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Audit data collection — Customs and indirect tax extension

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Foreword

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The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 295, *Audit data services*.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

ISO 21378, the audit data collection standard, establishes common definitions of accounting data elements and provides the information necessary to extract relevant audit data. ISO 21378 primarily focuses on the access of audit data. It helps bridge the gap between the various participants in the audit process, consisting of auditors, auditees, software developers and IT professionals by creating a mechanism to express information common to accounting in a way which is independent of accounting and enterprise resource planning (ERP) systems. ISO 21378 serves as a basis for data extraction in the areas of general ledger, accounts receivable, sales, accounts payable, purchasing, inventory (including both inventory and movement data), and property, plant, and equipment. ISO 21378 focuses on financial audits (financial statements).

This document concerns tax and customs audits relating to the accuracy and completeness of reported indirect taxes and customs duties conducted by or on behalf of governments. A tax or customs audit is the process where the auditor seeks to obtain audit information in an expert, structured, systematic, independent, and documented manner with the aim of answering the question of whether the subject to the audit meets defined regulations, guidelines and criteria.

Indirect taxes and/or customs duties audits require the same data set, or subsets thereof, as financial audits. Therefore, it makes sense to use the ISO 21378 for these types of audits. However, due to the specific characteristics of customs duties and indirect taxes (e.g. VAT, GST, sales tax, service tax, etc.) additional data is required to achieve the audit goals.

This document aims to address two challenges, namely the wide variety of laws and regulations prevailing globally, and the variety of methods used by ERP systems with respect to data attributes. At the same time, this document offers a relative limited extension to ISO 21378, and can be implemented without changing it.

This document introduces a mechanism to add characteristics to ISO 21378. Needs of data can obviously vary by audit type, country, and other factors. The mechanism makes it possible to unlock the ERP-data requested by the auditor in that the data dump for indirect tax audits can differ in that for customs duties audits or financial audits.

First of all, the mechanism is designed as a vehicle for data exchange. However, globally or widely accepted values for defined characteristics should be used where applicable. For example, other ISO standards or the World Customs Organization (WCO) standards may be practicable.

If these are lacking or not applicable, then values from a less comprehensive or hierarchical lower level may be used. For example, those which are practice in a specific region or country (e.g., European Union, African Union, India, China). If there is no shared understanding of certain values, then the auditee should explain to the auditor the actual meaning in case the semantics are missing.

This document provides auditors with an additional tool to assess whether the auditee has fulfilled its indirect tax obligations and customs duties in accordance with applicable legislation. It allows auditors to determine if the auditee has paid the correct amount of tax and customs duties, in a timely manner, and has filed all the necessary returns.

Audit data collection — Customs and indirect tax extension

1 Scope

This document specifies the functional requirements that build on ISO 21378 for audits in the areas of customs duties and indirect taxes [e.g. value-added tax (VAT) and excise duties]. It addresses how tax auditors obtain audit data for these audits, including data element formats and to some extent content requirements.

In practice, this document applies to virtually every step in the whole process in the supply chain and covers both goods, services and works.

It includes domestic transactions, cross-border transactions (import and export) and can cover both third-party and intercompany transactions or even movements of goods within the same company. This document does not describe when an event is taxable nor how to calculate tax or customs duties as this is legislation-specific and the situation can vary from country to country or even within the same country.

This document covers standard exchange of the data related to taxable operations/activities by businesses to perform controls and audits more effectively and efficiently through automated tests. This document focuses on the characteristics related to taxability and the related formalities of the indirect tax and customs duties regulations. It includes the result of a tax calculation, the relevant underlying parameters which can be processed by ERP-systems and/or indirect tax/customs duties systems, and data needed to comply with indirect tax and customs duties legislation and formalities.

This document is not designed to collect audit data from the regulators like tax and/or customs authorities.

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.

ISO 21378:2019, *Audit data collection*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 21378 and the following apply.

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

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

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

3.1
indirect tax
tax levied and collected by an intermediary on goods and services before they reach the consumer, who ultimately pays the tax as part of the market price of the goods or services purchased

3.2
consumption tax
indirect tax (3.1) on the purchase of a good or service which can take the form of sales taxes, tariffs, excise, and other taxes on consumed goods and services

3.3
VAT
value-added tax
tax collected at all stages of the processes of production and distribution of goods and services, accumulation of the tax being prevented by allowing businesses to deduct the tax which incurs on their inputs from the tax collected on their outputs

Note 1 to entry: For readability, this document uses the term VAT, but other types of taxes, such as good and services tax (GST) and sales tax, are explicitly included. In some cases, this document refers to a particular tax, such as GST or sales tax.

