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EXTERNAL SPECIFICATION FILE
CHORUS PRO

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Version 4.10 – 14/11/2018	AIFE	• Update of the work invoice notifications (§ 3.11.4) • Update of the features of account managers of private suppliers (§ 4.1.2) and public entities (§ 4.2.2)
Version 4.01 – 14/09/2018	AIFE	• Creation of a new consistency check (3.8.3) : if entered, an exemption reason makes the invoice completely tax-exempted • Modification of the table of interpretation of the recipient structures parameters (3.4.3)
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For older modifications please refer to Chapter 8.

Table of contents

1 Introductory remarks 5
1.1 Objectives of the document 5
1.2 Content of the document 5
1.3 Interpretation of the document 5
2 Introduction 6
2.1 The context and objectives of electronic invoicing 6
2.1.1 A context and trajectory seeking administrative simplification 6
2.1.2 The objectives of the electronic invoicing programme 6
2.2 Reminder of the regulatory framework 7
2.2.1 The European regulatory framework 7
2.2.2 The French regulatory framework 7
2.3 Scope of application of Chorus Pro 12
2.3.1 The stakeholders 12
2.3.2 The features of the relevant contractual relationships 15
3 Functional description of the solution 16
3.1 The guiding principles of Chorus Pro 16
3.2 Presentation of Chorus Pro 16
3.2.1 Functional scope of Chorus Pro 16
3.2.2 Service offering of Chorus Pro 17
3.3 Identification of the stakeholders 18
3.3.1 For the issuers of invoices 18
3.3.2 For the recipients of invoices 19
3.4 The service offering to the issuers of invoices 20
3.4.1 Invoice transmission modes 20
3.4.2 The provision of the directory of the structures receiving the invoices 23
3.4.3 Interpretation of the recipient structures parameters 23
3.4.4 Request for assistance 26
3.5 The service offering to recipients of invoices 27
3.5.1 Notification of receipt of an invoice 27
3.5.2 The availability of invoices and billing records 27
3.6 Chorus Pro guiding principles 28
3.6.1 Consideration of the creation of the statuses 28
3.6.2 Access to the user assistance of Chorus Pro, ... 29
3.7 The nominal lifecycle of the invoice 30
3.7.1 Statuses related to invoice lifecycle 30
3.7.2 Determining payment global deadline 43
3.8 The checks conducted by Chorus Pro 43
3.8.1 Flow consistency and security checks 43
3.8.2 Data structure checks 43
3.8.3 Data consistency checks 44
3.8.4 Focus on the uniqueness check 45
3.9 Possibilities of recycling the invoice 46
3.9.1 Limitation of the recycling 46
3.9.2 Recycling procedures in the case of an error in the identification of the recipient by the issuer 46
3.10 Invoice suspension 47
3.10.1 Definition of suspension 47
3.10.2 Modalities of completion of an invoice to be completed 47
3.11 The different invoicing frameworks 48
3.11.1 Consideration procedures for the specific invoicing frameworks 48
3.11.2 Focus on the use cases of the A2 invoicing framework 49
3.11.3 Focus on the validation procedures 50

3.11.4 Focus on the procedure for taking into account the works contract documents on Chorus Pro 51
3.11.5 Follow-up report of the validations and associations....58
4 The management of the structure and user accounts....59
4.1 The management of the structure and user accounts for the private suppliers....59
4.1.1 General principles of the management of the structure and user accounts....59
4.1.2 The features of account management....63
4.2 The management of structure and user accounts for public entities....64
4.2.1 General principles of the management of the structure and user accounts....64
4.2.2 The features of account management....67
5 Authentication....69
5.1 Authentication on Chorus Pro through a third party "suppliers" portal....69
5.1.1 The operating principle of France Connect Entreprises....69
5.1.2 The implementation of France Connect for third party portals as part of Chorus Pro....70
5.1.3 Technical description....70
5.1.4 Steps to connect to FranceConnect....71
5.2 Authentication on Chorus Pro from a third party IS....73
5.2.1 Operating principle for the authentication of a third party IS....73
5.2.2 Creating a public structure technical identifier....73
5.2.3 Authentication security on Chorus Pro through a third party IS....73
6 Flow qualification and monitoring area of Chorus Pro....75
6.1 The general principles....75
6.2 The stakeholders....75
6.2.1 Private suppliers....75
6.2.2 Local public sector entities and national public institutions....75
6.2.3 Dematerialising operators....76
6.3 The features of the flow qualification and monitoring area....76
6.3.1 The features for suppliers....76
6.3.2 The features for invoice recipients....78
7 Glossary....79
8 Modification history....81

1 INTRODUCTORY REMARKS

1.1 Objectives of the document

This document presents the external specifications file of Chorus Pro, made available by the French State and entitled the "e-Invoicing Portal". It enables:

- the submission and transmission of electronic invoices from suppliers to public entities,
- The transmission of information on the lifecycle of the invoices to these suppliers by the public entities.

The external specifications fall within the scope of the organisation, development and management of the information systems involved in this project.

This document is intended for:

- All public sphere suppliers,
- Public legal entities that are recipients of invoices,
- Publishers of financial solutions for public structures,
- Publishers of paperless exchange platforms,
- IT service providers responsible for the management of public platforms (partner portals) or third party teletransmission operator.

1.2 Content of the document

This document specifies the requirements necessary for the submitting, receiving and transmitting of electronic invoices to public entities, as well as the collecting of information on the invoice lifecycle.

This document is neither a user guide nor an explanation support for the " e-Invoicing Portal ". As such, this document provides a functional description of the solution. It specifies essential points such as authentication, management of user accounts or exchange protocols.

1.3 Interpretation of the document

Local authorities and their associations are grouped under the designation "Local public sector" (LPS).
The external specifications for the local public sector are intended for structures connected to the HELIOS information system (designated accounting system).
The external specifications for national public institutions are intended for structures that are not connected to the HELIOS information system (designated accounting system).

2 INTRODUCTION

2.1 The context and objectives of electronic invoicing

2.1.1 A context and trajectory seeking administrative simplification

As part of the acceleration of digital exchanges between businesses and public agencies, invoices between the State, local public sector entities and public institutions and their suppliers must gradually go paperless. This electronic billing programme falls within the ambit of the French Law on the modernisation of the economy (LME) of 4 August 2008[1] and the movement to modernise public action in terms of the decisions adopted by the Inter-ministerial Committee for the Modernisation of Public Action of 17 July 2013 and the Enabling Act of 3 January 2014 on the simplification and security of business life. It seeks to make mandatory the submission and receipt of invoices in a digital form for the public sphere and its suppliers.
The order of 26 June 2014 on the development of electronic invoicing[2] provides for electronic invoicing starting from 1 January 2017 for large companies and public suppliers, then gradually be made generally applicable by 1 January 2020, taking into account the size of the companies concerned[3]:

- by 1 January 2017: for large companies and public entities;
- by 1 January 2018: for intermediate-sized companies;
- by 1 January 2019: for small and medium-sized enterprises;
- By 1 January 2020: for micro-enterprises.

2.1.2 The objectives of the electronic invoicing programme

The electronic invoicing programme is a further step towards the dematerialisation of paper formats. It helps optimise and expand the panel of services provided to those who issue invoices to the public sphere. It is intended to:

- Establish a streamlined process for the filing and receipt of invoices through a single solution,
- Contribute to the reduction of the transmission period of invoices between different competent services,
- Contribute to the reduction of the processing period of invoices between different routing stages,
- Optimise the monitoring of the invoice from its issuance until its release for payment (or rejection),
- Archive the invoices filed by the suppliers and validated by the information systems,
- Make available to suppliers the history of the invoices that they submitted through the solution.

The electronic invoicing programme represents:

- Quantifiable financial gains, considering, among other factors, the gradual decrease of the burden associated with processing invoices[4],
- Productivity gains, taking account of the reduction in processing time per invoice,
- Time-saving gains, taking account of the reduction of the time spent on the different processing stages of the invoice,
- Improved security, given the archiving feature, with regard to the architecture of the IT systems deployed and the optimisation of invoice tracking.

All the points of impact are referenced in the impact sheet of 18 June 2014[5] issued by the Ministry of Finance and Public Accounts and attached to the draft order on the development of electronic invoicing.

1 Law no. 2008-776 of 4 August 2008 on the modernisation of the economy
2 Order no. 2014-697 of 26 June 2014 on the development of electronic invoicing
3 These business categories are those provided for under Article 51 of the Law of 4 August 2008
4 The projected gains resulting from the 2017 electronic invoicing project have been estimated in the "Draft impact statement of the regulatory text concerning the order relating to the development of electronic invoicing NOR: FCPX1413059R", established on 18 June 2004
5 NOR: FCPX1413059R

2.2 Reminder of the regulatory framework

Electronic invoicing under Community law is governed by regulation in the form of a European directive (EU Directive 2001/115/EC)[6] which has harmonised the legal notices, introduced the electronic signature and the unstructured PDF format.
This European Directive is transposed in the national law of each of the Member States of the European Union. An invoice is considered "dematerialised" when it meets certain technical and safety criteria (guarantees of authenticity, non-repudiation, and integrity). It is then considered strictly as an original invoice with respect to its accounting and fiscal status.

2.2.1 The European regulatory framework

The Council of the European Union sets the EU regulatory framework for electronic invoices, through several structuring texts:

- **European Directive 2001/115/EC** of 20 December 2001, introduces the **electronic signature and the unstructured PDF format.**
- **Council Directive 2010/45/EU**[7] of 13 July 2010, amending Directive 2006/112/EC on the common system of value added tax as regards the rules on invoicing, **liberalises the use of electronic invoices.**
- **European Directive 2014/55/EU**[8] requires contracting authorities and contracting entities to accept electronic invoices that comply with the European standards.

2.2.2 The French regulatory framework

<u>The terms of the issuance and receipt of invoices directed to the public sphere</u>

First, the Law on the modernisation of the economy No. 2008-776 of 4 August 2008 imposes **the obligation on the State to accept invoices** issued by suppliers in **electronic** format. **The implementing decrees No. 2013-346** regarding the VAT obligations for invoices and the storage of electronic invoices **and No. 2013-350 of 25 April 2013** amending the provisions of Appendix III of the French General Tax Code regarding invoices sent electronically concerning VAT**,** following **Law No. 2012-1510 of 29 December 2012**[9] on amending finances for 2012, **specify the procedures and rules** for implementing the obligation to accept electronic invoices as stipulated by the Law on the modernisation of the economy. They also implement the provisions relating to the rules on electronic invoicing from the Council Directive 2010/45/EU of 13 July 2010 liberalising the use of electronic invoices.

The implementing decree 2013-346 of 24 April 2013 amends the regulations on invoicing provided for in Articles 242 h and 242 h (A) of Appendix II of the French General Tax Code as part of the implementation of the aforementioned Directive 2010/45/EU.

The implementing decree 2013-350 of 25 April 2013 strengthens the features of the electronic signature, codifies the provisions concerning the exchange of electronic data, and specifies the procedures for storing invoices and the applicable rules on the restitution of invoices.

[6] Directive 2001/115 on harmonising invoicing in respect of value added tax and electronic invoicing
[7] European Council Directive 2010/45/EU of 13 July 2010, amending Directive 2006/112/EC on the common system of value added tax as regards the rules on invoicing
[8] Directive 2014/55/EU of the European Parliament and the Council of 16 April 2014 on electronic invoicing in public procurement
[9] Act No. 2012-1510 of 29 December 2012 on amending finances for 2012 (1) NOR: EFIX1238817L Version consolidated on 10 August 2014

Order No. 2014-697 of 26 June 2014[10] on the development of electronic invoicing makes mandatory the transmission of electronic invoices for the contracting party as well as for subcontractors entitled to direct payment from contracts entered into with the State, local authorities and public institutions. Furthermore, this order makes it mandatory for the State, local authorities and public institutions to accept invoices transmitted electronically by the contracting party and sub-contractors entitled to direct payment.

Article 2 of this order specifies that a shared solution, made available by the French State and named the "e-Invoicing Portal", enables the filing, receipt and transmission of electronic invoices. The State (unless otherwise required for defence or national security purposes), local authorities, public institutions, as well as contracting parties and sub-contractors entitled to direct payment, use the e-Invoicing portal.

Article 3 specifies the timing of the entry into force of the new obligations set forth in Article 1. The dematerialisation of invoices takes effect from 1 January 2017 for large companies and public suppliers and then is gradually generally applied by 1 January 2020, taking into account the size of the companies concerned.

2.2.2.1 Mandatory information in the electronic invoice

The invoice is evidence of a commercial transaction and therefore holds an important legal value. It also serves as proof of accounting and support for the exercise of VAT rights. The creation of the invoice therefore meets certain requirements regarding the content, defined by the codified texts.

Article L441-3 of the Commercial Code specifies the mandatory information to be included in invoices, mainly the following:

- name and address of the parties,
- date of the sale or service provision,
- quantity and precise description of the products or services,
- unit price exclusive of tax and any reductions granted,
- due date for payment,
- The late payment penalty clauses.

Articles R123-237 and 238 of the Commercial Code add the following corporate identification items to this list: registration number with the Registry, head office, legal form, etc.

In tax matters, there are a number of specific obligations governing the creation of invoices by those subject to VAT. They are introduced by **Article 289 of the French General Tax Code and further clarified by Article 242 h A of Appendix II**[11], which notably provides for the identification items of the seller and purchaser and details concerning the products and services sold.

This Article 242 h A of the French General Tax Code identifies the fourteen mandatory items of information for an electronic invoice to be valid. These are:

- the issuance date of the invoice,
- the sequential number,
- the VAT ID number of the taxable entity and the customer,
- the name and address of the taxable entity and the customer,
- the quantity and nature of the goods supplied,
- the scope and nature of the services rendered,
- the date on which the delivery of goods or the service rendered was performed or the payment date of a deposit if that date is determined and different from the issuance date of the invoice,

[10] Order no. 2014-697 of 26 June 2014 on the development of electronic invoicing NOR: FCPX1413059R The order repeals Article 25 of the Act of 4 August 2008 from 1 January 2017

[11] Amended by Decree no. 2013-346 of 24 April 2013

- when the person liable for the tax is a tax representative, their name, address and identification number,
- the taxable amount per rate or exemption, the unit price exclusive of tax and any discounts, rebates or any refunds if they are not included in the unit price,
- the applied VAT rate,
- the amount of tax payable (unless otherwise specified),
- in the event of an exemption or where the customer is liable for the tax, the reference to the relevant provision of the Directive or to the corresponding national provision, or any other reference indicating that the delivery is subject to an exemption or reverse charge,
- in the event of an intra-Community delivery of a new means of transport, the particulars are specified in Art. 28 a, paragraph 2, of the Directive,
- in the event of the application of the margin scheme, reference is made to Art. 26 or 26 a, or to the corresponding national provisions, or to any other reference indicating that the margin scheme has been applied,

The tax rules relating to information to include on the invoices are specified in the doctrine **BOI-TVA-DECLA-30-20-20**.

2.2.2.2 The relevant invoicing items

Under Article L441-3 of the Commercial Code: "All purchases of products or all provisions of services for a professional activity must be covered by an invoice".

Any invoice issued by a supplier providing *at least* all of the mandatory information specified in the General Tax Code, the Commercial Code or another specific regulatory framework[12] is necessarily taken into consideration by Chorus Pro.

The Chorus Pro takes into account the following defined types of invoice items[13]:

- The **direct invoices** intended for public entities
- The **assets**
- The **invoices of receipt** issued by the public entities
- The payment requests of the **sub-contractors** entitled to direct payment
- The payment requests of **joint contractors** (constituting the total requests on behalf of the group or one or more group member)
- The invoicing document in support of the **public works contracts:**
  - A draft accounting produced by the supplier (monthly and final)
  - A down payment statement produced by project manager
  - A down payment statement validated by the contracting authority
  - General and Definitive Statement
- Multi-year operations with direct counterpart

Transaction records issued by banks in the case of payment by bank card are not considered as invoices and, as such, fall outside the scope of Chorus Pro.
Holdbacks, advances, penalties and bonuses are not included in the scope of Chorus Pro.

So-called "zero" invoices are supported by Chorus Pro, particularly as regards the tax obligation that requires suppliers to issue them.

[12] Artisans, traders registered with the Trade and Companies Register or self employed entrepreneurs, for which professional insurance is mandatory, must now mention on their quotes and invoices the insurance taken out by virtue of their business activity, the details of the insurer or guarantor, and the geographical coverage of the contract or guarantee.

[13] All invoicing items can be both positive and negative. Invoices already paid can also be taken into account via a dedicated invoicing framework

2.2.2.3 Current arrangements for electronic invoicing

In France, the tax law provides for two exchange formats for rendering an invoice paperless.

- On one hand, **Article 96G of Appendix 3 of the French General Tax Code** authorises a structured EDI. This format enables automated processing through the use of predefined fields in the document.
  "I.-For the purposes of § 3 of Chapter VII of Article 289 of the French General Tax Code, invoices sent electronically in the form of a message structured according to a standard agreed upon between the parties, in a computer readable form and which can be processed automatically and unequivocally, constitute, subject to Chapters II and III, documents that take the place of original invoices"

- On the other hand, **Article 289 Chapters V, VI and VII of the French General Tax Code**[14] enables the paperless issuance of invoices in an unstructured, more accessible and less costly format (Word or PDF), subject to the guarantee, in particular, of authenticity.
  V.-The authenticity of the origin, integrity of the content and legibility of the invoice must be guaranteed from its issuance until the end of its period of retention.
  VI.-Electronic invoices are issued and received in any electronic form. They take the place of original invoices for the purposes of Article 286 and this article. Their transmission and availability are subject to acceptance by the recipient.
  VII.-To satisfy the conditions set forth in Chapter V, the taxable person may issue or receive invoices:
  § 1 Electronically using any technical solution other than those provided for in § 2 and § 3, or in paper form, where permanent, documented controls are implemented by the company and are used to establish a reliable audit trail between the issued or received invoice and the goods or services underlying it;
  § 2 Using the advanced electronic signature procedure set forth in section 2 of Article 233 of Council Directive 2006/112/EC of 28 November 2006 cited above regarding invoicing rules. A decree specifying the issuance, signature and storage conditions of these invoices;
  § 3 Or in the form of a message structured according to a standard agreed upon between the parties, in a computer readable form and which can be processed automatically and unequivocally, under the conditions specified by decree.

The electronic signature of the invoices is an invoicing procedure supported by Chorus Pro but is not mandatory.

[14] Article 289, amended by Decree no. 2013-463 of 3 June 2013 - Art. 1

2.2.2.4 The audit trail control procedures of Article 289 of the French General Tax Code

Each taxable person freely determines, according to its own organisation, **the extent and means of the controls** that it must implement in order to guarantee the authenticity of the origin and integrity of the content and **the computer readability of the invoices issued and received**. The size of the company, the nature of its business activity, its information systems, the volume of invoices that it sends and receives are parameters to be taken into account in determining the **appropriate level of control**.

- In any event, the controls implemented at companies must guarantee **the conditions of authenticity, integrity and readability** of the invoices by establishing that the invoices issued and received correspond to the performance of a delivery of goods or provision of services that was actually performed.
- The controls must in fact allow a taxable person to verify if the content of the invoice is correct, namely, whether the service rendered or the goods supplied conforms to the information stated on the invoice (in terms of quantity and quality) and whether the issuer of such invoice therefore has a right to payment.

The audit trail can be made up of documents issued by the company itself (quote, purchase order) or by third parties (bank statements). In the event of an audit, each taxable person must **be able to prove by any means the reality of transactions subject to VAT**. Supporting documents are very varied (transport document, invoice of the carrier, the insurance contract concerning the international carriage of goods, the contract with the buyer, business correspondence, written purchase order from the buyer indicating that the goods are to be dispatched or transported to another Member State, delivery order, removal order, written confirmation by the buyer of receipt of the goods in another Member State, duplicate invoice of the seller stamped with the stamp of the purchaser, foreign bank notice of settlement, etc.). It is neither appropriate nor possible to create an exhaustive list. **Retention of supporting documents is mandatory** by application of Article L. 102 B of the Tax Procedure Code and allows the taxpayer, regardless of the invoicing method, to prove the reality of the transactions forming the subject of the invoice. It is also part of the audit trail and reliability of the audit.

2.3 Scope of application of Chorus Pro

2.3.1 The stakeholders

The order makes electronic invoicing mandatory for suppliers providing invoices to the State, the local public sector and public institutions.

The obligation to issue has a corollary obligation on the State, the local public sector and public institutions to receive electronic invoices from their suppliers.

Other stakeholders such as the publishers of paperless trading platforms or partner portals and third party providers of remote transmission are indirectly affected by the implementation of Chorus Pro.

Public and private suppliers

The authorisation provided for in § 2 of Article 1 of Law no. 2014-1 of 2 January 2014 and the obligation established by Article 1 of order no. 2014-697 of 26 June 2014 expressly refer to contractual relationships. The order also applies to contractual parties, whether individually or in groups, and subcontractors entitled to the direct payment of contracts with the State, the local public sector entities and public institutions are affected by the measure.

The necessary condition is, thus, **the existence of a contract between the public entity and its supplier, whether public or private**.

Public entities issuing invoices to the State, local public sector entities and public institutions are required to send an electronic invoice through Chorus Pro.

Without a contractual relationship, the participation of a supplier on the basis of a provision or a unilateral decision is not subject to the obligations concerning electronic invoicing. It is the same for acts for lacking legal effect, namely, those invoking no mutual obligations that would be characterised as agreements, conventions or protocols.

Thus, the administration agreements entered into between public entities to define the terms of their work are not subject to the requirement for electronic invoicing.

Recipient public entities

The scope of the order no. 2014-697 of 26 June 2014 applies to the following public entities which are the recipients of invoices:

- the State,
- national public institutions (including public health establishments),
- regional authorities and their associations (local public sector):
  - Regions,
  - Provinces,
  - Municipalities,
  - Overseas departments.
- local public institutions:
  - Public institutions of inter-municipal cooperation (EPCI),
  - Mixed syndicates: Single-purpose intercommunal syndicates (SIVU) and multi-purpose intercommunal syndicates (SIVOM),
  - Public social and medical-social institutions (particularly, EHPAD),
  - Authorities with legal personality, namely, governmental legal entities.

