PD CEN/TS 16931-8:2024



BSI Standards Publication

Electronic invoicing

Part 8: Semantic data model of the elements of an e-receipt or a simplified electronic invoice

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National foreword

This Published Document is the UK implementation of CEN/TS 16931-8:2024.

The UK participation in its preparation was entrusted to Technical Committee IST/47/-/2, E-invoicing.

A list of organizations represented on this committee can be obtained on request to its committee manager.

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Electronic invoicing – Part 8: Semantic data model of the elements of an e-receipt or a simplified electronic invoice

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European foreword

This document (CEN/TS 16931-8:2024) has been prepared by Technical Committee CEN/TC 434 “Electronic Invoicing”, the secretariat of which is held by NEN.

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This document is part of a series of documents, consisting of the following parts:

— EN 16931-1, *Electronic invoicing - Part 1: Semantic data model of the core elements of an electronic invoice*

— CEN/TS 16931-2, *Electronic invoicing - Part 2: List of syntaxes that comply with EN 16931-1*

— CEN/TS 16931-3-1, *Electronic invoicing - Part 3-1: Methodology for syntax bindings of the core elements of an electronic invoice*

— CEN/TS 16931-3-2, *Electronic invoicing - Part 3-2: Syntax binding for ISO/IEC 19845 (UBL 2.1) invoice and credit note*

— CEN/TS 16931-3-3, *Electronic invoicing - Part 3-3: Syntax binding for UN/CEFACT XML Cross Industry Invoice D16B*

— CEN/TS 16931-3-4, *Electronic invoicing - Part 3-4: Syntax binding for UN/EDIFACT INVOIC D16B*

— CEN/TR 16931-4, *Electronic invoicing - Part 4: Guidelines on interoperability of electronic invoices at the transmission level*

— CEN/TR 16931-5, *Electronic invoicing - Part 5: Guidelines on the use of sector or country extensions in conjunction with EN 16931-1, methodology to be applied in the real environment*

— CEN/TR 16931-6, *Electronic invoicing - Part 6: Result of the test of EN 16931-1 with respect to its practical application for an end user - Testing methodology*

— CEN/TS 16931-7, *Electronic invoicing - Part 7: Methodology for the development and use of EN 16931-1 compliant structured Core Invoice Usage Specifications*

— CEN/TS 16931-8, *Electronic invoicing - Part 8: Semantic data model of the elements of an e-receipt or a simplified electronic invoice* (this document)

Any feedback and questions on this document should be directed to the users’ national standards body. A complete listing of these bodies can be found on the CEN website.

According to the CEN/CENELEC Internal Regulations, the national standards organisations of the following countries are bound to announce this Technical Specification: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

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Introduction

What separates a receipt document from an invoice document is basically the dynamics of the usage. An invoice is mainly issued to achieve a payment for delivered goods and services and a receipt is issued to document the payment for the purchase of goods and services. In addition, the invoices always contain information about the buyer, whereas the receipt only needs that in certain cases and is for the most part issued without a buyer identification.

These conditions are regulated differently by laws and practice in different countries, and this has been taken into consideration.

This document complies at least with the following criteria:

— it is technologically neutral;

— it is compatible with relevant international standards on electronic invoicing;

— it is consistent with the relevant provisions of Directive 2006/112/EC (the “VAT directive”);

— it allows for the establishment of practical, user-friendly, flexible and cost-efficient electronic invoicing and cash register systems;

— it takes into account the special needs of small and medium-sized enterprises as well as of sub-central contracting authorities and contracting entities;

— it is suitable for use in commercial transactions between enterprises and between enterprises and consumers.

NOTE Attention is drawn to the requirements for the protection of personal data of Regulation (EU) 2016/679, having due regard to the principles of privacy and data protection by-design, data minimization, purpose limitation, necessity and proportionality.

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1 Scope

This document establishes a semantic data model of an e-receipt or a simplified electronic invoice.

NOTE In the remainder of this document, when "e-receipt" is mentioned, "simplified invoice" is also meant.

The semantic model includes essential information elements that an electronic receipt needs to ensure legal (including fiscal) compliance and to enable interoperability for cross-border, cross sector and domestic trade. The semantic model can be used by organizations in the private and the public sector for documenting by issuing a receipt for the purchase of services and /or goods. It can also be used for documenting a purchase between private sector enterprises. In addition, it has been designed for the use of consumers.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN ISO 3166-1, *Codes for the representation of names of countries and their subdivisions — Part 1: Country code (ISO 3166-1)*

ISO 4217, *Codes for the representation of currencies*

ISO 8601-1:2019, *Date and time — Representations for information interchange — Part 1: Basic rules*

ISO 15000-5:2014, *Electronic Business Extensible Markup Language (ebXML) — Part 5: Core Components Specification (CCS)*

ISO/IEC 6523 (all parts), *Information technology — Structure for the identification of organizations and organization parts*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— IEC Electropedia: available at https://www.electropedia.org/

— ISO Online browsing platform: available at https://www.iso.org/obp

NOTE Business terms that are part of the semantic model are defined in the model itself.

3.1
electronic invoice
invoice that has been issued, transmitted and received in a structured electronic format which allows for its automatic and electronic processing

[SOURCE: Directive 2014/55/EU]

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3.2
simplified invoice
invoice with a total amount below a certain threshold that may contain less data elements than a normal invoice

[SOURCE: Directive 2006/112/EC]

3.3
electronic receipt
receipt that has been issued in a structured electronic format which allows for its automatic and electronic processing also to be transmitted and received by the customer if the customer so decides

3.4
semantic data model
structured set of logically interrelated information elements

3.5
information element
semantic concept that can be defined independent of any particular representation in a syntax

3.6
structured information element
information element that can be processed automatically

3.7
syntax
machine-readable language or dialect used to represent the information elements contained in an electronic document (e.g. an electronic receipt)

3.8
business term
label assigned to a given information element which is used as a primary reference

3.9
receipt model
semantic data model of the elements of an electronic receipt

3.10
elements of an e-receipt
set of essential information elements that an electronic receipt may contain in order to enable domestic and cross-border interoperability, including the necessary information to ensure legal compliance

3.11
identifier
character string used to establish the identity of, and distinguish uniquely, one instance of an object within an identification scheme from all other objects within the same scheme

Note 1 to entry: An identifier may be a word, number, letter, symbol, or any combination of those, depending on the identification scheme used.

3.12
identification scheme
collection of identifiers applicable for a given type of object governed under a common set of rules

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3.13
POS
cash register, or cash register system that allows communication between different components and systems

Note 1 to entry: A POS system is designed to facilitate user-friendly administration of sales for employees. The system also helps with the management of a business.

3.14
compliant
some or all features of the e-receipt model are used and all rules of the e model are respected

Note 1 to entry: Based on TOGAF definition of a compliant specification.

3.15
conformant
all rules of the e-receipt model are respected and some additional features not defined in the model are also used

Note 1 to entry: Based on TOGAF definition of a conformant specification.

4 The concept of an e-receipt

4.1 Introduction

A receipt is a proof that payment was affected both for the seller and the customer. For the buyer the receipt is an instrument mainly for consumer protection, guaranteeing that the purchase was legitimate and correct, but in the case the buyer is a taxable business entity the receipt may also serve the buyer as verification in bookkeeping and for deduction of VAT upon fulfilment of the respective legal requirements.