Note 2 to entry: A refund can occur in numerous countries, where it will not always be an option in others.

3.4
customs duties
tax imposed on imports and exports of goods

3.5
indirect tax audit
audit, assessment, or other examination relating to *indirect taxes* (3.1) by any tax authority or any judicial or administrative proceedings relating to indirect taxes

3.6
customs duties audit
structured examination to measure and improve the traders' compliance, after customs has released the cargo, of the relevant commercial data, sales contracts, financial and non-financial records, physical stock and other assets of traders

3.7
characteristic
property or attribute of a document, product or transaction

3.8
jurisdiction
practical authority granted to a legal body to administer justice, as defined by the kind of case, and the location of the issue

3.9
period
short or long part of the time with a beginning and end, whether or not specified, which is considered a unity because of its specific character, a typical phenomenon or a characteristic event within it

3.10
subset
group of elements which all belong to a given set

3.11
works
combination of both goods and services elements within construction and infra structure projects

4 Modules, tables and fields

4.1 General

ISO 21378 covers eight major business modules of accounting and ERP systems, including:

— base (BAS);

— general ledger (GL);

— sales (SAL);

— accounts receivable (AR);

— purchase (PUR);

— accounts payable (AP);

— inventory (INV);

— property plant and equipment (PPE).

These modules relate to major business processes including the areas of purchase, sales, inventory, fixed assets with the aim to identify and to specify data elements and file formats needed for auditing.

An overview of the business modules and select business events that demonstrate interaction points between the modules are shown in ISO 21378:2019, Figure 1.

From a customs and indirect tax perspective, there is a need to support data exchange of relevant characteristics on taxable transactions and related import duties, excise duties, VAT and similar consumption taxes.

The standard formulated in this document is an extension on ISO 21378. This document contains additional tables to the base module (BAS), general ledger module (GL), sales module (SAL), purchase module (PUR) and inventory module (INV) of ISO 21378, to determine selection criteria and selection period, and add necessary characteristics.

This document defines seven tables. These tables all have a level 2 indication. ISO 21378 recognizes level 1 and level 2 tables. The designation difference is based on the use of the information by auditors. Level 1 tables are defined as tables containing information the auditor should leverage when auditing. However, depending on the system, this information will possibly not be available, and therefore cannot be exchanged.

The level 2 table designation indicates that these tables contain information that the auditor can leverage if the scope of the audit requires this type of data.

Within each table, fields are also labelled as level 1 or level 2. Similar to the table designations, level 1 fields are defined as fields containing information the auditor should leverage when auditing and where the data are available within the system. The level 2 field designation indicates that these fields contain information that the auditor can leverage if the scope of the audit requires this type of data.

There are situations where level 2 tables contain level 1 fields. This scenario indicates that this type of information will possibly not be needed in some audit situations. However, if the data in the table are deemed to be required by the auditor, the level 1 fields within the level 2 table shall be included as they are key fields for the use of the information.

4.2 Naming conventions

The naming conventions aim to help readers to have a clear understanding of each table and data element. They also conform to the requirements of major accounting and ERP systems and databases.

For used naming conventions in this document, see ISO 21378.

For used abbreviated terms, see ISO 21378.

Additional abbreviated terms used in this document are listed in Table 1.

Table 1 — Abbreviated terms

Abbreviation	Full Name
ADC	Audit data collection
APAC	Asian Pacific countries
AT	Austria
BE	Belgium
CA	Canada
CHAR	Characteristic
CUST	Customs
DE	Denmark
DOC	Document
DMS	Document management system
ERP	Enterprise resource planning
ES	Spain
EU	European Union
GB	Great Britain
GEN	General
GST	Good and services tax
HST	Harmonized sales tax
NL	Netherlands
PERC	Percentage
PST	Provincial sales tax
TARIC	TARif Intégré Communautaire
USA	United States of America
UN	United Nations
VAT	Value-added tax
WCO	World Customs Organisation

4.3 Representation and datatype of data elements

Representation specifications and datatype specifications of the data elements defined in this document can be found in ISO 21378.