    - Other types of local public institutions:
        - public housing offices,
        - Local social welfare centres (CCAS)/International Council on Social Welfare (ICSW),
        - education offices,
        - public institutions of cultural cooperation,
        - fire and rescue departmental services,
        - public service management centre.
- consular organisations such as chambers of commerce and industry, chambers of trade or chambers of agriculture,
- other forms of cooperation between authorities (inter-provincial, interregional absent agreements, conventions, flexible cooperation, etc.).

National public institutions and local public institutions which do not use an accounting officer fall within the scope of the order.

The following fall outside of the scope of order no. 2014-697 of 26 June 2014 as recipients:

- Overseas communities, with the exception of Saint Pierre and Miquelon and Saint Barthélemy
- Health cooperation groups
- Other forms of cooperation in the health field:
    - Inter-hospital unions
    - domestic hospital community
- Social and medical-social cooperation groups
- Governmental entities with exclusive financial autonomy
- Local public interest groups (e.g., Regional House of Disabled Persons (Public Interest Grouping))
- Authorised union associations
- Rural land associations
- Semi-public companies

When semi-public companies, public interest groupings or another type of grouping act for and on behalf of recipients subject to the regulatory requirement, they are included in the scope of the order as a recipient of invoices.

Third party teletransmission

Third party teletransmission may be requested by the local public sector and the national public institutions to:

- Transmit the invoice flows issued or generated by their financial management information system (or other invoice management systems) to Chorus Pro,
- Monitor the integrity of the transmission,
- Timestamp the transmission,
- Receive the return flow.

Dematerialising operators

Dematerialising operators will make available to their clients (suppliers of public entities) the features of Chorus Pro offered in flow mode and portal mode from their solution through the API (application programming interface) of Chorus Pro which they will integrate into their solutions.

The publishers of upstream partner portals with added value

Upstream of Chorus Pro, so-called "value-added" portals allow the performance of "business" operations prior to the issuance of invoice statements (e.g., in the context of works contracts, the invoice portals enable project management to update the prices of the project or even help manage interactions with the supplier before the creation of the purchase order, auto-invoicing).
The publishers of these portals make the features of Chorus Pro available to their clients (suppliers of public entities) by using the available APIs from their platforms.

Publishers of professional solutions using billing data

The professional solutions which use billing data for specific adjustments (financial and accounting management, cost accounting, internal invoicing, etc.) and automated invoice processing will benefit from the availability of the invoice and will be able to provide invoice lifecycle data to the issuers of the invoices through Chorus Pro:

- For professional departmental applications through the Chorus exchange system,
- For professional applications of the local public sector entities and national public institutions through their financial management information system (SIGF) or exchange system.

2.3.2 The features of the relevant contractual relationships

All of the services performed on a contractual basis and resulting in the establishment of an invoice (Cf. 2.2.2.2) by a public or private supplier fall within the scope of order No. 2014-697 of 26 June 2014.

For similar reasons, the services performed under a contract between public entities and giving rise to the creation of an invoice fall within the scope of order no. 2014-697 of 26 June 2014. When there is an act reflecting an agreement of intentions between two separate legal persons and which gives rise to reciprocal obligations, the invoices issued by one of the contracting parties are subject to the requirement for electronic invoicing. In this regard, the following fall within the scope of order no. 2014-697 of 26 June 2014:

- Invoices for services provided by the State to a local authority on the basis of a contract.
- Invoices related to services provided, for consideration and as part of a contract, by a public institution of inter-municipal cooperation (EPCI) for a municipality, whether a member of this EPCI or not. The qualified exclusion of "providing in-house" in effect within the law of public procurement is not applicable with regard to electronic invoicing. It is the same for the local public sector entities.
- The public service invoices related to the management/distribution of fluids managed by the authorities (e.g., water and sanitation) in the event where the third party debtor is a public entity affected by the order.
    - If the public service for the management or distribution of fluids is managed by an entity with legal personality (a private company or public institution, for example), all of its benefits, made for valuable consideration and within a contractual framework, are subject to the requirement for electronic invoicing. It does not matter that these services are performed for the public authority to which this autonomous entity is attached or for any other public authority. To fall within the domain of the order of 26 June 2014, it is sufficient that this public entity is the State, a local government entity or a national or local public institution.

By contrast, the following are outside of the scope of order no. 2014-697 of 26 June 2014:

- The **administrative agreements** entered into between public entities to define the terms of their work because they do not constitute contracts (e.g.: supply agreement).
- The public service invoices related to the management/distribution of fluids managed by the authorities (e.g., water and sanitation) in the event that the third party debtor is a public person affected by the order if the **public service for the management or distribution of fluids is managed by a service not having its own legal personality** because a contract does not, in fact, exist in the strict sense when there is no relationship between two legal people.

3 FUNCTIONAL DESCRIPTION OF THE SOLUTION

3.1 The guiding principles of Chorus Pro

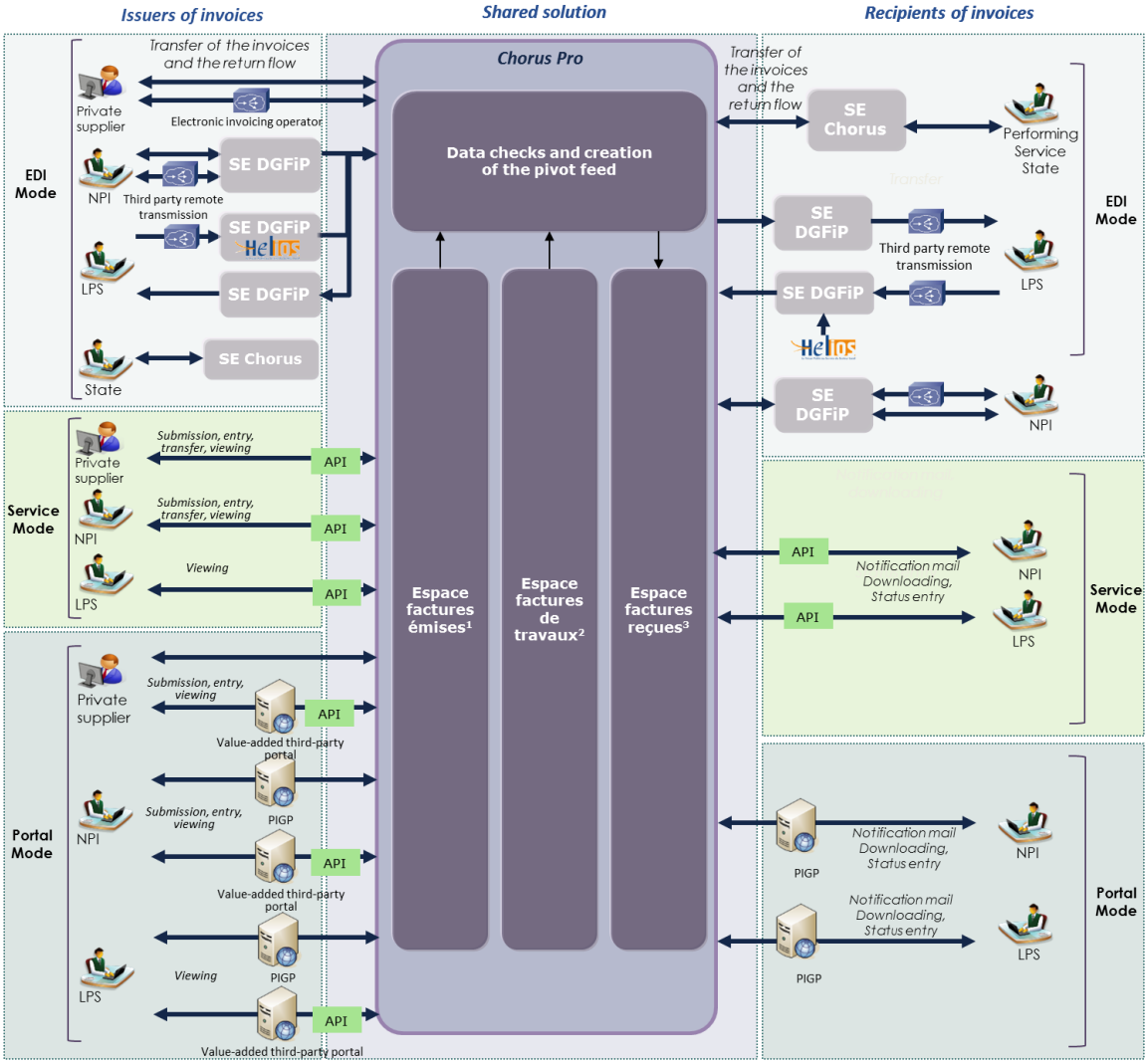
The guiding principles for the operation of Chorus Pro revolve around:

- **the implementation of a shared solution for all of the (private and public) suppliers of the public sphere,** allowing them to submit their invoices and check on the progress of payment processing. Chorus Pro takes into account the formats and modes of exchanges currently being implemented by companies (Portal mode and EDI mode),
- **the implementation of a "pivot" flow allowing the direct integration (in EDI mode) of billing data (including electronic invoice) in the IS of the public recipients and enabling data collection (through portal mode) for processing,**
- the availability of the features of Chorus Pro through APIs implemented on upstream and/or downstream Chorus Pro-related applications.

3.2 Presentation of Chorus Pro

3.2.1 Functional scope of Chorus Pro

The diagram below summarises the overview of the methods of submission, transmission and reception of the electronic invoices as well as the returning data flows concerning the processing of the invoice, allowing the issuers to follow the processing life cycle of the invoice.



1 Issued invoices area / 2 Works invoices area / 3 Received invoices area

3.2.2 Service offering of Chorus Pro

All of the issuers of invoices have access in Portal mode to the areas "Issued invoices", "Memorandum on justice costs", "Works invoices", "Commitments," "Invoices to validate", "Issued requests", "Users and structures" and "Account" in Chorus Pro. These areas allow such access to the following features:

- identification and verification of issuer information,
- submission (PDF and XML), entering invoices[15], including processing in the event of the specific invoicing (subcontracting, co-contracting and works invoices). Controls associated with submission and entry shall take place through Chorus Pro,
- archiving invoices (for 10 years[16]),
- access to invoices (in the course of processing or already processed) through a search tool,
- access to legal obligations issued by the State services,
- monitoring the processing of the invoice,
- notification on the progress of invoice processing,
- addition of attachments after submission of the invoice and upon the request of the recipient of the invoice,
- management of accounts, user authorisations,
- validation of invoices (example: validation of a subcontractor invoice),
- user assistance.

NB: some of its features are also available in EDI for suppliers opting for this transmission mode.

The recipients of invoices (local public sector and national public institutions) use a specific area in Chorus Pro, entitled "Received invoices", that particularly enables:

- viewing/downloading the billing records sent to them (invoices and associated attachments),
- updating the statuses related to invoice processing and, in particular, informing the issuers in the event of rejection or suspension,
- looking for a received or archived invoice through a multi-criteria search form,
- submitting invoices in the event that the local public sector entity issues ASAPs (through the "Issued invoices" area),
- processing requests from their suppliers (through the "Received requests" area),
- managing accounts and user authorisations (through the "Users and structures" area),
- requesting assistance (through the "Issued requests" area).

[15] Excluding Local Public Sector entities that benefit from the PES Facture ASAP service offering of the DGFiP and for which the accounting officer is responsible for the issuance of invoices to Chorus Pro.

[16] Chorus Pro supports the archiving of invoices for the supplier, whether private or public, for 10 years. The use of Chorus Pro does not exempt national public institutions from storage according to regulation in force elsewhere.

3.3 Identification of the stakeholders

Each stakeholder that is an issuer or recipient of an invoice is uniquely identified in Chorus Pro, whatever the method of transmission.
This identification is different for the issuers and recipients of invoices.

3.3.1 For the issuers of invoices

Identification is based on three elements:

- The country code,
- The identifier type,
- The identifier.

The types of identifiers are as follows (for detailed management rules, see Part 4 below):

- For the issuers of invoices whose registered office is in France (FR country code):
  - The identifier consists of the SIRET number [Identification number for French companies].
- For the issuers of invoices whose registered office is in a country within the European Union but outside of France:
  - The identifier consists of the intra-community VAT number.
- For the issuers of invoices whose registered office is in a country outside of the European Union:
  - The identifier consists of the country code and the first 16 characters of the company's name.
- For French Polynesia:
  - The identifier consists of the Tahiti number.
- For New Caledonia:
  - The identifier consists of the RIDET number [Identification number for New Caledonian companies].
- For the issuers of invoices undergoing the RCS registration process [French companies register]:
  - The identifier consists of the country code and the first 16 characters of the last name and first name.
- For individual issuers of invoices:
  - The identifier consists of an 80 character maximum concerning the specific order:
    - Character no. 1: sex, represented by one digit (1 for men and 2 for women);
    - Character no. 2 and no. 3: year of birth, represented by the last two digits;
    - Character no. 4 and no. 5: the month of birth, represented by two digits;
    - Character no. 6 to no. 10: the place of birth, represented by 5 digits.
      - For people born in France, these are the two digit code of the province of birth (from 01 to 95 and 2A or 2B for Corsica from 1 January 1976) followed by the three digits of the official municipality code of the national statistics office, INSEE.
      - For people born in the overseas departments and territories, the department code is 97 or 98, followed by the municipality code.
      - For those born abroad, the 2-digit code of the province is replaced by 99 and the municipality code by an INSEE code of the country of birth. For those born in Algeria, Morocco or Tunisia before the independence of these countries, a specific code (91, 92, 93 or 94 for Algeria, 95 for Morocco and 96 for Tunisia) appear instead of the code 99 and the related INSEE country code.
      - The first 35 characters of the last name (without spaces)
      - The first 35 characters of the first name (without spaces)

The authentication procedures will be described in the User Guide.

3.3.2 For the recipients of invoices

For the invoice recipients, the identification is based exclusively on the SIRET number.
For local public sector entities connected to HELIOS, each budget is identified by a single SIRET number.
For multi-establishment national public institutions, a single SIRET number for the national public institution allows the identification of each establishment.

In addition, service codes can be entered in order to identify, within the entity concerned, each service that is responsible for taking care of the invoices in order to process them. The recipient can define (in their account settings) whether or not the information in this zone is compulsory, but this reference does not by itself allow the routing of the invoices and therefore does not replace the SIRET number.

For invoices coming from public sector entities or national public institutions, the issuer of the invoice must place the service "FACTURES_PUBLIQUES " [PUBLIC_INVOICES], created by default at structure level and dedicated to intra-public sphere invoicing.

With specific reference to the State, a generic SIRET number referencing the Ministry of Finance identifies the receiving structure of the State. The additional mention of a service code (the code executing the payment requests mentioned on the Chorus purchase orders) is required to ensure the delivery of the invoice to the department in charge of processing the invoice.

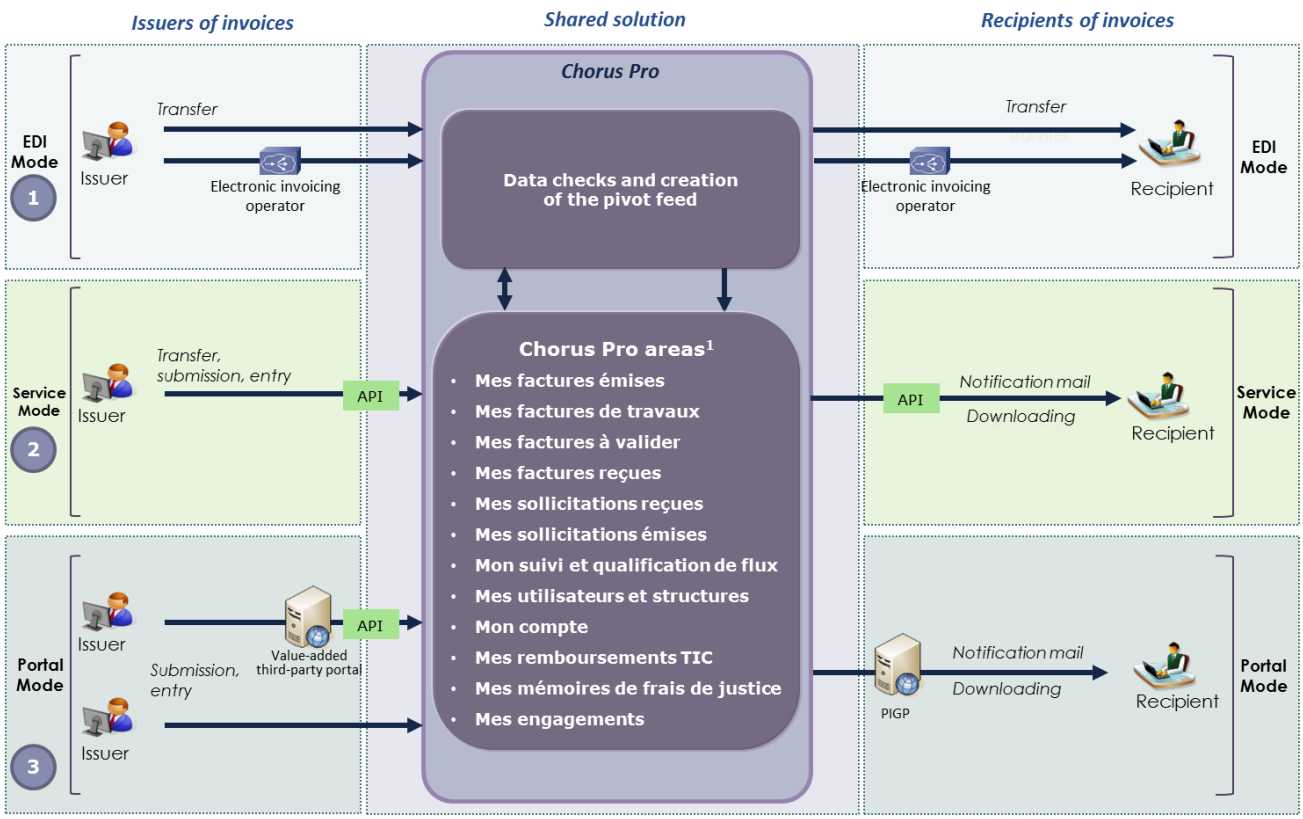
The authentication and setting procedures will be described in the User Guide.

3.4 The service offering to the issuers of invoices

3.4.1 Invoice transmission modes

The service offering proposed by Chorus Pro is available in three ways:

- **EDI mode**: Chorus Pro enables exchanges of information through flows issued from the information systems of private suppliers, local public sector entities, national public institutions and the State, based on standardised formats. A new external specifications appendix on EDI mode has been created[17].
- **Service mode**: the solution allows the integration of its services with the third party information system of the supplier. In this case, Chorus Pro offers all of its features as integrated services in a third party portal (API/web service). An appendix presents all the specifications relating to the API mode (intput and output tables, API sequences, error codes)[18].
- **Portal mode**: Chorus Pro provides access to suppliers through a portal that can be:
  - Chorus Pro Portal dedicated to the entry or submission of invoices.
  - A third party Portal with added value providing access to the same areas as Chorus Pro Portal through integrated services (API/Web service). Suppliers who are already using a third party portal with added value continue to benefit from the features implemented in the third party portals in addition to the ability to submit or view the invoice.



1 Issued invoices/Works invoices/Invoices to validate/Received invoices/Received requests/Issued requests/ Flow tracking and qualification/Users and structures/Account/ICT reimbursements/Memoranda on justice costs/ Commitments

1) In **EDI mode**, the issuer of the invoice:

- directs its flows either:
  - directly to Chorus Pro,
  - through an intermediary dematerialising operator.

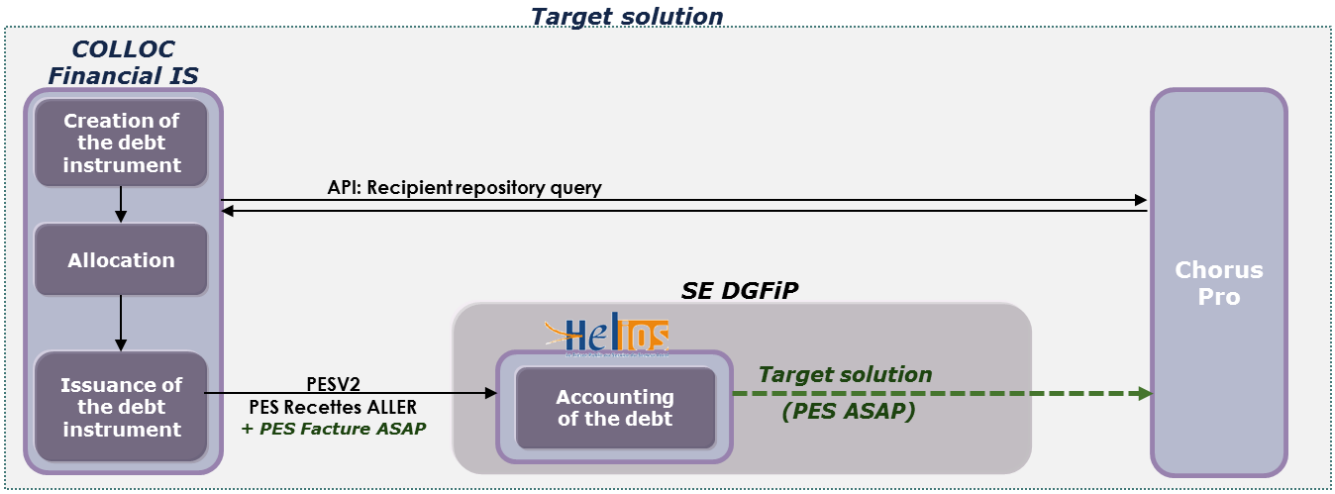
[17] See specifications appendix relating to EDI connection mode

[18] See specifications appendix relating to API connection mode

- receives the integration and processing reports of the invoices to enable the monitoring of invoice settlements.

N.B. The features that are not available in EDI remain accessible for the issuers of invoices in EDI through the portal mode. As such, the issuers connected in EDI to Chorus Pro must create an account on the portal (see User Guide) and can then access functionalities by connecting to Chorus Pro in portal mode or service mode.

