Tax compliant e-Invoicing with billManager BM4.4

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Disclaimer:

This document describes the capabilities of the BM4 e-Invoicing platform.

Each project implementation represents a customized subset of the functionalities described herein. Therefore, project specifications take precedence over the content of this document in terms of expected behavior.

This document must be used to understand the global process of electronic invoicing as well as to become familiar with the capabilities of the platform.

Summary

1 Terms of reference

Term	Definition
Invoicing data	The data contained in an invoice, no matter what format it is in. An EDI file containing 10 invoices represents invoicing data which will be cut, parsed and controlled in order for the system to generate the original electronic invoice.
Data acquisition	The process of receiving invoicing data and integrating it into billManager.
XIL	XML Invoice Language: billManager's pivot invoice format.
Norm/ Normalization process	The process which consists in parsing an input format to retrieve functional data such as invoice date, invoice number, etc. It also designates the translation of the data from its source file to the XIL. *Norm* is used to briefly name the process of normalization, but also the technical component which parses the file. This component is a configurable add-on.
Denorm/ Denormalization process	Translate from the invoicing data from the XIL to another output format. *Denorm* is used to briefly name the process of denormalization, but also the technical component which performs the translation. This component is a configurable add-on.
FO style sheet/ XSL-T	Format Output: Technical component applied to the XIL in order to generate a PDF FO is a standard: http://www.w3.org/TR/xsl/ In addition, we use the FOP parser by the Apache foundation to transform the XML-FO into a PDF (or another type of image)
EDI	Electronic Data Interchange. By extension, EDI is also used to designate a particular format. In this text, EDI is used in its generic meaning.
Dematerialization process	The process of creating a tax compliant electronic invoice.
Demat type	Parameter specific to the billManager platform, which is present on any invoice and determines its type of processing.
OCR	Optical Character Recognition: technology used to extract data from scanned documents. In other words, it allows transforming an image into data readable for machines.
Proof	Synonym of original tax compliant electronic invoice.
LIS	Legal Invoice Storage, also called legal archive: BillManager's standard functionality which allows to store all original electronic invoices in a third-party secure archive (CDC Arkhinéo)
Principle of	The principle according to which 2 identical copies of the original invoice must be issued - one for the buyer and one for the supplier.

symmetry	
UAT	User Acceptance Test: delivery of the solution to the client in test environment, also called BETA environment, for test. After completion of all necessary tests to validate the solution, the client signs an Acceptance agreement for move to production of the solution.
Web form	Invoice form available online that suppliers can use to key-in invoice data and submit invoices online. Generally, this acquisition solution is used by suppliers that send few invoices.
Smart PDF	Technology developed by b-process which extracts invoicing data from a PDF document.
Interoperability **Interop R** **Interop E**	Process in which billManager sends/receives invoices to/from another e-Invoicing platform. In this case, the platform is not directly connected to a buyer/supplier. There are 2 types of interoperability: Interoperable reception (Interop R) and Interoperable emission (Interop E).
PO	Purchase Order number.
Reference table	Also called, look-up table is a list of authorized values, used to perform consistency controls.
Demat controls	A country-specific set of data whose presence is mandatory on a document for it be considered as a valid invoice in front of tax authorities. Example: invoice number, invoice date, buyer tax registration number, supplier tax registration number, etc. Demat controls are also called legal controls. A valid electronic invoice cannot be created if a demat control fails. In other words, demat controls are blocking.
Business controls	Business controls are defined by opposition to legal controls. Business controls are additional data presence controls applied to invoices in order to optimize invoice data processing by the buyer. A valid electronic invoice can be created even if a business control fails. Example: purchase order number.
FTC	French Tax Code
Legal entity	Company unit that can be uniquely identified by a tax-registration number.
Deployment	Continuous process during which all the suppliers of a given buyer, or all the buyers of a given supplier, are being affiliated to the platform in order to send/receive electronic invoices via billManager.
CDC Arkhinéo	French state-owned third party service provider for electronic archiving: http://www.cdcarkhineo.com/
EU	European Union

2 Introduction

billManager is a shared, internet-based platform enabling buyers and suppliers to interconnect and exchange electronic invoices. As such, the tool's main function is to manage electronic data flows.

However, due to the specificity of the invoice, being documentary evidence in front of Tax authorities - its content, origin and integrity must be protected in the context of electronic data transmission.

The purpose of this document is to explain in detail what the steps of invoice processing on billManager are as well as to illustrate the tool's capacity to respect the fundamental principles of tax compliant e-Invoicing.

The term billManager is the trademark under which the platform is known by the large audience. It is used in this document to both designate the platform and to refer specifically to BM4.4 which is a particular version of the so called e-Invoicing platform.

3 Fundamental principles of tax compliant e-Invoicing

The shift to electronic data flows in all business areas brought along a significant change in people's working habits. In the field of administration, it brought benefits such as process optimization and simultaneous access to data, but it also raised risks related to potential data loss or misinterpretation.

As far as, invoice processing is concerned, the change has an even stronger impact, since paper itself was considered as a protection of the data. Removing the paper- based process and replacing it by electronic data flows imposed the establishment of the following fundamental principles for any application dealing with electronic invoices:

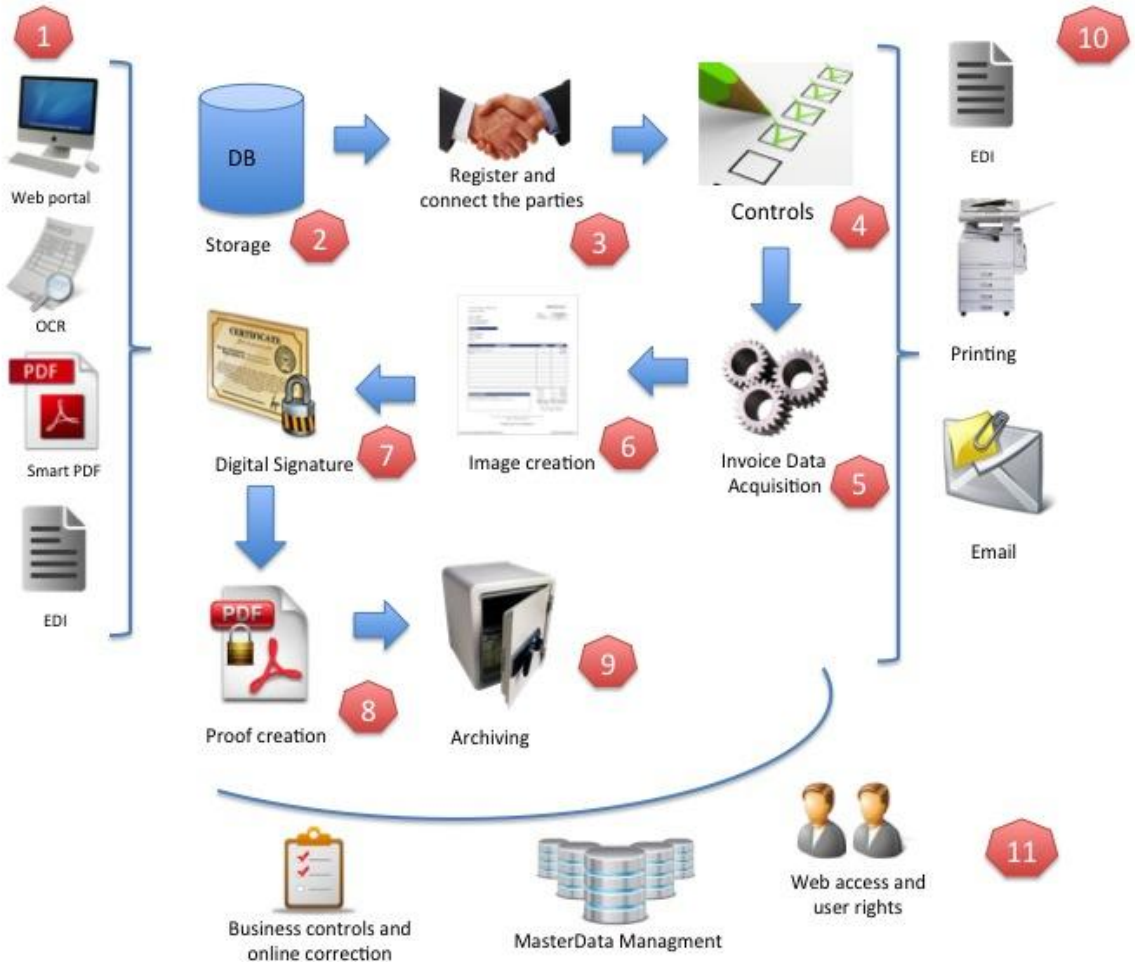
1. Identify the buyer and supplier and make sure they have agreed to exchange electronic invoices
2. Control the content of the document in order to be sure it is an invoice
3. Guarantee the authenticity of the origin and the integrity of the content of the document
4. Present a human readable version of the document (legibility)
5. Store the document for the period of time during which it could be required by Tax authorities
6. Guarantee instant access to all documents, including easy retrieval of a subset of documents via capabilities for search by criteria.
7. Ensure that the same original document exists in two copies : one for the supplier and one for the buyer
8. Secure the data flows

The following sections describe in detail how electronic invoices are generated and processed on the billManager platform.

4 Overview of the major processes

4.1 Dematerialization process and invoice proof

Diagram 4.1a



The diagram above summarizes the major e-Invoicing processes. A pre-requisite for the establishment of a tax-compliant e-Invoicing flow is that buyer, supplier and service provider sign a formal subscription agreement.

Step 1: Sending invoices to billManager

From this point on, supplier can send invoicing data to the system. This data may come under different formats: EDI, PDF, XIL, etc. Several acquisition solutions, tailored to meet the level of technical maturity and invoice volumes of the supplier, are offered to him: web portal to enter invoicing data online, Uploader to send directly PDF invoices to the platform, EDI to connect the supplier's ERP to billManager, OCR to continue sending paper invoices.

Step 2: Source file storage

All files received by the platform are stored in its database for tracking and reprocessing purposes.

Step 3: Partner identification and e-Invoicing relation

Buyer and supplier are declared on the platform by using a unique identifier corresponding to one legal entity. After the partners have been registered in the system, they are connected by an e-Invoicing relation. This triggers a new record in the Partner file, whose purpose is to show the list of all the e-Invoicing counterparts of a given company.

Step 4: Controls

Then, upon reception of the invoicing data from the supplier, the data is controlled, whenever this is required (for more details, see section 7 – Demat summary), to make sure that the document is an invoice.