It should be noted that the legislation on receipts in the EU member states has national scope – the only exception is the EU VAT Directive (directive 2006/112/EC) that has been transposed into national law.

In many countries retail businesses are required to use certified cash registers or point of sales systems (POS) to produce receipts for each transaction, and to record and preserve the sales data for audit. The purpose is to better tax compliance and set the stage for fair competition. The requirements set for the content of the receipt, and the sales data to be preserved, have strong seller emphasis, linking also to the seller's obligations for bookkeeping and VAT declaration.

The VAT directive recognizes *invoice* and *simplified invoice* as valid forms of transaction. This means that, to the extent a receipt is to substantiate reporting of VAT, it shall satisfy the requirements as either invoice or simplified invoice. But, again, while the invoice is implemented consistently across the member states, the implementation of the simplified invoice may be adapted to national practice.

Consequently, under current legal regimes the receipt has mainly domestic reach; if one wants to do transactions internationally in many cases one needs to use the invoice.

4.2 Contents of the e-receipt model

Semantic building blocks for the e-receipt have been chosen, when applicable, from EN 16931 or from simplified invoice requirements (https://ec.europa.eu/taxation_customs/business/vat/eu-vat-rules-topic/vat-invoicing-rules_en). The EU's Digital Single Market aims to overcome challenges by creating the right environment for digital networks and services to flourish.

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This is not only achieved by setting the right regulatory conditions, but also by providing cross-border digital infrastructures and services.

To achieve these in the e-receipt standardization, required elements for e-receipt are chosen so that already existing national receipt solutions could find needed elements from the e-receipt standard and optional requirements support functionality that may vary depending on national interests, needs and legislation allowing future developments.

Semantic building blocks for required and optional elements have been described in Clause 5 introducing some examples of use cases.

In cases where new optional semantic elements were introduced or arise during handling of comments after enquiry from national standardization bodies, work needs to be done during the standardization process to add and introduce those into existing references e.g. to UBL or UN/CEFACT CII.

Caveat: The content of the semantic model has been drafted to satisfy a wide range of stakeholder needs and application/industry areas. Only a limited set of legislations was considered but the ambition has been to designate a framework standard that can accommodate for the various legislations in Europe. However, it cannot be guaranteed that various regulations (for tax compliance, VAT reporting, bookkeeping, and more) recognize the concept of receipt. As can be concluded from 4.1, implementation has to be done on a national level and, furthermore, implementers need to verify that the selected transaction format supports the relevant regulations.

4.3 How to use the e-receipt model

This document lists business terms (information elements) and business term groups that may be included in an e-receipt or electronic simplified invoice. An e-receipt is transmitted between a sending and a receiving application. Sending applications may take any subset of the set of business terms listed in this document, provided it respects the stated cardinality (mandatory/conditional status and minimum/maximum repetition) and the business rules that apply to the business terms used. Receiving applications shall be able to receive all business terms listed, but may interpret and process only the information elements they need for their purpose. No prior agreement between sending and receiving applications is needed. Sending applications obviously should advertise to their users for what purposes the e-receipt transmitted is fit, e.g. by identifying the type of document it is.

Different countries have varying legislation on the content and conditions of e-receipts. In some countries, businesses may deduct the VAT that is specified on e-receipts, in other not. Some countries have specific legislation on the content of e-receipts. It is the responsibility of the e-receipt sender to adhere to the legislation that applies. This document does not list business rules that check such legal compliance. The purpose of the business rules that are listed is to ensure proper calculation of totals etc.

4.4 Compliance

4.4.1 Compliance of sending or receiving party

A receiving party may only claim compliance to the e-receipt model if it can accept all documents that comply with the model. It nevertheless only needs to understand and process the information elements that it needs for its purposes.

A sending party may claim compliance if it sends documents that comply with the e-receipt model.

4.4.2 Compliance of a receipt document instance

An e-receipt document instance is compliant to the model if it respects all rules and cardinalities defined for the e-receipt model.

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5 Use cases and functionality supported by the e-receipt

5.1 Introduction

This subclause describes processes that are supported by the e-receipt model. How the receipts are electronically exchanged is not described in the process models. Parties may handle document exchange with their own resources or outsource (part of) it. See also CEN/TR 16931-4.

The processes described here are examples. The set of processes is not exhaustive. The process models included in this subclause are intended to indicate the business contexts that are supported by the e-receipt model. The models do not give a full definition of those processes.

The process models focus on the external activities of the parties and do not describe internal activities.

The process model diagrams are presented in the Business Process Model and Notation (BPMN) of the Object Management Group (OMG). A short legend of the symbols used can be found in Annex B.

The following processes are supported by the e-receipt model:

- U1: B2C and G2C e-receipts,
- U2: Online shop e-receipt,
- U3: e-Receipt is used to claim expenses,
- U4: e-receipt is used for returns, guarantee and refund,
- U5: Simplified invoice for B2B transactions.

5.2 U1: B2C and G2C e-receipts

5.2.1 Introduction

The most common case for an e-receipt is when a consumer purchases goods or services, pays and receives the receipt as proof of purchase and payment.

5.2.2 Short description

The receipt is a result of a purchase process carried out by a Consumer. The receipt is issued by a cash register (ECR/POS) or with a ticket or vending machine, after the payment has been made.

There exist different options how the document is sent to the buyer.

- The document can be transferred to the buyer's mobile device by means of a wireless protocol (e.g. NFC, Bluetooth);
- The document (or a link to the document) can be represented in a barcode (e.g. a QR-code) which is scanned by the buyer;
- The buyer may use a service provider (e.g. a bank or an application provider) to receive the e-receipts, so that the buyer may represent a secondary address, as the service provider is the primary address (applicable in a "four corner" network);
- The buyer may provide their electronic address and the receipt is sent to that address, possibly by means of one or more service providers;

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- The buyer may use an app to receive the receipt. That app may contain another address for sending the receipt further e.g. to a bookkeeping system.

The cash register and the payment terminal may not be connected with each other. In that case either the e-receipt may not contain payment authorization information or the buyer's application gets the payment information through another channel from the payment terminal. It is also possible that the e-receipt is completed (manually) with payment authorization information by the seller or the buyer.

The buyer may use the receipt information to get an overview of their spending and to reconcile the spending with the payment record (credit or debit card slip / bank statement).

The Seller uses the information on the e-receipt for his bookkeeping and VAT administration. In some countries the cash registers may directly be connected to the system of the tax authorities. A copy of the e-receipt as provided to the customer may then be sent to the tax system as proof of the tax declaration to support sellers' and buyers' automated electronical VAT-filing.

