available in ICD annex 005 to help you creating the connection
 - ✓ Use your GLN and the EC GLN to create the SOAP header
 - ✓ Don't forget the http basic authentication
 3. **Do some preliminary testing**
 - ✓ The Acceptance environment will be used both for your internal testing and for the Conformance Testing
 - ✓ The e-PRIOR team is available to help you (contact details at the end)

Validation Tool

The screenshot shows a software window titled "ValidationTool" with a blue title bar. The interface is divided into several sections:

- Type of XML Document:** A dropdown menu set to "Invoice".
- Select XML Document:** A text input field containing "negative_total_amount.xml" and a "Select File" button.
- XSD Validation:** A section with a green checkmark icon on the left. The main area contains the text "XSD validation ok" and a large green arrow pointing upwards. Below the arrow, the text "XSD validation OK" is displayed in green.
- Schematron Validation:** A section with a red 'X' icon on the left. The main area contains an error message: "error: 'The total amount of the invoice cannot be negative: '-2470.05'' at /*[local-name()='Invoice']/*[local-name()='LegalMonetaryTotal']/*[local-name()='PayableAmount']". A large red arrow points upwards from the text "Hard Business rule violation" (displayed in red) towards the error message.

At the bottom of the window, there are three buttons: "Run", "Save Results", and "Clear".

In practice

- **What is expected from suppliers (or their service providers)?**
 1. **Sign the final interchange agreement**
 2. **Execute the Conformance Testing Protocol (incl. business validation)**
 - ✓ A. Data mapping
 - ✓ B. Web Service connection
 - ✓ C. Business validation
 3. **Welcome! Go Live**

Interchange Agreement (ICA)

- VAT Compliance through an EDI Concept
- An ICA must be signed, as an amendment to each Framework Contract
- The ICD is an annex to the ICA

The ICD is not to be signed itself and can be subject to change

- The ICA must be signed before going into production

Conformance Test Protocol

Test Case Summary	
ID	A.01
Name	Invoice mapping, XSD and Schematron validation
Category	Data Mapping & Validation
Objective	Ensure that the Invoice structure is mapped to UBL, is valid according to its XSD and does not violate any hard business rules.
Description	During this test, you will map the structure of your internal Invoice to the UBL data format and perform the XSD and the Schematron validation using the information and tool provided in the ICD and its annexes.

Preconditions

The user has fulfilled all administrative pre-requisites				
Step #	Step Description	Scenario Data	Expected Result	Comments
1	Using the documentation in the ICD annexes, map your internal Invoice document to the UBL syntax and semantic data model		Invoice mapping complete	The Invoice XSD describes the structure of the Invoice message. It includes information on for example the cardinality and data-type of elements. The Invoice business rules describe restrictions on the Invoice message structure and content which are not expressed in the XSD schemas. The mapping guides and FAQ contain information that assist you in mapping specific sections of the Invoice document
2	Use the document validator tool from the XSD annexes to perform the XSD validation of the Invoice	Mapped Invoice XML	No error messages in the document validator tool for the XSD validation	The document validator tool performs two validation steps: - An XSD validation which checks the well-formedness and validity of the XML message - A Schematron validation which checks the hard business rules expressed in Schematron
3	Use the document validator tool from the XSD annexes to perform the Schematron validation of the Invoice	Mapped Invoice XML that has been checked to be valid against its XSD	No error messages in the document validator tool for the Schematron validation	
4	Send a zip file containing 5 Invoices to DIGIT-EPRIOR-SUPPORT@ec.europa.eu to validate that the Invoice mapping is complete and the Invoice messages do not contain any issues, making them suitable to be sent to the e-PRIOR system	E-mail with zip file containing 5 Invoice messages	E-mail response from the e-PRIOR team, confirming that the mapped Invoice messages are suitable to be sent to the e-PRIOR system	
Result	Not Run			

Conformance Test Protocol

Practicalities

- To successfully complete the Conformance Protocol document, a Supplier must:
 - ✓ indicate which test cases are in the roadmap in the Index sheet
 - ✓ indicate the result ("Not run", "Passed" or "Failed") in the Scenario Procedure of each test case. The document will automatically update the Index sheet and dashboards
- Please use the test case ID as part of your message ID
- The e-PRIOR team is available for questions and assistance
- Successful completion of a set of tests will be communicated via mail and/or bi-weekly progress reports
- The e-PRIOR team will verify your results