Step 5: Invoice data acquisition

At this stage of the process, the invoicing data of valid invoices is integrated in billManager.

Step 6: Image creation

If necessary, an image is generated in order to be able to display a human readable version of the original electronic invoice on the platform (principle of legibility).

Step 7: Digital signature

The basis of the original electronic invoice, XIL or image, is digitally signed (for more details, see section 7 – Demat summary).

Step 8: Proof creation

The signed XIL or invoice image becomes the original electronic invoice.

Step 9: Archiving

At the end of the process, the system archives the proof .In addition, every time a new invoice is issued, the summary list is updated. Also, every time a change occurs in an existing e-Invoicing relation between the partners or a new relation is created, the partner file is updated. Every record sent to CDC is time stamped and sealed.

This is the basis of the dematerialization process. Note that easy online access and invoice retrieval from the archive are essential to tax compliant e- invoicing. billManager has improved search capabilities allowing searching invoices by criteria and retrieving a subset of invoices from the archive or from the system's database.

Step 10: Sending the invoicing data to the buyer

After archiving, the invoice is ready for transmission to the buyer's system. billManager sends the invoicing data in the format chosen by the buyer.

Step 11: Business controls

However, additional treatments such as business data controls may apply before transmission to the buyer's system. Note that these additional treatments do not affect the original invoice., which after being issued, signed and archived cannot be modified. For example, if a purchase order number is added during the business controls step, this modification would not affect the proof. The PO number will not be added to the original XIL, basis of the proof, but only to invoicing data sent to the buyer." Master data management" refers to reference tables containing buyer data used for consistency controls. For example, the list of possible PO numbers for a given buyer can be stored in the system and used to validate the PO number reference indicated on each incoming invoice. Master data tables managed on the platform are limited to 2 columns.

From an implementation perspective, there are 2 types of projects:

Inbound projects, initiated by buyers who put in place a core model allowing all kinds of electronic invoices to converge to the same output format. This type of project implies a continuous supplier on-boarding phase (supplier deployment/ on-boarding).

Outbound project, initiated by big suppliers who put in place a core model to use the same input format whoever the recipient is. This type of project implies a continuous buyer on-boarding phase (buyer deployment/on-boarding).

4.2 Classification of the types of invoice processing on billManager: demat types

On billManager, the demat type is the actual driver of the invoice processing.

On one hand, the demat type is an element of the invoice. It corresponds to a tag in the XIL and generally it is populated during the normalization process. On the other hand, it can be seen as a type of e-Invoice processing, which is set in the relation between buyer and supplier.

There are five possible demat types:

COLLABORATIVE

COLLABORATIVE 289V

INTEROPERABLE R (reception)

INTEROPERABLE E (emission)

NO DEMAT

The last one, NO DEMAT, is not used for tax compliant e-Invoice processing. This demat type literally means « not dematerialized ». It could be used for the transmission of a scanned image (OCR chain). None of the demat controls apply, and the invoice is not considered as the original document (the proof) but as an electronic duplicate.

Other demat types exist on BM4, such as COLLABORATIVE_V which can be assimilated to the COLLABORATIVE demat family, or INTEROPERABLE_PDF_E that can be associated to the INTEROPERABLE_E demat family.

Here is how the other four major demat types (COLLABORATIVE, COLLABORATIVE 289V, INTEROPERABLE R, INTEROPERABLE E) relate to the legal framework of tax compliant e-Invoicing.

From a legal standpoint, there are 2 dematerialization **modes** with 3 possible types:

1- Dematerialization according to article 289 VII 3° FTC (EDI) - applicable to any invoice in structured format.

COLLABORATIVE

INTEROPERABLE R (reception)

INTEROPERABLE E (emission)

2- **Dematerialization according to article 289 VII 2° FTC (Signed invoices) – applicable to any invoice, digitally signed by its emitter.**

COLLABORATIVE 289V

INTEROPERABLE R (reception)

INTEROPERABLE E (emission)

Provided that the original electronic invoices are always signed and included in the Summary list, we do not distinguish between:

INTEROPERABLE R according to article 289 VII 3° FTC [EDI] and INTEROPERABLE R according to article 289 VII 2° FTC [Signed invoices]

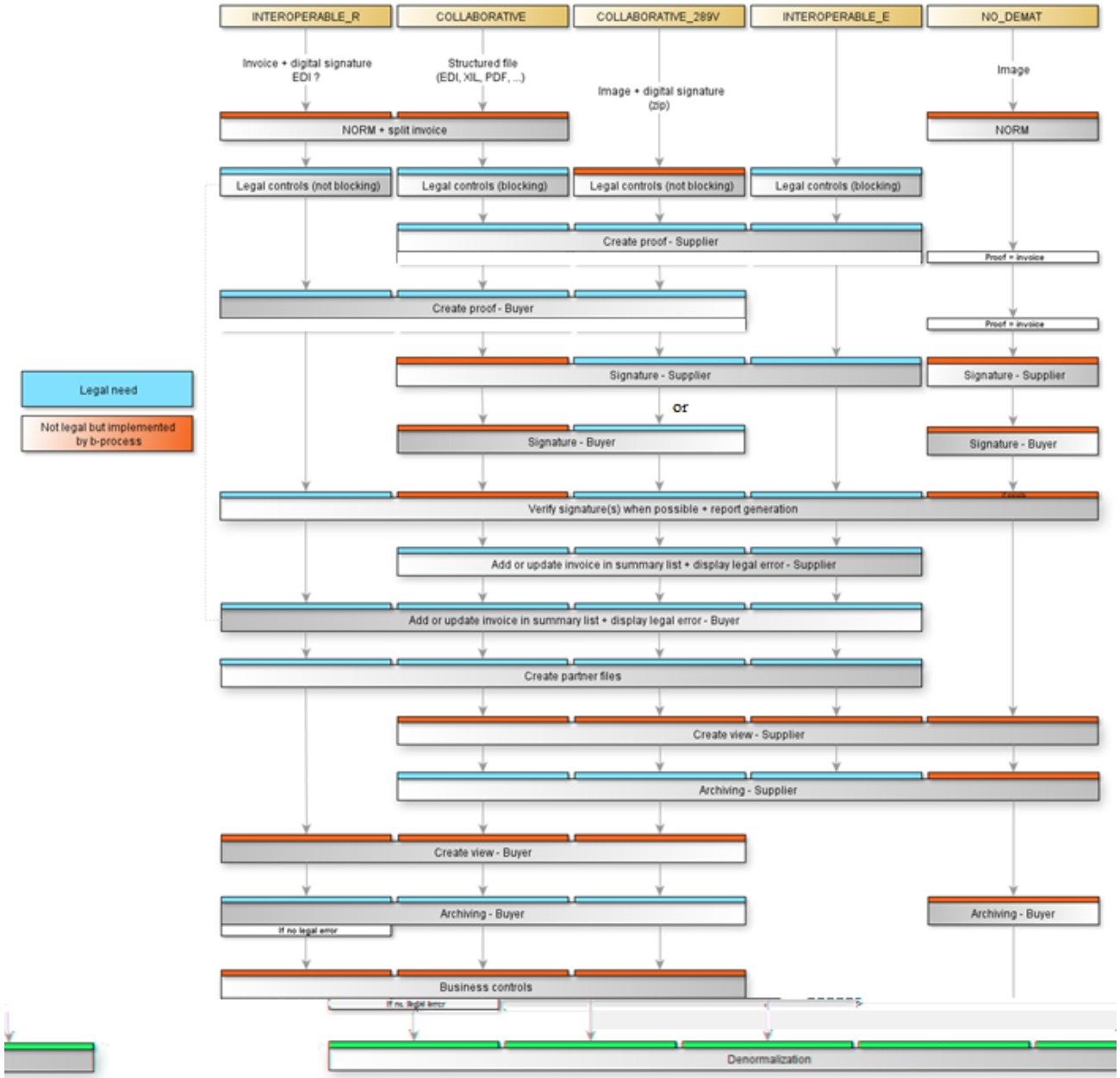
INTEROPERABLE E according to article 289 VII 3° FTC [EDI] and INTEROPERABLE E according to article 289 VII 2° FTC [Signed invoices]

when we talk about demat types on billManager from a technical perspective.

Consequently, there is only one demat type INTEROPERABLE R and only one demat type INTEROPERABLE E.

Diagram 5a hereunder illustrates the steps of invoice processing for each of the 5 possible demat types.

Diagram 4.2a


INTEROPERABLE_R
COLLABORATIVE
COLLABORATIVE_289V
INTEROPERABLE_E
NO_DEMAT
Invoice + digital signature EDI ?
Structured file (EDI, XIL, PDF, ...)
Image + digital signature (zip)
Image
NORM + split invoice
NORM
Legal controls (not blocking)
Legal controls (blocking)
Legal controls (not blocking)
Legal controls (blocking)
Create proof - Supplier
Proof = invoice
Create proof - Buyer
Proof = invoice
Legal need
Not legal but implemented by b-process
Signature - Supplier
Signature - Supplier
or
Signature - Buyer
Signature - Buyer
Verify signature(s) when possible + report generation
Add or update invoice in summary list + display legal error - Supplier
Add or update invoice in summary list + display legal error - Buyer
Create partner files
Create view - Supplier
Archiving - Supplier
Create view - Buyer
Archiving - Buyer
If no legal error
Archiving - Buyer
Business controls
Denormalization

The next two sections of this document describe the invoice processing on billManager in more details, taking as a starting point the relevant legal framework: article 289 VII 3 of the FTC (EDI) and article 289 VII 2 of the FTC (Signed invoice).

First we focus on the COLLABORATIVE demat type and follow the end-to-end process. The Collaborative type is used as a basis. Then the Interoperable E and Interoperable R processes are introduced by highlighting their differences compared to the Collaborative processing type.

5 Dematerialization according to article 289 VII 3 of the FTC (EDI)

5.1 COLLABORATIVE

Let's start the deep dive by describing the COLLABORATIVE demat type. This is the most common process in which both buyer and supplier are connected to the platform and they respectively receive or send structured files such as EDIFACT, XIL or any other structured file format. The following subsections describe the collaborative process in details.

The first step in this process, as already mentioned, is the data acquisition from the supplier. If the input file is multi-invoice, it is cut into single invoices.

As a comparison, the multi-invoice input message can be seen as an envelope containing several paper invoices. Each paper invoice is represented in the system by the single invoice cut.