4.4 Characteristics tables

The characteristic tables are used as an extension mechanism if the auditor needs additional information for a table to be audited. Additional information means that the information is not specified already in the existing tables of ISO 21378.

A characteristic is a property or attribute of a document, product or transaction. The characteristics are important for the audit to be carried out. Which characteristics are relevant depends on the type of audit, the region, the country, or the type of auditor. Because different audits are possible, in a multitude of regions, countries and for different supervisory authorities, it is impossible to establish a globally standardized list of characteristics. Auditors and auditees shall therefore jointly establish a list of permitted and required characteristics.

Examples of characteristic are:

— goods/service/works indicator;

— jurisdiction identifier;

— tax point date;

— size of the business of the taxpayer;

— status of the product;

— gross weight minus the tare weight of the packaging;

— commodity code according to the tariff of the goods used; commodity code is also referred as TARIC code;

— alcohol percentage.

Characteristics can be standardized at world level, region level or country level. This is outside the scope of this document.

4.5 Base module

4.5.1 General

The base (BAS) module of ISO 21378 contains basic information that is used across multiple modules. Its content includes data related to the data collection, customers, suppliers, tax types, currency etc. Other modules (e.g. GL, SAL, PUR, INV) shall be used in conjunction with this module.

4.5.2 BAS_Selection_Period

In the case of indirect tax audits or customs duties audits, it cannot be necessary or even permitted to receive the data of the entire audit data collection (ADC) from auditees. In that case, customs and tax authorities shall receive a self-defined subset of the entire ADC in accordance with the scope of the audit. In general, it shall be able to derive subsets of the overall ADC that are predetermined and tailored to the purpose of the control data.

To reference the selection criteria for compiling the subset, and to define the selection period, table BAS_Selection_Period (Table 2) is added to the base module in this document.

The selection criteria and dates that shall fall within the selection period, should be determined by mutual agreement between the auditor and the auditee.

BAS_Selection_Period is an extension to table BAS_Profile. BAS_Profile contains the proprietary data that led to the dataset. The fields Profile_Number and Profile_Name are therefore a name/reference of the auditee itself.

For a subset of ADC, all definitions, rules, and agreements that apply to the entire ADC also shall apply to that subset, unless a deviation from ISO 21378 is specified in this document.

The unique identifier for the applied selection criteria, the selection period start date and end date that apply to the selected tables and selected fields are contained in Table 2. Table 2 is level 2.

Table 2 — BAS_Selection_Period

No.	Name	Datatype	Representation	Description	Level
1	Selection_ID	String	%75s	Unique identifier that refers to the selection criteria for selecting tables and fields. The permitted values of Selection_ID and the associated selection criteria should be determined by mutual agreement between the auditor and the auditee. EXAMPLE: “ADC Customs NL”	1
2	Selection_Start_Date	Date	%10s	Start date of the selected period (YYYY-MM-DD). The start time is always "00:00:00".	1
3	Selection_End_Date	Date	%10s	End date of the selected period (YYYY-MM-DD). The end time is always "23:59:59".	1

Guidance on how to use Table 2 can be found in Annex A.

4.6 General ledger module

4.6.1 General

The general ledger (GL) module in ISO 21378 is used to record the financial impacts of business processes. In most ERP systems and accounting packages, the GL is the module where transactional-level data are accumulated, summarized, stored and staged for reporting. Additionally, the closing entries for both periods and year-end are contained within these tables.

In the case of indirect tax audits, it can be necessary to add characteristic information upon the general ledger detail information because:

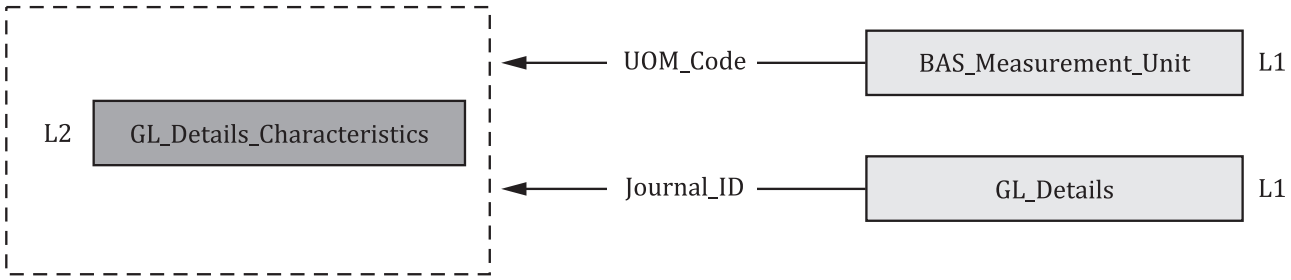
— taxpayers can book certain indirect tax events only in the general ledger of their ERP system and not in other modules;

— there are adjustments due to non-deductibility that cannot be attributed to an individual transaction but are a periodic adjustment that is only recorded in the general ledger.