Focus on the procedures for issuing invoices by the local public sector entities



The issuance of invoice documents by the local public sector entities is based on:

- Sending a PES Facture ASAP (statement of the sums to pay) flow to HELIOS for all of the documents issued whether to the public or private sphere,
- Drafting and sending ASAP statements by the publishing centre of the DGFiP [Direction Générale des Finances Publiques] for documents addressed to private recipients,
- Electronic dispatch by the accounting officer to Chorus Pro for documents addressed to public recipients.

N.B. In EDI mode, the status of the invoices issued by the local public sector entities is retrieved through a third party teletransmission operator and the SE DGFiP. The statuses are not transmitted to HELIOS with a flow in Chorus ProStatutPivot format. Chorus ProStatutPivot flow is thus sent to the local public sector entity; the entity also receives a return flow in the PES Recette Retour [Standard File Transfer protocol Return Receipt] format issued by HELIOS after being included in the accounts.

2) In **Service mode (through API)**, the issuer of the invoice:

- is identified through the API,
- without re-authenticating, has access to all the services of Chorus Pro through the APIs accessible through their own portal:
  - Submitting and entering invoices,
  - Tracking invoice processing,
  - Uploading and downloading additional documents,
  - Viewing the document database,
  - Managing user accounts,
  - Access to legal obligations issued by the State services,
  - Request for assistance,
  - Managing the user account and the account structure.

N.B. The list of services available in service mode may be enhanced in the final version of the specifications.

3) In **Portal mode**, the issuer of the invoice can, in particular:

- Submit invoices in PDF format (signed or unsigned) or in XML format or manually input the invoice data using an online form[19],
- Monitor these invoices processing statuses,
- Request user assistance from the portal help,
- Attach additional documents required to process the invoice,
- View the document database,
- View the legal obligations issued by the State services,
- Manage the user accounts,
- Access the knowledge base through an avatar.

When entities of the local public sector are positioned as emitters, the space "Issued invoices" is only accessible to view issued invoices and not for invoice submission or transfer. Local public sector entities must transmit their invoices through HELIOS or ASAP PES Invoice.

The portal is accessible through the Internet network, from any type of hardware equipped with any of the following OS: Windows (Windows 2000/XP/VISTA/7), Mac OS (Apple MacOS X 10.3 and above) and Linux as well as any standard internet browser (IE11 and above, Firefox 17 and above, Safari 5.0 et 5.1 and above, Chrome 23 and above).

[19] Excluding local authorities that benefit from the PES Facture ASAP service offering of the DGFiP

3.4.2 The provision of the directory of the structures receiving the invoices

Chorus Pro provides a directory of the structures receiving the invoices that is automatically updated. This directory is available in portal mode and service mode through the APIs which can be directly implemented in the information system of the supplier. It is based on Chorus Pro repository of recipients. It is updated, in particular, by the DGFiP IS for the recipient structures and relies on the INSEE SIREN database. It will incorporate the service codes of the State and certain settings of the recipient accounts (compulsory or non-compulsory service code).

The organisational changes taking place in public structures (creation of metropolitan centres, the merging of inter-communal structures, the reorganisation of regions and departments, the implementation of invoicing services, etc.) will be included in the directory, as well as changes to account settings made by the recipients.

The directory will enable issuers of invoices to determine, from a SIRET ID, if the recipient has adopted Chorus Pro, and obtain additional information such as:

- The corporate name and address of the recipient,
- Whether the service code and/or the reference of the order is compulsory on each invoice (depending on the account settings of the recipient) in order to determine what information to mention on the invoice,
- The statuses sent as part of the life cycle (depending on the account settings of the recipient) in order to identify which statuses the recipient is not likely to resubmit.
-

3.4.3 Interpretation of the recipient structures parameters

The recipient structures can indicate if the service code or the agreement number is mandatory in the in invoices that are destined to them.

A coherence check is conducted between the service code that is indicated in the invoice and the service code indicated by the recipient in its structure. In order to facilitate the communication between the invoice sender and recipient, the recipient should indicate in Chorus Pro the same service codes as used elsewhere (in their respective information systems, on their purchase orders). Thus, contradictions between the information indicated in Chorus Pro and out of Chorus Pro are limited.

Invoice senders have access to the information that must be indicated on their invoice for each recipient in the directory. It is recommended to indicate only the information (agreement number and service code) that are required by the recipient.

Particular case of the State as recipient :

Unlike many public structures, State affiliated entities like Ministries or decentralised departements are attached on Chorus Pro to an unique SIRET number : 11000201100044. Every recipient attached to this singular SIRET is registered on Chorus Pro as a service. For those clients, the filling of the service code and the commitment number is required. Commitment numbers on State destinated invoice are composed of 10 alphanumeric caracters.

The board below facilitate the interpretation of the various combinations that exists in the directory:

Interpretation board for the recipient's structures parameters for recipients that indicate at least one service other than "FACTURES PUBLIQUES" [PUBLIC INVOICES]

Parameter of the structures			Parameters of the service	Information on the invoice			
Commitment number [CN]	Service code	CN or service code	CN	Without CN or service code	With CN Without service code	Without CN With service ode	With CN and service code
O*	O*	O*	O*	✓	✓	✓	✓
O	O	O	M	✓	✓	✗	✓
M	O		O	✗	✓	✗	✓
M	O		M	✗	✓	✗	✓
O	M		O	✗	✗	✓	✓
O	M		M	✗	✗	✗	✓
O	O	M	F	✗	✓	✓	✓
O	O	M	M	✗	✓	✗	✓
M	M		O	✗	✗	✗	✓
M	M		M	✗	✗	✗	✓

Explanatory note:

O	Optional information
M	Mandatory information

✓	Accepted invoice
✗	Rejected invoice

**Default settings*

Interpretation board for the recipient's structures parameters for recipients that don't indicate at least one service other than "FACTURES PUBLIQUES" [PUBLIC INVOICES] :

Parameter of the structures		
Commitment number [CN]	Service code	CN or service code
O*	O*	O*
M	O	

Informations on the invoice			
Without CN or service code	With CN Without Service code	Without CN With Code service	With CN With Service code
✓	✓	✓	✓
✗	✓	✓	✓

explanatory note:

O	Optional information
M	Mandatory information

✓	Accepted invoice
✗	Rejected invoice

**Default settings*

3.4.4 Request for assistance

The suppliers have the opportunity to request assistance from Chorus Pro.

Each request is established by a "ticket" submitted by the suppliers through a support request form specifying the information required to process the request (e.g. invoice number). Attachments can be added (e.g., a screen shot).

The traceability of requests is ensured throughout the treatment process.

3.5 The service offering to recipients of invoices

3.5.1 Notification of receipt of an invoice

This notification occurs when submitting an invoice regarding the local public sector entity or national public institution. Users are then notified by email about the receipt of invoices. The emails are configurable in Chorus Pro. At least one user must be mentioned to receive the notification emails. The email is sent on a daily basis at 00h01 and shows all of the invoices made available during the day.

3.5.2 The availability of invoices and billing records

The recipients of the invoices have several methods of receiving the invoices and billing records:

- In EDI mode,
- In Service mode,
- In Portal mode,

In addition to billing records, the recipients take delivery of the pivot flow that allows them to pre-assign most of the fields required for the creation of an order or a request for payment through their financial information systems.

<u>In EDI mode</u>

In EDI mode, the recipient of the invoice is automatically provided with the invoice data through the pivot flow, enabling the pre-assignment of data in their information system.
Depending on the terms for submission of the invoice data (structured flow, mixed flow or portal), the data of the invoice attachment is structured or unstructured and may or may not be used by the information systems of the recipients.

<u>In Service mode</u>

Access to the "Received invoices" area is available through the API and allows recipients to view the invoices in the same way as in portal mode.
The recipient:

- is identified through the API,
- without re-authenticating, has access to all the services of Chorus Pro through the API accessible through their own portal:
    - Downloading an invoice file (invoice and associated attachments) and the pivot flows and associated metadata for the manual integration in the IS not connected in EDI,
    - Rejecting an invoice file after viewing, if necessary,
    - Downloading additional documents,
    - Updating the status of the invoices,
    - Viewing the document database,
    - Managing the user accounts,
    - Request for assistance.

<u>In Portal mode</u>

In Portal mode, the recipient of the invoice can:

- view/download the billing records sent to them (original invoices and associated attachments),
- reject an invoice file after viewing, if necessary,
- look for a received or archived invoice through a multi-criteria search form,

- perform an XML export in a downloadable PIVOT flow format (see below) for manual integration in their IS. This export includes:
  - The data extracted from the invoice allowing the creation of an order or request for payment,
  - The invoice in its original format,
  - The attachments to the original formats.

3.6 Chorus Pro guiding principles

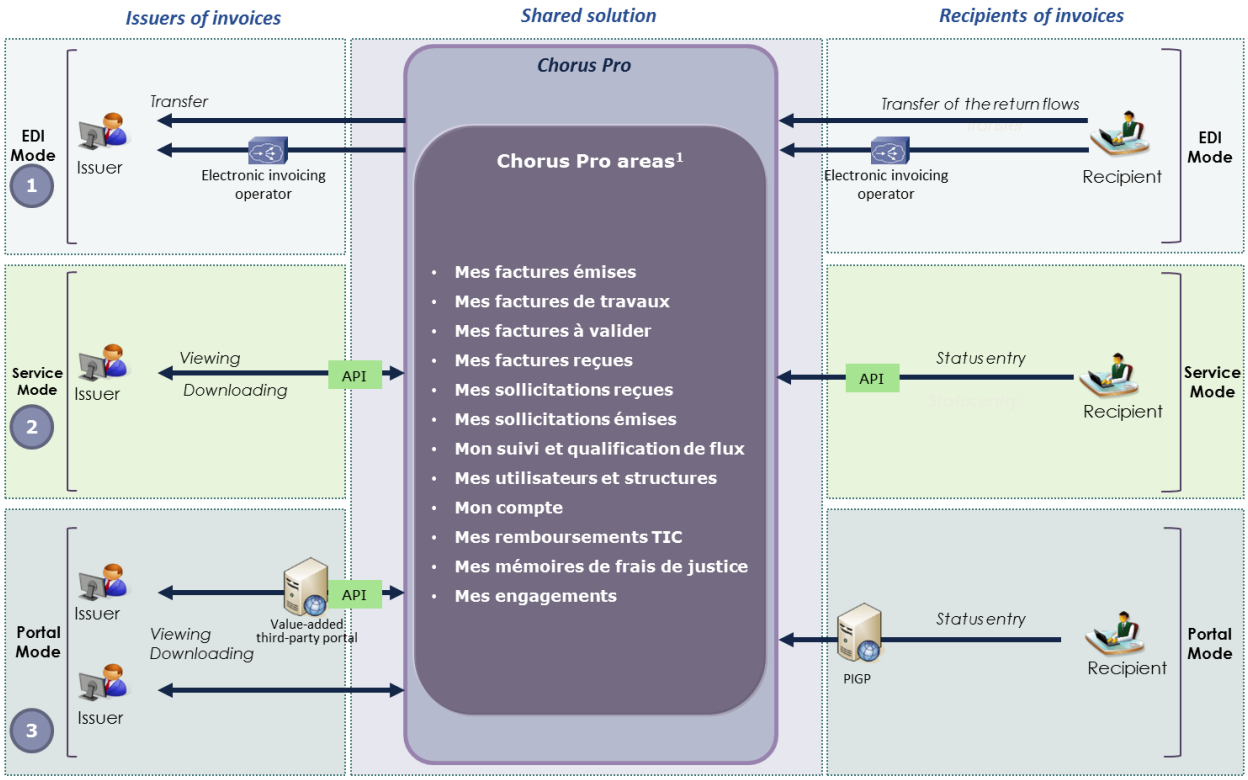
The operating principles of Chorus Pro is built around:

- The implementation of Chorus Pro for all suppliers in the public sphere (private and public), allowing them to submit their invoices and to consult the progress of payment processing. Chorus Pro takes into account the formats and modes of exchange currently implemented by companies (Portal mode and EDI mode),
- The implementation of a "pivot" flow to directly integrate (in EDI mode) the invoicing data (including the dematerialized invoice) into the IS of the public receivers or to recover (in portal mode) these data for processing,
- The availability of Chorus Pro features through APIs implemented on applications upstream and / or downstream of Chorus Pro.

3.6.1 Consideration of the creation of the statuses

- 1) In EDI mode by the local public sector entity or the national public institution if it's IS is connected to the SE DGFiP,
- 2) In Service mode (API) by the local public sector entity or the national public institution,
- 3) In the Portal mode by the local public sector entity or the national public institution.

NB: For invoices to the local public sector, some statuses (see below) are produced by the accounting officer. These statuses are created directly by HELIOS to Chorus Pro.



1 Issued invoices/Works invoices/Invoices to validate/Received invoices/Received requests/ Flow tracking and qualification/Users and structures/Account/ICT reimbursements/Memoranda on justice costs/ Commitments

3.6.2 Access to the user assistance of Chorus Pro,

Assistance requests by the invoice recipients

Chorus Pro enables local public sector entities and national public institutions to request assistance in the event of questions relating to the operation of Chorus Pro.
The local public sector entities and the national public institutions can directly access the assistance features of Chorus Pro through the "Issued requests" area in Portal mode or in Service mode (API) which enables them:

- To issue and monitor outbound requests for assistance from Chorus Pro (functional and technical issues),
- To track the history of exchanges.

The response to requests from the issuers of invoices

The issuers of invoices can contact the recipients of invoices concerning any business matter, particularly regarding the processing of their invoices.
Users authorised by the administrator of the national public institution or local public sector entity can directly access the assistance features of Chorus Pro through the "Received requests" area in the Portal mode or in Service mode (API) which enables them:

- to view and process incoming requests sent by the issuers of invoices (private suppliers, other administrative entities),
- to reroute/escalate incoming requests to other assistance resources from Chorus Pro,
- To track the history of exchanges.

The assistance from Chorus Pro does not enable exchanges upon the initiative of the recipients of the invoices (local public sector entities, national public institutions) to the suppliers, outside of the exchanges performed in context of the "Suspended" status.

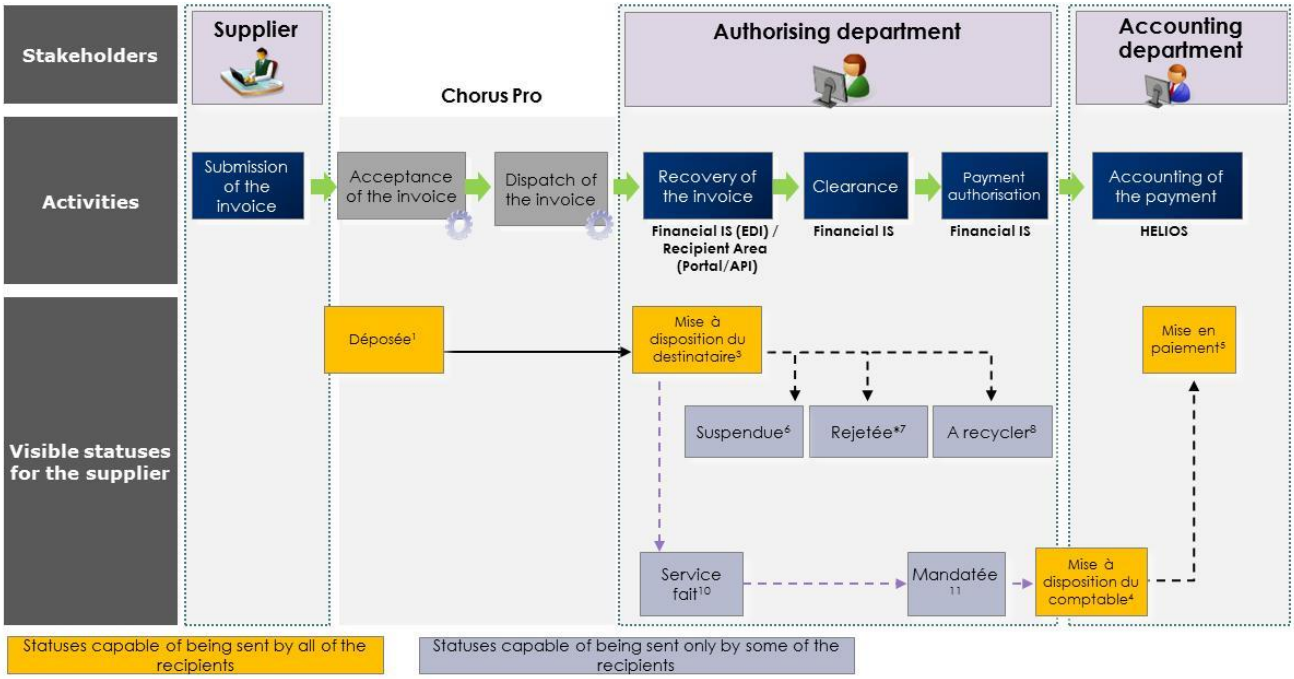
3.7 The nominal lifecycle of the invoice

Chorus Pro makes flowback available to the issuers of invoices through invoice status reporting. This is necessary in order to enable the supplier to monitor the progress of the processing of its billing data. The reporting of the optional statuses enables more precise monitoring of the processing of the billing data. The reporting of statuses updated through the invoice lifecycle flow in EDI mode occurs every 15 minutes. In API or Portal mode, status updates are instantaneous.

3.7.1 Statuses related to invoice lifecycle

The statuses associated with the invoice lifecycle are as follows:

<u>For invoices directed to local public sector entities</u>



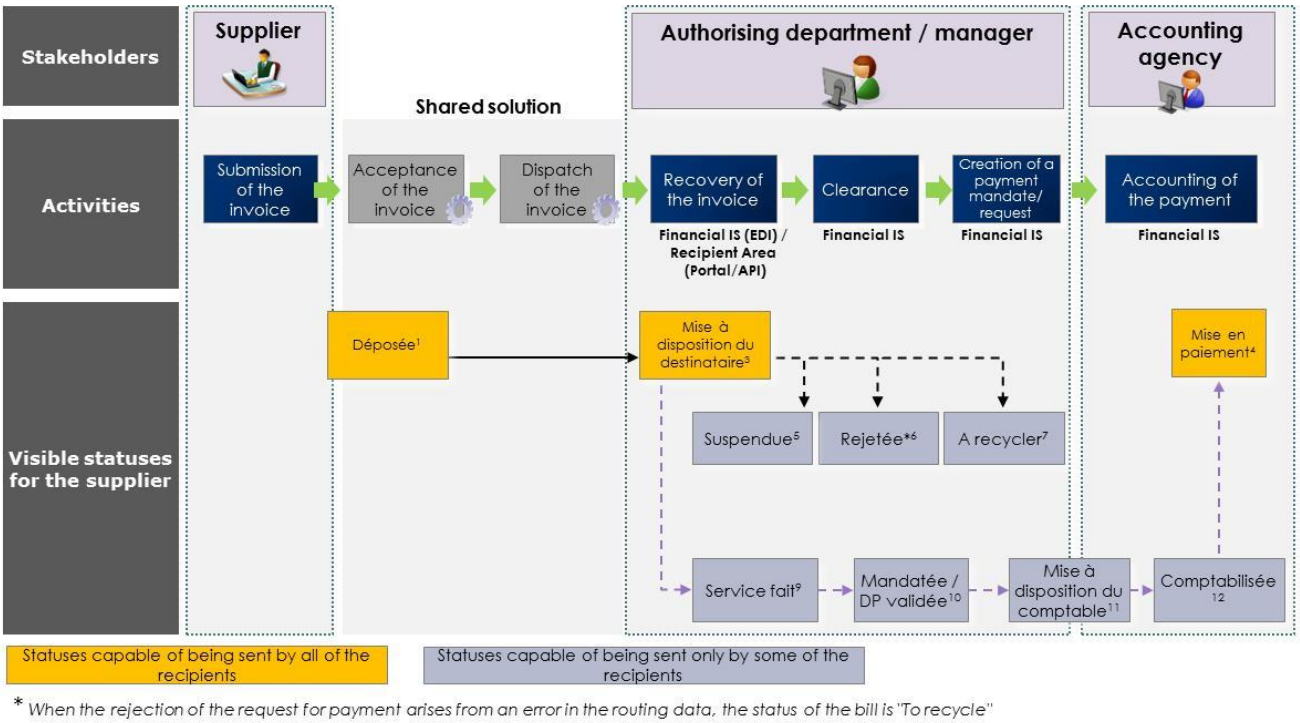
* *When the rejection of the request for payment arises from an error in the routing data, the status of the bill is "To recycle"*

1 Submitted
3 Made available to the recipient
4 Made available to the accounting officer
5 Released for payment
6 Suspended
7 Completed
8 Rejected
9 To recycle
10 Service rendered
11 Payment mandated

The table below shows the triggers of the statuses and the associated liability perimeters for the local public sector :

Code	Status	Producer	Trigger
1	**Submitted**	Chorus Pro	▪ EDI mode: Payment flow ▪ Portal mode: validation of the submission or entry by the supplier
3	**Made available to the recipient**	Chorus Pro	▪ EDI mode: payment following the exchange of the pivot flow ▪ Portal mode: Sending the email notification indicating the arrival of the invoice in the recipient's "Received invoice" space
4	**To be recycled**	Recipient	The invoice is rejected by the recipient service of the invoice on the basis of an error in the routing data
5	**Rejected by the authorising officer** *(depending on the situations)*	Recipient	The invoice is rejected by the recipient service of the invoice (e.g. incorrect billing data, error in the amounts, etc.)
6	**Suspended** (depending on the situations)	Recipient	The invoice processing may be suspended if one or more supporting documents are missing
12	**Completed** *(depending on the situations)*	Chorus Pro	The invoice is completed when the provider adds an attachment or a comment to an invoice with a "Suspended" status (see Chapter 3.9)
7	**Service rendered** (optional status)	Recipient	The service rendered was recognised and the authorising officer can now proceed with the settlement and mandating
8	**Payment mandated** (optional status)	Recipient	The mandate was created and processed by the authorising officer and can now be sent to the accounting officer for processing
9	**Made available to the accounting officer**	HELIOS	The mandate was integrated by HELIOS (made available to the accounting department for processing)
11	**Released for payment**	HELIOS	The bank transfer flow was sent to the Bank of France

For invoices directed to national public institutions



* *When the rejection of the request for payment arises from an error in the routing data, the status of the bill is "To recycle"*

1 Submitted
3 Made available to the recipient
4 Released for payment
5 Suspended
6 Rejected
7 To recycle
9 Service rendered
10 Mandated/Validated payment requests
11 Made available to the accounting officer
12 Booked

Please note: some statuses may not be reported depending on the recipient public entity.

