



E-INVOICING

UBL, CII, FACTUR-X: UNDERSTANDING THE FORMATS REQUIRED BY THE STATE

From September 2026 onwards, any invoice falling within the scope of the reform must be transmitted via an Approved Platform in one of the three formats recognized by the State: UBL, CII, Factur-X.

These three formats are the only ones that allow regulatory submission and the transmission of data expected by the French tax authorities.

But what do they actually cover?

How do they differ?

And how does EDIFACT still fit into this new framework?

To support this transition, Normeyes published in 2025 a new version of the OPTO standard: OPTOv36, designed to bridge EDIFACT and the three official formats required by the State.

👉 This update is documented on our website: <https://normeyes.org/standards-recommandations/facture/>.

1. The three official formats of the reform: UBL, CII or Factur-X

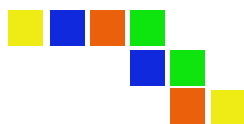
Although UBL, CII and Factur-X differ technically, they are all based on the same European semantic data model.

This model defines:

- mandatory invoice information (identifiers, amounts, VAT, addresses, etc.)
- consistency rules (totals, line/header reconciliation)
- the controls expected by platforms

France additionally applies a national profile (EXTENDED-CTC-FR), which notably introduces:

- additional VAT management rules
- handling of sub-lines
- management of multi-seller invoices
- clarifications regarding regulatory identifiers



This means that choosing a format (UBL, CII or Factur-X) does not exempt companies from complying with the mandated data rules.

1.1 UBL: a widely used XML standard in Europe

UBL (Universal Business Language) is a structured XML format widely deployed in European B2B exchanges.

It follows a document-centric approach, meaning that the invoice is organized into clearly identified functional blocks:

- Parties (seller / buyer)
- Invoice lines
- Totals
- VAT
- Payment

UBL is notably used within the PEPPOL ecosystem (a European network for exchanging electronic invoices) and in highly automated environments.

It is particularly suited to:

- technically mature companies
- organizations with international flows
- interconnected architectures (ERP ↔ platforms ↔ partners)

👉 UBL often requires stronger technical capabilities but provides excellent interoperability.

1.2 CII: a more “data-centric” structured model

CII (Cross Industry Invoice), developed by UN/CEFACT¹, is also an XML format.

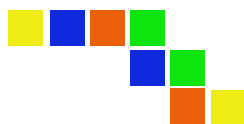
Its logic is more “data-centric,” structuring the invoice around a precise semantic model separating:

- header
- commercial transactions
- tax data
- payment means
- totals

CII is particularly rigorous in data organization and automated validation.

👉 For companies seeking a fully structured invoice without a PDF, CII is relevant.

¹ UN/CEFACT : United Nations Centre for Trade Facilitation and Electronic Business – an intergovernmental body of the United Nations developing international standards to facilitate trade exchanges (e.g., UN/EDIFACT).



1.3 Factor-X: a hybrid implementation of CII

Technically, Factor-X is based on the PDF/A-3 standard, which allows structured attachments to be embedded within a PDF file. The XML file (factur-x.xml), compliant with the CII standard, is embedded in the PDF and constitutes the regulatory data source.

Automated processing relies exclusively on the XML; the PDF is only a visual representation. In practice, the user sees a conventional PDF, but information systems process the embedded XML file containing all structured data.

Factor-X is therefore not a third data model, but a hybrid format combining:

- a human-readable PDF (intended for reading and archiving)
- a structured XML file, based on CII, automatically processed by systems

It therefore offers:

- the simplicity and readability of a PDF (an important reference point for business teams)
- the technical compliance of a structured format
- a controlled transition for teams accustomed to visual documents

👉 For many companies in the optical and audiology sector, it represents a balanced compromise between business continuity and regulatory requirements.

2. OPTOv36 and EDIFACT: what role in this new framework?

2.1 OPTO and EDIFACT: clarifying the roles

In the optical and audiology sector, historical exchanges are based on the INVOIC message of the EDIFACT standard.

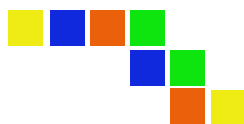
It is important to distinguish two notions that are often confused:

- The OPTO standard is a business data dictionary defining invoicing data specific to the sector.
- INVOIC EDIFACT is the EDI format in which this data is currently exchanged

In other words:

- OPTO defines which data may or must be included in invoicing flows between sector partners, independently of the format used to transmit them.
- INVOIC EDIFACT structures the data according to precise syntactic rules, making it processable by recipient systems.

OPTO is therefore not an exchange format but a set of business data, historically carried via EDIFACT.