5.2.3 Process or workflow description

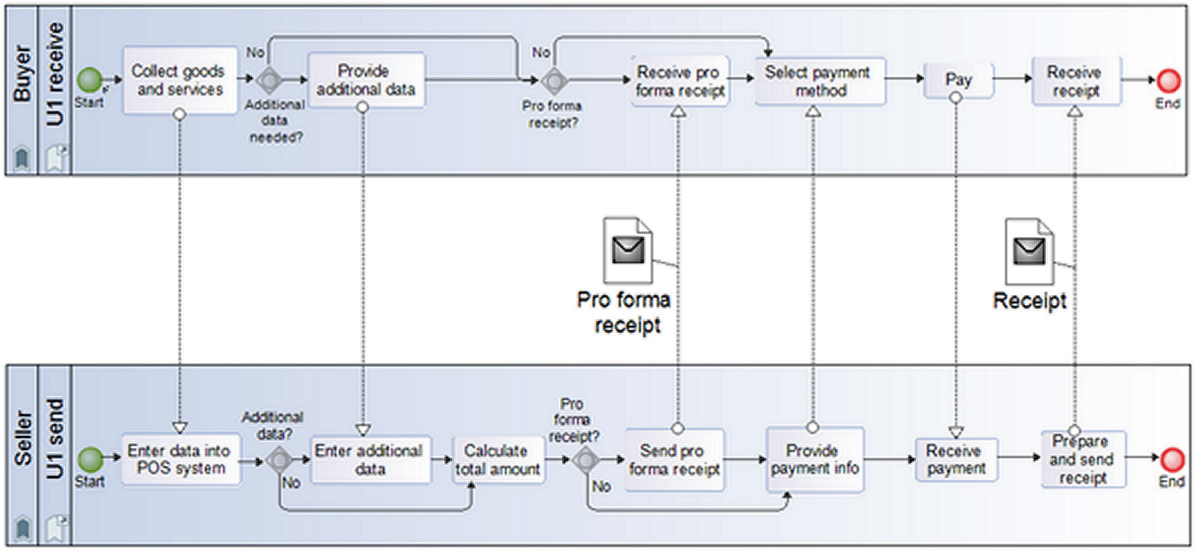


Figure 1

1. The Buyer purchases goods and/or services from the Seller.
2. If necessary, the Buyer provides additional information to the Seller (e.g. ID number).
3. The Seller calculates the total amount of the purchase.
4. The Buyer selects a payment method from the options offered by the Seller.
5. The Buyer pays or initiates the payment (cash, voucher or with electronic means).
6. The Seller generates the e-receipt with their cash register and sends it to the Buyer.
7. The Buyer imports the e-receipt in their application or in the system of a service provider.

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5.2.4 Variants

Many payment options exist that may be offered to the Buyer. Some options need specific information that is included in the receipt. Options include cash, vouchers and electronic payments of several kinds. Parts of the amounts may be paid with different means. In some cases, a cash withdrawal may be part of the transaction. In other cases, a tip may be given that increases the calculated amount.

In some cases (e.g. in restaurants) first a pro-forma receipt is issued and after payment the final receipt is generated.

In some environments specific (product) information needs to be included in the receipt:

— For selected product categories sold in Europe a Digital Product Passport is required. A DPP identifier enables linking to the verified product information, adding transparency of the full life cycle of a product. The passport will tell how sustainably materials are sourced, what are the social and environmental impacts of used materials, production, use and end of life;

— When purchasing **food**, Best Before dates, lot numbers, a list of ingredients, information about the source, quality labels, nutrition value and allergy issues may need to be given;

— With **textile** products, the composition, washing instructions and a non-child labour statement may be needed;

— With **electronics**, serial numbers, warrantee information and safety instruction may need to be included;

— With **cultural events** or facilities and means of transport, a unique token may need to be included together with rang and seat information;

— With **pharmaceuticals** or medical services, the receipt may need to include information identifying the patient, the prescriber and the treatment, in order for the patient to reimburse the expense. Each country has different legislation with regards to financing or refunding pharmacy and health care services. In some cases, the State or an insurance company directly pays the health care provider, in other cases the buyer needs to pay and may later get refunded. In both cases the buyer may be entitled to receive a receipt. Usually the patient (who can be different from the buyer) is identified on the receipt, as is the doctor who prescribed the pharmaceutical or treatment.

5.3 U2: Online shop e-receipts

5.3.1 Introduction

In online sales to consumers the receipt is by definition electronic.

5.3.2 Short description

Usually, after having ordered the goods or services and having initiated the payment, the buyer receives the e-receipt as a download on the web page or in their mailbox, possibly together with a PDF representation. The e-receipt is provided to the buyer after ordering, in some cases after delivery.

The purpose of the e-receipt for the Seller is to provide the required information related to the purchase to fulfil the obligations set by the law and ensure that the customer has a good customer experience so as to minimize customer service costs. The purpose for the buyer is to receive the information to their selected service in a structured format to further utilize the receipt and enable

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sharing this information. The receipt documents the rights or at least the ownership of a specific product or service (e.g. a concert ticket) with the reference to the seller's legal identity, obligations, etc.

The seller may be registered in accordance with VAT legislation. If applicable, the seller collects and pays the VAT to the tax authorities where the customer is living. In case the customer is a company, the VAT amount may be deducted/refunded according to local rules and regulations.

5.3.3 Process or workflow description

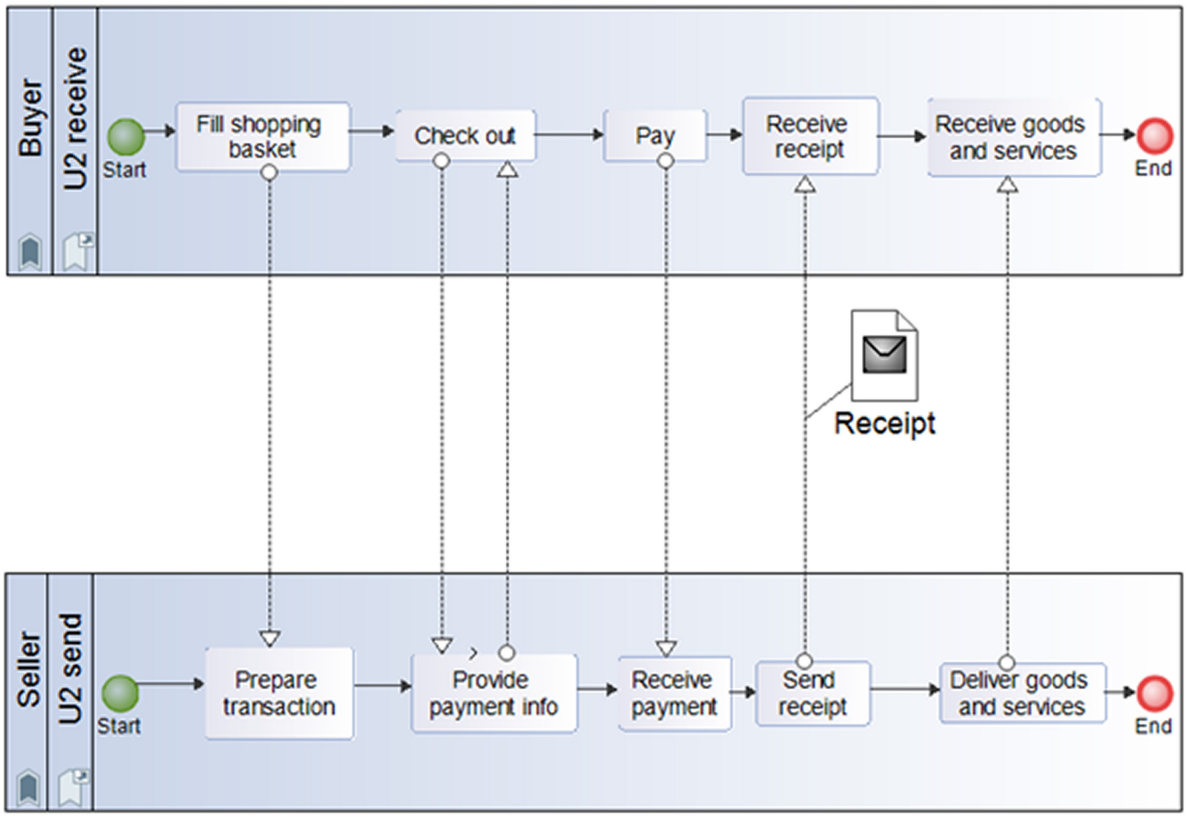


Figure 2

1. The buyer finalizes their shopping basket.
2. The buyer initiates the payment.
3. The seller sends the e-receipt to the buyer or makes it available.