Complementary status associated to work invoicing, subcontractor or cocontractor invoices

The table below shows the triggers of the statuses and the associated liability perimeters (for the national public institutions):

Code	Status	Producer	Trigger
1	**Submitted**	Chorus Pro	▪ EDI mode: Payment flow ▪ Portal mode: validation of the submission or entry by the supplier
3	**Made available to the recipient**	Chorus Pro	▪ EDI mode: Payment following the exchange of the pivot flow ▪ Portal mode: Sending the email notification indicating the arrival of the invoice in the recipient's "Received invoice" space
4	**To be recycled**	Recipient	The invoice is rejected by the recipient service of the invoice on the basis of an error in the routing data.
5	**Rejected by the authorising officer** *(depending on the situations)*	Recipient	The invoice is rejected by the recipient service of the invoice (e.g. incorrect billing data, error in the amounts, etc.)
6	**Suspended** (optional status for national public institutions which are not in flow mode)	Recipient	The invoice processing may be suspended if one or more supporting documents are missing.
12	**Completed** *(depending on the situations)*	Chorus Pro	The invoice is completed when the provider adds an attachment or a comment to an invoice with a "Suspended" status
7	**Service rendered** (optional status)	Recipient	The service rendered was certified and the authorising officer can now proceed with the settlement and mandate/creation of the payment request
8	**Mandated/Validated payment request** (optional status)	Recipient	The mandate or the payment request was created and processed by the authorising officer and can now be sent to the accounting officer for processing
9	**Made available to the accounting officer** (optional status)	Recipient	The mandate/payment request has been created by the authorising department and made available to the accounting department for processing
10	**Entered into the accounts** (optional status)	Recipient	The mandate/payment request related to the invoice has been validated by the payer and entered into the accounts
11	**Released for payment** (optional status for national public institutions which are not in flow mode)	Recipient	The bank transfer flow was sent to the Bank of France

The table below shows the triggers of the statuses and the associated liability perimeters for a payment request submitted by a subcontractor in case of a simple invoice (A9) or a work invoice (A10):

Code	Status	Producer	Trigger
23	**Made available to the first validator**	Chorus Pro	▪ EDI mode: Payment flow ▪ Portal mode: validation of the submission or entry by the subcontractor
24	**Rejected by the first validator on the basis of an error in the routing data**	Chorus Pro	The contracting party rejects the payment request on the basis of an error in the routing data
14	**Rejected by the first validator for another reason**	Chorus Pro	The contracting party rejects the payment request for another reason (e.g. incorrect billing data, error in the amounts, etc.)
13	**Validated by the first validator**	Chorus Pro	The contracting party validates the payment request.
15	**Validation 1 over the deadline**	Chorus Pro	The payment request is not taken care of by the contracting party. The validation is automatic.
25	**Made available to the second validator**	Chorus Pro	If a second validation is requested, the first validation (formal or automatic) leads to make available the payment request to the second validator.
26	**Rejected by the second validator on the basis of an error in the routing data**	Chorus Pro	The authorized representative rejects the payment request on the basis of an error in the routing data
17	**Rejected by the second validator for another reason**	Chorus Pro	The authorized representative rejects the payment request for another reason (e.g. incorrect billing data, error in the amounts, etc.)
18	**Validated by the second validator**	Chorus Pro	The authorized representative validates the payment request.
40	**Made available to project manager** *(A10 only)*	Chorus Pro	The first validation (formal or automatic) or the second validation (formal or automatic) leads to make available the payment request to the project manager. The reject by the first or the second validator leads to make available the payment request to the project manager.
29	**Take into account by project manager** *(A10 only)*	Chorus Pro	The project manager takes into account the payment request of the subcontractor.
28	**Rejected by the project manager on the basis of an error in the routing data**	Chorus Pro	The project manager rejects the monthly statement draft on the basis of an error in the routing data
19	**Rejected by the project manager for another reason**	Chorus Pro	The project manager rejects the monthly statement draft for another reason (e.g. incorrect billing data, error in the amounts, etc.)
39	**Made available to the contracting authority (A10 only)**	Chorus Pro	The first validation (formal or automatic) or the second validation (formal or automatic) leads to make available the payment request to the contracting authority if the project manager is absent.

Code	Status	Producer	Trigger
			The reject by the first or the second validator leads to make available the payment request to the contracting authority if the project manager is absent.
38	**Take into account by contracting authority** *(A10 only)*	Chorus Pro	The contracting authority takes into account the payment request of the subcontractor.
31	**Rejected by the contracting authority on the basis of an error in the routing data**	Chorus Pro	The contracting authority rejects the monthly statement draft on the basis of an error in the routing data
32	**Rejected by the contracting authority for another reason**	Chorus Pro	The contracting authority rejects the monthly statement draft for another reason (e.g. incorrect billing data, error in the amounts, etc.)
3	**Made available to the recipient (A10 only)**	Chorus Pro	The first validation (formal or automatic) or the second validation (formal or automatic) leads to make available the payment request to the recipient if the project manager and the contracting authority is absent. The reject by the first or the second validator leads to make available the payment request to the to the recipient if the project manager and the contracting authority is absent.
36	**Take into account by recipient** *(A10 only)*	Recipient	The recipient takes into account the payment request of the subcontractor.
35	**Transmitted to the contracting authority**	Recipient	The recipient of a billing piece for a construction market indicated he has transmitted the piece to the contractring authority for validation.

The table below shows the triggers of the statuses and the associated liability perimeters for a monthly statement draft submitted by a joint contractor (A12):

Code	Status	Producer	Trigger
23	**Made available to the first validator**	Chorus Pro	▪ EDI mode: Payment flow ▪ Portal mode: validation of the submission or entry by the joint contractor
24	**Rejected by the first validator on the basis of an error in the routing data**	Chorus Pro	The authorized representative rejects the monthly statement draft on the basis of an error in the routing data
14	**Rejected by the first validator for another reason**	Chorus Pro	The authorized representative rejects the monthly statement draft for another reason (e.g. incorrect billing data, error in the amounts, etc.)
13	**Validated by the first validator**	Chorus Pro	The authorized representative validates the monthly statement draft .

The table below shows the triggers of the statuses and the associated liability perimeters for a final statement draft submitted by a joint contractor (A13):

Code	Status	Producer	Trigger
23	**Made available to the first validator**	Chorus Pro	The joint contractor validates the final statement draft.
24	**Rejected by the first validator on the basis of an error in the routing data**	Chorus Pro	The authorized representative rejects the final statement draft on the basis of an error in the routing data
14	**Rejected by the first validator for another reason**	Chorus Pro	The authorized representative rejects the final statement draft for another reason (e.g. incorrect billing data, error in the amounts, etc.)
13	**Validated by the first validator**	Chorus Pro	The authorized representative validates the final statement draft.
27	**Made available to project manager**	Chorus Pro	The validation by the authorized representative leads to make available the final statement draft to the project manager.
28	**Rejected by the project manager on the basis of an error in the routing data**	Chorus Pro	The project manager rejects the final statement draft on the basis of an error in the routing data
19	**Rejected by the project manager for another reason**	Chorus Pro	The project manager rejects the final statement draft for another reason (e.g. incorrect billing data, error in the amounts, etc.)
6	**Suspended**	Chorus Pro	The monthly statement draft processing may be suspended if one or more supporting documents are missing.
21	**Associated**	Chorus Pro	The project manager associates the account statement with the final statement draft.

The table below shows the triggers of the statuses and the associated liability perimeters for a final statement draft submitted by a joint contractor (A14):

Code	Status	Producer	Trigger
23	**Made available to the first validator**	Chorus Pro	The joint contractor validates the final statement draft.
24	**Rejected by the first validator on the basis of an error in the routing data**	Chorus Pro	The authorized representative rejects the monthly statement draft on the basis of an error in the routing data
14	**Rejected by the first validator for another reason**	Chorus Pro	The authorized representative rejects the monthly statement draft for another reason (e.g. incorrect billing data, error in the amounts, etc.)
13	**Validated by the first validator**	Chorus Pro	The authorized representative validates the monthly statement draft .
27	**Made available to project manager**	Chorus Pro	The validation by the authorized representative leads to make available the final statement draft to the project manager.
28	**Rejected by the project manager on the basis of an error in the routing data**	Chorus Pro	The project manager rejects the final statement draft on the basis of an error in the routing data
19	**Rejected by the project manager for another reason**	Chorus Pro	The project manager rejects the final statement draft for another reason (e.g. incorrect billing data, error in the amounts, etc.)
34	**Additional information demand**	Chorus Pro	The treatment of the stratement draft is waiting for complement because one or several documents of proof are missing.
6	**Suspended**	Chorus Pro	The monthly statement draft processing may be suspended if one or more supporting documents are missing.
21	**Associated**	Chorus Pro	The project manager associates the account statement with the final statement draft.

The table below shows the triggers of the statuses and the associated liability perimeters for a monthly statement draft submitted by a supplier (A4):

Code	Status	Producer	Trigger
27	**Made available to project manager**	Chorus Pro	The supplier validates the monthly statement draft
28	**Rejected by the project manager on the basis of an error in the routing data**	Chorus Pro	The project manager rejects the monthly statement draft on the basis of an error in the routing data
19	**Rejected by the project manager for another reason**	Chorus Pro	The project manager rejects the monthly statement draft for another reason (e.g. incorrect billing data, error in the amounts, etc.)
6	**Suspended**	Chorus Pro	The monthly statement draft processing may be suspended if one or more supporting documents are missing.
21	**Associated**	Chorus Pro	The projet manager associates the account stratement with the monthly statement draft

The table below shows the triggers of the statuses and the associated liability perimeters for a final statement draft submitted by a supplier (A7):

Code	Status	Producer	Trigger
27	**Made available to project manager**	Chorus Pro	▪ EDI mode: Payment flow ▪ Portal mode: validation of the submission or entry by the supplier
28	**Rejected by the project manager on the basis of an error in the routing data**	Chorus Pro	▪ The project manager rejects the final statement draft on the basis of an error in the routing data
19	**Rejected by the project manager for another reason**	Chorus Pro	▪ The project manager rejects the final statement draft for another reason (e.g. incorrect billing data, error in the amounts, etc.)
34	**Suspended**	Chorus Pro	▪ The monthly statement draft processing may be suspended if one or more supporting documents are missing.
21	**Associated**	Chorus Pro	▪ The project manager associates the general statement draft with the final statement draft.

The table below shows the triggers of the statuses and the associated liability perimeters for an account statement (A5 or A15):

Code	Status	Producer	Trigger
30	**Made available to the contracting authority**	Chorus Pro	The supplier or the project manager validates the account statement
31	**Rejected by the contracting authority on the basis of an error in the routing data**	Chorus Pro	The contracting authority rejects the monthly statement draft on the basis of an error in the routing data
32	**Rejected by the contracting authority for another reason**	Chorus Pro	The contracting authority rejects the monthly statement draft for another reason (e.g. incorrect billing data, error in the amounts, etc.)
6	**Suspended**	Chorus Pro	The account statement processing may be suspended if one or more supporting documents are missing.
21	**Associated**	Chorus Pro	The contracting authority associates the validated account statement with the account statement.
3	**Made available to the recipient** *(only if the recipient is not registered as "is MOA")*	Chorus Pro	▪ EDI mode: Payment following the exchange of the pivot flow ▪ Portal mode: Sending the email notification indicating the arrival of the invoice in the recipient's "Received invoice" space

Code	Status	Producer	Trigger
4	**To be recycled** *(only if the recipient is not registered as "is MOA")*	Recipient	The invoice is rejected by the recipient service of the invoice on the basis of an error in the routing data.
5	**Rejected by the authorising officer** *(only if the recipient is not registered as "is MOA")*	Recipient	The invoice is rejected by the recipient service of the invoice (e.g. incorrect billing data, error in the amounts, etc.)
6	**Suspended** *(only if the recipient is not registered as "is MOA")*	Recipient	The invoice processing may be suspended if one or more supporting documents are missing.
13	**Validated by the first validator** (optional status) *(only if the recipient is not registered as "is MOA")*	Chorus Pro	The authorized representative validates the monthly statement draft .
7	**Service rendered** (optional status) *(only if the recipient is not registered as "is MOA")*	Recipient	The service rendered was certified and the authorising officer can now proceed with the settlement and mandate/creation of the payment request
8	**Mandated/Validated payment request** (optional status) *(only if the recipient is not registered as "is MOA")*	Recipient	The mandate or the payment request was created and processed by the authorising officer and can now be sent to the accounting officer for processing
9	**Made available to the accounting officer** (optional status) *(only if the recipient is not registered as "is MOA")*	Recipient	The mandate/payment request has been created by the authorising department and made available to the accounting department for processing
10	**Entered into the accounts** (optional status) *(only if the recipient is not registered as "is MOA")*	Recipient	The mandate/payment request related to the invoice has been validated by the payer and entered into the accounts
11	**Released for payment** (optional status) *(only if the recipient is not registered as "is MOA")*	Recipient	The bank transfer flow was sent to the Bank of France

The table below shows the triggers of the statuses and the associated liability perimeters for a validated account statement (A6, A16 or A19):

Code	Status	Producer	Trigger
1	**Submitted**	Chorus Pro	▪ EDI mode: Payment flow ▪ Portal mode: validation of the submission or entry by the supplier
3	**Made available to the recipient**	Chorus Pro	▪ EDI mode: Payment following the exchange of the pivot flow ▪ Portal mode: Sending the email notification indicating the arrival of the invoice in the recipient's "Received invoice" space
4	**To be recycled**	Recipient	The invoice is rejected by the recipient service of the invoice on the basis of an error in the routing data.
5	**Rejected by the authorising officer** *(depending on the situations)*	Recipient	The invoice is rejected by the recipient service of the invoice (e.g. incorrect billing data, error in the amounts, etc.)
6	**Suspended** (optional status for national public institutions which are not in flow mode)	Recipient	The invoice processing may be suspended if one or more supporting documents are missing.
13	**Completed** *(depending on the situations)*	Chorus Pro	The validated account statement is completed when the provider adds an attachment or a comment to an invoice with a "Suspended" status
7	**Service rendered** (optional status)	Recipient	The service rendered was certified and the authorising officer can now proceed with the settlement and mandate/creation of the payment request
8	**Mandated/Validated payment request** (optional status)	Recipient	The mandate or the payment request was created and processed by the authorising officer and can now be sent to the accounting officer for processing
9	**Made available to the accounting officer** (optional status)	Recipient	The mandate/payment request has been created by the authorising department and made available to the accounting department for processing
10	**Entered into the accounts** (optional status) *(only if the recipient is not registered as "is MOA")*	Recipient	The mandate/payment request related to the invoice has been validated by the payer and entered into the accounts
11	**Released for payment** (optional status) *(only if the recipient is not registered as "is MOA")*	Recipient	The bank transfer flow was sent to the Bank of France

The table below shows the triggers of the statuses and the associated liability perimeters for a general statement draft (A17):

Code	Status	Producer	Trigger
30	**Made available to the contracting authority**	Chorus Pro	▪ EDI mode: Payment flow ▪ Portal mode: validation of the submission or entry by the project manager
31	**Rejected by the contracting authority on the basis of an error in the routing data**	Chorus Pro	The contracting authority rejects the general statement draft on the basis of an error in the routing data
32	**Rejected by the contracting authority for another reason**	Chorus Pro	The contracting authority rejects the general statement draft for another reason (e.g. incorrect billing data, error in the amounts, etc.)
34	**Pending additional information**	Chorus Pro	The general statement draft processing may be suspended if one or more supporting documents are missing.
21	**Associated**	Chorus Pro	The contracting authority associates the general statement with the general statement draft.
41	**Replaced by A22**	Chorus Pro	The supplier associates thye general statement draft in a tacite procedure after the general account statement was submitted by the project manager

The table below shows the triggers of the statuses and the associated liability perimeters for a general statement (A18 or A20):

Code	Status	Producer	Trigger
33	**Made available to the supplier**	Chorus Pro	▪ EDI mode: Payment flow ▪ Portal mode: validation of the submission or entry by the project manager or the contracting authority
20	**Rejected by the supplier authority for another reason**	Chorus Pro	▪ The supplier rejects the general statement for another reason (e.g. incorrect billing data, error in the amounts, etc.)
6	**Suspended**	Chorus Pro	▪ The general statement processing may be suspended if one or more supporting documents are missing.
21	**Associted**	Chorus Pro	▪ The supplier associates the signed general statement with the general statement.

The table below shows the triggers of the statuses and the associated liability perimeters for a signed general statement:

Code	Status	Producer	Trigger
1	**Submitted**	Chorus Pro	▪ EDI mode: Payment flow ▪ Portal mode: validation of the submission or entry by the supplier
3	**Made available to the recipient**	Chorus Pro	▪ EDI mode: Payment following the exchange of the pivot flow ▪ Portal mode: Sending the email notification indicating the arrival of the invoice in the recipient's "Received invoice" space
4	**To be recycled**	Recipient	The invoice is rejected by the recipient service of the invoice on the basis of an error in the routing data.
5	**Rejected by the authorising officer** *(depending on the situations)*	Recipient	The invoice is rejected by the recipient service of the invoice (e.g. incorrect billing data, error in the amounts, etc.)
6	**Suspended** (optional status for national public institutions which are not in flow mode)	Recipient	The invoice processing may be suspended if one or more supporting documents are missing.
12	**Completed** *(depending on the situations)*	Chorus Pro	The invoice is completed when the provider adds an attachment or a comment to an invoice with a "Suspended" status
7	**Service rendered** (optional status)	Recipient	The service rendered was certified and the authorising officer can now proceed with the settlement and mandate/creation of the payment request
8	**Mandated/Validated payment request** (optional status)	Recipient	The mandate or the payment request was created and processed by the authorising officer and can now be sent to the accounting officer for processing
9	**Made available to the accounting officer** (optional status)	Recipient	The mandate/payment request has been created by the authorising department and made available to the accounting department for processing
10	**Entered into the accounts** (optional status) *(only if the recipient is not registered as "is MOA")*	Recipient	The mandate/payment request related to the invoice has been validated by the payer and entered into the accounts
11	**Released for payment** (optional status) *(only if the recipient is not registered as "is MOA")*	Recipient	The bank transfer flow was sent to the Bank of France

3.7.2 Determining payment global deadline

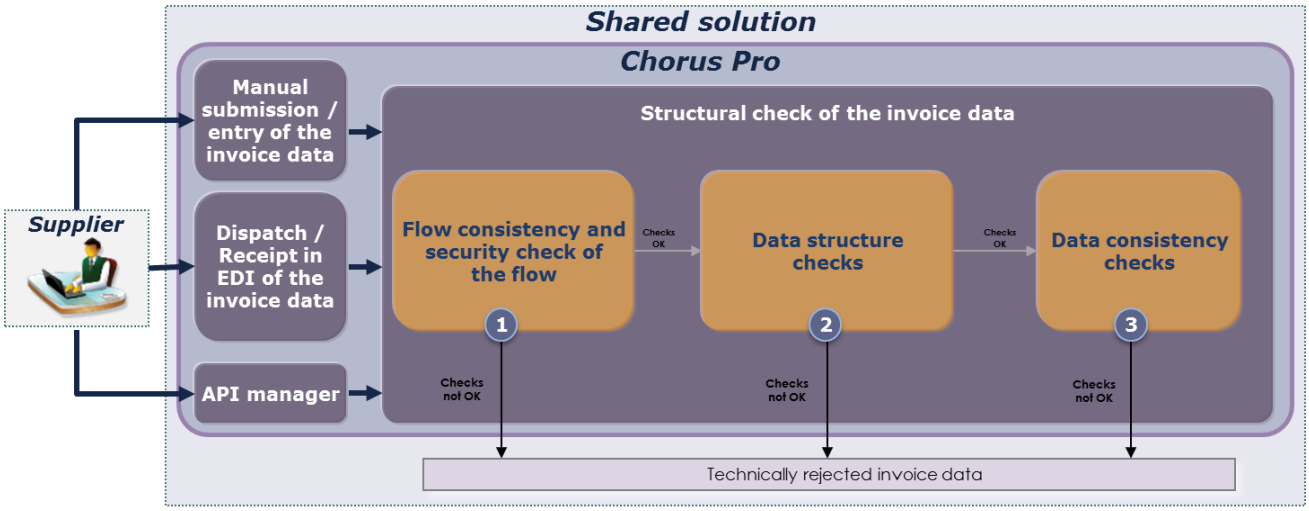
Payment global deadline (PGD) is determined from when the invoice is made available to the recipient. Chorus Pro does not determine PGD, it remains the recipient's responsibility. The invoice date of availability may differ depending on the mode of reception:

- EDI mode: an invoice is considered as "made available" to the recipient when acknowledgement is sent, following a pivot flow transfer.
- Service and Portal mode: an invoice is considered as "made available" to the recipient when it is available in "Received invoices".
- In both cases, the recipient is notified by an email sent to him every day.

This sending date, that initiate the PGD, is available in status history and relates to the date of status "made available to the recipient".

3.8 The checks conducted by Chorus Pro

Chorus Pro provides 3 levels of control over the billing information conveyed by the supplier:



3.8.1 Flow consistency and security checks

For each flow received, an antiviral check and format check are planned for both the original invoice data and the attachments.

3.8.2 Data structure checks

For each type of flow, the syntax rules, cardinality and data format described in Part 4 of the document are checked upon entry into the solution.

3.8.3 Data consistency checks

For each type of flow, the syntax rules, cardinality and data format described in Part 4 of the document (description of the format supporting the exchange flows around Chorus Pro) are checked upon entry into the solution.