The characteristics should be delivered on the applicable granular level, which is at GL_Details line level.

To exchange characteristic information, table GL_Details_Characteristics (Table 3) is added to the GL module in this document.

Figure 1 shows the relation between a GL_Details and its GL_Details_Characteristics.



Key

Components

table in customs and indirect tax extension

table in ISO 21378

Connections and lines

tables within the customs and indirect tax extension

reference relationship

L1 table containing information that the auditor should leverage when auditing

L2 table containing information that the auditor can leverage if the scope of the audit requires this type of data

Figure 1 — Table relation diagram of GL module

4.6.2 GL_Details_Characteristics

Additional characteristics that apply to GL_Details lines are contained in Table 3. Examples include VAT status, jurisdiction identifier, tax point date, size of the business of the taxpayer etc. Table 3 is level 2.

Table 3 — GL_Details_Characteristics

No.	Name	Datatype	Representation	Description	Level
1	Journal_ID	String	%100s	Unique identifier for the journal entry. Shall match the Journal_ID in the GL_Details table.	1
2	Characteristic_Type	String	%60s	Type of characteristic in relation to the GL_Details line. The permitted values of Characteristic_Type should be determined by mutual agreement between the auditor and the auditee. EXAMPLE NL_VATSTATUS	1
3	Characteristic_Sequence_Number	String	%60s	The sequence number of a characteristic or group of related characteristics within the same Journal_ID. The sequence number is mandatory if there are multiple characteristics of the same type within the same Journal_ID.	1
4	Characteristic_UOM_Code	String	%80s	Code of measurement of the value of the characteristic, if applicable. Shall match the UOM_Code in the BAS_Measurement_Unit table. EXAMPLE PERC, KG	1
5	Characteristic_Value	String	%1000s	The value of the characteristic on basis of the Characteristic UOM Code. EXAMPLE — 0.125 in case of alcohol percentage of 12,5 percent. — L in case of low-rated VAT product.	1
6	System_Characteristic_Value	String	%1000s	The value of the characteristic as recorded in the source system of the organization to be audited, on basis of the Characteristic UOM Code. EXAMPLE — 0.125 in case of alcohol percentage of 12,5 percent. — 1 in case of low-rated VAT product.	1

The primary key and reference identifiers, with the related referenced fields and tables, for GL_Details_Characteristics are listed in Table 4.

Table 4 — Identifiers in GL_Details_Characteristics

No.	Name	Identifier	Referenced field	Referenced table
1	Journal_ID	PK/REF	Journal_ID	GL_Details
2	Characteristic_Type	PK	not applicable	not applicable
3	Characteristic_Sequence_Number	PK	not applicable	not applicable
4	Characteristic_UOM_Code	PK/REF	UOM_Code	BAS_Measurement_Unit

Guidance on how to use Table 3 and Table 4 can be found in Annex B.