Then each cut goes through a normalization process which maps the invoicing data from the input format to the XIL.

Hereunder an example of structured input format and the corresponding XIL:

Excerpt of a custom input structured file:

```
      <sh:TelephoneNumber/>
      <sh:ContactTypeIdentifier/>
    </sh:ContactInformation>
  </sh:Sender>
  <sh:Receiver>
    <sh:Identifier Authority="EAN.UCC">3027800008606</sh:Identifier>
    <sh:ContactInformation>
      <sh:Contact/>
      <sh:EmailAddress>EHQ-supplier@ppg.com</sh:EmailAddress>
      <sh:FaxNumber/>
      <sh:TelephoneNumber/>
      <sh:ContactTypeIdentifier/>
    </sh:ContactInformation>
  </sh:Receiver>
  <sh:DocumentIdentification>
    <sh:Standard>EAN.UCC</sh:Standard>
    <sh:TypeVersion>2.4</sh:TypeVersion>
    <sh:InstanceIdentifier>
    </sh:InstanceIdentifier>
    <sh:Type>Invoice</sh:Type>
    <sh:MultipleType>false</sh:MultipleType>
    <sh:CreationDateAndTime>2012-11-29T00:47:12</sh:CreationDateAndTime>
  </sh:DocumentIdentification>
</sh:StandardBusinessDocumentHeader>
<eanucc:message xmlns:eanucc="urn:ean.ucc:2">
  <entityIdentification>
    <uniqueCreatorIdentification>DUKSSIN00011998</uniqueCreatorIdentification>
    <contentOwner>
      <gln>5037130000001</gln>
    </contentOwner>
  </entityIdentification>
  <eanucc:transaction>
    <entityIdentification>
      <uniqueCreatorIdentification>DUKSSIN00011998</uniqueCreatorIdentification>
      <contentOwner>
        <gln>5037130000001</gln>
      </contentOwner>
```

Excerpt of the XIL produced after normalization of the input file:

```
<?xml version="1.0" encoding="ISO-8859-1"?>
<Invoice xmlns="http://www.BillManager.com">
<InvoiceHeader>
    <InvoiceType stdValue="380"/>
    <Control stdValue="CHECKLINESUM">Y</Control>
    <InvoiceStatus stdValue="7"/>
    <InvoiceLanguage stdValue="it"/>
    <TaxMode stdValue="EXO">VAT exempt according to art. 138 of the EU
    <TaxTreatment stdValue="GIL"/>
    <InvoiceTreatment stdValue="E"/>
    <InvoiceNumber>DFRSSIN00004442</InvoiceNumber>
    <InvoiceDate>2012-11-07</InvoiceDate>
    <Currency stdValue="EUR"/>
    <Party stdValue="II">
```

The XIL is then submitted to the demat controls. From a technical standpoint, the demat controls are applied to the XIL.

The term “demat controls” corresponds to the data presence checks that the system will apply to any invoice candidate. The set of data whose presence is mandatory to certify the validity of an invoice is country-dependent. The precise list of demat controls per country is available in Appendix 1.

Depending on country in the supplier’s company address, billManager executes the corresponding demat controls.

Specific controls exist for the following countries:

- Belgium
- Canada
- France
- Germany
- Great Britain
- Ireland
- Italy
- Netherlands
- Spain
- Switzerland
- USA

For any other EU country, there are no specifically defined demat controls, the system checks only the mandatory mentions defined in article 226 of the European directive for electronic invoicing from 2006 (http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32006L0112:FR:NOT). The set of controls is listed in Appendix 1 under “DEMAT_EU”.

For any other non-EU country, the system executes the demat controls applicable in France.

In addition to these controls, the platform checks that:

- The invoice is not a duplicate (in other words, the same invoice has not already been processed. The control will check the invoice number, the invoice emitter and the invoice date within the fiscal year;
- The invoice date is not in the future;
- The total amount excluding tax plus the total tax equals to the total due (checksum control). Another version of this checksum control exists on invoice line level. It is activated upon client request.

These tests are blocking for the fiscal dematerialization mode according to article 289 VII 3° FTC (EDI). Basis of the original electronic invoice

After successful validation, the XIL becomes the basis of the original electronic invoice. It is issued twice – once for the supplier and once for the buyer.

This explains why the dematerialization controls are not executed a second time on the buyer side in the COLLABORATIVE type.

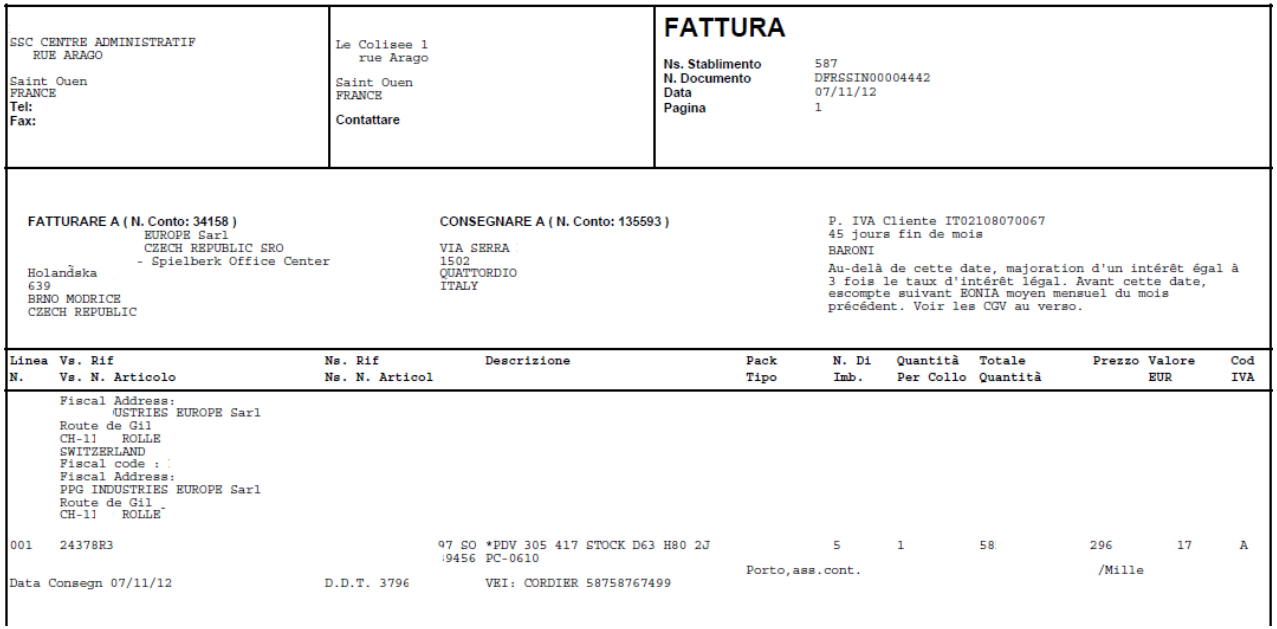
A specific technical component called XSL-FO style sheet will be applied to the XIL in order to generate a human readable version of the original invoice. The example hereunder illustrates this process.

Example: Excerpt from a XIL

```
<?xml version="1.0" encoding="ISO-8859-1"?>
<Invoice xmlns="http://www.BillManager.com">
<InvoiceHeader>
    <InvoiceType stdValue="380"/>
    <Control stdValue="CHECKLINESUM">Y</Control>
    <InvoiceStatus stdValue="7"/>
    <InvoiceLanguage stdValue="it"/>
    <TaxMode stdValue="EXO">VAT exempt according to art. 138 of the EU
    <TaxTreatment stdValue="GIL"/>
    <InvoiceTreatment stdValue="E"/>
    <InvoiceNumber>DFRSSIN00004442</InvoiceNumber>
    <InvoiceDate>2012-11-07</InvoiceDate>
    <Currency stdValue="EUR"/>
    <Party stdValue="II">
```

Upon application of the FO style sheet to this XIL, a PDF image is generated.

It looks as follows:



SSC CENTRE ADMINISTRATIF
RUE ARAGO

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Tel:
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Le Colisee 1
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Saint Ouen
FRANCE

Contattare

FATTURA

Ns. Stablimento	587
N. Documento	DFRSSIN00004442
Data	07/11/12
Pagina	1

FATTURARE A (N. Conto: 34158)
EUROPE Sarl
CZECH REPUBLIC SRO
- Spielberk Office Center

Holandska
639
BRNO MODRICE
CZECH REPUBLIC

CONSEGNARE A (N. Conto: 135593)

VIA SERRA
1502
QUATTORDIO
ITALY

P. IVA Cliente IT02108070067
45 jours fin de mois
BARONI
Au-delà de cette date, majoration d'un intérêt égal à 3 fois le taux d'intérêt légal. Avant cette date, escompte suivant EONIA moyen mensuel du mois précédent. Voir les CGV au verso.

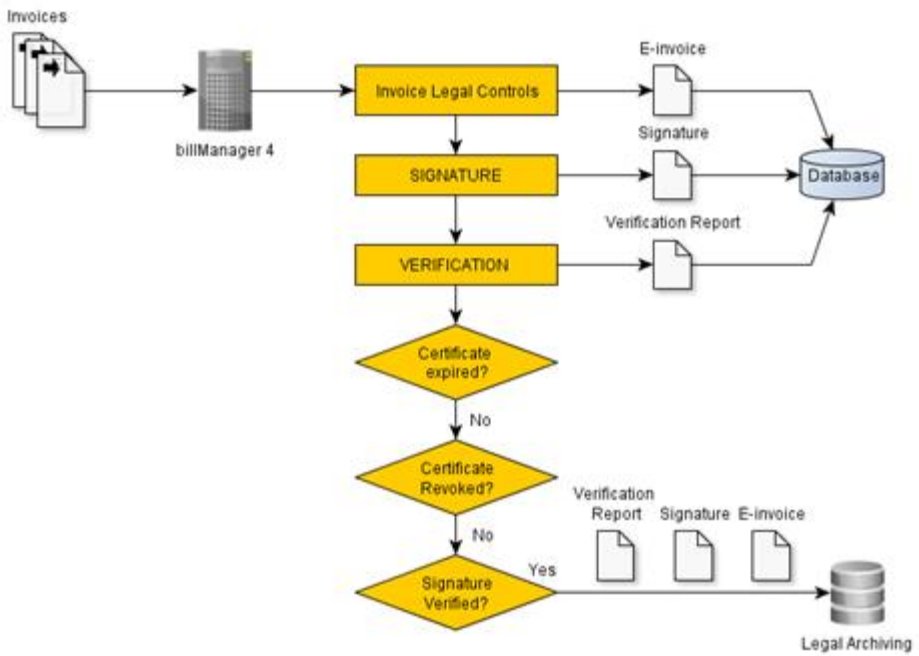
Linea N.	Vs. Rif / Vs. N. Articolo	Ns. Rif / Ns. N. Articol	Descrizione	Pack Tipo	N. Di Imb.	Quantità Per Collo	Totale Quantità	Prezzo	Valore EUR	Cod IVA
	Fiscal Address: USTRIES EUROPE Sarl Route de Gil CH-11 ROLLE SWITZERLAND Fiscal code : Fiscal Address: PPG INDUSTRIES EUROPE Sarl Route de Gil CH-11 ROLLE									
001	24378R3	97 SO 19456	*PDV 305 417 STOCK D63 H80 2J PC-0610		5	1	58	296	17	A
				Porto,ass.cont.				/Mille		
Data Consegn 07/11/12		D.D.T. 3796	VEI: CORDIER 58758767499							

The XIL is then digitally signed.