Data	Checks performed by Chorus Pro
Supplier ID	▪ Verification of the existence of a SIRET number (or other type of identifier)
Invoice number	▪ Uniqueness check (if any other invoice from the same supplier has been sent with the same number) AND no rejection warranting resubmission (incorrect SIRET number/incorrect service codes) ▪ Check on the length of the field
Recipient ID	▪ Verification of the existence of a SIRET number
Service code	▪ The service code of the debtor appearing on the invoice must belong to the recipient structure. The presence of a service code is required for all invoices intended to State services as well as debtors other than State services who specifically ask for a service code when setting up their structure
Date of issuance	▪ Date of issuance ≤ Date of receipt (Date of receipt = Date of the day of the billing data is entered in Chorus Pro)
Amount to Pay	▪ Invoice data with payable amounts of €0 are accepted by Chorus Pro, even if they are not subject to actual payment
Invoice currency	▪ The invoice data must be in a single currency
Commitment reference	▪ Check for the presence of information only if the national public institution or the local public sector entity has indicated it as a mandatory element in its settings: the information must be verified by the national public institution or public sector entity and communicated to the supplier ▪ This information is required for invoices issued by private suppliers and for State services ▪ The commitment reference is not required for intra-public sphere invoices to local public sector entities and national public institutions.
Exemption reason	▪ Check for the presence of exemption reason. If entered, it makes the invoice completely tax-exempted.

3.8.4 Focus on the uniqueness check

Definition of uniqueness

The uniqueness of the invoice is derived from the following four items of information:

- Type of supplier identifier,
- Supplier ID,
- The invoice number,
- Year of

Uniqueness check

The uniqueness of the invoice seeks to avoid billing errors (including double billing). An invoice with similar information concurrently on these four data points with respect to a previously sent invoice will be rejected by Chorus Pro.

The uniqueness check systematically rejects invoices except in the case where the previous invoice was rejected on technical grounds resulting from the checks carried out by Chorus Pro or was rejected due to an error on the routing data (e.g. SIRET number).

3.9 Possibilities of recycling the invoice

In some cases where an invoice is rejected, the supplier is entitled to re-use the data in its invoice to facilitate the issuance of a new invoice to Chorus Pro.

3.9.1 Limitation of the recycling

Only certain rejections can lead to a recycling of the invoice:

- Rejections during entry into the solution following the failure of the checks cited above and forbidding their integration of the invoices,
- Rejections due to an identification error of the recipient by the issuer (automatic rejection of the IS or manual rejection by an agent through the portal).

3.9.2 Recycling procedures in the case of an error in the identification of the recipient by the issuer

If the recipient considers that an invoice was sent to him by mistake, he can reject it with the motive "erreur dans les données d'acheminement" [mistake in the routing data]. The rejected invoice's new status is "A recycler" [to be recycled].
Le invoice issuer is notified with a daily notification mail that lists all the rejected, suspended or to be recycled invoices.

The invoice issuer can emit again the original invoice, with the same invoice number and with different routing data, choosing any modality regardless of the initial deposit modality:

- In portail mode or Service mode, in the « factures émises » [send invoices], a form or a request can be filled to indicate new routing data. The invoicer can also modifie the agreement number of the invoice in order to adaptat to the parameters of the new recipient of the invoice.
- In EDI mode, a new flow can be send. This flow must include :
    - The new routing data
    - In needed, a new agreement number
    - The other data of the flow must be identical to the previous flow, especially the invoice number and the main attachement in the cas of an Invoice Mixed flow.

Regardless of the recycling modality, the original invoice that was recycled is transmitted to the new recipient in a new pivot flow, in which the new routing data are included. The invoice has the status « mise à disposition du destinataire ».
The state « téléchargé » [downloaded] is positionned to « false ». The recipient can recover the invoice in the list of not downloaded invoices.

3.10 Invoice suspension

3.10.1 Definition of suspension

The global payment delay of an invoice can be suspended by the recipient only once if one or several information of the invoice or some important documents of proof are missing.
The recipient can apply the status "Suspendue" [Suspended] to the invoice in order to notify the suspension of the global payment delay. The invoice appears "To be completed" to the emitter.

3.10.2 Modalities of completion of an invoice to be completed

The emitter is informed daily by an email listing every invoice rejected, to be recycled and suspended. He has the possibility to complete and to re-emit the original invoice by adding a new document of proof or a comment, while keeping the same invoice number.
The emitter can complete it according to different modalities, independently from the modalities of initial dropping:

- In Portal or API mode, in the space "Emitted invoices", a form or request allows to add new documents of proof and/or missing information in the comment section.
- In EDI mode, a new invoice flow can be emitted while adding new document in the corresponding section. Yet, it is not permitted to add a new comment to the invoice.

The invoice acquires the status "Completed" when the supplier has added a new comment/document of proof. A new pivot flow is transmitted to the recipient, including the original invoice and the new elements.
The dates of suspension/completion are shown in the records of the invoice on the portal Chorus Pro or through an API. Those information are the new global payment delay's legal base for calculation.

3.11 The different invoicing frameworks

3.11.1 Consideration procedures for the specific invoicing frameworks

Chorus Pro will cover the specific invoicing cases related to

- subcontracting where the subcontractor is entitled to direct payment[20],
- co-contracting,
- invoicing of memoranda on justice costs,
- ICT reimbursements requests,
- for works contracts.

In order to implement the processes related to these specific cases, an invoicing framework must be specified for each invoice sent. Such information is provided in EDI mode through the indication of an invoicing framework. In Portal mode (submission or manual input), it is made possible to select an invoicing framework through a drop down list. 24 invoicing frameworks allow the issuer to specify the type of invoicing document sent. These different frameworks are prepared based on the role of the issuer of the document in the invoicing process. The usable invoicing framework in EDI mode are described in the management rule G1.35.

Role of the submitter	Object submitted	Invoice framework
A supplier or an authorised representative	Invoice	A1
	Invoice already paid (e.g.: bank card)	A2
	Memorandum on justice costs	A3
	Draft monthly statement	A4
	Account statement	A5
	Work invoice document sent to a financial service	A6
	Draft final statement	A7
	General and definitive statement	A8
A subcontractor	Invoice	A9
	Draft monthly statement	A10
A joint contractor	Invoice	A12
	Draft monthly statement	A13
	Draft final statement	A14
Project management as part of the invoicing of a works contract	Account statement	A15
	Validated account statement	A16
	Draft general statement	A17
	General statement	A18
A contracting authority as part of the invoicing of a works contract	Validated account statement	A19
	General statement	A20
A beneficiary of the ICT reimbursement	Request for ICT reimbursement	A21
Documents submitted through a work contract invoicing procedure and a « tacit » procedure		
A supplier or an authorised representative	Draft general statement*	A22
	General and final tacit statement	A23
Project management	General and final tacit statement	A24
A contracting authority as part of the invoicing of a works contract	General and final statement**	A25

* Submission of a draft general statement by the supplier is allowed as part of a "tacit" procedure according to the article 13.4.4 of "Cahier des clauses administratives générales applicables aux marchés publics de travaux" (CCAG Travaux) or "General Conditions of Contract for work contracts" (GCC for work contracts)
** Submission of a general and final statement by the contracting authority is allowed as part of a "tacit" procedure according to article 13.4.5 of GCC for work contracts

[20] "Only the top tier subcontractors can benefit from direct payments, second tier subcontractors and lower ranking subcontractors are not entitled to this" (Instruction no. 12-012-M0 of 30 May 2012, http://circulaire.legifrance.gouv.fr/pdf/2012/06/cir_35389.pdf). Suppliers relying on successive subcontracting (beyond rank 1) are not entitled to use Chorus Pro. Only invoices in the amount of EUR 600 or above are concerned.

3.11.2 Focus on the use cases of the A2 invoicing framework

The A2 invoicing framework "Facture déjà payee" [already paid invoice] permits to transmit to a public recipient an invoice or a credit note that doesn't lead to a financial or accountable operation (Liquidation, title creation, treasury operation, disbursement, repayment) et that doesn't require the creation of a payment request to take in charge the sender's invoice.

Any invoice, credit note, down payment or regularization payment which have a null payable amount must be transmitted with thin invoicing framework. It particularly concerns:

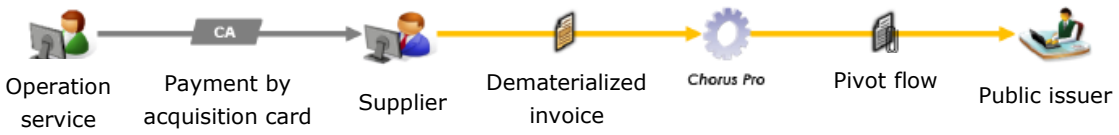
- Acquisition cards,
- Balance invoices that are issued after a validated account payment in the case of a work contract

<u>Case of the purchase card</u>

In the case of a service payed with a acquisition card, the recipient can ask the invoices of those services to link them with the bank statement. It is notably the case for services payed with level 1 purchase cards.

In this case, an invoice linked with those expenses can be transmitted by the supplier through Chorus Pro using the invoicing framework A2 et indicating null payable amounts.

The transmission of the bank statement is done accordingly to the current modalities.

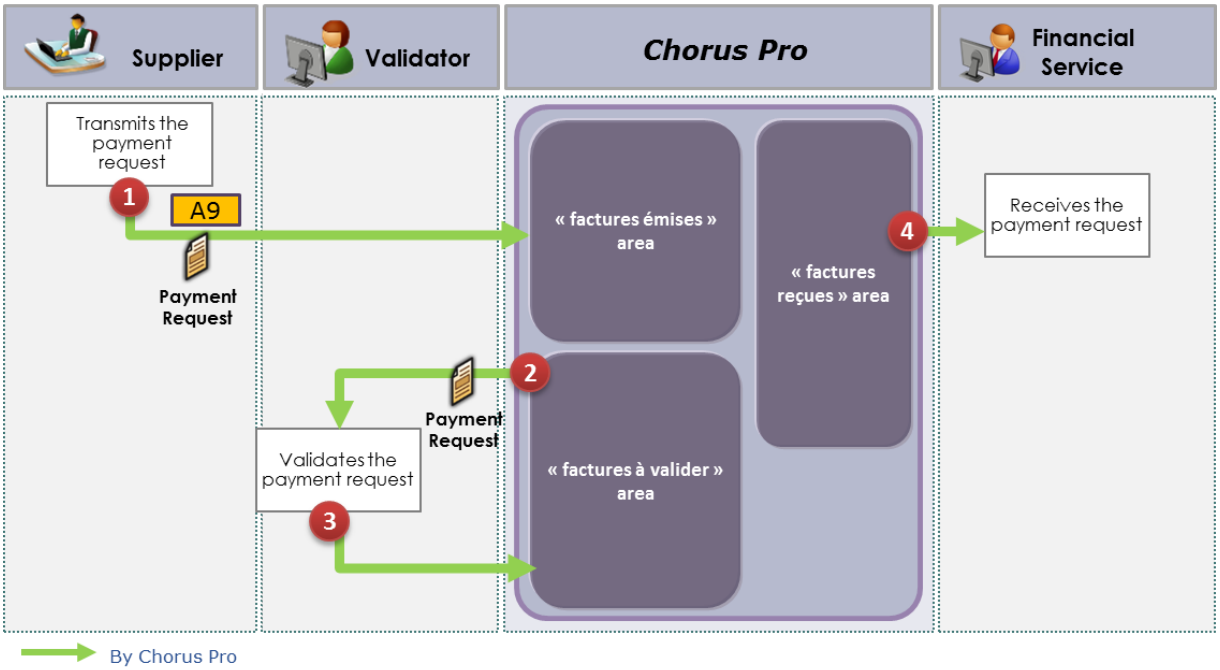


3.11.3 Focus on the validation procedures

Some invoice frameworks may require approval of the invoice by the stakeholders before transmission to the recipient, when there are subcontractors or joint contractor. Thus, the indication by the supplier of the identification data of the validator (the "validating entity" of the flows presented in part 5) is compulsory for some billing frameworks (submission of the invoice bill or draft breakdown by a subcontractor or joint contractor, in particular: frameworks A9, A10, A13, and A14).

If items which require multiple validations are submitted, the first validator will indicate the contact information allowing the identification of the next validator. The validations are performed in Portal or Service mode.

The diagram below describes the standard validation process of an invoice in Chorus Pro:

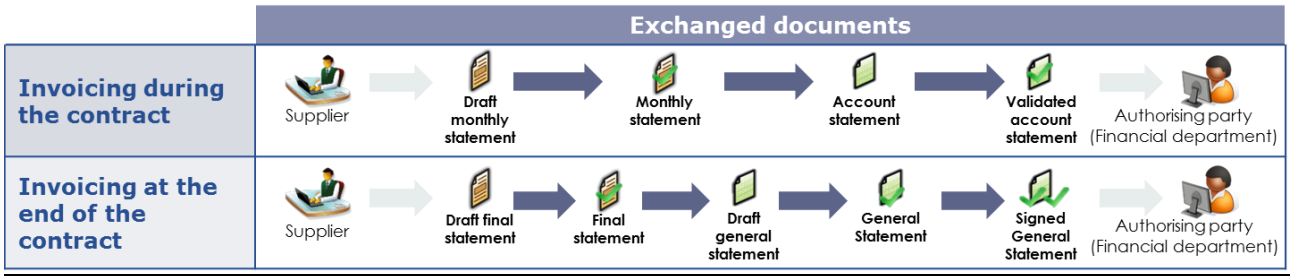


The validation procedures are explained in the appendix "Processus de facturation" of external specifications.

3.11.4 Focus on the procedure for taking into account the works contract documents on Chorus Pro

The works contracts mentioned below are subject to the General Conditions of Contract for works contracts (when the establishment of an account statement by a project manager and the establishment of a validated account by a contracting authority are required).

In this regard, Chorus Pro will cover the following invoicing processes:



Throughout the rest of the document, these acronyms may identify operator taking part in the invoicing procedures:

- **PM:** Project Manager
- **CA:** Contracting Authority

Throughout the rest of the document, these acronyms may identify the type of invoicing document sent:

- **DMS**: Draft monthly statement produced by a supplier
- **AS**: Account statement produced by a project manager
- **VAS:** Validated account statement produced by a contracting authority
- **DFS:** Draft final statement produced by a supplier
- **DGS:** Draft general statement produced by a project manager
- **GS:** General statement produced by a contracting authority
- **SGS:** Signed general statement produced by a supplier
- **GFTS:** General and final tacit statement produced by a supplier or a project manager
- **GFS**: General final statement produced by a contracting authority as part of a "tacit" procedure

Applied principles:

- Chorus Pro allows to send an invoicing document without reference to a previous invoicing document (initial submission) or with reference to a previous invoicing document previously sent (link).
- The submission modes allowed (EDI, Portal, Service) depend on the invoicing framework. You are not allowed to entry a work contract invoice with Service or Portal mode.
- The dematerialisation process may be started at any moment of the invoicing process.

Initial submission and link:

- An initial submission is the start of an invoicing process by the submission of an invoicing document by the supplier, the project manager or the contracting authority. Submission of a draft monthly statement or a final general statement by the supplier is considered as the nominal use case.
- An association consists of attaching a new document to a previous document in order to complete the same invoicing file.
- An operator cannot link a work invoice with a previous document he submitted himself on Chorus Pro (except for "tacit" procedures).

Submissions mode allowed by invoice framework:

- The supplier only, who can be a subcontractor, a joint contractor or an authorised representative, is allowed to use the EDI mode, if he is the producer of the invoice and if it's an initial submission.
- For project manager and contracting authority and for document transmitted by a different actor than the author of the document, the portal or service mode should be used.
- To link a document to a previous document, only service and portal mode are allowed.

	Emision mode accepted			
	EDI mode		PDF in Portail mode	PDF in Service mode
	Initial transmission	Link		
A4 - Draft monthly statement by a supplier	✓	N/A	✓	✓
A5 - Account statement by a supplier	✗	✗	✓	✓
A6 – Work invoice document sent to a financial service	✓	✗	✓	✓
A7 - Draft final statement by a supplier	✓	N/A	✓	✓
A8 - General and definitive statement by a supplier	✓	✗	✓	✓
A10 - Payment request by a subcontractor	✓	N/A	✓	✓
A13 - Draft monthly statement by a joint contractor	✓	N/A	✓	✓
A14 - Draft final statement by a joint contractor	✓	N/A	✓	✓
A15 - Account statement by a projet manager	✗	✗	✓	✓
A16 - Validated account statement by a project manager	✗	✗	✓	✓
A17 - Draft general statement by a project manager	✗	✗	✓	✓
A18 - General statement by a project manager	✗	✗	✓	✓
A19 - Validated account statement by a contracting authority	✗	✗	✓	✓
A20 - General statement by a contracting authority	✗	✗	✓	✓
A22 - Draft general statement by a supplier	✓	✗	✓	✓
A23 - General and final tacit statement by a supplier	✗	✗	✓	✓
A24 - General and final tacit statement by a project manager	✗	✗	✓	✓
A25 - General and final statement by a contracting authority	✗	✗	✓	✓

<u>Identification of the operators of a work contract:</u>

- The identity of the supplier and the final recipient must be specified during the initialisation of the invoicing process. The "validators" of each document filed must be specified at each stage.
- The supplier has to be the same during all the invoicing process and must be specified.
- The features of Chorus Pro (consulting/submission/validation) are open to project managers. To specify a project manager, the supplier can use "validator" tag if he uses the EDI mode, or search the structure in the directory of the structures if he uses portal or service mode.
- The features of Chorus Pro (consulting/submission/validation) are open to contracting authorities, if the public structure specifies on its structure configuration that a contracting authority is acting on this structure (has a CA) or if the public structure creates a structure especially for the contracting

authority (CA only). To specify a contracting authority, the supplier can use "debtor" tag if he uses the EDI mode, or search the structure in the directory of the structures if he uses portal or service mode and specify it in the final recipient field. In the case of a "CA only", the supplier can therefore specify another recipient than the final recipient in the field final recipient.

Type of invoicing:

- A work contract document should not be a credit note.

Invoice life cycle:

- The supplier has access to the life cycle in EDI mode for all documents he submitted but only these ones. For the entire invoicing file, he receives mail notification or can see it at any moment in portal and service modes.
- All operators have access to the life cycle of an invoicing file in service and portal modes if they are identified oh the documents.

Notifications:

- Each operator receives an email notification once per day for statuses changes on a document he submitted himself (for example: rejected, paused…).
- Each operator receives an email notification once per week for statuses changes on a document he is mentioned.
- When a new file is deposited, the identified operators, whose operations have preceeded this deposit, receive notifications. The following table shows them:

Invoicing frameworks	Depositor	Other operator notified
A5	Supplier	PM (if entered)
A6	Supplier	PM (if entered) and CA (if entered)
A8, A23	Supplier	PM (if entered) and CA (if entered)
A15, A17	PM	Supplier
A16	PM	Supplier and CA (if entered)
A18	PM	CA (if entered)
A19, A25	CA	Supplier and PM (if entered)
A20	CA	PM (if entered)
A22	Supplier	PM (if entered)
A24	PM	Supplier

- When the status of a work invoice is "Mise en paiement" [Payment], then all the operators (Contrating Authority, Project Manager, validators and supplier) receive notifications.

Invoice framework combination:

Invoice Framework	Submitter	Invoice type	Initial submission allowed	Previous document	Next document
A4	Supplier	DMS	YES	X	A15 - A19
A5	Supplier	AS	YES	X	A19
A6	Supplier	DMS/AS/VAS/DFS/DGS/GS/SGS	YES	X	X
A7	Supplier	DFS	YES	X	A17 - A20 - A22

A8	Supplier	SGS	YES	A17 - A22 - A18 - A20	X
A10	Subcontractor	PR	YES	X	X
A13	Joint contractor	DMS	YES	X	A15 - A19
A14	Joint contractor	DFS	YES	X	A17 - A20 - A22
A15	PM	AS	YES	A4 - A13	A19
A16	PM	VAS	YES	X	X
A17	PM	DGS	YES	A7 - A14	A20 - A22
A18	PM	GS	YES	X	A8 - A24
A19	CA	VAS	YES	A4 – A5 - A13 - A15	X
A20	CA	GS	YES	A7 - A14 - A17	A8 - A24 - A25
A22	Supplier	DGS*	YES	A7 - A14 - A17	A20 - A23
A23	Supplier	GFTS	X	A22	X
A24	PM	GFTS	YES	A18 - A20	X
A25	CA	GFS*	X	A20	X

**In case of a "tacit" procedure*

For instance: the invoice framework A4 can be used by a supplier to submit a draft monthly statement. It can only be an initial submission. Therefore, no other previous document can be linked with it. Then, a link to it can be made by an operator who submits a document with the invoice framework A15 or A19.

<u>Recap of the use cases:</u>

All the processes are specified in the appendix Processus de facturation of external specifications.

The table below summarises all of the defined use cases to enable coverage in Chorus Pro of the items necessary for **invoicing during the contract**:

Submission of an item	Draft monthly statement Produced by the supplier	Monthly statement Produced by the project manager	Account statement Produced by the project manager	Validated account statement Produced by the contracting authority
Supplier	✓ ▪ Submission by the supplier of a draft statement and project manager/contracting authority validation on the portal	(Attachment to the account statement)	✓ ▪ Submission by the supplier of an account statement (based on the preliminary discussions with the project manager outside of the CPP)	✓ ▪ Submission by the supplier of a validated account statement (based on the preliminary discussions with the contracting authority outside of the CPP)
Project manager	N/A	(Attachment to the account statement)	✓ ▪ Submission by the project manager of the account statement (based on the preliminary discussions with the supplier in CPP or outside of CPP)	✓ ▪ Submission by the project manager of the validated account statement (based on the preliminary discussions with the project manager outside of CPP)
Contracting authority (service mode only through an upstream portal)	N/A	*(Attachment to the validated account statement)*	*(Attachment to the validated account statement)*	✓ ▪ *Submission by the contracting authority of the validated account statement (based on the preliminary discussions with the supplier and the project manager in CPP or outside of CPP)*

Submission of a draft monthly statement by the supplier is considered as the nominal use case. Other use cases are available are offered which enable a transitory management of work contracts when a stakeholder does not use Chorus Pro.