5.4 U3: e-Receipt is used to claim expenses

5.4.1 Introduction

Employees frequently travel or do purchases that they may reimburse to their employer. The e-receipt streamlines this process. Instead of re-keying information from hard-to-read sales slips, the employee sends the e-receipt as received from the seller to the application of the employer.

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5.4.2 Short description

The buyer makes a purchase according to U1 or U2. The buyer then uses the receipt information to claim expenses with their employer, an insurance company or any other third party. There are systems that support the process connected with these claims for registering, approval routing and accounting. Today this process is manual to a large degree. With e-receipts, these processes can to a large degree be automated, just by entering the receipt in a structured format that will ease the identification of the type of expense, and thereby the form and extent of documentation needed for that specific expense type, which in turn will decide the coding and the approval workflow.

The employee sends the e-receipt as received from the seller to the application of the employer. The employer refunds the employee. In some countries the employer may use the e-receipt information for VAT or income tax deduction.

5.4.3 Process or workflow description

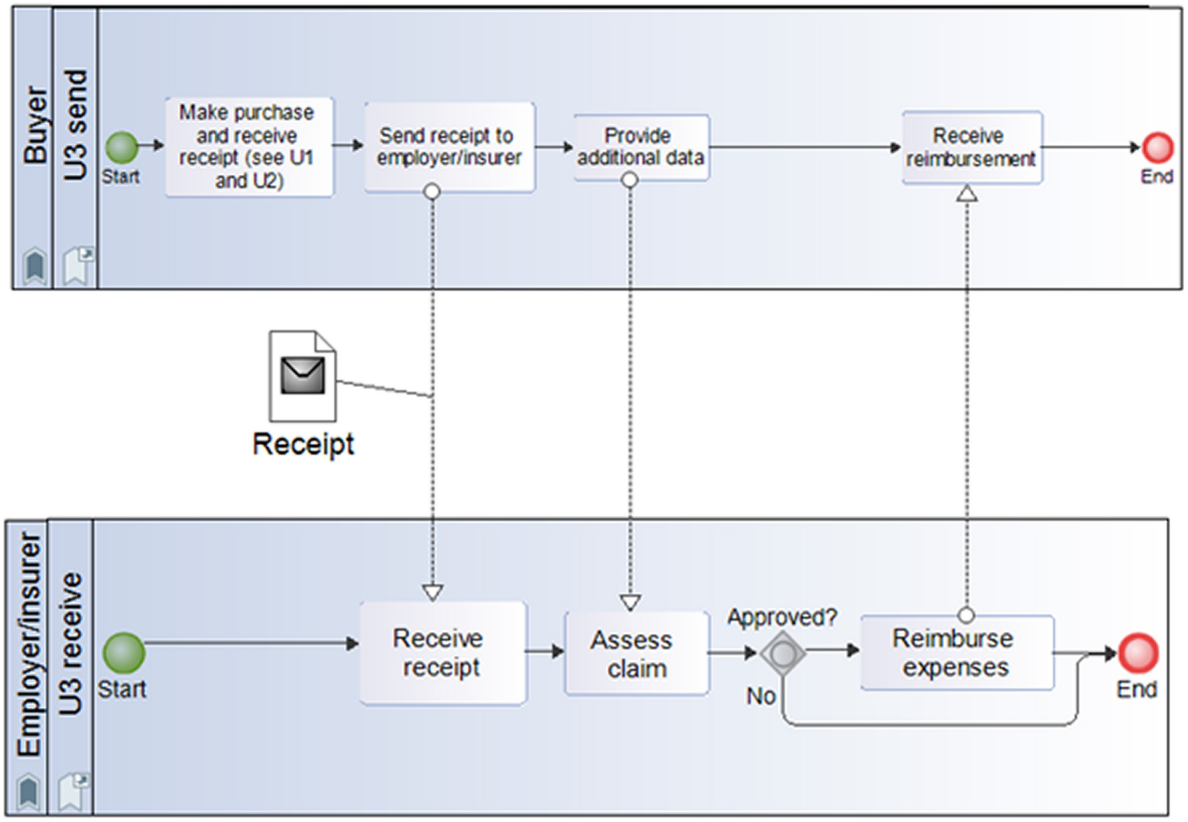


Figure 3

1. POS creates a digital receipt (see U1 or U2).
2. Buyer uploads the e-receipt to the Financial Management System of the employer.
3. The buyer might need to add some information like reason, description and ask for approval.
4. Someone approves the expense.

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5. Approved expense is sent to company accounting system.

6. Buyer is reimbursed.

NOTE If the company uses the receipt information for deduction of VAT, the company is the legal buyer.

5.4.4 Variants

Several types of expenses need specific information to be included in the receipt. With hotel expenses, e.g. the dates of the stay are needed. With restaurant bills, a distinction needs to be made between food and drinks. Taxi rides need the from and to locations.

5.5 U4: e-receipt is used for returns, guarantee and refund

5.5.1 Introduction

In general, the receipt is documenting a purchase and the person having the item and the receipt, has the right to claim a return, a fault or damage to get a repair or refund in some way. The receipt can contain such information, and part of the intention with the e-receipt is that this information shall be presented in the e-receipt whenever it is relevant.

This is also applicable for receipt for online purchases.

5.5.2 Short description

The e-receipt as received from the seller may be used a proof of purchase when returning the goods or claiming guarantee. It may also serve as a voucher in case of refunds.

Faults with a purchase, whether is on delivery or it arises later within the period of warranty the purchase may be returned or be repaired. The receipt is used to document the purchase. The use of e-receipt is simpler and identifies the contractual part / the agreement of the purchase in a better way than an old faulty paper-based receipt.

The e-receipt makes it easier to handle any claim and makes it even more obvious for the parties that the receipt in fact is a contract connected to a business transaction.

Buyers always have the receipt with them, e.g. in a mobile app, so return is easier for all parties because the receipt is not missing or in bad condition (ink faded).