Depending on the applicable legislation, billManager signs the invoice with an advanced or qualified signature. For more details, see section 5.1.1.5.1

In addition, a signature verification report is generated and archived, as shown on the diagram hereunder.

Diagram 5.1.1.4a



The signed XIL contains the signature at the very bottom of the XML, whereas the XIL without signature does not contain the part framed in red on the first picture (see paragraph 5.1.1.6).

There are two types of electronic signature, as follows:

5.1.1.4.1.1 Advanced electronic signature

The advanced electronic signature is used for authentication and content integrity validation.

It has the following characteristics:

- it is uniquely linked to the signatory;
- it is capable of identifying the signatory;
- it is created using means that the signatory can maintain under his sole control;
- it is linked to the data in such way that any subsequent change of the data is detectable

When using the advanced electronic signature on billManager, b-process uses the certificate delivered by CERTINIOMIS according to the product named class 1 certificate “AC 1 étoile”.

The advanced signature is always embedded in the signed document. The signature is always stored with the invoice.

5.1.1.4.1.2 Qualified electronic signature

This type of signature is based on a qualified certificate which is created by a secure-signature-creation device (this is a smart card which actually contains the certificate).

The qualified digital signature is used for authentication, content integrity, confidentiality, non-repudiation.

For this type of signature, billManager signs using Authendidate. The signature verification report is generated by calling the Authentidate online services. The certificates are continuously provided by Swisscom or Telesec.

billManager uses the **advanced electronic signature** and the **qualified electronic signature**. The latter is used only if a given country’s local legislation in terms of e-Invoicing imposes it. For example, a qualified certificate must be used for signing German and Swiss invoices. For details see the next subsection.

billManager signs the original electronic invoice (buyer’s and supplier’s one) with the appropriate signature based on the country-specific requirements. For cross border transactions, the original invoice is signed according to the most stringent signature requirements, as follows:

Case 1: Supplier requires advanced signature – **Buyer requires qualified signature** => the invoice is signed with the certificate of the buyer

Case 2: **Supplier requires qualified signature** - Buyer requires advanced signature => the invoice is signed with the certificate of the supplier

Case 3: **Supplier requires advanced signature** Buyer requires advanced signature => the invoice is signed with the certificate of the supplier

Case 4: **Supplier requires qualified signature** - Buyer requires qualified signature = > the invoice is signed with the certificate of the supplier

Certinomis AC 1 étoile

Certinomis is billManager’s internal signature, used on a regular basis unless more stringent requirements apply.

Swisscom

Certificate name :Swisscom Diamant CA 2

Certificate issuer: Digital Certificate Services, Swisscom,

Country: Switzerland

This is the qualified certificate used for signing Swiss invoices.

Telesec

Certificate name:Tele Sec PKS SigG CA 30:PN

Certificate issuer: Deutsche Telekom AG

Country: Germany

This is the qualified certificate used for signing German invoices.

billManager generates a signature verification report for every signature. This report is the output of the signature check. This measure allows providing the actual proof that the content of the original invoice has not been altered. In addition, it is a way to avoid issues with checking the content of an invoice later on, when the certificate is no longer valid.

The verification process will check that:

the certificate had not expired at the time the invoice was signed
the certificate had not been revoked at the time the invoice was signed
the data integrity (the signature is reproduced with the original document then compared to the signature of the document)

A verification report is created and archived with the proof.

The list of fields in the report is available in Appendix 2.

Online signature verification service

Upon customer or tax authorities' request, b-process provides a ***service of online signature verification*** *« b-process Signature Tool ».*

However, note that this service can be used to verify Authentidate signatures only.

Steps to verify a signature:

1. *Download the invoice and the signature from BM4 / Summary List, or CDC archiver*
2. *Upload the XIL*
3. *Upload the signature*
4. *Choose your language report*
5. *Submit*

1. *Download the verification report (XML format)*

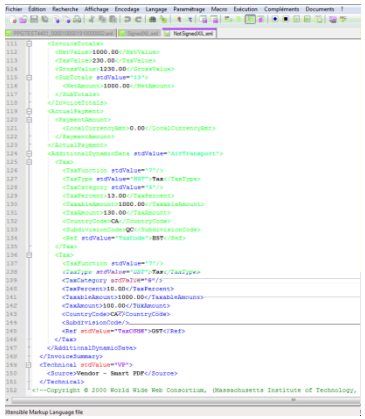
   Note: It is possible to validate only one signature at a time.

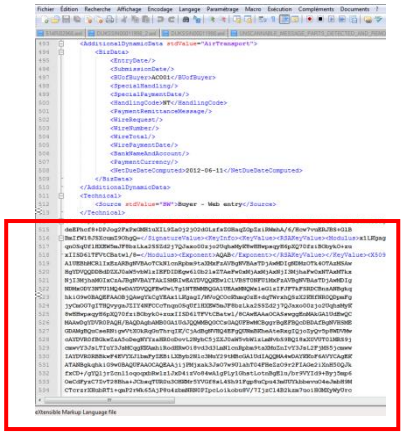
In some countries, local regulations enforce electronic invoices to be time-stamped. This is the case in Italy and Hungary.

billManager has the capability to time-stamp legal invoices whenever this is required, using the services of its partner Trust Weaver.

The notion of proof relates only to the original electronic invoice. In the COLLABORATIVE process, the proof is the signed XIL.

Example:





The signed XIL contains the signature at the very bottom of the XML, whereas the XIL without signature on the first picture does not contain the part framed in red.

The concept of the summary list consists in maintaining a read-only register of all the electronic invoices received by a buyer or all the electronic invoices sent by a supplier, detailing basic information such as the total due, total tax, VAT registration numbers, etc. Every record of this register is sent to the legal archive, time stamped and sealed. All the records can be retrieved via billManager's web interface both form the system's database and from the archive.

The Summary list stored in the platform's database can be retrieved from the menu "Dematerialization/Summary list" whereas the Summary list stored at CDC can be retrieved from the menu "Dematerialization/Archived summary list".

In the summary list, one will find all invoices whose demat type is:

Collaborative
Collaborative 289V
Interoperable reception (if logged in as a buyer)
Interoperable emission (if logged in as a supplier)

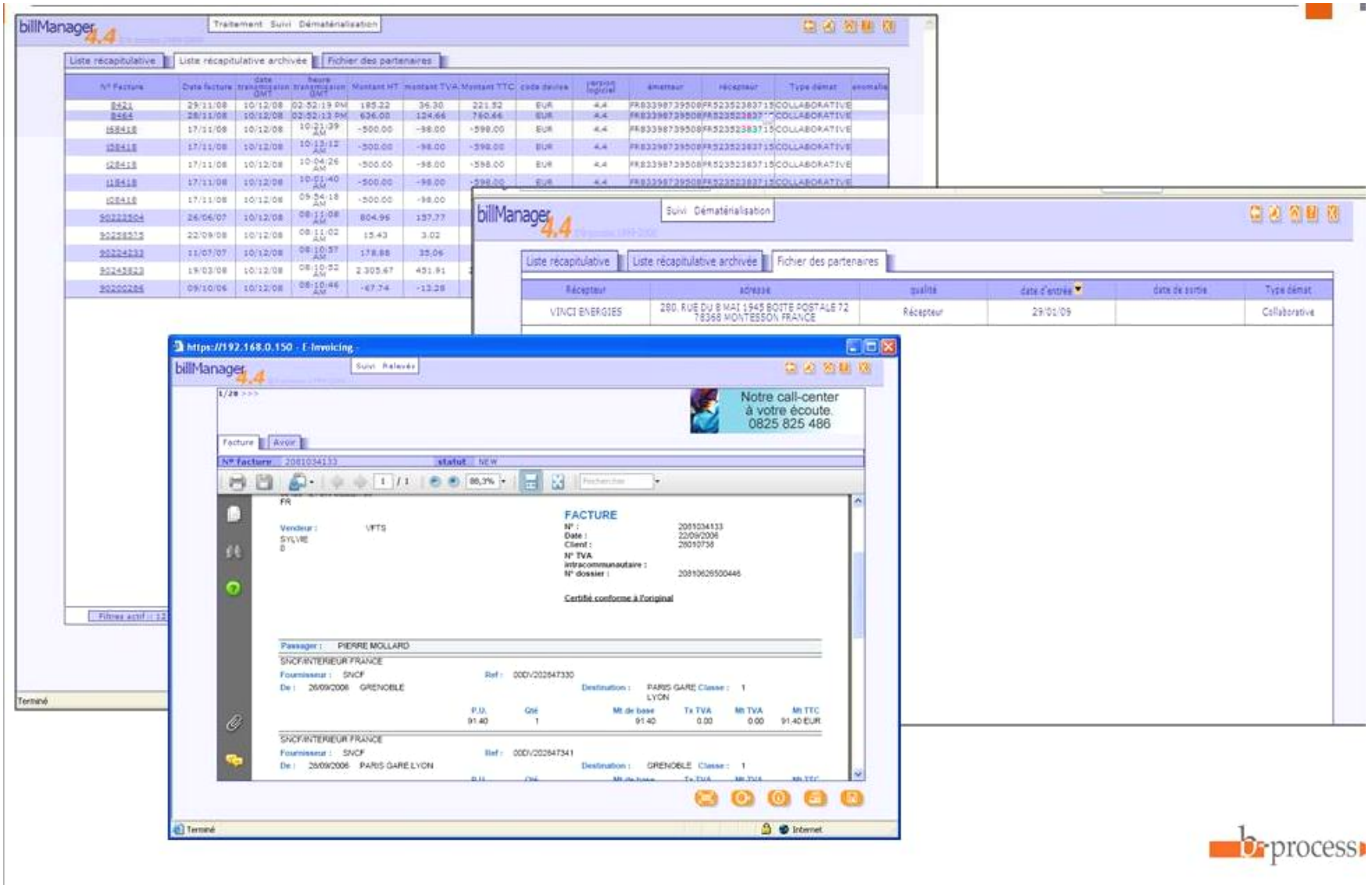
The columns of the summary list view are fixed and they show the following information:

Invoice Number
Invoice Date: the invoice date found on the invoice
Transmission Date, Time: the date and time the invoice was received on billManager
Net Amount: the total net amount of the invoice
VAT Amount: the total tax amount of the invoice
Total amount
Currency: a 3-letter ISO currency code
Invoice Type: 380 (Invoice), 381 (Credit Note), etc.
Version: billManager software version
Supplier: supplier VAT code + full legal addresses (on popup)
Buyer: buyer VAT code + full legal addresses (on popup)
Demat type: demat type

Problems: any anomaly observed on the invoice
Lis: Archive CDC status
Proof download

The functionalities available from the web screen are:

View the image of the invoice. (click on the invoice number link)
Download the proof - the XIL, the signature, the certificate and the signature verification report (when available)- and the summary list (restricted to 3000 entries) as a CSV or Excel file (click on the disk icon), PDF (click on the print icon)
Search, paginate, order



The partner file lists all the e-Invoicing relations existing between a buyer and all his suppliers or respectively the relations existing between a supplier and all his buyers. This read-only register is also archived. For more details see section 5.1.1.10

This file is autonomous and audit logged. The updating process is simultaneous for the two parties: buyer and supplier.

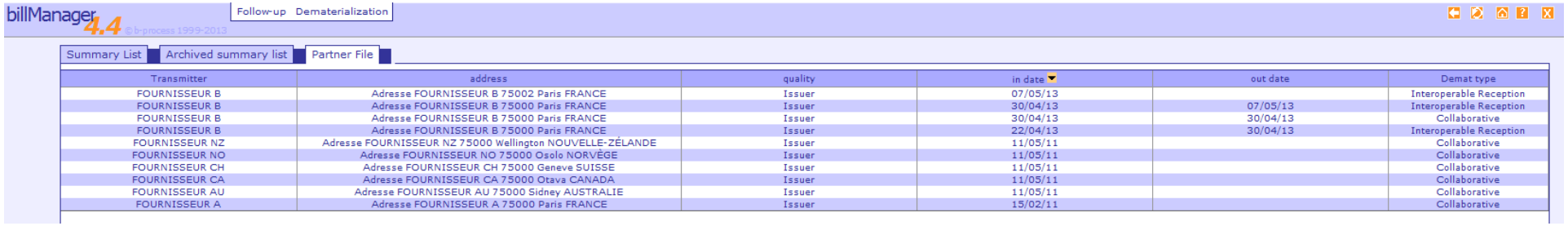
The Partner File registers the exact period (between a date in and a date out) of an e-Invoicing relation between two partners. If the partnership has not ended the date out is empty. One company cannot have different e-Invoicing partnerships with the same partner and at the same period of time.

The list of columns visible on the web interface is the following:

Entity name (buyer, or supplier)
Address: Full Address
Quality: emitter (supplier) or receiver (buyer)
In date: the partnership start date
Out date: the partnership end date. It is empty, if the partnership is still open.
Demat type

The associated functionalities available on this screen are:

download the list (restricted to 3000 entries) as a CSV or Excel file (click on the disk icon), PDF
Search, paginate, order



Transmitter	address	quality	in date	out date	Demat type
FOURNISSEUR B	Adresse FOURNISSEUR B 75002 Paris FRANCE	Issuer	07/05/13		Interoperable Reception
FOURNISSEUR B	Adresse FOURNISSEUR B 75000 Paris FRANCE	Issuer	30/04/13	07/05/13	Interoperable Reception
FOURNISSEUR B	Adresse FOURNISSEUR B 75000 Paris FRANCE	Issuer	30/04/13	30/04/13	Collaborative
FOURNISSEUR B	Adresse FOURNISSEUR B 75000 Paris FRANCE	Issuer	22/04/13	30/04/13	Interoperable Reception
FOURNISSEUR NZ	Adresse FOURNISSEUR NZ 75000 Wellington NOUVELLE-ZÉLANDE	Issuer	11/05/11		Collaborative
FOURNISSEUR NO	Adresse FOURNISSEUR NO 75000 Oslo NORVÈGE	Issuer	11/05/11		Collaborative
FOURNISSEUR CH	Adresse FOURNISSEUR CH 75000 Geneve SUISSE	Issuer	11/05/11		Collaborative
FOURNISSEUR CA	Adresse FOURNISSEUR CA 75000 Otava CANADA	Issuer	11/05/11		Collaborative
FOURNISSEUR AU	Adresse FOURNISSEUR AU 75000 Sidney AUSTRALIE	Issuer	11/05/11		Collaborative
FOURNISSEUR A	Adresse FOURNISSEUR A 75000 Paris FRANCE	Issuer	15/02/11		Collaborative

At the end of the processing, the invoice can go through business controls before being transmitted to the buyer (denormalization process).

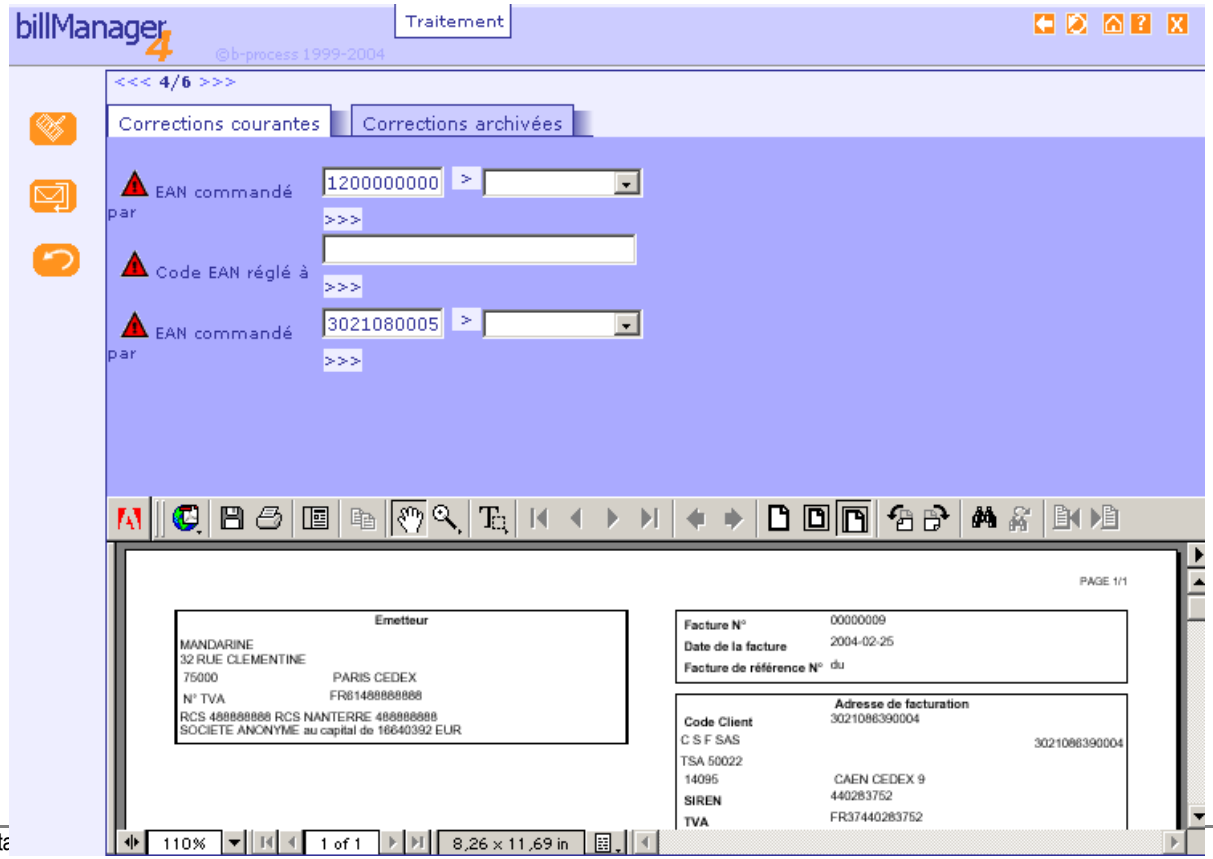
If business controls fail, supplier will be invited to enter or correct business data online using billManager's web interface.

The correction has no impact on the original invoice which cannot be altered. The corrected and data is extracted to the buyer but the proof does not change.

Example: The supplier can find in the menu "Current corrections" all his invoices that could not be pushed to the buyer because of missing business data.

On the screen hereunder, the wrong or missing data is open for correction (EAN commandé). Supplier can see the PDF of the invoice in order to visualize what was previously sent. Upon submission, the invoice continues its processing.

Note that, if the supplier takes no action, the invoice will however be pushed to the buyer after a reasonable period of time, generally 48 hours. Its further processing cannot be blocked for business reasons.



billManager archives the original electronic invoices as well as other legally required documents, such as the certificate used to digitally sign the original electronic invoice, the partner file, the summary list, the source files, the time stamping document, the schema and FO XSL-T, the component used to generate the invoice image. All the documents are stored in billManager's database and sent to the third-party legal archive (CDC Arkhinéo), as illustrated on diagram 5.1.1.10a

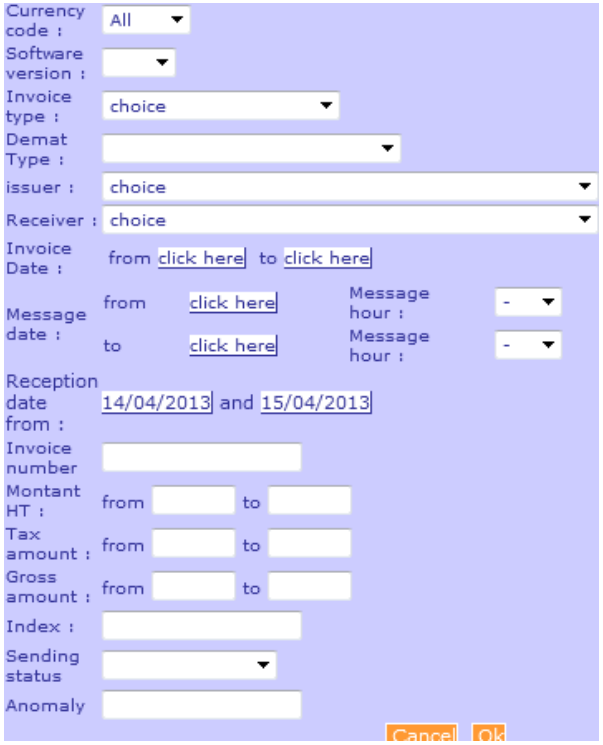
As far as the proof is concerned, two separated objects exist: one for the supplier and one for the buyer.