4.7 Sales module

4.7.1 General

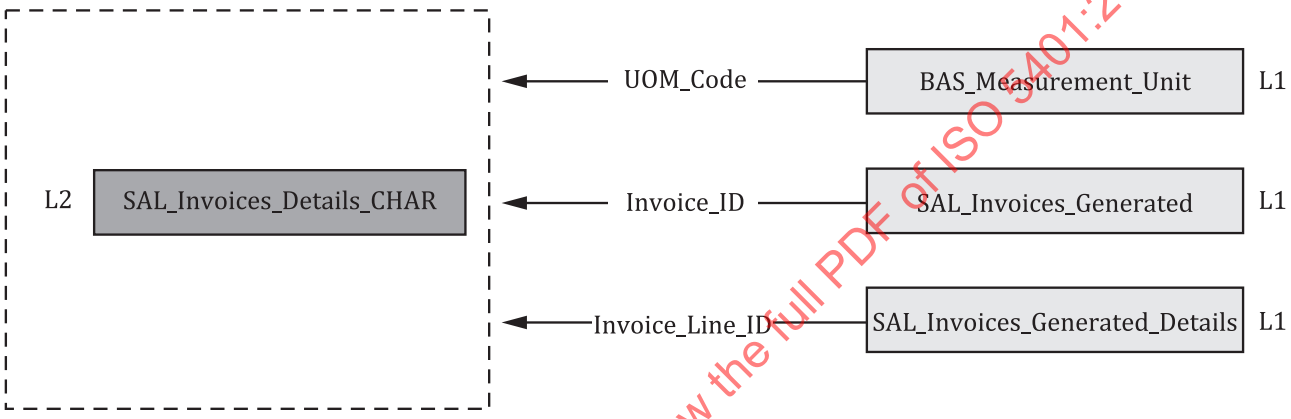
The SAL module of ISO 21378 is intended to encompass data collection and basic analysis of the sales process.

In the case of indirect tax audits, it can be necessary to add characteristic information upon invoices.

The characteristics should be delivered on the applicable granular level, which is at invoice level and invoice line level.

To exchange characteristic information, table SAL_Invoices_Details_CHAR (Table 5) is added to the SAL module in this document.

Figure 2 shows the relation between a SAL_Invoices_Generated, SAL_Invoices_Generated_Details and its SAL_Invoices_Details_CHAR.



Key

Components

table in customs and indirect tax extension

table in ISO 21378

Connections and lines

tables within the customs and indirect tax extension

reference relationship

L1 table containing information that the auditor should leverage when auditing

L2 table containing information that the auditor can leverage if the scope of the audit requires this type of data

Figure 2 — Table relation diagram of SAL module

4.7.2 SAL_Invoices_Details_CHAR

Additional characteristics that apply to SAL_Invoices_Generated and SAL_Invoices_Generated_Details are contained in Table 5. Examples include VAT status, jurisdiction identifier, tax point date, size of the business of the taxpayer etc. Table 5 is level 2.

Table 5 — SAL_Invoices_Details_CHAR

No.	Name	Datatype	Representation	Description	Level
1	Invoice_ID	String	%60s	Unique identifier for the invoice. The same ID shall be used for all tables with invoice data. Shall match the Invoice_ID in the SAL_Invoices_Generated table.	1
2	Invoice_Line_ID	String	%60s	Unique identifier for the invoice line. If not empty, it shall match the Invoice_Line_ID in the SAL_Invoices_Generated_Details table.	1
3	Characteristic_Type	String	%60s	Type of characteristic in relation to the invoice or invoice line. The permitted values of Characteristic_Type should be determined by mutual agreement between the auditor and the auditee. EXAMPLE NL_VATSTATUS	1
4	Characteristic_Sequence_Number	String	%60s	The sequence number of a characteristic or group of related characteristics within the same Invoice_ID and Invoice_Line_ID combination. The sequence number is mandatory if there are multiple characteristics of the same type within the same Invoice_ID and Invoice_Line_ID combination.	1
5	Characteristic_UOM_Code	String	%80s	Code of measurement of the value of the characteristic, if applicable. Shall match the UOM_Code in the BAS_Measurement_Unit table. EXAMPLE PERC, KG	1
6	Characteristic_Value	String	%1000s	The value of the characteristic on basis of the Characteristic UOM Code. EXAMPLE — 0.125 in case of alcohol percentage of 12,5 percent. — L in case of low-rated VAT product.	1
7	System_Characteristic_Value	String	%1000s	The value of the characteristic as recorded in the source system of the organization to be audited, on basis of the Characteristic UOM Code. EXAMPLE — 0.125 in case of alcohol percentage of 12,5 percent. — 1 in case of low-rated VAT product.	1

The primary key and reference identifiers, with the related referenced fields and tables, for SAL_Invoices_Details_CHAR are listed in Table 6.