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5.5.3 Process or workflow description

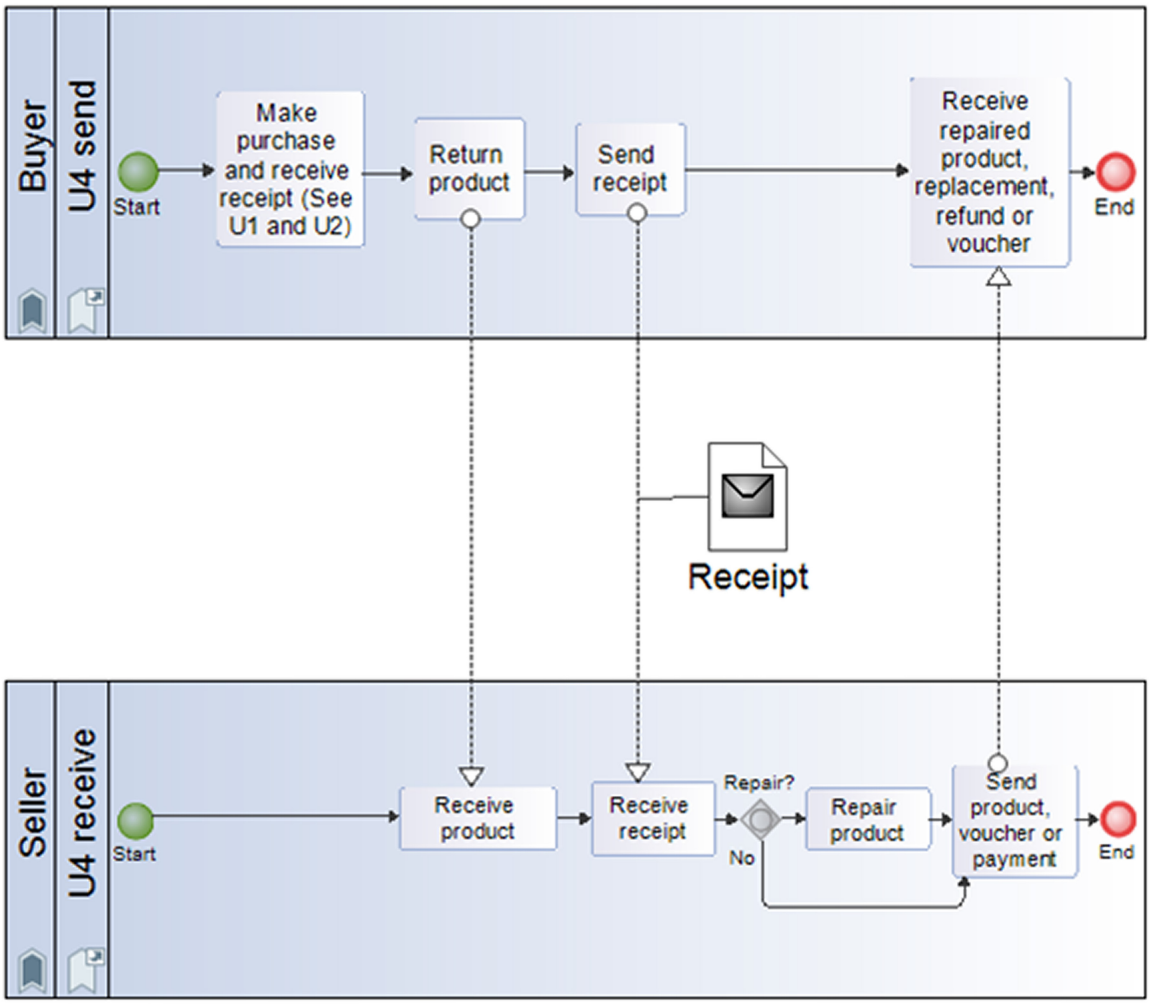


Figure 4

The buyer or owner presents the fault together with the receipt to the seller to prove the ownership and to correct the error according to the agreement and applicable law.

5.6 U5: Simplified invoice for B2B transactions

5.6.1 Introduction

In some cases of business to business trade, simplified invoices may be used instead of normal invoices. Simplified invoices do not need all information elements that are required for regular invoices. The data content of an e-receipt may suffice.

5.6.2 Short description

Buyer use receipt information for VAT or other administrative reporting or update own inventory accounting.

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5.6.3 Process or workflow description

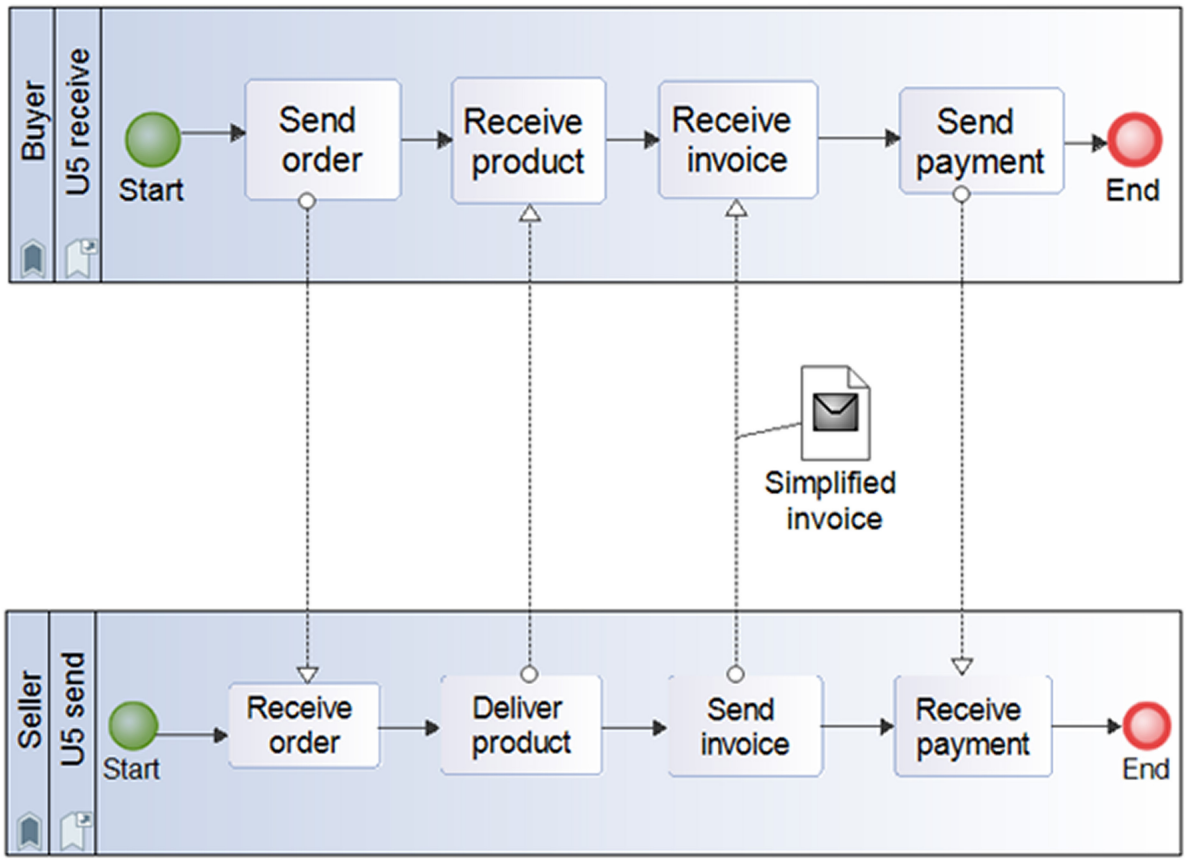


Figure 5

6 The semantic data model of the elements of an e-receipt

6.1 General

This Clause 6 describes the information elements, and groups of information elements, that constitutes the semantic data model of the elements of an e-receipt, as well as their relationship and the business rules required to ensure the integrity and consistency in the data provided in a compliant instance document (an individual e-receipt).

For an instance document to be compliant to the e-receipt model, it shall respect all rules defined in this Clause 6.

It is the responsibility of the e-receipt issuer to ensure that an e-receipt respects any rules defined by relevant legislation, including requirements related to personal data protection, as well as rules stated as part of a trading relationship between the Seller and the Buyer. An e-receipt conforming to the rules of the semantic data model of the elements of an e-receipt as described in this Clause 6 does not guarantee its legal compliance OR compliance to contractual obligations.