The duration of the storage is 10 years by default, but it could be extended upon client request.

The application provides instant online access to all the proofs of the partner who is logged in.

The platform enables users to do a search based on the following criteria:

- Currency
- Software version
- Invoice type
- Demat type
- Issuer
- Receiver
- Invoice number
- Invoice date
- Message date
- Reception date
- Total amount excluding VAT (Amount HT)
- Total VAT (tax amount)
- Total amount with VAT (Gross amount)
- Currency
- Index
- Sending status
- Anomaly



All the documents are sent to a third-party provider of archiving services – CDC Arkhinéo. This functionality is also known as LIS (legal invoice storage).

This archive is located in France, unless otherwise stated by the applicable e-Invoicing legislation. If so, CDC redirects the documents to locally based archiving facilities.

b-process has a common space for all its customers on CDC's servers. However, for clients with very high invoice volumes, dedicated repositories can be created.

The storage period is 10 years by default. If necessary, this period could be extended upon client request.

According to the subrogation clause, part of the contract signed between b-process and CDC Arkhinéo, in case of dysfunction of b-process, clients will be granted direct access to their original invoices until expiration of the contractual storage period.

As illustrated on diagram 5.1.1.10a after the original electronic invoice is created, it is stored in a dedicated table on billManager. Technically, no record in this table can be deleted or modified. In other words, every original electronic invoice created by billManager is saved in its database.

The exit format is how b-process enables a client who suspended their subscription to its e-Invoicing services, to continue having access to their original invoices.

A specific access to the archive can be created in this case. The procedure described in Appendix 3 applies.

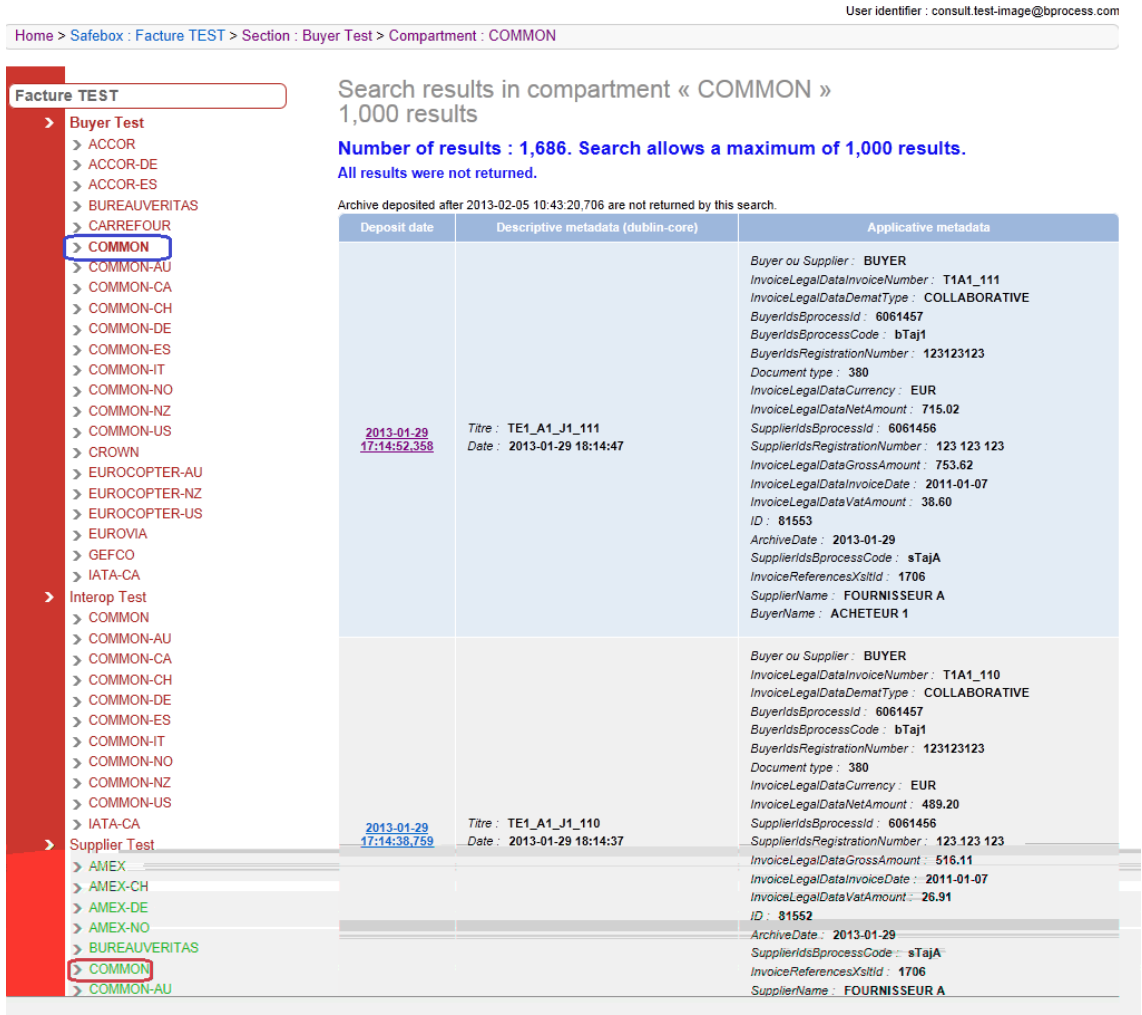
In this case, b-process, jointly with CDC Arkhinéo provides a separate access to the client in order for him to directly retrieve invoices from CDC.

The client connects to a web interface linked to the CDC archive.

The client can search for and retrieve any of his existing original documents created by billManager without necessarily being a user of the platform's any longer.

Hereunder the web interface allowing to access invoices from CDC:

Diagram 5.1.1.10.3a



This web interface allows searching for invoices by using different filters such as InvoiceLegalData/InvoiceNumber to search by invoice number. XIL, signature and signature verification report can be downloaded. The interface supports unit download. If a mass download is needed, a specific request has to be sent to CDC.

This interface also gives access to the archived summary lists, partner files and source files in case of Interop R and XSL-T components.

As already mentioned at the beginning of this document, e-Invoicing is essentially about managing electronic data flows. Moreover, these flows concern transactions between two parties and therefore, the data itself is as sensitive as the quality of the transmission. Seen from this perspective, billManager is an intermediate body situated between two parties that use it to communicate billing data. Consequently, billManager is able, as part of its standard functionalities, to communicate with the two parties in order to acknowledge reception, notify about the execution of a process or report an error.

Here are the standard messages that billManager sends, generally on a daily basis.

The supplier is notified how many invoices have been received on the platform from him during the day.

The attached file(s) list at least:

- All the invoices successfully processed
- All the rejected invoices with the corresponding error message

Example:

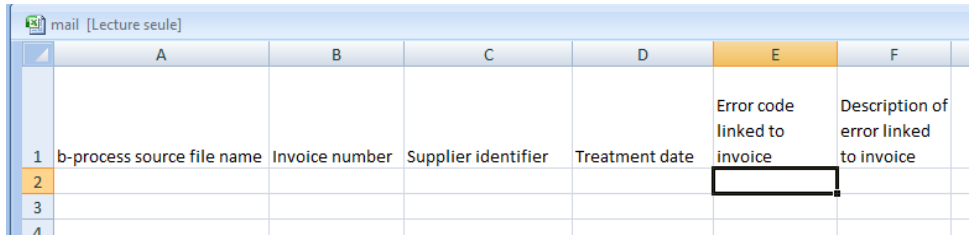
```
Bonjour, vous trouverez ci-joint les reportings journaliers de votre facturation.
Cordialement.

----------------

Hello, please find attached to this mail your daily invoicing report.
Best regards.
```

The attached file **ClientName_INVC.csv** contains all the successfully processed invoices for the day:

mail [Lecture seule]

	A	B	C	D	E	F	G	H	I	J	K
1	Filename	Invoice No	Invoice Date	Supplier	Party ID	Creation	Demat type	Denorm			
2											
3											
4											
5											
6											

The attached file **ClientName_BADI.csv** contains all the rejected invoices for the day :



Once on the buyer side of the process, billManager would not apply the legal controls again on the electronic invoice. The reason for it is that, in the COLLABORATIVE demat type, controls are applied once, upon reception of the document from the supplier, as explained in section 5.1.1.2. If the controls are successfully passed, the original electronic invoice is created, i.e. billManager issues the proof. The same proof is immediately replicated for the buyer. Therefore, applying the controls on buyer side in this scenario is unnecessary.

The signature is verified during the creation of the proof, right after signing the XIL.

The resulting signature verification report is stored and available to both parties.

A copy of the proof is issued for the buyer at the moment of its creation. It is a different object from the supplier's proof. However, in accordance with the principle of symmetry, these two documents are exactly the same.

A link to the buyer's proof is available in their summary list.

The buyer's summary list is different from the supplier's one. It only contains the original electronic invoices of the buyer.

The buyer's proof is archived at CDC Arkhinéo.

At the end of the processing, the invoice can go through business before being transmitted to the buyer (denormalization process).

In case business controls failed, buyer has the option to connect to billManager and input correct values before the data is extracted and integrated into their system.

The same web interface is available to the buyer as the one used by the supplier to correct the wrong or missing business data (see section 5.1.1.9).

Even if the buyer does not take action, after a reasonable period of time (generally 48 hours), the invoice is released and pushed to the buyer's system for integration.

The buyer is notified how many invoices have been received on the platform to their attention during the day and what is their status.