The table below summarises all of the defined use cases to enable coverage in Chorus Pro of the items necessary for **invoicing at the end of the contract**:

Submission of an item	Draft final statement Produced by the supplier	Final statement Produced by the project manager	Draft general statement Produced by the project manager	General Statement Produced by the contracting authority	Signed General Statement Produced by the supplier
Supplier	✓ ▪ Submission by the supplier of a draft statement and project manager/ contracting authority validation on the portal	N/A	N/A	N/A	✓ ▪ Submission by the supplier of the general and definitive statement (after preliminary discussions with the contracting authority/ project manager in CPP or outside of CPP)
Project manager	N/A	(Attachment to the draft general statement)	✓ ▪ Submission by the project manager of the draft general statement (based on the preliminary discussions with the supplier in CPP or outside of CPP)	✓ ▪ Submission by the project manager of the general statement (based on the preliminary discussions with the contracting authority outside of CPP)	N/A
Contracting authority ***(service mode only through an upstream portal)***	*N/A*	*N/A*	*(Attachment to the general statement)*	✓ ▪ *Submission by the contracting authority of the general statement (based on the preliminary discussions with the project manager in CPP or outside of CPP)*	*N/A*

Submission of a draft final statement by the supplier is considered as the nominal use case. Other use cases are available are offered which enable a transitory management of work contracts when a stakeholder does not use Chorus Pro.

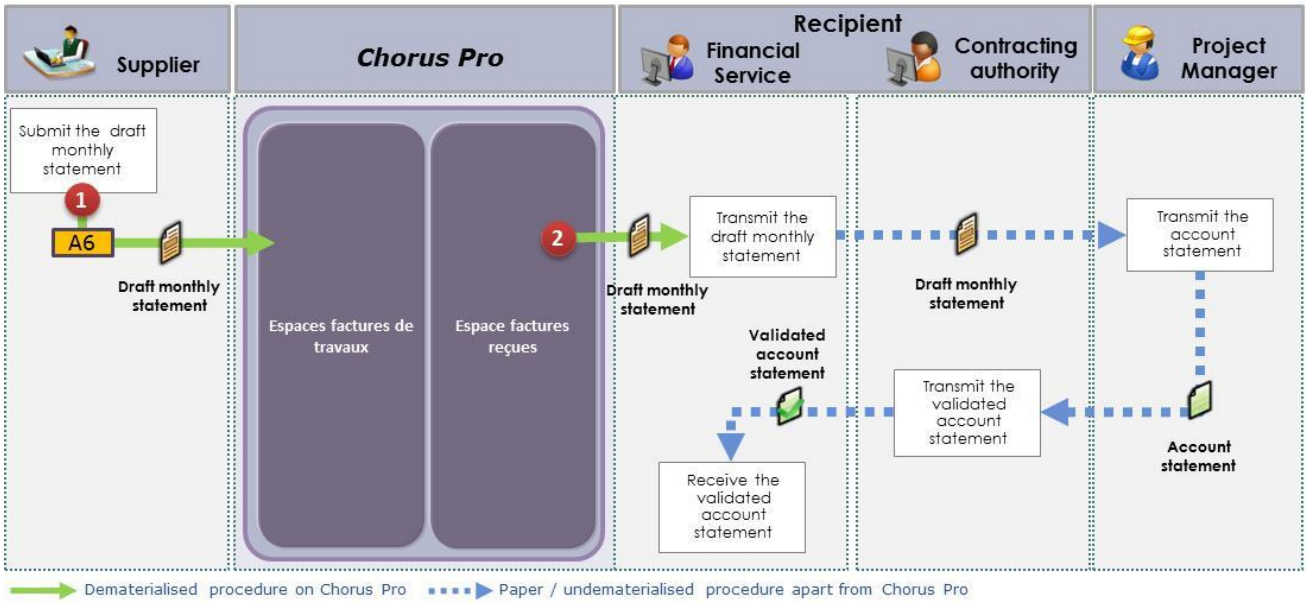
<u>A6 invoicing framework specificities</u>

A6 invoicing framework enable suppliers (contract holders) to transmit any work invoicing piece directly to the final recipient (the financial service). It can only be used on demand of the contracting authority, in the following cases :

- If the contracting authority and the financial service are in the same entity;
- If the project manager is internal and the validation procedure is realised apart from Chorus Pro;
- In transitory period, if the project manager isn't concerned by the dematerialisation obligation and if no contract disposition has been taken to arrange it.

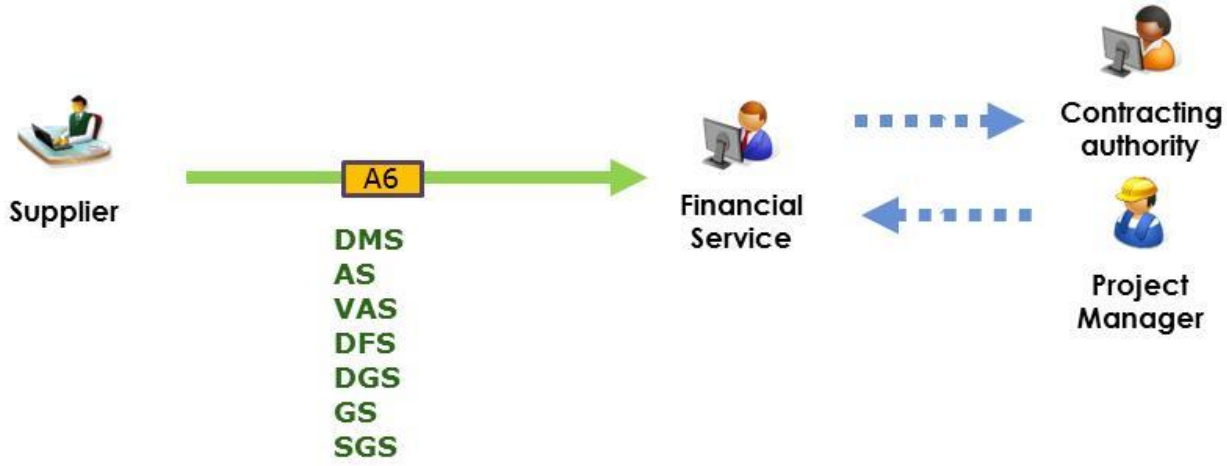
This framework can be used by the work contract supplier during or a the end of a contract period and implies a upstream or downstream work with the others actors of the contract (Project manager and contracting authority). The A6 transmitted document appears in the "Invoices received" space of the recipient.

Exemple of the use of the A6 framework with the transmission of an work invoicing piece (Draft monthly statement) from the supplier to the recipient financial service :



The previous example shows the validation procedure of an work invoice document apart from Chorus Pro : once the invoicing piece transmitted to the financial service, it transmits it to the competent actor (Projet manager or contracting authority) to initiate the downstream procedure apart from Chorus Pro.

Only the supplier (contract holder) can submit an A6 invoicing piece. The work invoice documents concerned by this A6 framework are the **DMS**, the **AS**, the **VAS**, the **DFS**, the **DGS**, the **GS** and finally the **SGS**.



No document can preceed or follow the A6 invoicing piece submitted by the supplier. The work invoice document is limited to this single piece. The update of the status can be realized in the "Invoices received" space of the financial service.

<u>Use of transitional management case for works contracts</u>

The use of a transitional management case must be agreed by all stakeholders (contracting party, representatives, project managers, contracting authorities and recipients).

3.11.5 Follow-up report of the validations and associations

When an invoice is validated by one or more validators or when several work document have been linked to an invoice, a follow-up report (PDF) is add as a an additional document of the invoice in the Pivot flow received by a recipient (additional document BORxxx.pdf)

This follow-up report mentions the information below:

- Issue date of the invoice
- Validation or association date of the invoice
- Structure who made the transmission/validation/submission
- User who made the transmission/validation/submission if necessary
- Comments of the user when he transmitted/validated/submitted the invoice if necessary

The information in the follow-up report make possible to identify the information of the validations/submissions without using "validation cycle" item of the Pivot flow.

Exemple:

Liberté • Égalité • Fraternité
RÉPUBLIQUE FRANÇAISE

Chorus Pro

Bordereau de suivi

Structure / Service	Utilisateur	Date	Etat	Commentaire	N° de facture associée
[illegible]	[illegible]	01/09/2016 01:52:29	VALIDEE_1	validation OK	20160000000000277847
[illegible]	[illegible]	01/09/2016 01:52:30	DEPOSEE		20160000000000277847

4 THE MANAGEMENT OF THE STRUCTURE AND USER ACCOUNTS

4.1 The management of the structure and user accounts for the private suppliers

4.1.1 General principles of the management of the structure and user accounts

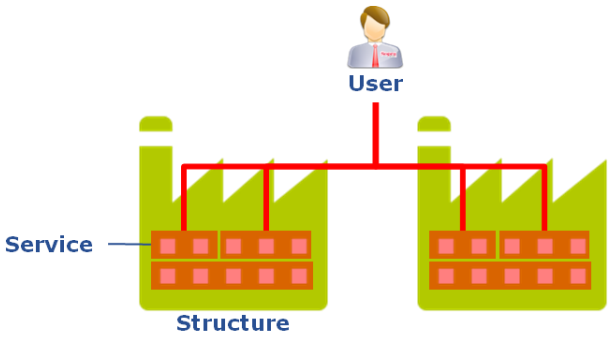
The organisation of the structures

A structure as defined in Chorus Pro corresponds to a physical structure of the supplier identified by a unique identifier (SIRET number, intra-community VAT number or other type of identifier). A structure corresponds to an autonomous budget.
It is not possible to create several structures within Chorus Pro for the same unique identifier.
The same structure can have different divisions or services that can be defined in Chorus Pro.
In the case where a company has subsidiaries, each with its own physical structure and its own identifier, it must have as many structures in Chorus Pro as it has subsidiaries.

Connecting users to the structures in the solution

The users of Chorus Pro are attached to one or more structures.
Different users can be attached to the same structure.
In the various areas in which the user is authorised, the different structures are aggregated.
A user can be attached to several structures particularly in the case where:

- Their company is organised into subsidiaries and they want to be able to interact with Chorus Pro on behalf of several subsidiaries.
- They are delegated to act on behalf of one or more companies on Chorus Pro.



The authorisations assigned to a user of the solution

Chorus Pro offers various user profiles:

- **The primary manager** is an individual who administers the profile of the structure and manages the authorisations of all the users connecting to the structure. The primary manager can search and view all of the information relating to the actions performed by the users of their structure on Chorus Pro.
- **The secondary manager** is an individual who can manage the profile of the structure and manage the authorisations of simple users. The secondary manager can assign simple users to their entity but has no ability to assign manager profiles. Several secondary managers may be appointed by the primary manager. The secondary manager can search for and view all of the information relating to the actions performed by the users of their structure on Chorus Pro.
- **The simple user** is an individual who has an account in Chorus Pro. The simple user can search for and submit the invoices submitted or entered on the "Issued invoices" area of the structures to which such user is assigned. The user only accesses the areas for which they are authorised. The simple user cannot modify data in the structure profiles to which they are assigned.

According to the user profile, certain areas or features of the area are accessible to all of the users by default or may be subject to authorisation by the manager. The table below shows the main features allowed per profile:

	Primary manager	Secondary manager	User
Management of the structure in the "Users and structures" area • Create a structure • Modify the data of the structure • Sign a mandate • Add an open space • Add an attachment • Add, modify the services of the structure • Duplicate a structure	X	X	
Management of the users in the "Users and structures" area • Connect a user • Manage a request for authorisation to an area, the secondary administrator profile or a service code • View the authorisations of the users and secondary managers • View the subscriptions of the users and secondary managers • View the history of the actions of a simple user and a secondary manager	X	X	
Management of the user account in the "Account" area • Modify the account • Create a structure • Consult and request a connection to a structure or a service • Consult and request a subscription to an area	X	X	X
"Issued invoices" area • View the invoices sent by all of the users and managers (managers only) • View the invoices issued by the user • Submit and enter invoices	X	X	*X* *(According to the authorisations)*
"Works invoices" area • View the works invoices sent by all of the users and managers (managers only) • View the works invoices issued by the user • Submit works invoices	X	X	*X* *(According to the authorisations)*
"Invoices to validate" area • View the invoices validated by all of the users and managers (managers only) • View the invoices validated by • Validate the invoices to validate	X	X	*X* *(According to the authorisations)*

"ICT reimbursements" area • View the ICT reimbursement requests sent by all of the users and managers (managers only) • View the reimbursement requests issued by the user • Enter the reimbursement claims	X	X	*X* *(According to the authorisations)*
"Memoranda on justice costs" area • View the memoranda on justice costs issued by all of the users and managers (managers only) • View the memoranda on justice costs issued by the user • Submit, enter or transmit memoranda on justice costs	X	X	*X* *(According to the authorisations)*
"Commitments" area • View the purchase orders issued by the State services	X	X	*X* *(According to the authorisations)*
"Received requests" area • View the received requests • Process the received requests	X	X	*X* *(According to the authorisations)*
"Issued requests" area • View the issued requests • Issue a request to support or the invoice recipients	X	X	*X*
"Flow tracking and qualification" area • View the flows qualified by all of the users and managers (managers only) • View the flows qualified by the user • Qualify a flow	X	X	*X* *(According to the authorisations)*

4.1.2 The features of account management

The management of the structure profile

By connecting to the "Users and structures" area, the primary or secondary managers can:

- Create a new structure,
- Modify the legal and commercial information of the structure,
- Subscribe for, validate and revoke a billing mandate,
- Customise the areas that are available to users associated with the structure (Issued invoices, Received invoices, etc.),
- Add, remove an attachment,
- Modify the organisational scheme of the structure and services that comprise it through the service codes affecting the substructures,
- Duplicate the structure. This operation consists in transferring some parameters from a structure to another. The parameters kept are the beneficiaries (for TIC reimbursements) and provider (of justice costs invoice) categories (if entered), the services, the subscriptions and the connections.

The "Users and structures" area allows the managers to indicate the following structure settings items:

- Activate sending life cycle information to the structure through Chorus Pro in EDI mode,
- Activation of the dedicated area at the farm management centre and associated settings (CAP (Common Agricultural Policy) identifying number and category of beneficiary),
- Setting of the elements relating to the issuance of memoranda on justice costs (category of supplier and social system).

The management of the users of the structure

By connecting to the "Users and structures" area, the primary and secondary managers can:

- Create a new user on Chorus Pro and attach them to the structure (however, the user must activate their user account),
- Connect, validate the connection or delete a user's connection to the structure,
- Subscribe, validate the subscription or cancel the subscription of a user to an area subject to validation,
- Authorise, validate or delete the authorisation of a user to one or more service codes (e.g., to allow viewing access only to certain invoices),
- Authorise or delete the authorisation of a user as the primary or secondary manager (feature accessible only to a primary manager),
- Modify the authorisations of managers and users,
- View the history of the actions of a simple user and a secondary manager.

The management of the user account

By connecting to the "Account" area, the primary managers, the secondary managers and the users can:

- View, modify, deactivate or reactivate their account,
- Request a connection or delete a connection to a structure,
- Create a structure,
- View the profile of the structures to which they are attached,
- Request or delete the subscription to one or several areas subject to authorisation,
- Subscribe to or cancel the subscription to an area not subject to authorisation,
- Request or delete the authorisation to one or several service codes,
- Add or remove an attached file.

4.2 The management of structure and user accounts for public entities

4.2.1 General principles of the management of the structure and user accounts

The organisation of the structures

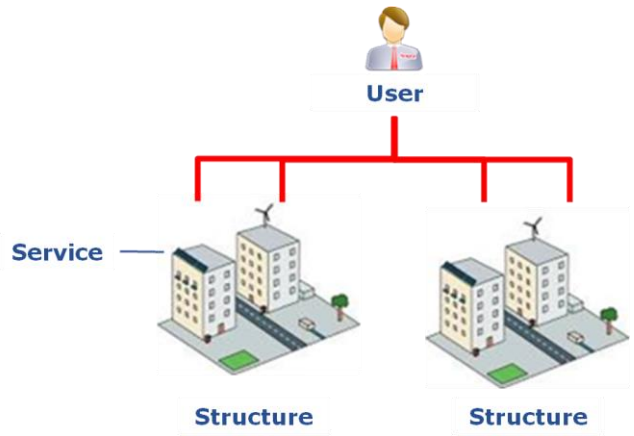
A structure receiving invoices as defined in Chorus Pro corresponds to a physical structure of a public entity (national public institution or local public sector entity) identified in a unique manner by its SIRET number.
It is not possible to create several structures within Chorus Pro for the same unique identifier.
Public entities with SIRET numbers for one or more supplementary budgets must create as many structures as they have SIRET numbers.
The same recipient structure can include different divisions or services that can themselves be invoice recipients.
It is therefore possible to manage the sub-structures in Chorus Pro through service codes.
In the event where several of these services would like to interact with Chorus Pro, it is possible to propose separate views that are organised through the management of authorisations to, for example, authorise the users of a service on a specific area. For example, some agents may be authorised to send invoices while others will only be authorised to receive them.

Connecting users to the structures

Different users of Chorus Pro can be attached to the same structure.
A user can be assigned to different structures, particularly in the case where:

- The national public institution or local public sector entity is organised into separate budgets each with an identifier (SIRET number) and the user must be able to interact in Chorus Pro on all of these budgets,
- They are the manager of one or several public structures delegated to act on their behalf on Chorus Pro.

In the various areas in which the user is registered, the different structures are aggregated.



The authorisations assigned to a user

Chorus Pro offers many user profiles:

- **The primary manager** is an individual who administers the profile of the structure and manages the authorisations of all the users attached to the structure. The primary manager can search and view all of the information relating to the actions performed by the users of their structure on Chorus Pro.
- **The secondary manager** is an individual who can manage the profile of the structure and manage the authorisations of simple users. The secondary manager can connect simple users to their entity but has no ability to attach manager profiles. Several secondary managers may be appointed by the primary manager. The secondary manager can search and view all of the information relating to the actions performed by the users of their structure on Chorus Pro.
- **The simple user** is an individual who has an account in Chorus Pro. The simple user can search for and submit the invoices submitted or entered on the "Issued invoices" area of the structures to which such user is attached. The user only accesses the areas for which they are authorised. The simple user cannot modify data in the structure profiles to which they are attached.

According to the user profile, certain areas or features of the area are accessible to all of the users by default or may be subject to authorisation by the manager. The table below shows the main features allowed per profile:

	Primary manager	Secondary manager	User
Management of the structure in the "Users and structures" area • Create a structure • Modify the data of the structure • Sign a mandate • Add an open space • Add an attachment • Add, modify the services of the structure • Duplicate a structure	x	x	
Management of the users in the "Users and structures" area • Connect a user • Manage a request for authorisation to an area, the secondary administrator profile or a service code • View the authorisations of the users and secondary managers • View the subscriptions of the users and secondary managers • View the history of the actions of a simple user and a secondary manager	X	x	
Management of the user account in the "Account" area • Modify the account • Create a structure • Consult and request a connection to a service • Consult and request a subscription to an area	X	x	x
"Issued invoices" area • View the invoices sent by all of the users and managers (managers only) • View the invoices issued by the user • Submit and enter invoices	X	X	*X* *(According to the authorisations)*
"Received invoices" area • View the invoices • Download the invoices • Update of the status of the invoices	X	X	*X* *(According to the authorisations)*
"Works invoices" area • View the works invoices sent by all of the users and managers (managers only) • View the works invoices issued by the user • Submit works invoices	X	X	*X* *(According to the authorisations)*
"Invoices to validate" area • View the invoices validated by all of the users and managers (managers only) • View the invoices validated by	X	X	*X* *(According to the authorisations)*

• Validate the invoices to validate			
"Commitments" area • View the purchase orders issued by the State services	X	X	*X* *(According to the authorisations)*
"Issued requests" area • View the issued requests • Issue a request to support or the invoice recipients	X	X	*X*
"Flow tracking and qualification" area • View the flows qualified by all of the users and managers (managers only) • View the flows qualified by the user • Qualify a flow	X	X	*X* *(According to the authorisations)*

4.2.2 The features of account management

<u>The management of the structure profile</u>

The local command and control repository of the DGFIP enables the completion of the structure profiles of the public structures. This data can be modified by the primary and secondary managers of the structure. By connecting to the "Users and structures" area, the managers can:

- Modify the legal and commercial information of the structure,
- Subscribe to and validate a billing mandate,
- Customise the areas that are available to users associated with the structure (issued invoices, received invoices, etc.),
- Add, remove an attached file,
- Modify the organisational scheme of the structure and services that comprise it through the service codes affecting the substructures
- Duplicate the structure. This operation consists in transferring some parameters from a structure to another. The parameters kept are the services, the subscriptions, the connections and the parameters of public structure.

The "Users and structures" area allows the managers to indicate the following structure settings items:

- Activate sending life cycle information to the structure through Chorus Pro in EDI mode,
- Activate sending billing data to the structure through Chorus Pro in EDI mode,
- Activation of the check for the presence of the service code for the invoices sent by suppliers of the structure,
- Activation of the uploading of the "Released for payment" status by the structure during the processing of the invoices of the suppliers,
- Activation of the check for the presence of the commitment reference for the invoices sent by suppliers of the structure. The activation of the presence of the commitment reference enables setting the activation of the check for the presence of the commitment reference at structure services level. In the case where this check is not activated in any of the structure services, the check is applied to all services of the structure. By default, this setting is set to "NO" for the specific service code for intra-public sphere invoicing "FACTURES_PUBLIQUES".

The "Users and structures" area also allows the managers to indicate the following structure service setting item:

- Activation of the check for the presence of the commitment reference for the invoices sent by the suppliers.

If no setting item is specified at the service level, the settings defined for the structure apply to this structure service.

The management of the users of the structure

By connecting to the "Users and structures" area, the managers can:

- Validate or delete a user's connection to the structure,
- Customise the spaces that are available to users associated with their structure (issued invoices, received invoices, etc.),
- Subscribe, validate the subscription or cancel the subscription of a user to an area subject to validation,
- Authorise or delete the authorisation of a user as the primary or secondary manager (feature accessible only to a primary manager),
- Modify the authorisations of managers and users,
- View the history of the actions of a simple user and a secondary manager.