An overview of the groups of information elements contained in the semantic model is provided in Figure 6. Each of these groups and their detailed content is explained in detail in 6.3.

The business rules defined in order to ensure the integrity and consistency in the data provided in a compliant instance document can be found in 6.4.

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The semantic data type assigned to individual information elements in the e-receipt model to specify data format and metadata requirements that apply are detailed in 6.5.

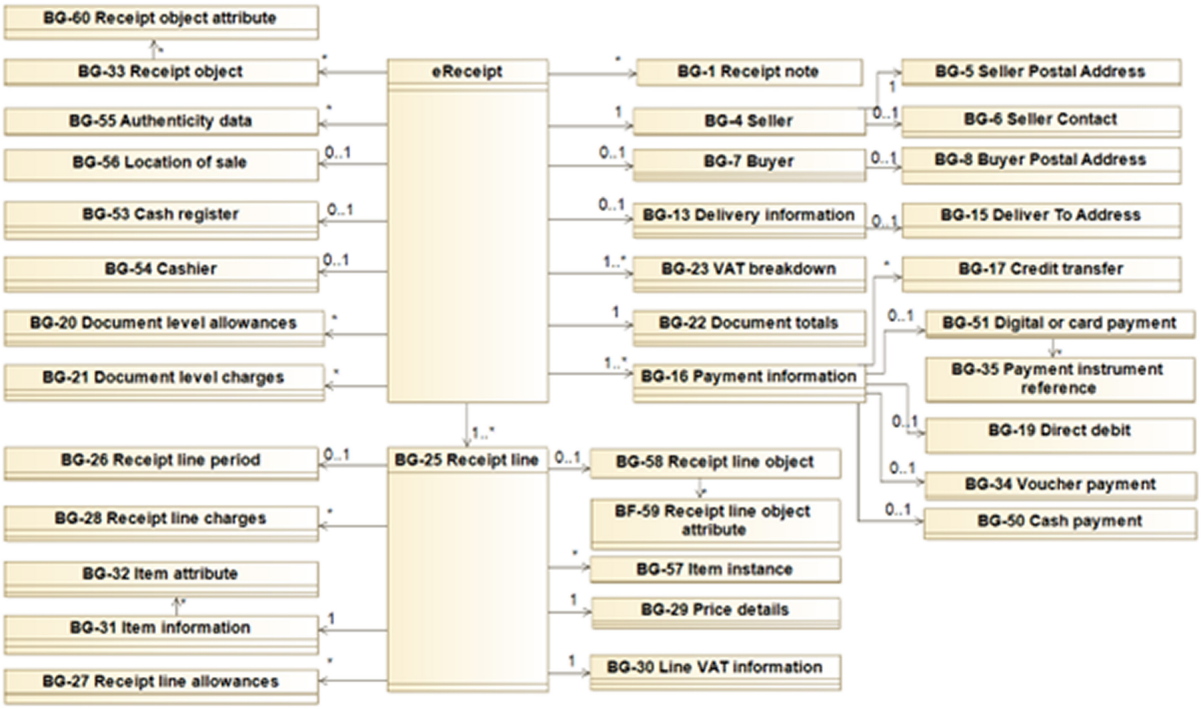


Figure 6 — Overview of the semantic model

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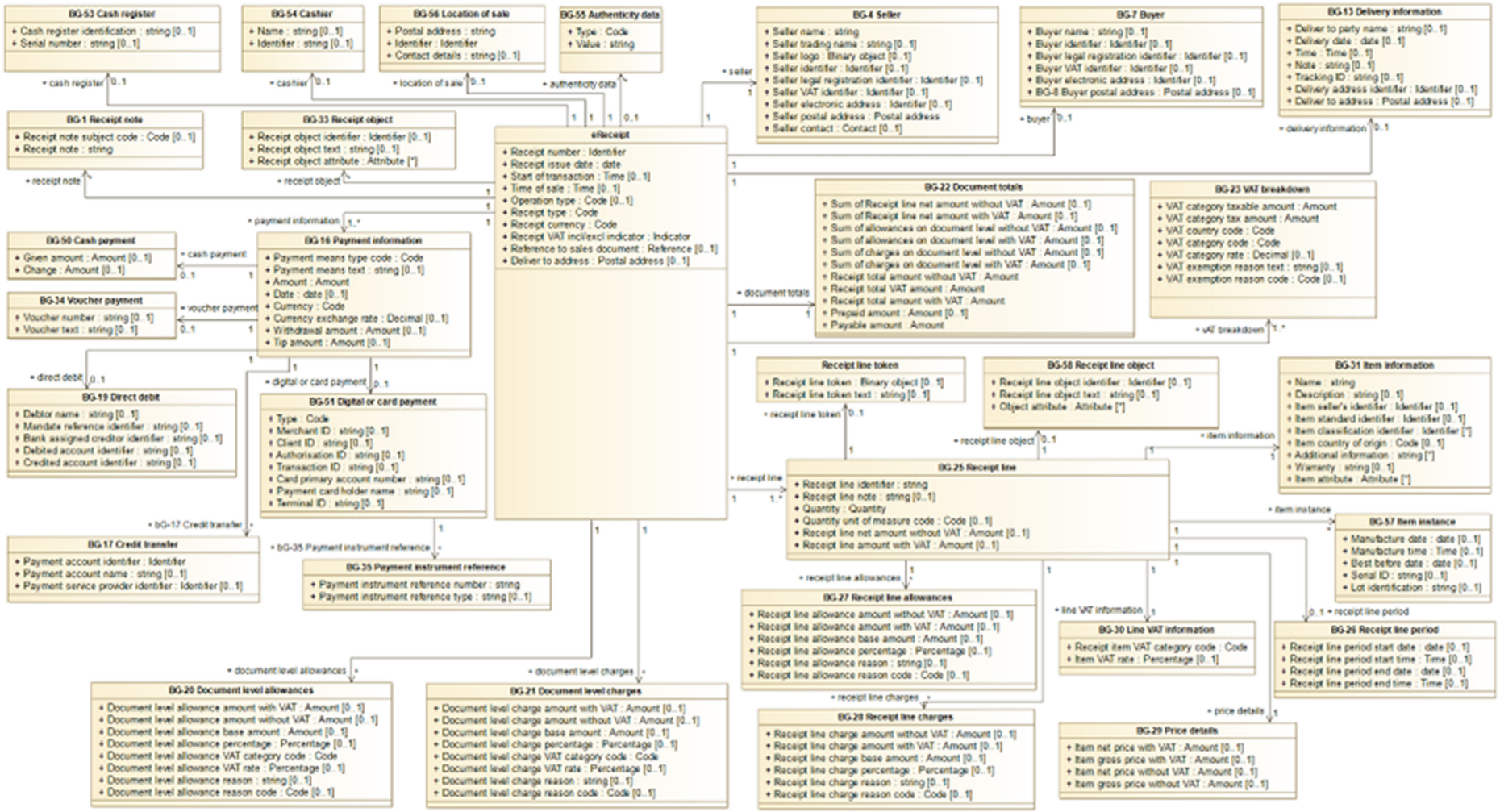


Figure 7 — The semantic model

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6.2 Legend

Each information element, as well as groups of information elements, that constitutes the semantic data model of the elements of an e-receipt is described as a row in the table documented in 6.3 where the following information is provided:

ID	Level	Cardinality	Business Term	Description	Usage Note	Semantic data type

ID: An identifier for the information element (BT - Business Term) and group of information elements (BG - Business terms Group). The identifiers are not necessarily consecutive or in sequence.