Table 6 — Identifiers in SAL_Invoices_Details_CHAR

No.	Name	Identifier	Referenced field	Referenced table
1	Invoice_ID	PK/ REF	Invoice_ID	SAL_Invoices_Generated
2	Invoice_Line_ID	PK REF	Invoice_Line_ID	SAL_Invoices_Generated_Details
3	Characteristic_Type	PK	not applicable	not applicable
4	Characteristic_Sequence_Number	PK	not applicable	not applicable
5	Characteristic_UOM_Code	PK/ REF	UOM_Code	BAS_Measurement_Unit

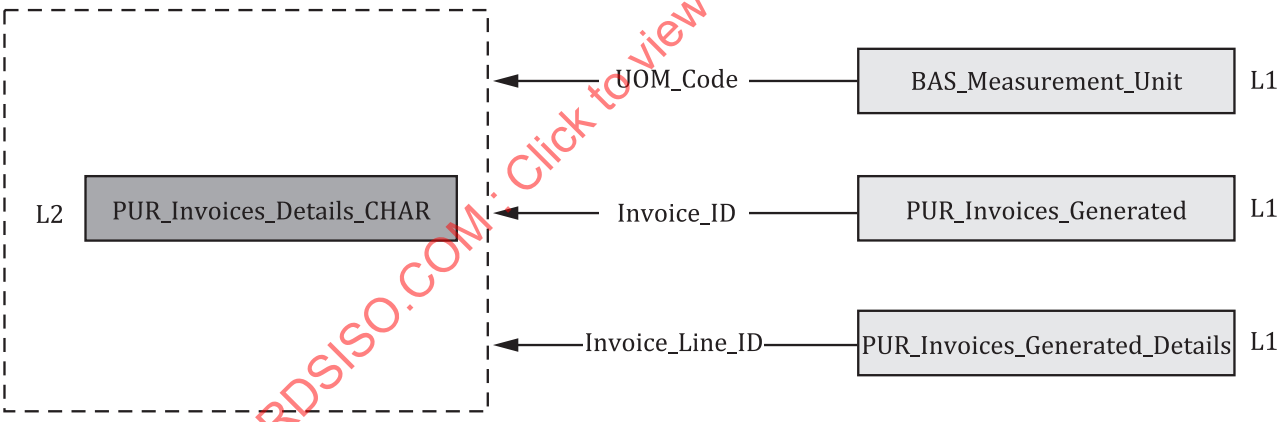
Guidance on how to use Table 5 and Table 6 can be found in Annex B.

4.8 Purchase module

4.8.1 General

The PUR module of ISO 21378 is intended to encompass data collection and basic analysis of the purchase process. In the case of indirect tax audits, it can be necessary to add characteristic information upon invoices. The characteristics should be delivered on the applicable granular level, which is at invoice level and invoice line level. To exchange the characteristic information, table PUR_Invoices_Details_CHAR (Table 7) is added to the PUR module in this document.

Figure 3 shows the relation between a PUR_Invoices_Received, PUR_Invoices_Received_Details and its PUR_Invoices_Details_CHAR.



Key

Components

table in customs and indirect tax extension

table in ISO 21378

Connections and lines

tables within the customs and indirect tax extension

reference relationship

L1 table containing information that the auditor should leverage when auditing

L2 table containing information that the auditor can leverage if the scope of the audit requires this type of data

Figure 3 — Table relation diagram of PUR module

4.8.2 PUR_Invoices_Details_CHAR

Additional characteristics that apply to PUR_Invoices_Received and PUR_Invoices_Received_Details are contained in Table 7. Examples include VAT status, jurisdiction identifier, tax point date, size of the business of the taxpayer etc. Table 7 is level 2.

Table 7 — PUR_Invoices_Details_CHAR

No.	Name	Da-tatype	Rep-resentation	Description	Level
1	Invoice_ID	String	%60s	Unique identifier for the received invoices. The same ID shall be used for all tables with invoice data. Shall match the Invoice_ID in the PUR_Invoices_Received table.	1
2	Invoice_Line_ID	String	%60s	Unique identifier for the received invoice line. If not empty, it shall match the Invoice_Line_ID in the PUR_Invoices_Received_Details table.	1
3	Characteristic_Type	String	%60s	Type of characteristic in relation to the invoice or invoice line. The permitted values of Characteristic_Type should be determined by mutual agreement between the auditor and the auditee. EXAMPLE NL_VATITEMSTATUS	1
4	Characteristic_Sequence_Number	String	%60s	The sequence number of a characteristic or group of related characteristics within the same Invoice_ID and Invoice_Line_ID combination. The sequence number is mandatory if there are multiple characteristics of the same type within the same Invoice_ID and Invoice_Line_ID combination.	1
5	Characteristic_UOM_Code	String	%80s	Code of measurement of the value of the characteristic, if applicable. Shall match the UOM_Code in the BAS_Measurement_Unit table. EXAMPLE PERC, KG	1
6	Characteristic_Value	String	%1000s	The value of the characteristic on basis of the Characteristic UOM Code. EXAMPLE — 0.125 in case of alcohol percentage of 12,5 percent. — L in case of low-rated VAT product.	1
7	System_Characteristic_Value	String	%1000s	The value of the characteristic as recorded in the source system of the organization to be audited, on basis of the Characteristic UOM Code. EXAMPLE — 0.125 in case of alcohol percentage of 12,5 percent. — 1 in case of low-rated VAT product.	1