Conformance Test Protocol

- Through the CTP, a Supplier must demonstrate full conformance to the ICD
- The CTP contains both mandatory and recommended test scenarios
- The CTP is comprised of 3 categories of tests
 - ✓ Data mapping & validation
 - ✓ Business scenario testing
 - ✓ Document validation
- Each test is explained in detail in a separate worksheet in the CTP. Where available it refers to documentation to help implement the test:
 - ✓ Mapping guides in FAQ
 - ✓ Validation Tool
 - ✓ ...

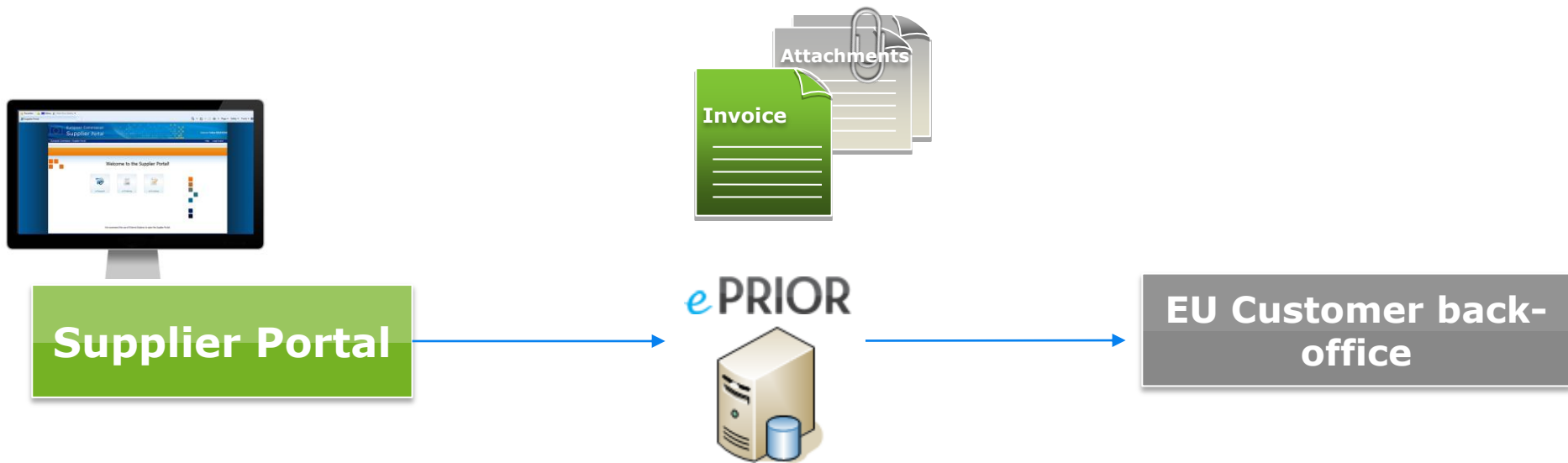
Next steps

- *Contact your Customer (EU Institution / Agency), responsible for your contract to learn the next steps to follow.*

To know more

- **Communication with the e-PRIOR team for suppliers connecting via web-services :**
DIGIT-EPRIOR-SUPPORT@ec.europa.eu
- **Technical Specifications of e-PRIOR are available on CIRCABC:**
<https://circabc.europa.eu/w/browse/2f186976-61f9-42b9-a9d3-5b5428239e33>

When connecting via the Supplier Portal



Next steps

- *Contact your Customer (EU Institution / Agency), responsible for your contract to learn the next steps to follow.*



ePRIOR



Technical specifications (Interface Control Document):

<https://circabc.europa.eu/w/browse/2f186976-61f9-42b9-a9d3-5b5428239e33>



Supplier Portal documentation:

http://ec.europa.eu/dgs/informatics/supplier_portal/documentation/documentation_en.htm



Follow-up of suppliers connecting via web-services through:

DIGIT-EPRIOR-SUPPORT@ec.europa.eu



@ePRIOR_EU



<http://www.linkedin.com/groups/ePRIOR-3686902/about>



Open-source code:

<https://joinup.ec.europa.eu/software/openeprior/home>