The authorisation procedures allow a manager to specify the roles and scope of interaction of the users with Chorus Pro.

The management of the user account

By connecting to the "Users and structures" area, the primary or secondary managers and users can:

- View, modify, deactivate or reactivate their account,
- Request a connection or delete a connection to a structure,
- View the profile of the structures to which they are attached,
- Request or delete the subscription to one or several areas subject to authorisation,
- Subscribe to or cancel the subscription to an area not subject to authorisation,
- Request or delete the authorisation to one or several service codes,

Add or remove an attachment.

5 AUTHENTICATION

Two methods allow users to be authenticated on Chorus Pro:

- Users who wish to use a third party value-added Portal are identified using an identifier specific to each user and provided by France Connect Entreprises.
- Users who wish to go through a third party information system to connect to their Chorus Pro areas in Service mode (API/web services integrated into the third party IS) do so through the technical identifier of the third party IS. The management of physical user authorisations is the responsibility of the third party IS.

5.1 Authentication on Chorus Pro through a third party "suppliers" portal

Today professionals (users acting on behalf of a company) have multiple accounts and passwords to access the different services offered by the French administrative entities. From the user perspective, access to State services is complicated by this multiplicity of identifiers.

One solution is to delegate user authentication to the identity providers. Identity management is then under the responsibility of an external identity provider, namely, the entity at which the user account is hosted.

France Connect is an IT project led by the Secrétariat Général à la Moderisation de l'Action Publique (SGMAP) and DINSIC. The objective is to implement an authentication delegation system that aims to simplify the relationship between users (both individuals and businesses) and all administrative entities.

5.1.1 The operating principle of France Connect Entreprises

A. The company accesses the home page of a third party portal with the API service offering of Chorus Pro.
B. It activates the France Connect button.
C. Multiple identity providers compatible with France Connect are thus offered: PLACE, etc.
D. The company chooses an identity provider and is authenticated using an already defined account (entries of it's login and password).
E. Once authenticated, the user gains access to the service offering of Chorus Pro.

France Connect is thus a web service that allows users to be identified and authenticated at the service providers through the intermediary of the identity providers.

The user is not required to have a specific username and password per application (service provider).

France Connect acts as a third party that links businesses and administrative entities to the identity providers. The authentication is transparent to an application using France Connect (it never directly interacts with the identity provider, it is France Connect that assumes this responsibility).

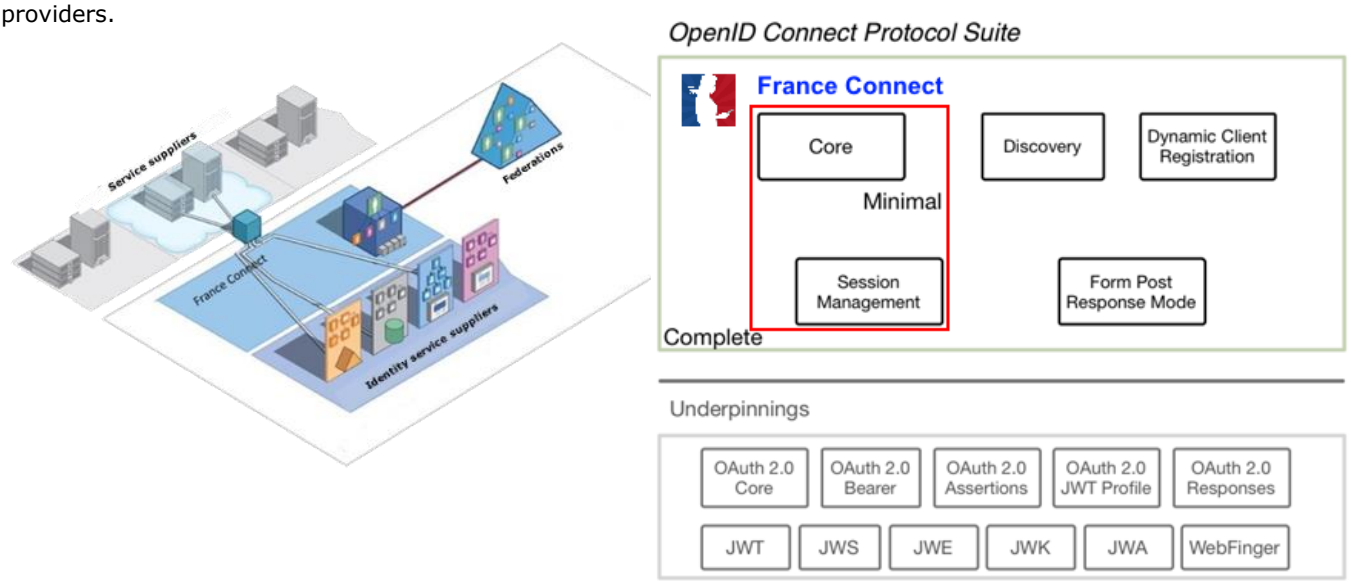
France Connect provides the different stakeholders with a unique identity for a physical person, called the pivot identity.

5.1.2 The implementation of France Connect for third party portals as part of Chorus Pro

The implementation of the France Connect services is described in detail on the website of the SGMAP: **https://doc.integ01.dev-franceconnect.fr/**
We present a streamlined version here, however, the most up-to-date information will be included in the link referenced above.
Assistance is available through a dedicated support service available at the address:
support@dev-franceconnect.fr

5.1.3 Technical description

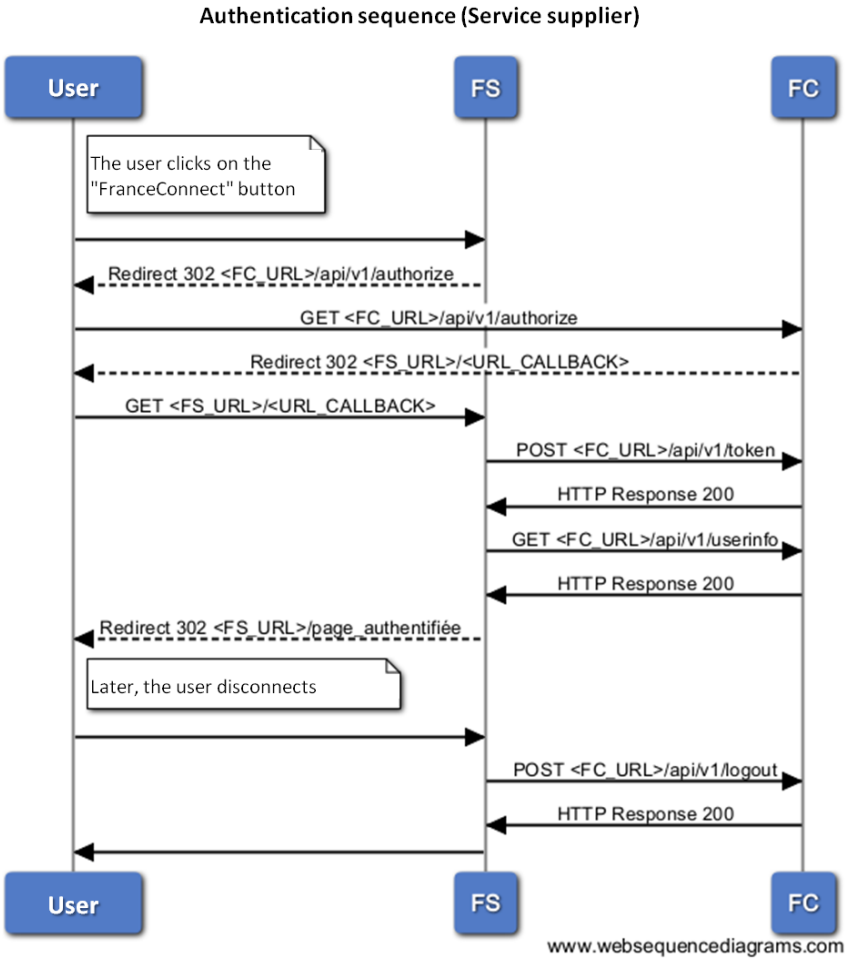
France Connect is a web service that acts as a trusted third party between Chorus Pro and the identity service providers.



France Connect implements the "core" and session management for the OpenId Connect standard.
OpenID Connect allows applications to verify the identity of users and obtain information about them based on the authentication performed with an authentication server.
OpenID Connect 1.0 is presented as an identity management overlay of the OAuth 2.0 authentication protocol.
The OAuth protocol specifications define the mechanisms used to obtain and use the tokens to access the resources.

5.1.4 Steps to connect to FranceConnect

Presentation of the service provider diagram:



Source of the diagram: https://doc.integ01.dev-franceconnect.fr/fournisseur-service

Each of the steps is described as follows:
1. <FC_URL>/api/v1/authorize REDIRECTION
Context: From the previous query, the service provider (FS) redirects to /api/v1/authorize to engage the authentication process.
Origin: FS
Target: FC
Call type: browser redirection
Request
URL:
<FC_URL>/api/v1/authorize?response_type=code&client_id=<CLIENT_ID>&redirect_uri=<FS_URL>%2F<URL_CALLBACK>&scope=<SCOPES>&state=<STATE>&nonce=<NONCE> Response
/
[…]

Order of the steps to connect to FranceConnect for an upstream portal:

Step 1: Register as a new service provider in order to receive a customer ID and a secret client
An online form is available at: https://doc.integ01.dev-franceconnect.fr/integration-fs/

Step 2: Obtain an OpenId Connect client

- Examples of client applications that operate based on the contract libraries are made available by France Connect at: https://github.com/france-connect/service-providers-examples.
- Other clients are available at the official site of OpenId Connect: http://openid.net/developers/libraries/.
    - Note: it is necessary to choose a product whose "Relying Party" characteristic is "Yes".

Step 3: Configure your OpenID Connect client,

With the EndPoints of France Connect (Authorisation, Token, UserInfo and Logout)
Authorisation endpoint: https://fce.integ01.dev-franceconnect.fr/api/v1/authorize
Token endpoint: https://fce.integ01.dev-franceconnect.fr/api/v1/token
UserInfo endpoint: https://fce.integ01.dev-franceconnect.fr/api/v1/userinfo
Logout endpoint: https://fce.integ01.dev-franceconnect.fr/api/v1/logout

5.2 Authentication on Chorus Pro from a third party IS

5.2.1 Operating principle for the authentication of a third party IS

Use of the Service mode by a partner requires the creation of a secure link between the user and Chorus Pro.

The implementation of this secure link is based on an exchange of certificates between the partner's information system and Chorus Pro. The security of the exchanges is ensured through a TLS connection.

The authentication of exchanges during interactions between the third party IS and Chorus Pro is based on the use of a unique technical identifier for the entire structure, irrespective of the physical user of the partner participating in the processes. This technical identifier is managed from the Portal of Chorus Pro through a "primary manager"-type user profile.

5.2.2 Creating a public structure technical identifier

A technical user account is created on the portal of Chorus Pro by a user using a "primary manager"-type user profile. This account cannot be used to log in Chorus Pro Portal.

To do this, it is sufficient to activate the Service mode in the settings of the structure and then provide a technical user name and a password with a minimum of 25 characters. These identifiers, which are specific to the technical user account, are exclusively dedicated to the interaction with Chorus Pro through API calls.

Chorus Pro then provides it with a public key necessary to secure the exchanges. This responds to a private key stored by Chorus Pro and enables the asymmetric encryption of the data exchanged between the partner structure and Chorus Pro.

5.2.3 Authentication security on Chorus Pro through a third party IS

<u>Establishing a secure connection</u>

The information system of the partner sends an access request to it’s third party information system, which forwards it to the API Manager of Chorus Pro.

The third party IS and Chorus Pro then conduct a mutual exchange of certificates enabling the security of the authentication request. The exchanged certificates are X.509 certificates, referenced and compliant with the European trust list, including French trust authorities as referenced in the Référentiel général de sécurité [General Security Reference] (RGS).
The certificate transmitted by the third party IS sends the public key that was transmitted to it by the public partner structure.
The third party IS verifies the validity of the certificate of Chorus Pro:

- Verification of the signature of the certificate, it’s relationship (authority) and the start and end dates of it’s validity
- Check on the non-revocation of the certificate

Chorus Pro verifies the validity of the certificate sent by the third party IS

- Verification of the signature of the certificate, it’s certification authority and the start and end dates of it’s validity
- Check on the non-revocation of the certificate
- Check for the presence of the public key of the partner in the list of keys accepted by Chorus Pro. If it is not recognised by the service for the validation and verification of certificates, the certificate is rejected.

Implementation of a technical user authentication through the login and password

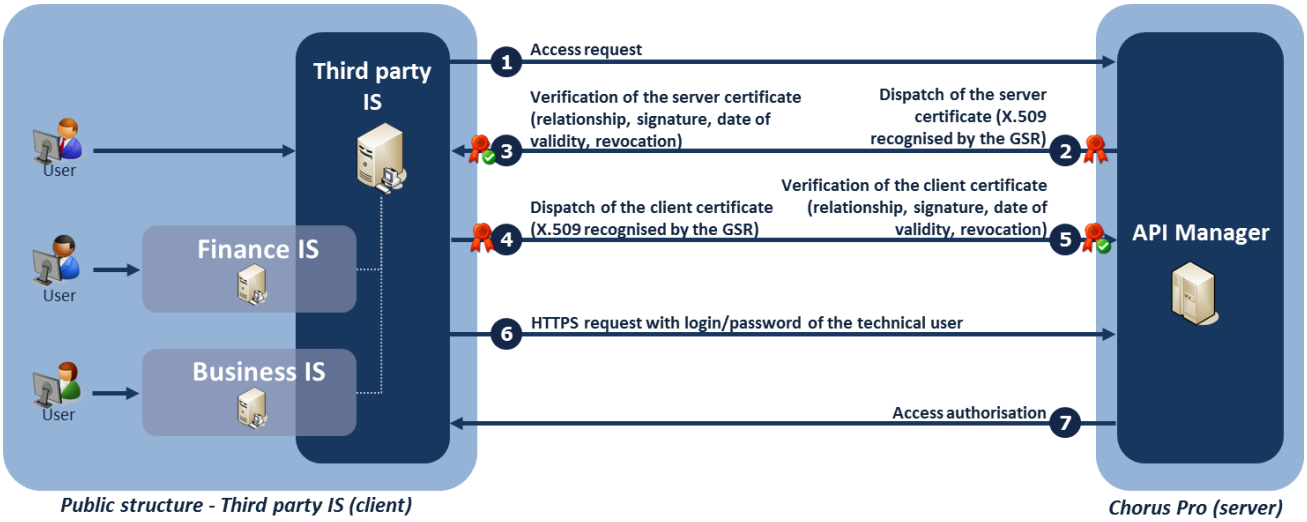
To define the perimeters (functions and data) accessible through the web services and meet the accountability demands and constraints for actions performed on the Chorus Pro Service Portal, an authentication of the technical user is implemented after the establishment of the secure connection with the partner.

As part of the login and password authentication, after the establishment of a secure connection with the partner application, the third party IS inserts the "Authorization" field in the HTTP header of the REST query. This field includes the following two elements separated with a blank space:

- The value "Basic" (authentication type)
- The login or identifier of the technical user invoking the service as well as the associated password. The two elements are separated with the ":" sign. The resulting chain is encoded in base64.

Here below is an example of an "Authorization" tag for a user with "username" as login and "password" as password, and the base64 encoding of the "username:password" series being "dXNlcm5hbWU6cGFzc3dvcmQ=":
Authorization:Basic dXNlcm5hbWU6cGFzc3dvcmQ=

Kinematics of authentication



Standards and references used

The standards and references recognised by Chorus Pro for the establishment of a secure connection are:

- TLS1.x: RFC 5246 and RFC 4346
- List of the Public Key Infrastructures (PKI) recognised by the European trust list: http://tlbrowser.tsl.website/tools[21]
- X509 certificate: RFC 5280

[21] French suppliers should refer to this list to PKIs recognised by the French "Secrétariat Général pour la Modernisation de l'Action Publique" [Secretary for the modernisation of public action] (SGMAP)

6 FLOW QUALIFICATION AND MONITORING AREA OF CHORUS PRO

6.1 The general principles

Chorus Pro includes a module for qualifying and checking the flows in the form of an area that can be accessed in portal mode and service mode. This area allows a structure that issues or receives invoices to qualify it's flows as part of it's connection to Chorus Pro and to monitor these flows once connected.

The aim of the flow qualification activities is to verify that the information systems react as intended when sending flows, and more specifically to:

- validate the methods for generating flows by the various stakeholders, whether sending or receiving invoices,
- ensure the proper functioning of the flow exchange procedures between the different information systems,
- ensure the successful integration of the flows into the information systems of the partners.

These qualification activities are also intended to identify the problematic behaviours of the various information systems in order to take corrective actions prior to being placed into production.

The flow monitoring capabilities allow the various public and private partners to ensure the proper receipt and integration of their flows by Chorus Pro.

6.2 The stakeholders

6.2.1 Private suppliers

The private suppliers who have opted for a direct connection to Chorus Pro can access the flow qualification area using the account identifiers that they will have already created on the portal of Chorus Pro.

Through the qualification area, private suppliers are able to:

- test the structure of the invoice type flows (E1, E2, E3) that they issue. For this, they can:
  - qualify the invoice type flows submitted on the qualification portal,
  - qualify the invoice type flows transmitted in EDI mode to the qualification area of Chorus Pro,
- test the connection of their information systems to Chorus Pro,
- test the ability of their information systems to receive and integrate the invoice life cycle flows (R flow),
- test the ability of their information systems to receive and integrate the acknowledgement flows generated by Chorus Pro in the return of the invoice flow.

The qualification area also allows private suppliers to generate connection forms in order to connect their information system to Chorus Pro, during qualification and then in production.

6.2.2 Local public sector entities and national public institutions

The local public sector entities and national public institutions exchange their flows with Chorus Pro through an exchange system of the DGFiP system to which they are connected. Chorus Pro enables them in this context to qualify the structure of the exchanged flows.

In the qualification area, the local public sector entities and national public institutions that receive invoices can also:

- test the ability of their information system to integrate the pivot flow issued by Chorus Pro,
- test the structure of the life cycle type flows (R) that they generate.

Local public sector entities and national public institution which issue invoices can test the structure of the flows that they generate by accessing the flow qualification area of Chorus Pro through the PIGP. This area allows them to:

- test the structure of the XML files corresponding to the invoice type flows that they generate,
- test the ability of their information systems to integrate the returns issued by Chorus Pro by downloading the invoice life cycle flows (R flows),
- test the ability of their information systems to receive an acknowledgement flow sent by Chorus Pro as flow-back of the invoice type flow.

6.2.3 Dematerialising operators

The dematerialising operators can access the qualification area to qualify the flow exchanges between the information systems, whether it is an invoice type (E1, E2 and E3 flows) or a life cycle type (R flow).

To do this, through the qualification area, they can:

- test the structure of the invoice type flows (E1, E2, E3) that they issue. It is possible for them to:
  - qualify the invoice type flows placed on the portal,
  - qualify the invoice type flows transmitted in EDI mode to Chorus Pro,
- test the connection of their information system to Chorus Pro,
- test the ability of their information systems to receive and integrate the returns issued by the Chorus Pro by downloading the invoice life cycle flows (R flow),
- test the ability of their information systems to receive and integrate an acknowledgement flow generated by Chorus Pro in the return of the invoice flow.

6.3 The features of the flow qualification and monitoring area

6.3.1 The features for suppliers

<u>Qualification of an invoice flow placed on the qualification portal</u>

Chorus Pro enables a public or private supplier to qualify the invoice type flows in XML format, which they previously generated from their information system. In the case of anomalies detected in the flow, Chorus Pro indicates to the user the erroneous items in their flow so that it can be modified and regenerated according to the standards established for Chorus Pro.

In order to do this, the flow qualification area of the solution allows a user to submit:

- a flow in XML format for the E1, E2 and E3 type invoice flows,
- a flow in PDF/A3 format for the E2 type invoice flows.

Following the submission of this flow, Chorus Pro generates a report stating:

- errors in the creation of the flow,
- missing information and tags,
- incorrect values found in the tags.

The solution makes this report available in the qualification area. It is preserved by Chorus Pro and can be downloaded by the user.

<u>Qualification of the integration features of a life cycle flow</u>

Chorus Pro allows suppliers to test the integration features of a life cycle type flow from their information system.

For this, they can generate a life cycle type flow in the qualification area of Chorus Pro. This flow is created from an invoice flow previously sent to Chorus Pro and saved in the user area.

The life cycle type flow generated by Chorus Pro can be downloaded and manually integrated by the user into their information system. Users can thereby validate the compatibility between their information system and returned flows generated by the solution.

Qualification of the connection of supplier information systems

The qualification area allows a private supplier to connect it's information system in EDI mode to the qualification area of Chorus Pro.
A "Connection form" area allows a supplier to generate a qualification type connection form. This file is a prerequisite to the connection of their information system to the qualification area and includes an estimated start and end date for the qualification work.

Once the connection form is activated, the supplier's information system can be connected to the qualification area of Chorus Pro. This allows them to transmit and qualify, in EDI mode, the invoice type flows generated by their information system. In the case of anomalies detected in the flow, the solution indicates in the acknowledgement flow to the supplier the erroneous items to modify in their flow so that it complies with the standards established for Chorus Pro.

For this, the user can transmit in EDI mode:

- a flow in XML format for the E1, E2 and E3 type invoice flows,
- a flow in PDF/A3 format for the E2 type invoice flows.

Chorus Pro generates a report stating:

- errors in the creation of the flow,
- missing information and tags,
- incorrect values found in the tags.

The solution makes this report available in the qualification area. It is preserved by Chorus Pro and can be downloaded by the user. This report is also sent to the supplier's information system in the form of an acknowledgement flow.

In the qualification area, the supplier can view the status of the invoices sent and monitor the transmitted flows.

Connection of the supplier information systems during production

The qualification area allows a private supplier to complete the connection of their information system to Chorus Pro.