The primary key and reference identifiers, with the related referenced fields and tables, for PUR_Invoices_Details_CHAR are listed in Table 8.

Table 8 — Identifiers in PUR_Invoices_Details_CHAR

No.	Name	Identi-fier	Referenced field	Referenced table
1	Invoice_ID	PK/ REF	Invoice_ID	PUR_Invoices_Received
2	Invoice_Line_ID	PK/ REF	Invoice_Line_ID	PUR_Invoices_Received_Details
3	Characteristic_Type	PK	not applicable	not applicable
4	Characteristic_Sequence_Number	PK	not applicable	not applicable
5	Characteristic_UOM_Code	PK/ REF	UOM_Code	BAS_Measurement_Unit

Guidance on how to use Table 7 and Table 8 can be found in Annex B.

4.9 Inventory module

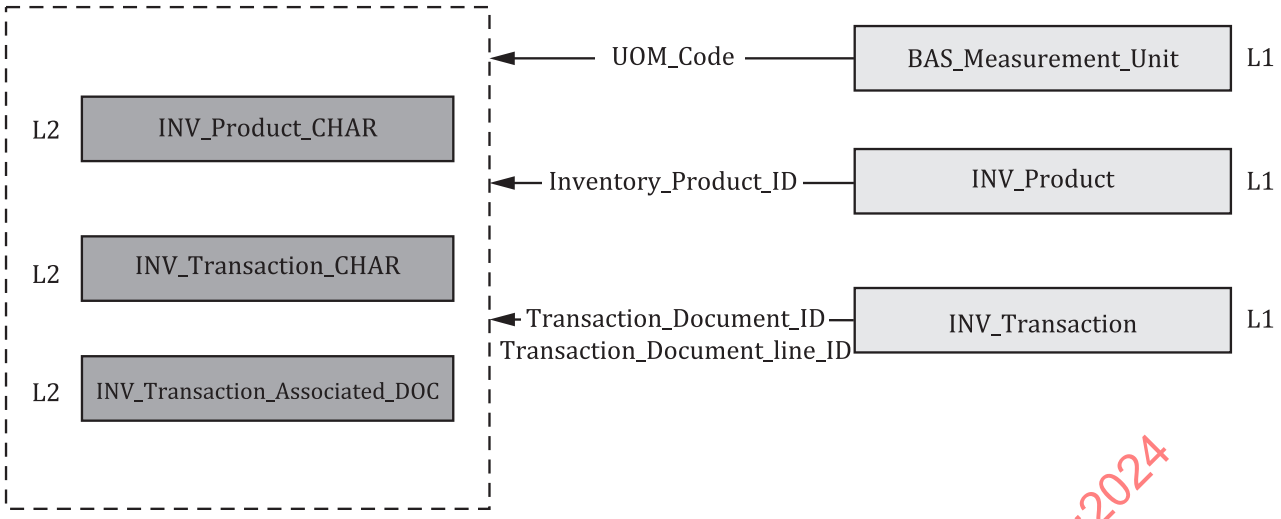
4.9.1 General

Inventory (INV) is one of several business processes related to the supply chain. The INV module of ISO 21378 is intended to encompass data collection and basic analysis of the inventory process (i.e. raw and auxiliary materials, work in progress and finished goods).

In the case of customs audits, it can be necessary to add characteristic information upon inventory products and inventory transactions. The characteristics should be delivered on the applicable granular level, which is at inventory product level for individual items, and when possible, on product/serial level or product/lot level and inventory transaction level. To exchange the characteristic information, table INV_Product_CHAR (Table 9) and table INV_Transaction_CHAR (Table 11) are added to the INV module in this document.