Level: Indicates on which level in the model the information element occurs:

— +: The first level of the model;

— ++: The second level of the model. The information element (or the group of information elements) is part of a group of information elements which is defined at the first level of the model;

— +++: The third level of the model. The information element (or the group of information elements) is part of a group of information elements which is defined at the second level of the model;

— ++++: The fourth level of the model. The information element is part of a group of information elements which is defined at the third level of the model.

Cardinality: Also known as multiplicity is used to indicate if an information element (or group of information elements) is mandatory or conditional, and if it is repeatable. The cardinality shall always be analysed in the context of where the information element is used. Example: the Payee Name is mandatory in the e-receipt model, but only when a Payee is stated and is relevant.

The following cardinalities exist:

— 1..1: Mandatory, minimum 1 occurrence and maximum 1 occurrence of the information element (or group of information elements) shall be present in any compliant instance document;

— 1..n: Mandatory and repeatable, minimum 1 occurrence and unbounded upper maximum occurrences of the information element (or group of information elements) shall be present in any compliant instance document;

— 0..1: Conditional, minimum 0 occurrences and maximum 1 occurrence of the information element (or group of information elements) may be present in any compliant instance document; it's use depends on business rules stated as well as the regulatory, commercial and contractual conditions that applies to the business transaction;

— 0..n: Conditional and repeatable, minimum 0 occurrences and unbounded upper maximum occurrences of the information element (or group of information elements) may be present in any compliant instance document; it's use depends on business rules stated as well as the regulatory, commercial and contractual conditions that applies to the business transaction.

Business Term: The name of the information element used in the e-receipt model or the name of a coherent group of related information elements, provided to give logical meaning.

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Description: A description of the semantic meaning of the information element.

Usage Note: Clarifying information on how the information element shall or may be used (such as calculation rules).

Semantic data type: The data format that applies to the information element (see 6.5).

Supplementary components or attributes are specified with the Business Term they belong to.

Note that in the naming of business terms, in descriptions and in usage notes, the term “invoice” also applies to Credit notes, unless mentioned otherwise.

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6.3 The semantic model

Table 1 — Semantic data model of the e-receipt / simplified invoice

ID	Level	Cardinality	Business Term	Description	Usage Note	Semantic data type[1]
BT-1	+	1..1	Receipt number	A unique identification of the receipt.	Sequential number	Identifier
BT-2	+	1..1	Receipt issue date	The date when the Receipt was issued		Date
BT-256	+	0..1	Start of transaction	The time the sales transaction started		Time
BT-201	+	0..1	Time of sale	Exact time when the transaction completed	Time of 24-h day	Time
BT-202	+	0..1	Operation type	Business transaction type		Code
BT-3	+	1..1	Receipt type code	A code specifying the functional type of the Receipt		Code
BT-5	+	1..1	Receipt currency code	The currency of the amounts in the receipt	The currency in which all Receipt amounts are given shall be according to ISO 4217	Code
BT-259	+	1..1	Receipt VAT incl/excl indicator	Indication whether the calculations in the receipt are inclusive or exclusive of VAT	See subclause 6.7	Indicator
BT-204	+	0..1	Reference to sales document	Reference to the sales document related to eReceipt		Reference
BG-33	+	0..n	RECEIPT OBJECT	an object on which the receipt is based, given by the Seller		

[1] The suffix ".Type" has been deleted for readability.

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ID	Level	Cardinality	Business Term	Description	Usage Note	Semantic data type[1]
BT-18	++	0..1	Receipt object identifier	An identifier for an object on which the receipt is based.	It may be a subscription number, telephone number, patient, meter point, vehicle, person etc., as applicable.	Identifier
		0..1	Scheme identifier	The identification scheme identifier of the receipt object identifier.	If used, the scheme identifier shall be chosen from the UNTDID 1153 code list entries.	
BT-258	++	0..1	Receipt object text	A description of the receipt object.		Text
BG-60	++	0..n	RECEIPT OBJECT ATTRIBUTE			
BT-285	+++	1..1	Object attribute name	The name of the attribute or property of the object.		Text
BT-286	+++	1..1	Object attribute value	The value of the attribute or property of the object.		Text
BG-1	+	0..n	RECEIPT NOTE	A group of business terms providing textual notes that are relevant for the Receipt, together with an indication of the note subject.		
BT-21	++	0..1	Receipt note subject code	The subject of the textual note in BT-xx.		Code
BT-22	++	1..1	Receipt note	A textual note that gives unstructured information that is relevant to the Receipt as a whole.		Text
BG-4	+	1..1	SELLER	A group of business terms providing information about the Seller.		

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ID	Level	Cardinality	Business Term	Description	Usage Note	Semantic data type[1]
BT-27	++	1..1	Seller name	The full formal name by which the Seller is registered in the national registry of legal entities or as a Taxable person or otherwise trades as a person or persons.		Text
BT-28	++	0..1	Seller trading name	A name by which the Seller is known, other than Seller name (also known as Business name).		Text
BT-271	++	0..1	Seller logo	The logo of the Seller.	Logo as picture to be shown on screen and print.	Binary object
BT-29	++	0..1 0..1	Seller identifier Scheme identifier	An identification of the Seller. The identification scheme identifier of the Seller identifier.	If used, the identification scheme identifier shall be chosen from the entries of the list published by the ISO/IEC 6523 maintenance agency.	Identifier
BT-30	++	0..1 0..1	Seller legal registration identifier Scheme identifier	An identifier issued by an official registrar that identifies the Seller as a legal entity or person. The identification scheme identifier of the Seller legal registration identifier.	If used, the identification scheme identifier shall be chosen from the entries of the list published by the ISO/IEC 6523 maintenance agency.	Identifier
BT-31	++	0..1	Seller VAT identifier	The Seller's VAT identifier (also known as Seller VAT identification number).		Identifier
BT-34	++	0..1	Seller electronic address	Identifies the Seller's electronic address to which the application level response to the receipt may be delivered.		Identifier
		1..1	Scheme identifier	The identification scheme identifier of the Seller legal registration identifier.	The identification scheme identifier shall be chosen from the entries of the list published by the ISO/IEC 6523 maintenance agency.	

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ID	Level	Cardinality	Business Term	Description	Usage Note	Semantic data type[1]
BG-5	++	1..1	SELLER POSTAL ADDRESS	A group of business terms providing information about the address of the Seller.		
BT-35	+++	0..1	Seller address line 1	The main address line in an address.	Usually the street name and number or post office box.	Text
BT-36	+++	0..1	Seller address line 2	An additional address line in an address that can be used to give further details supplementing the main line.		Text
BT-162	+++	0..1	Seller address line 3	An additional address line in an address that can be used to give further details supplementing the main line.		Text
BT-37	+++	0..1	Seller city	The common name of the city, town or village, where the Seller address is located.		Text
BT-38	+++	0..1	Seller post code	The identifier for an addressable group of properties according to the relevant postal service.	Such as a ZIP code or a post code.	Text
BT-39	+++	0..1	Seller country subdivision	The subdivision of a country.		
BT-40	+++	1..1	Seller country code	A code that identifies the country.	The country where VAT is liable. The lists of valid countries shall be as registered with the EN ISO 3166-1 Maintenance agency, “Codes for the representation of names of countries and their subdivisions”.	Code
BG-6	++	0..1	SELLER CONTACT	A group of business terms providing contact information about the Seller.		