Example of a standard buyer report:

```
Bonjour, vous trouverez ci-joint les reportings journaliers de votre facturation de TEST.
Cordialement.
```

The attached zip file ClientName_DailyE-InvoicingReport.csv contains:

mail [Lecture seule]

	A	B	C	D	E	F	G
1	Buyer	Supplier	Document number	Type of document	Document date	Total due	Document status
2							

Note that generally buyers need their reports to be customized in order to include business data, such as internal buyer entity code.

5.2 INTEROPERABLE R

In case buyer and supplier do not share the same e-Invoicing provider, billManager must interoperate with another e-Invoicing platform.

The Interoperable Reception demat type is used when billManager receives an original electronic invoice already produced by another platform. In this context, billManager creates the original invoice only for the receiver (buyer) but not for the emitter (supplier).

The process of creating the original electronic invoice for the buyer will be the same as in case of COLLABORATIVE demat type. The difference is that the invoice is neither created, nor signed, nor archived for the supplier. There is no update of the summary list and the partner file for the supplier as well.

In addition, demat controls are not blocking. In other words, if a demat control fails, the invoice is not rejected. This is due to the fact that the original document has already been issued by the other platform and billManager cannot reject an existing original invoice. However, it will be registered with the mention « Demat Error » in the summary list. Demat controls are applied on the source file.

Finally, the platform archives the source files sent by the emitter. In this process, the source file is the proof.

All formats are accepted: EDI, XIL, IDOC, etc.

5.3 INTEROPERABLE E

The Interoperable Emission processing type is used when billManager must create the original electronic invoice for the emitter (supplier) but not for the receiver (buyer). The buyer's proof is handled by another e-Invoicing platform.

The process of creating the original electronic invoice on the supplier side is the same as in the demat type COLLABORATIVE. The demat controls are performed on the output file; the summary list and the partner file are generated; the proof is archived.

The difference is that the invoice is neither created, nor signed, nor archived for the buyer. There is no update of the summary list and the partner file for the buyer as well.

billManager can send XIL, EDIFACT, XML, etc . Other formats can be implemented on demand.

This XIL is signed and the signature verified.

6 Dematerialization according to article 289 VII 2 of the FTC (Signed invoice)

6.1 COLLABORATIVE 289V

When using this demat type, billManager receives an invoice image, generally a PDF. This image already contains the data in a human readable format.

Although there is no legal obligation to apply any demat controls for this demat type, billManager has the ability to apply the appropriate country-specific controls, as described in demat controls (see section 5.1.1.2). However, to avoid any misunderstanding, the error messages are not displayed on the screen. They are stored in billManager's database and could be communicated by e-mail. In other words, these controls are not blocking as in case of Collaborative demat type. The invoice can be submitted even if one or more of the controls fail.

billManager considers the image as the basis of the original electronic invoice for both buyer and supplier.

Example of an invoice image sent by a supplier to billManager:

SOCIETE
DE PRODU
www. .fr
Aufan
F-92300 Leva
Tel. 33 (0)1 41 40
Fax 33 (0)1 41 40
contact@

FACTURE N°:FAC007089
INVOICE

Adresse de livraison
Delivery Address

RIES ITALIA

Stabilimie
Strade Sta
IT80023 CAIVANO
Italie

Adresse de facturation
Invoicing Address

EUROPE SARL

route de gil
CH-1180 Rolle

SUISSE

Identifiant CEE : IT02108

Client *Customer*	Votre Référence: *Your reference:*	Notre Référence: *Our reference:*	Date	Incoterm	Devise *Currency*
02 X01	270		30/09/2012	D	€ EUR

Code produit *Product Code*	Designation *Description*	Qte *Qty*	U *Unit*	P.U. *Price Unit*	Montant H.T *Total*	Livraison le *Delay*
SULFA001	Sulfamic Acid 99.8 % min Class ADR 8 C2 PG III UNO 2967 (E) HS 2811198010 LOT : 12030904 D8024	6 8 36.00	KG	75	14.30	30/09/2012
SULFA001	Sulfamic Acid 99.8 % min Class ADR 8 C2 PG III UNO 2967 (E) HS 2811198010 LOT : 12051504 D8149-1 VAT to be paid by our representative Ex art. 17 DPR 26/10/72 N 633	55.00 55.00	KG	75	51.38	30/09/2012

Poids Total : / ***Total Weight :*** **801.00 Kgs**

TVA	Escompte	Total Marchandises HT.	Port	Emballage	Total Base HT.	Taux TVA	Montant
72.79		55.68		0.00	55.68	1.0	

Banque :	TOTAL HT	TOTAL TAXES	TOTAL TTC	ACOMPT
/ / /	55.68	2.79	8.47	

Condition de règlement

Virement 90 jrs fin de mois le 10
Echéance : 10/01/2013

Devise € EU
NET A PA

Les marchandises livrées demeurent la proj au paiement complet de leurs prix, frais
éventuels et taxes. Le non paiement à l'échéance prévue entraînera l'exigibilité de la dette.
Aucun escompte ne sera accordé en cas de paiement anticipé.Pénalités de retard à taux d'intérêt

SOCIETE PAR ACTIONS SIMPLIFIEE AU CAPITAL DE 100 EUROS - 552 INTERRE TVA FR 8 8 598 - APE 52

After acquisition and controls, the image is digitally signed as described in "Digital signature and signature verification report" for both buyer and supplier (see section 5.1.1.4). The proof is duplicated for the buyer immediately after being created. The content of the proof is described in table 7b.

The process continues as for demat type Collaborative (see section 5.1.1.7).

The original electronic invoice is archived and can be retrieved as described in "Archiving" (section 5.1.1.10)

Demat controls do not constitute a fiscal obligation for this dematerialization type.

The proof for the buyer is duplicated immediately after creation of the original electronic invoice.

The signature is verified during the creation of the proof.

The signature verification report is (part of the proof) stored and available to both parties.

A copy of the original electronic invoice is issued for the buyer. It is a different object from the supplier's proof. However, in accordance with the principle of symmetry, these two documents are the same.

A link to the buyer's proof is available in their summary list.

The buyer's summary list is different from the supplier's one. It only contains the original electronic invoices of the buyer.

6.2 INTEROPERABLE R

In case buyer and supplier do not share the same e-Invoicing provider, billManager must interoperate with another e-Invoicing platform.

The Interoperable Reception type is used when billManager receives an original electronic invoice already produced by another platform. In this context, billManager processes the original invoice only for the receiver (buyer) but not for the emitter (supplier).

The process of managing the original electronic invoice on the buyer side is the same as in the demat type COLLABORATIVE. The demat controls are performed when possible but they are not blocking. A verification of the signature is performed, whenever the emitter sends the elements necessary to verify sign the signature (certificate, etc.). For example in a GS1 document, there must be a node: ds:X509Certificate (Certificat permettant de vérifier la signatures) ; ds:Object Contenu de l'objet (PDF, XML, etc.)

Finally, the proof is archived.

The difference is that the invoice is neither created, nor signed, nor archived for the supplier. There is no update of the summary list and the partner file for the supplier as well.

In this processing type, demat controls are applied on the original message whenever this is possible.

In addition, the verification of the signature is performed. If the signature verification fails or billManager is unable to verify the signature, the invoice is registered in the summary list with anomaly detected.

billManager can receive XIL, PDF, GS1 format. Other formats can be implemented on demand.

Finally, the platform archives the original document sent by the emitter. In this process, the original document represents the proof.

6.3 INTEROPERABLE E

The Interoperable Emission type is used when billManager must create the original electronic invoice for the emitter (supplier) but not for the receiver (buyer). The buyer's proof is handled by another e-Invoicing platform.

The process of creating the original electronic invoice on the supplier side is the same as in the demat type COLLABORATIVE. The demat controls are performed whenever this is possible but they are not blocking. A verification of the signature is performed and the original electronic invoice is archived for the supplier.

The difference is that the invoice is neither created, nor signed, nor archived for the buyer. There is no update of the summary list and the partner file for the buyer as well.

billManager can send signed XIL, signed PDF or signed EDIFACT. Other formats can be implemented on demand.

7 Demat summary

The following table summarizes the essential characteristics of each demat type.

Tables 7a

Legal framework	DEMAT TYPE (b-process specific)	Demat controls	Digital signature		Proof		Archiving		Summary list						Partner file					
									For the supplier			For the buyer			For the supplier			For the buyer		
			Signature	Signature verification	Proof created for the supplier	Proof created for the buyer	Proof archived for the supplier	Proof archived for the buyer	Created	Archived	Visible on the web interface	Created	Archived	Visible on the web interface	Created	Archived	Visible on the web interface	Created	Archived	Visible on the web interface
Dematerialization according to article 289 VII 3 of the FTC (EDI)	COLLABORATIVE	Yes, blocking	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	INTEROPERABLE EMISSION	Yes, blocking	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes	No	No	No	Yes	Yes	Yes	No	No	No
	INTEROPERABLE RECEPTION	Yes, not blocking	No	Yes	No	Yes	No	Yes	No	No	No	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes
Dematerialization according to article 289 VII 2 of the FTC (signed inovoice)	COLLABORATIVE 289V	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	INTEROPERABLE EMISSION	No	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes	No	No	No	Yes	Yes	Yes	No	No	No
	INTEROPERABLE RECEPTION	No	No	Yes	No	Yes	No	Yes	No	No	No	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes
None	NO DEMAT	No	Possible	Possible	No	No	Possible	Possible	No	No	No	No	No	No	No	No	No	No	No	No

Tables 7b

Legal framework	DEMAT TYPE (b-process specific)	Supported input file formats	Demat controls applied on	Digital signature applied on	Content of the proof	Content of the archive
Dematerialization according to article 289 VII 3 of the FTC (EDI)	COLLABORATIVE	XIL EDIFACT XML Custom format	XIL	XIL	Signed XIL; Signature verification report;	XSL-T; Schema; XIL; Signature; Signature verification report; Certificate;
	INTEROPERABLE EMISSION	XIL EDIFACT XML	output file	XIL	Structured file (depends on the format); XIL; Signature;	XSL-T; Schema; XIL; Signature; Signature verification report; Certificate;
	INTEROPERABLE RECEPTION	EDIFACT XIL IDOC	input file		Invoice sorce file; Signature verification report, if it is possible to verify the signature;	Invoice sorce file; XIL; Signature verification report, if it is possible to verify the signature;
Dematerialization according to article 289 VII 2 of the FTC (signed inovoice)	COLLABORATIVE 289V	PDF XIL	XIL	PDF	Signed image; Signature verification report; Certificate;	Certificate; XIL; Signature; Signature verification report; Invoice image;
	INTEROPERABLE EMISSION	XIL PDF signed EDIFACT		output file	Output file; Signature; Certificate; Signature verification report;	XIL; Signature; Signature verification report; Invoice image;
	INTEROPERABLE RECEPTION	XIL PDF GS1 format			Source file; Signature; Certificate;	XIL; Signature verification report, if it is possible to verify the signature; Invoice image;
None	NO DEMAT	Any		Possible	Paper invoice	