A "Connection form" area allows a supplier to generate a production type of connection form. This file is a prerequisite to the connection of their information system during production and includes a start date.

Once the connection form is activated, the information system of the supplier can be connected during production to Chorus Pro.

Monitoring the flows

The flow monitoring area allows the suppliers to track all of the flows that they exchange with Chorus Pro and ensure the proper generation, receipt and integration of these flows.

6.3.2 The features for invoice recipients

Qualification of the structure of a life cycle flow generated by an invoice recipient entity

Chorus Pro enables a recipient of invoices to qualify the structure of the life cycle flows in XML format generated by their information system. In the case of anomalies detected in the flow, the solution indicates to the user the items to modify in their flow so that it complies with the standards established for Chorus Pro.

For this, the flow qualification area of Chorus Pro allows a user to submit a life cycle flow (R) in XML format.

Chorus Pro generates a report stating:

- errors in the creation of the flow,
- missing information and tags,
- incorrect values found in the tags.

The solution makes this report available in the qualification area. It is preserved by Chorus Pro and can be downloaded by the user.

Qualification of the integration features of a pivot flow by a structure that receives invoices

Chorus Pro allows the recipients of invoices to test the integration features of a pivot flow from their information system.
For this, they can generate a pivot flow in the flow qualification area of Chorus Pro. This flow can be derived from:

- an invoice flow previously transmitted to Chorus Pro and saved in the user area,
- a generic flow generated by Chorus Pro from a data set.

The pivot flow generated by Chorus Pro can be downloaded and manually integrated by the user into their information system. Users can thereby validate the compatibility between their information system and the flows transmitted by the solution.

7 GLOSSARY

Abbreviation	Meaning
AIFE	French Agency for State Financial Information Technology, responsible for guiding the implementation of Chorus Pro and the deployment of the solution
API	Application Programming Interface. The standardised set of functions that serves as a front through which the software provides it's services to other programs
ASAP	Avis des sommes à payer [Statement of the sums to pay]
Atlas	Solution for storing invoices and supporting documents
Attachment (PJ)	Supporting document or attachment, depending on the context
Chorus	Chorus is the application common to all of the managers and accountants of the French State, managing expenditures, non-tax revenues and the accounting of the State. It integrates all of the stakeholders of the State's financial management. The application is based on integrated management software (IMS) and allows the implementation of all the ambitions of the LOLF [legislation governing public finance], particularly in terms of accounting
DGFiP	Direction Générale des Finances Publiques [General Directorate of Public Finance]
DP	Object created by the State or national public institutions authorising department allowing liquidation of the invoice (corresponding to the mandate of the local public sector)
DRFiP	Direction régionale des finances publiques [Regional Directorate of Public Finance]
EDI	Electronic data interchange
EPL	Etablissement Public Local [Local Public Institution]
EPN	Etablissement Public National [National Public Institution]
EPS	Etablissement Public de Santé [Public Health Establishment]
Espace factures reçues [Received invoices area]	The portal in SaaS mode, which enables local authorities and national public institutions to download their invoices, upload their statuses of progress, and interact with the suppliers and support
GSA	General settlement of accounts
HELIOS	HELIOS: Accounting information system of the General Directorate of Public Finance dedicated to the local sector for the management of local accounts
Invoice	The invoice is an accounting document by which the seller (or service provider) indicates the quantity, characteristics and price details of the goods or services previously delivered which constitute the set of invoice data. The invoices included in the scope of the paperless initiative are those arising from public procurement sent by the suppliers
Invoice data	Invoice field
Invoicing document	Supporting document submitted to support an invoice
Invoice file	Set of documents that enable payment and liquidation (invoice and invoicing document)
CN	Commitment Number
MOA	Contracting authority
MOE	Project manager
Payment request	Payment request: joint-contracting or subcontracting invoice
PES	Protocole d'échange standard [Standard file transfer protocol]
PIGP	Portail internet de la gestion publique [Internet portal for public management]
Saas mode	Saas mode (Software as a Service) is a commercial operating model for online software that allows users to not have to install the tool on their own services
SE	Service performing the State expenditure

SE Chorus	Système d'échange Chorus
SIGF	Système d'Information de gestion financière [Financial Management Information System] (of public authorities and institutions)
SIRET	The SIRET number is an institutional identifier for French suppliers. This numeric identifier of 14 digits is divided into two parts: the first is the SIREN number of the legal unit to which the SIRET unit belongs; the second is usually called the NIC (internal classification number), and is made up of a four-figure number attributed to the establishment and a control figure used to validate the SIRET number as a whole.
SMA	Service mandataire Atlas [Atlas proxy service]
Solution mutualisée-Chorus Pro [Chorus Pro shared solution]	Target shared solution of the Chorus Portal Pro "Invoicing portal"
UBL Invoice	Universal Business Language (standard for structuring invoice data)
UN/CEFACT	United Nations Centre for Trade Facilitation and Electronic Business

8 MODIFICATION HISTORY

Version - Date	*Issuer*	*Status/Tracking of changes*
Version 4.10 – 14/11/2018	AIFE	• Update of the work invoice notifications (§ 3.11.4) • Update of the features of account managers of private suppliers (§ 4.1.2) and public entities (§ 4.2.2)
Version 4.01 – 14/09/2018	AIFE	• Creation of a new consistency check (3.8.3) : if entered, an exemption reason makes the invoice completely tax-exempted • Modification of the table of interpretation of the recipient structures parameters (3.4.3)
Version 4.00 – 04/06/2018	AIFE	• Creation of an appendix relating to the EDI connection method • Transfer of paragraph 5 (exchanges flows) in a new appendix relating to the EDI connection mode • Transfer of paragraph 6 (use of API services) in the appendix relating to the API connection mode • Modification of the opening parts (§1.2) • Addition of a reference to the appendices related to the EDI and API connection mode (§3.4.1) • Addition of a reference to the Invoicing Process Appendix (§3.11.3and §3.11.4) • Modification of the table of transmission modes by invoicing frameworks: renaming of the frame A6 (§3.11.4)

Version 3.29 01/03/2018	AIFE	• Vocabulary correction :
		  ○ Terms "Legal Commitment" and "LC" are respectively replaced by "Commitment Number" and "CN".
		  ○ The term "work market" is replaced by "work contract"
		• Addition of complementary information about recipients attached to the State structure (§3.4.3)
		• Removal of the status "Routing to the recipient" from the status listing (§3.6)
		• Correction of treatment modalities of suspended invoices (§3.9.2)
		• Update of the A6 invoicing framework and addition of information about its use (§3.10)
		• Correction of the following management rules :
		  ○ G1.35 : invoicing frameworks possibly transmitted with E1 and E2 invoices (G1.35)
		  ○ G2.13 : VAT Regime management rule (G2.13)
		  ○ G8.14 : Commitment number rule for E3 Invoice (G8.14)

		○ G8.39 : Currency codification rule for E3 Invoice (G8.39) ○ S2.06 : Codification of the VAT Regime field for CII format (S2.06) • Addition of the following management rules : ○ S1.09 : Codification of the VAT Regime field for UBL Invoice format (S1.09) ○ Recipient Id rule for UBL Invoice format (S1.10), CII (S2.19) and CPPFactureMixte (S5.05) ○ G8.12 : Debtor identifier management rule for E3 invoice (G8.12) • Addition of the european format Factur-X and its management rules (§5.7.2.2.5) • Addition of 2 new fields "Type" and "Subtype" in the formats UBL Invoice minima (§5.7.2.2.1) and CII minimal (§5.7.2.2.2) • Update of some fields of the CII 16B formats (§5.7.2.1.2.1&§5.7.2.2.2.1) • Correction of the format FSO1120 – Memoranda on justice costs (E3) (§5.2.2.3& §5.7.2.3), concerned fields : ○ Service code & service name (addition) ○ Contact name (deletion) ○ Invoicing framework (now optional) ○ Tax Summary bloc (now mandatory) ○ Commercial address fields (line, postcode & city name now mandatory) ○ Supplier legal address (tag modified) ○ Jurisdiction address – supplier bloc (line, postcode and city name tags have been modified) ○ Bank agency ID (now optional) • Correction of typing modalities of the contract number for UBL Invoice (type E1) (§5.7.2.1.1) • Update of the line error description of the unitary flow status (§5.11.1) • Update of the style sheet visual : addition of the payment bloc to the visual (§5.12.2.1) • Update of the existing API schemes due to the addition of new Chorus Pro services in the 1.3.3 version (§6.2) • Addition of new API schemes concerning the following use cases : ○ Research of facturation datas of State/None State recipient (§XX) ○ Spaces management of a structure/service (§XX) ○ User account management (§XX) • Addition of information concerning the exchange modalities of API (§6.1) and EDI (§9.2.2& §9.3.2) modes

Version 3.28
13/11/2017
	AIFE	• Correction of the maximal amount of invoices that can be emitted at once, from 1000 invoices to 500 (§5.9.3)
		• Addition of the avaibility of the recipient directory to Portal and Service modes (§5.2.5)
		• Update of the following management rule :
		  ○ Filling of the "VAT regime" field of the provider block (G2.13)
		• Update of the E3 format :
		  ○ Correction of the case number format (G8.41)
		  ○ Addition of a recommendation concerning the maximal amount of lines in an E3 invoice (50 lines at maximum) (§5.6.2.3)
		• Addition of the CII 16B format (§5.6.2.1.2.1et §5.6.2.2.2.1)
		• Addition of the presentation of the use of API services in the case of invoices to be validated (§6.2.2.4)
		• Addition of an use case (1.8) about the correction of the validator by the supplier following a refusal for "wrong validator" (§6.2.2.1.3)
		• Update of API schemes of the issued invoices area (§6.2.2.1)
		• Addition of "best practices" about total amount of invoices in a single flow in the chapter about EDI transmission (§9)

Version 3.26 – 08/03/2017	AIFE	• Details regarding the routing rules toward the service FACTURES_PUBLIQUES (§3.3.2)
		• Addition of a chapter regarding the delivery note (§ 3.9.4)
		• Alignement of the external specification with the management of work contracts:
		  ○ Alignement of the chapters regarding the habilitations (§4.1.1.3 and 4.2.1.3)
		  ○ Addition of the status related to work invoices in the management rules G5.01 and G5.07
		  ○ Addition of the chaptrer 6.2.2.2 that presents the use cases of the API of the space « factures de travaux »
		• Details regarding the use of discounts/charges in global amounts in a flow (§5.2.2.1 and §5.2.2.2)
		• Modification of the managemenet rule of the setting "Engagement obligatoire » in the directory flow (§5.2.5)
		• Addition of a chapter related to the use of inadmissibility and invoice rejections reports (§5.10)
		• Addition of an illustration of the style sheet in the paragraph 5.11.1

		• Update of the items of the format UBL:
		  ○ « Identifier » of the block « Delivery »
		  ○ Contact items of the block « validator »
		• Modification of the item « Excluding taxes amounts » of the bloc « General informations » with the format CII version 14b
		• Modification of the format CII version FEN135:
		  ○ Items of the bloc « Delivery Adress »
		  ○ Items « market number » and « contract number » and associated « effective date »
		  ○ Items of the block « Debtor »
		  ○ Item « contact name » of the validator and of the collector
		  ○ Item "delivery unit" of the bloc "line"
		  ○ Deletion of the obsolete footnotes in the bloc « Delivery adress »
		  ○ Details regarding the items not supported with this format
		  ○ Details concerning the intracommunity VAT number
		  ○ Validator identifier
		• Update of the format E3 (memorunda on justice costs)
		  ○ Correction of the legal adress
		  ○ Addition of a management rule about the invoicing framework (G8.35)
		  ○ Addition of a management rule about the amounts (G8.36)
		  ○ Correction of the case of certain items and correction of the management rules incorrectly placed
		• Udpate of those generic management rules:
		  ○ G1.05: special caracters authorized for the invoice number
		  ○ G1.09: details regarding dates format
		  ○ G1.17, G1.18 and G1.19: details regarding the mandatory bank details
		  ○ G1.35: new management rules regarding the invoice framework tha t can be used in EDI mode
		  ○ G2.04: Addition of the supplier identifier types «7 » or « IREP »
		  ○ G2.09: modification of the maximum caracters for the debtor's name
		  ○ G4.16: précisions on the extension to be used with the attachment
		  ○ G6.01: augmentation of the maximum line number
		  ○ G6.03: details regarding the type of lines displayed in the pivot flow
		• Suppression of the management rules:
		  ○ G5.08

		○ S2.03 ○ S2.07 • Addition of management rules related to the UBL format: ○ S1.06: naming of attachements in the FEN105 version of the UBL ○ S1.07: details on the invoicing framework ○ S1.08: attachement type • Update of the XSD CPPFactureMixte: country code of the supplier is now facultative • Update of the XSD CPPFacturePivot: addition of the invoicing frameworks related to work contracts • Update of the XSD CPPStatutPivot: addition of the status codes related to work contracts
Version 3.25 – 04/10/16	AIFE	• Publication of the appendices related to work contracts and update of the management rules • Addition of the directory flow • Addition of the effective date of the contract in the UBL format (§ 5.6.2) • Addition of the naming rules of the additionnal attachements and the delivery note in the G4.12 management rule • Modification of the name of the solution to Chorus Pro • Modification of the XSD CPPFactureMixte: ○ Harmonisation of the cardinality of the item « paramètre » in the enveloppe ○ Modification of the format of the item « contenu » ○ Addition of the invoicing frameworks A22 to A25 • XSD CPPFacturePivot: Addition of the invoicing frameworks A22 to A25 • Modification of the syntax of the items of the format CII version 14B (5.6.2.1.2.1 and 5.6.2.2.2.1): • Addition of information related to the life cycle flow in the case of work contracts, subcontractors and co-contractors (§ 6.1.1) • Modification of the syntax of the items of the format CII version FEN135 (5.6.2.1.2.1 et 5.6.2.2.2.1) • Addition of footnotes in order to detail particular uses of items in the format CII version FEN135
Version 3.24 – 29/07/2016	AIFE	• Addition of (G2.08) related the status supplement (5.3) • Update of the optional characteristic of country code for E1, E2 and lifecycle flows • Suppression of rule G5.02 (similar to G5.04) and reformulation of rule G5.04 as a consequence (5.3)

		• Moving rule G5.05 from flow identifier to flow producer (5.2.3) • Details regarding the name of the attachment of rules G8.17 and G8.18 (5.4) • Details regarding the optional characteristic of the due date in E1 flow (5.2.2.1) • Suppression of the "numerocommande" tag in PES format (5.5.2.2.3) • Modification of rules P1.08 and P1.09 on the type of possible values (5.3) • Addition of a chapter related to flow compression procedures (5.8) • Addition of rule P1.10 regarding flow compressing • Addition in rule G4.03 of the list of possible MimeType values for each type of file extension (5.3) • Update of the mandatory characteristic of the attachment in pivot flow (5.2.1) • Addition of rule G4.15 regarding authorised format for an invoice type of attachment (5.2.2.2) • Reinsertion of rule G2.02 regarding country code in E2 and its optional characteristic (5.2.2.2) • Details regarding authorised special characters for the numerofacture [invoicenumber] attribute (5.5.2, 5.6) • Update regarding the notion of contract (5.2.2.1) • Modification of the syntactical of the tag related to the original invoice number in Chorus Pro formats (5.5.1.2 and 5.5.3.1.2) • Modification of rule G6.04 • Modification of the description of invoice transmission to the "FACTURES_PUBLIQUES" service (3.3.2) • Details regarding prerequisites to portal access (OS and browser) (3.4.1) • Modification of the tag description referring to the stylesheet (5.8.2.1.1) • Modification of the tag syntactical for the payee entity of E1 flow in UBL format (5.5.2.1.1) and of the payee corporate name tag of E2 flow in Minimal UBL format (5.5.2.2.1) • Modification of the "commercial address line" tag syntactical of E1 flow in UBL format • Updates related to invoicing frameworks (3.9) • Updates regarding work contracts (3.9.9) • Update of the list of documents in a pivot flow (5.2.1) • Modification of syntactical data related to commitment and contract numbers in UBL

		format (E1 and E2 flows) (5.5.2.1.1 et 5.5.2.2.1)
Version 3.23 – 21/04/2016	AIFE	• Details regarding the mandatory country code in invoice flows so as to identify suppliers and invoice validators, and suppression of REG G2.02 (5.2.2) • Updates related to filling technical user information in ISDN requests headers (7.2.3.2) • Update of the Pivot flow xsd file (5.5.3.1)
Version 3.22 – 30/03/2016	AIFE	• Details regarding notification frequency (3.5.1) • Addition of a "Completed" status (3.6.1) • Details regarding global payment deadline (3.6.2) • Details regarding invoice recycling (3.8.2) • Pivot flow: details regarding the use of pivot flow (portal mode, EDI and web service) (5.2.3) • E1 flow: modification of the semantics and syntactical of "Rebate" so as to integrate the notion of "Charge" (additional costs) (5.2.2.1)
Version 3.21 – 11/01/16	AIFE	• Update of time stamp format (G1.25) • Details regarding the management of intra-public sphere invoicing (3.3.2) • Update of the XSD files (appendix to the external specifications)
Version 3.2 – 06/01/16	AIFE	• Addition of consistency check regarding the service code indicated on an invoice (3.7.3) • Addition of "Collector Corporate name" data in the pivot flow (5.2.1 and 5.5.1.2) and E2 (5.2.2.2 and 5.5.2.2.4) to provide information in the event of factoring • Update of the management rules concerning the country code in the invoice flows (5.2.2) and the status flows (5.2.3) • The "names" of the recipients and issuers on the envelope is now optional (5.2.4) • Update of the syntactic description of the UBL invoice format (5.5.2.1.1 and 5.5.2.2.1) • Update of the invoice types covered (G1.01) • Update of the status codes relating to the validation cycle (management rule G5.05) • Update of the description of the services related to areas of "issued invoices», «received invoices», «invoices to process" and "legal commitments" (Part 6) • Update of the XSD files (appendix to the external specifications)
Version 3.1 – 17/11/15	AIFE	• Update of the description of the flows transmitted by the local public sector bodies (5.1.1.1.2) • Modification of the cardinalities of the pivot flow attachment item (5.2.1) • Update of the tag description *Effective date* in the E1 flow (5.2.2.1)

		• Update of the description of the services (Part 6)

Version 3 – 21/10/15	AIFE	• Addition of the "Management of the structure and user accounts" part (Part 4)
		• Update of the invoice types headings.
		• Modification of the management rules:
		  ○ Update of the identifier (G2.08) and the format of the identifier (G2.07) of a third party
		  ○ Update of the management rules relating to the identifier type G2.04 and G2.05.
		• Addition of the "To recycle" status in the "nominal lifecycle of the invoice" chapter (3.6) and in the associated management rule (G5.01)
		• Update of the format recommendations for the comment fields (P1.09)
		• Update of the XSD files (appendix to the external specifications)
		• Update of the "Memorandum on justice costs" E3 flow (Part 5.2.2.3), specific management rules (5.4) and the applicable syntactic format (Part 5.5.2.3)
		• Addition of the chapter, "Procedures for using style sheets" (Part 5.7)
		• Update of the description of the services (Part 6)
		• Update of the "Authentication" part (Part 7)
		• Addition of the chapter, "Area for the qualification and monitoring of the flows of Chorus Pro" (Part 8)
		• Update of the part, "File transfer protocols concerning the connection of the suppliers" (Part 9)

Version 2.3 – 01/09/15	AIFE	• Modification of the management rules:
		  ○ Update of the management rules of the "PESDepenseAller" flow (5.6.4)
		  ○ Update of the management rule G4.13

Version 2.2 – 25/08/15	AIFE	• Modification of the generic description schemes of the data indicated by the E1 and E2 flows (the format of the attachment is a required field) • Modification of the payment methods and types of invoices in Chorus ProFactureMixte and CPPFacturePivot formats (applicable management rule and XSD) • Addition of a payment method for the UBL and CII formats (applicable management rule) • Addition of a management rule on the payment terms (G1.15) • Update of the values of the management rule G5.01 • Modification of the cardinalities of Chorus Pro flow budget

		• Modification of the management rules concerning the amounts • Removal of the "Note.Producteur" tag of the pivot flow (CPPFacturePivot format) • New referencing of the management rules relating to the name of the attachment, the reference of the contract, the agreement reference, the commitment reference, the public sphere service reference and the service name • Modification of the management rule on the character count of the contract reference (G3.02) • The VAT rate tags of the line items of the E1 and E2 flows are optional • Update of the tree structures of Chorus ProFacturePivot (5.5.1), CPPFactureMixte (5.5.2.2.4, CPPStatut (0) and AIFE_Statut formats
Version 2.1 – 28/07/15	AIFE	• Removal of the S3.03 management rule on the commitment references • New semantic description of the "Validator" item tags of the E1 and E2 flows • Update of the XSD (adjustment in the naming of the tags, removal of the attachment/IdOriginal tag of XSDCPPFactureMinimal, new naming of the XSD) • Referencing of the G7.13, G7.14, G7.15, G7.16 management rules • Addition of the "Payment method" tag in the E2 format • Adjustment of the lifecycle flow scheme • Referencing the "Payment method" tag in the syntactical descriptions of the UBL and CII formats of the E2 flow

Version 2.0 – 20/07/15	AIFE	• Introduction: addition of hypertext links to the applicable regulation
		• Functional description of the solution:
		  ○ Clarification on the archiving period of the invoices on behalf of the issuers (10 years)
		  ○ Update of the invoicing frameworks
		• Description of the formats:
		  ○ Production of the XSD for flows specific to Chorus Pro and not referenced in the international standards (CII, UBL) or in the Direction Générale des Finances Publiques (hereinafter, "DGFiP") (PES) format
		  ○ Update of the semantic and syntactic management rules (including the addition of management rules relating to the payment methods)
		  ○ Addition of the "Memorandum on justice costs" flow, its syntactic format and the associated management rules

		○ Description of the budget of the flows specific to Chorus Pro and not referenced in the international formats (CII, UBL) or in the DGFiP (PES) format ○ Update of the pivot and lifecycle flows ○ Addition of the management rules applicable to the syntactic format of the PES_Depense Aller flow