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ID	Level	Cardinality	Business Term	Description	Usage Note	Semantic data type[1]
BT-41	+++	0..1	Seller contact point	A contact point for a legal entity or person.		Text
BT-42	+++	0..1	Seller contact telephone number	A phone number for the contact point.		Text
BT-43	+++	0..1	Seller contact email address	An e-mail address for the contact point.		Text
BG-7	+	0..1	BUYER	A group of business terms providing information about the Buyer.		
BT-44	++	0..1	Buyer name	The full name of the Buyer.		Text
BT-46	++	0..1 0..1	Buyer identifier Scheme identifier	An identifier of the Buyer. The identification scheme identifier of the Buyer identifier.	If used, the identification scheme identifier shall be chosen from the entries of the list published by the ISO/IEC 6523 maintenance agency.	Identifier
BT-47	++	0..1 0..1	Buyer legal registration identifier Scheme identifier	An identifier issued by an official registrar that identifies the Buyer as a legal entity or person. The identification scheme identifier of the Buyer legal registration identifier.	 If used, the identification scheme identifier shall be chosen from the entries of the list published by the ISO/IEC 6523 maintenance agency.	
BT-48	++	0..1	Buyer VAT identifier	The Buyer's VAT identifier (also known as Buyer VAT identification number).		Identifier

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ID	Level	Cardinality	Business Term	Description	Usage Note	Semantic data type[1]
BT-49	++	0..1 1..1	Buyer electronic address Scheme identifier	Identifies the Buyer's electronic address to which the receipt is delivered. The scheme of the Buyer's electronic address.	The identification scheme identifier shall be chosen from the entries of the list published by the ISO/IEC 6523 maintenance agency.	Identifier
BG-8	++	0..1	BUYER POSTAL ADDRESS	A group of business terms providing information about the postal address for the Buyer.		
BT-50	+++	0..1	Buyer address line 1	The main address line in an address.		Text
BT-51	+++	0..1	Buyer address line 2	An additional address line in an address that can be used to give further details supplementing the main line.		Text
BT-163	+++	0..1	Buyer address line 3	An additional address line in an address that can be used to give further details supplementing the main line.		Text
BT-52	+++	0..1	Buyer city	The common name of the city, town or village, where the Buyer's address is located.		Text
BT-53	+++	0..1	Buyer post code	The identifier for an addressable group of properties according to the relevant postal service.	Such as a ZIP code or a post code.	Text
BT-54	+++	0..1	Buyer country subdivision	The subdivision of a country.		Text

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ID	Level	Cardinality	Business Term	Description	Usage Note	Semantic data type[1]
BT-55	+++	1..1	Buyer country code	A code that identifies the country.	The lists of valid countries shall be as registered with the EN ISO 3166-1 Maintenance agency, "Codes for the representation of names of countries and their subdivisions".	Code
BG-13	+	0..1	DELIVERY INFORMATION	A group of business terms providing information about where and when the goods and services are delivered.		
BT-70	++	0..1	Deliver to party name	The name of the party to which the goods and services are delivered.		Text
BT-205	++	0..1	Delivery date	The date on which the supply of goods or services was or will be made or completed.		Date
BT-206	++	0..1	Time	The time of the delivery.		Time
BT-207	++	0..1	Note	Free text note to the delivery.		Text
BT-208	++	0..1	Tracking ID	ID to be used to track and trace the delivery.		Text
BT-284	++	0..1 0..1	Delivery address identifier Scheme identifier	An identifier for the delivery address. The identification scheme identifier of the Delivery address identifier.	If used, the identification scheme identifier shall be chosen from the entries of the list published by the ISO/IEC 6523 maintenance agency.	Identifier
BG-15	++	0..1	DELIVER TO ADDRESS	Information about the address to which goods and services were or are delivered.		
BT-75	+++	0..1	Deliver to address line 1	The main address line in an address.		Text

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ID	Level	Cardinality	Business Term	Description	Usage Note	Semantic data type[1]
BT-76	+++	0..1	Deliver to address line 2	An additional address line in an address that can be used to give further details supplementing the main line.		Text
BT-165	+++	0..1	Deliver to address line 3	An additional address line in an address that can be used to give further details supplementing the main line.		Text
BT-77	+++	0..1	Deliver to city	The common name of the city, town or village, where the deliver to address is located.		Text
BT-78	+++	0..1	Deliver to post code	The identifier for an addressable group of properties according to the relevant postal service.	Such as a ZIP code or a post code.	Text
BT-79	+++	0..1	Deliver to country subdivision	The subdivision of a country.		Text
BT-80	+++	1..1	Deliver to country code	A code that identifies the country.	The lists of valid countries shall be as registered with the EN ISO 3166-1 Maintenance agency, “Codes for the representation of names of countries and their subdivisions”.	Code
BG-53	+	0..1	CASH REGISTER			
BT-235	++	0..1	Cash register identification	Identification number of the cash register		Text
BT-236	++	0..1	Serial number	Serial number of the cash register		Text
BG-54	+	0..1	CASHIER			

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ID	Level	Cardinality	Business Term	Description	Usage Note	Semantic data type[1]
BT-237	++	0..1	Name	Name of the cashier.		Text
BT-238	++	0..1	Identifier	Identification number of the cashier.		Text
BG-55	+	0..n	AUTHENTICITY DATA			
BT-239	++	1..1	Type	The method used to create the authenticity data.		Code
BT-240	++	1..1	Value	Hash or other value to proof the authenticity of the e-receipt.		Text
BG-56	+	0..1	LOCATION OF SALE			
BT-242	++	0..1 1..1	Location of sale identifier Scheme identifier	Identifies the location of sale. Identification scheme.	The identification scheme identifier shall be chosen from the entries of the list published by the ISO/IEC 6523 maintenance agency.	Identifier
BT-241	+++	0..1	Location of sale address line 1	The main address line in an address.		Text
BT-278	+++	0..1	Location of sale address line 2	An additional address line in an address that can be used to give further details supplementing the main line.		Text
BT-279	+++	0..1	Location of sale address line 3	An additional address line in an address that can be used to give further details supplementing the main line.		Text
BT-280	+++	0..1	Location of sale city	The common name of the city, town or village, where the sale is located.		Text

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ID	Level	Cardinality	Business Term	Description	Usage Note	Semantic data type[1]
BT-281	+++	0..1	Location of sale post code	The identifier for an addressable group of properties according to the relevant postal service.	Such as a ZIP code or a post code.	Text
BT-282	+++	0..1	Location of sale country subdivision	The subdivision of a country.		Text
BT-283	+++	1..1	Location of sale country code	A code that identifies the country.	The lists of valid countries shall be as registered with the EN ISO 3166-1 Maintenance agency, “Codes for the representation of names of countries and their subdivisions”.	Code
BT-243	++	0..1	Contact details	Location of sale contact.		Text
BG-16	+	1..n	PAYMENT INFORMATION	A group of business terms providing information about the payment.		
BT-81	++	1..1	Payment means type code	The means, expressed as code, for how a payment has been settled.		Code
BT-82	++	0..1	Payment means text	The means, expressed as text, for how a payment has been settled.		Text
BT-211	++	1..1	Amount	Paid amount in selected method.		Amount
BT-212	++	0..1	Date	Date when the payment is made.		Date
BT-213	++	1..1	Currency	The currency of the payment.		Code

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