8 Data model

Diagram 8a

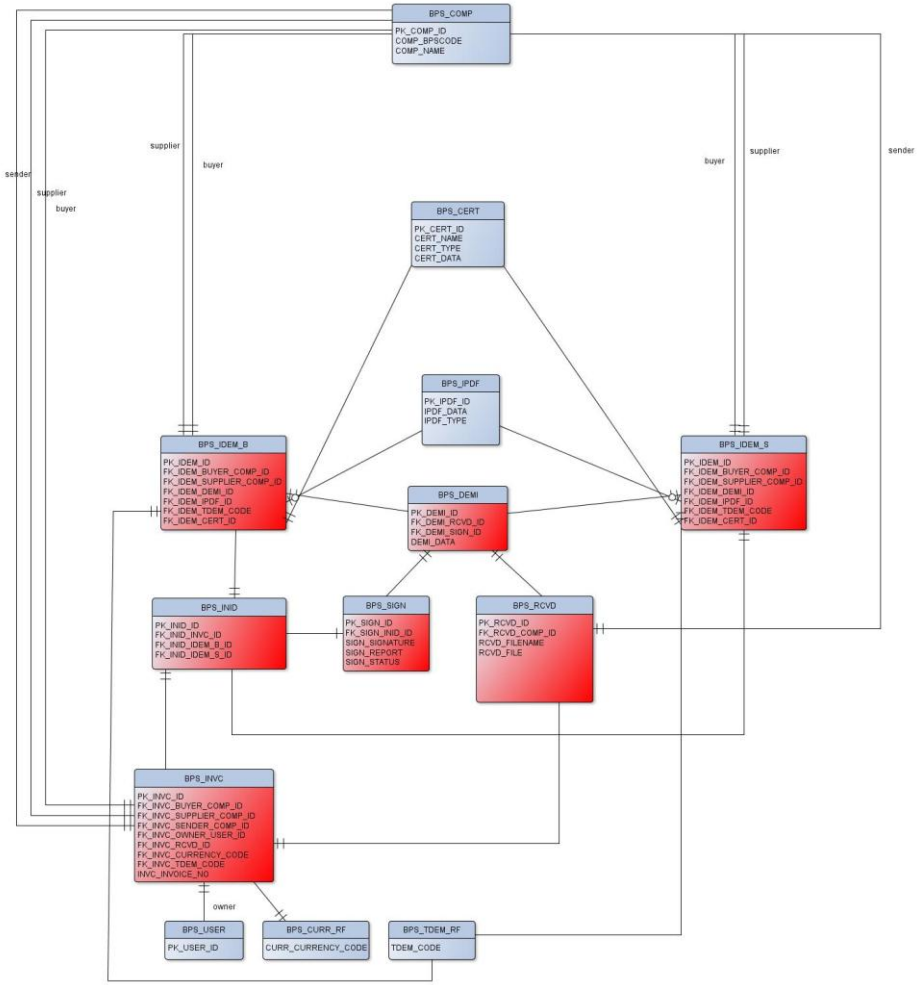


Diagram 8a illustrates billManager's data model.

Table BPS_COMP is used to identify buyer and supplier.

Incoming files arrive in BPS_RCVD. The created invoices are stored in BPS_INVC. This table is linked to BPS_USER which contains the users, BPS_CURR_RF contains currencies, BPS_TDEM_RF contains the demat codes.

The original electronic invoice for the buyer is stored in BPS_IDEM_B. The supplier's copy is in BPS_IDEM_S.

Table BPS_IND is the link between invoice and original electronic invoice table (IDEM).

In BPS_SIGN are stored all the signatures and the signature verification reports.

In case of Interoperable Reception, the source file is stored in BPS_DEMI.

The invoice image is located in BPS_IPDF.

Certificates are stored in BPS_CERT.

9 Conclusion: billManager and tax compliant e-Invoicing

In this section, we link each of the principles listed in section 3 to the corresponding building block of the platform.

1. Identify the buyer and supplier and make sure they have agreed to exchange electronic invoices
   - ⇨ **The Partner list:** This is a read-only register of the electronic invoicing relations between a buyer and all their suppliers or between a supplier and all their buyers. Each party is uniquely identified by its VAT registration number or other equivalent identifier.
2. Control the content of the document in order to be sure it is an invoice
   - ⇨ **Demat controls**: This is the process which controls the presence of a particular set of data on the document allowing to certify that it is an invoice. This set of data is country-specific. The control is based on the supplier's country.
3. Guarantee the authenticity of the origin and the integrity of the content of the document
   - ⇨ **Digital signature**: By digitally signing the document, and generating a signature verification report, the application guarantees the document's origin and the integrity of its content.
4. Present a human readable version of the document (legibility)
   - ⇨ **Style sheets:** Whenever the supplier is not sending their invoice in a human readable format to the platform, a specific component is developed in order to display the invoice data in the form of a PDF document.
5. Store the document for the period of time during which it could be required by Tax authorities
   - ⇨ **Legal archive**: A 10-year archiving period is guaranteed for all invoices. Archives are located in France, unless otherwise stated by local legislation, depending on the client's location.
   - ⇨ **The proof** : distinguish the original invoice document from other data
   - ⇨ **XIL**: the role of the unique invoice pivot format
6. Guarantee instant access to all documents and their easy retrieval upon request
   - ⇨ **Web interface:** The platform's web interface allows data accessibility, instant retrieval and search by criteria
7. Ensure that the same original document exists in two copies : one for the buyer and one for the supplier (the principle of symmetry)
   - ⇨ **Proof**: the proof is issued in two copies whenever billManager is entitled to create the original invoices for both parties
   - ⇨ **Summary List**: The supplier's and the buyer's summary lists are simultaneously updated.
   - ⇨ **Archiving**: the proof is archived for the two parties whenever billManager is entitled to create the original invoices for both of them.
8. Secure the data flows
   - ⇨ **Subscription agreement:** Agreement between b-process and the supplier, which formalizes the supplier's agreement to send electronic invoices by using billManager.
   - ⇨ **Dematerialization process**: its design guarantees the integrity of the proof. Once created by the platforms, the proof cannot be modified or deleted.
   - ⇨ **Platform security:** firewalls, back-up systems and user access rights preserve the data from any breach.

10 Appendices

10.1 Appendix 1: Demat controls

10.2 Appendix 2: Signature verification report fields

10.3 Appendix 3: Procedure for granting access to CDC Arkhinéo

Procedure: Grant access to the CDC Arkhinéo archive

1. The e-Invoicing service provider sends a request to CDC Arkhinéo to create a specific access (user name and password) to the Production archive limited to a particular client's data.

2. Communicate to the user his credentials and the URL address.

URL

User name

Password

3. User can connect to the web interface of CDC Arkhinéo

Note: CDC applies IP address filtering when opening access to the archive.

3.1 Types of archived documents:

- Invoices
- Summary lists
- Partner files

3.2 Search capabilities:

The search engine supports the following search criteria:

Invoice filter:

Field label	**Criterion description**
Archive date	User can search for invoices archived during a given period of time: before, after or on a particular date.
SupplierName	Supplier's company name
SupplierIdsRegistrationNumber	A unique fiscal ID of the supplier. If there is no fiscal ID, then other unique company identifier. Ex: SIRET
SupplierIdsBprocessId	Unique b-process ID given to each company registered on billManager.

BuyerName	Buyer's company name
BuyerIdsRegistrationNumber	A unique fiscal ID of the buyer. If there is no fiscal ID, then other unique company identifier. Ex: SIRET
BuyerIdsBprocessId	Unique b-process ID given to each company registered on billManager.
InvoiceLegalDataInvoiceNumber	Invoice number
InvoiceLegalDataInvoiceDate	Invoice date. User can search for invoices whose date is before, after or on a particular date. The filter allows to search for invoices whose date is from a date X to a date Y.
InvoiceLegalDataGrossAmount	Invoice total gross amount (including tax). User can search for invoices whose gross amount is comprised in a given range.
InvoiceLegalDataNetAmount	Invoice total net amount (excluding tax) User can search for invoices whose net amount is comprised in a given range.
InvoiceLegalDataVatAmount	Invoice total tax amount (VAT amount) User can search for invoices whose Vat amount is comprised in a given range.
InvoiceLegalDataCurrency	Invoice currency
InvoiceLegalDataDematType	Type of dematerialization process, as described on diagram 5a (5 possible options)
InvoiceLegalDataIndex	Unique invoice sequence number
ID	Invoice ID
InvoiceReferenceXsltId_old	Name of the component used to generate the PDF. Not used.
SupplierIdsBprocessCode	B-process code of the supplier.
BuyerIdsBprocessCode	B-process code of the buyer.

InvoiceReferencesXsltId	Name of the component used to generate the PDF.
Buyer ou Supplier	Buyer or supplier
SupplierBprocessGroupId	B-process unique code for a supplier group, in case there is one used in the configuration of the supplier on billManager.
BuyerBprocessGroupId	B-process unique code for a buyer group, in case there is one used in the configuration of the buyer on billManager.
Document type	If one is searching for invoices only, they have to enter the code 380. If one is searching for credit notes only, they have to enter the code 381.
Deposit date	User can search for invoices sent to CDC during a given period of time, by defining a range.

- Summary list filter

Archive date	User can search for summary lists archived during a given period of time: before, after or on a particular date.
ID	Id of the summary list
OwnerIdsRegistrationNumber	Id of the owner of the summary list. Generally, the VAT registration number of the company is used.
UIC	Type of company identification code used by billManager
BprocessID	Unique Id of the summary list on billManager

- Partner file filter

Archive date	User can search for summary lists archived during a given period of time: before, after or on a particular date.
ID	Id of the partner file
OwnerIdsRegistrationNumber	Id of the owner of the partner file. Generally, the VAT registration number of the company is used.
UIC	Type of company identification code used by billManager
BprocessID	Unique Id of partner file on billManager
BprocessCode	Unique code of the company on billManager. Example: b-process

11 Index of the diagrams