2.2 OPTOv36: a necessary evolution

The reform now regulates the invoicing data to be transmitted and requires the use of standard EDI formats, UBL or CII/Factur-X, as the exchange models to which Approved Platforms must comply.

The reform does not regulate sector-specific business data. These remain necessary for industry stakeholders and continue to fall under existing sector standards.

Similarly, the reform does not prohibit the use of other EDI formats between partners. It only requires that invoices falling within the regulatory framework be transmitted in one of the core formats (UBL or CII/Factur-X).

The objective of the OPTOv36 invoice standard is twofold:

- To combine, within a single dictionary, both the regulatory data required by the reform and the business data required by the sector.
- To define the representation of this data in the different core EDI formats, as well as in EDIFACT, the historical format widely used in the sector.

For what purpose?

- To implement a single EDI flow that meets both regulatory requirements and sector-specific needs.

Regardless of the EDI format used at issuance, as long as it complies with OPTOv36, an Approved Platform will be able to convert and transmit the invoice in the format required by the recipient, including the tax authorities.

This is no longer possible with OPTOv33/v34, as these versions do not cover all the data and rules now required.

👉 The OPTOv36 standard therefore forms part of a broader simplification approach, facilitating reform implementation while meeting sector needs.

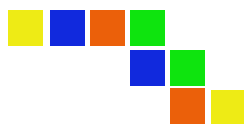
Maintaining EDIFACT as a possible exchange format is part of the same approach, minimizing necessary adaptations for issuers and recipients already using it.

In summary:

- **OPTO = sector-specific business dictionary**
- **EDIFACT = historical EDI exchange syntax**
- **OPTOv36 = the version ensuring regulatory compliance and full correspondence between EDIFACT ↔ UBL ↔ CII/Factur-X**

👉 **Strong recommendation: migrate to OPTOv36 now**

The data dictionary is freely available on our website: <https://normeyes.org/standards-recommandations/facture/>.



WHAT'S NEXT IN THE SERIES

In the next article, we will address the 2026/2027 obligations relating to e-reporting and e-invoicing.

KEY TAKEAWAYS — COMPARATIVE SUMMARY OF FORMATS

Format	Nature	Typical Use Case	Strengths	Points of Attention
UBL	Structured XML	Automated / international environments	Highly interoperable, widely used in Europe	Requires robust technical integration
CII	Structured XML	Advanced architectures	Rigorous semantic model	No native PDF
Factur-X	PDF + CII XML	Majority of companies	Readable + structured, smooth transition	XML remains the “source of truth”
EDIFACT	Historical EDI	Optical sector	Robust, widely deployed	Requires OPTv36 + conversion via PA

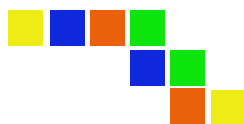
TECHNICAL SIDEBAR

1 Model and profiles

- **UBL 2.1 and CII (UN/CEFACT)** syntaxes implement the EN16931-1 semantic model, structured into Business Terms (BT) and Business Groups (BG) with inter-field consistency rules.
- France applies a national **CIUS complemented by the EXTENDED-CTC-FR profile**, which:
 - imposes additional management rules (BR-FR)
 - introduces elements required for e-reporting
 - modifies certain cardinality constraints
 - structures data for extraction into reporting flows
- The implemented profile must be explicitly declared and consistent with the content. Any discrepancy between the declared profile and the actual data may result in rejection at platform level.

2 Validation levels

- Invoice compliance relies on three cumulative validation levels:
 1. Syntactic validation (XSD)
 2. EN16931 semantic validation (European business rules)
 3. National regulatory validation (CIUS + BR-FR + reporting constraints)
- Controls notably cover:
 - arithmetic integrity (Σ lines, VAT bases, aggregated amounts)
 - consistency between VAT categories, rates and amounts



- strict qualification of identifiers via their schemeID
- compliance with allowed cardinalities and occurrences
- conformity of extracted data for reporting flows

3 Regulatory consistency and traceability

- Invoices (Flow 2) must be consistent with:
 - lifecycle messages (Flow 6)
 - data transmitted under e-reporting (Flow 10)This implies internal traceability of identifiers and document statuses.
- Version management (syntax, profile, national rules) must be carefully controlled, as any version change may modify validation constraints or mapping rules.

4 Sectoral conversion (EDIFACT → regulatory core)

- Converting a sectoral EDIFACT flow into a core regulatory format requires:
 - exhaustive segment → BT mapping
 - resolution of qualifier ambiguities
 - handling of multiple occurrences
 - alignment with CIUS constraints
 - the ability to generate data usable for reporting flows
- Inter-platform interoperability relies on strict application of common profiles and rules; any proprietary implementation exposes stakeholders to validation discrepancies.