Also, in case of customs audits, it can be necessary to add reference information to customs related documents associated to inventory transactions. To exchange the document reference information, table INV_Transaction_Associated_DOC (Table 13) is added to the INV module in this document.

Figure 4 shows the relation between an INV_Transaction and INV_Transaction_CHAR, INV_Transaction and INV_Transaction_Associated_DOC, INV_Product and INV_Product_CHAR.



Key

Components

- table in customs and indirect tax extension
- table in ISO 21378

Connections and lines

- tables within the customs and indirect tax extension
- reference relationship

L1 table containing information that the auditor should leverage when auditing

L2 table containing information that the auditor can leverage if the scope of the audit requires this type of data

Figure 4 — Table relation diagram of INV module

4.9.2 INV_Product_CHAR

Additional inventory product characteristics that apply from a certain start date and time until a certain end date and time are contained in Table 9. Examples include net weight, country of origin, legal indicator, alcohol percentage. Table 9 is level 2.

Table 9 — INV_Product_CHAR

No.	Name	Datatype	Representation	Description	Level
1	Inventory_Product_ID	String	%75s	The unique identifier for the inventory item. Typically, auto generated by the system. Shall match the Inventory_Product_ID in the INV_Product table.	1
2	Characteristic_Type	String	%60s	Type of characteristic of the product. The permitted values of Characteristic_Type should be determined by mutual agreement between the auditor and the auditee. EXAMPLE EU_COMCODE, GEN_ALCPERC	1
3	Characteristic_Sequence_Number	String	%60s	The sequence number of a characteristic or group of related characteristics within the same Inventory_Product_ID. The sequence number is mandatory if there are multiple characteristics of the same type within the same Inventory_Product_ID.	1
4	Characteristic_UOM_Code	String	%80s	Code of measurement of the value of the product characteristic, if applicable. Shall match the UOM_Code in the BAS_Measurement_Unit table. EXAMPLE PERC, KG	1
5	Start_Date	Date	%10s	Start date from which the product characteristic value became valid.	1
6	Start_Time	Time	%8s	Start time on the start date from which the product characteristic value became valid.	1
7	End_Date	Date	%10s	End date until which the product characteristic value was valid.	1
8	End_Time	Time	%8s	End time on the end date until which the product characteristic value was valid.	1
9	Characteristic_Value	String	%1000s	The value of the product characteristic on basis of the Characteristic UOM Code according to the Standard Characteristics table (to be developed). EXAMPLE — 0.125 in case of alcohol percentage of 12,5 percent, — L in case of low-rated VAT product.	1
10	System_Characteristic_Value	String	%1000s	The value of the product characteristic as recorded in the source system of the organization to be audited, on basis of the Characteristic UOM Code. EXAMPLE — 0.125 in case of alcohol percentage of 12,5 percent. — 1 in case of low-rated VAT product.	1

The primary key and reference identifiers, with the related referenced fields and tables, for INV_Product_CHAR are listed in Table 10.

Table 10 — Identifiers in INV_Product_CHAR

No.	Name	Identifier	Referenced field	Referenced table
1	Inventory_Product_ID	PK/REF	Inventory_Product_ID	INV_Product
2	Characteristic_Type	PK	not applicable	not applicable
3	Characteristic_Sequence_Number	PK	not applicable	not applicable
4	Characteristic_UOM_Code	PK/REF	UOM_Code	BAS_Measurement_Unit
5	Start_Date	PK	not applicable	not applicable
6	Start_Time	PK	not applicable	not applicable

Guidance on how to use Table 9 and Table 10 can be found in Annex A.

4.9.3 INV_Transaction_CHAR

Additional inventory product characteristics that apply to the moment of the transaction are contained in Table 11. Examples include net weight, country of origin, legal indicator, alcohol percentage. Table 11 is level 2.

Table 11 — INV_Transaction_CHAR

No.	Name	Datatype	Representation	Description	Level
1	Transaction_Document_ID	String	%100s	The unique identifier for the picking ticket, shipping notice, or other document created upon or associated with movement. Typically, auto generated by the system. Shall match the Transaction_Document_ID in the INV_Transaction table.	1
2	Transaction_Document_Line_ID	String	%100s	The unique identifier for the line number for a document other than a customer order, or supplier purchase order. Typically, auto generated by the system. Shall match the Transaction_Document_Line_ID related to the Transaction_Document_ID in the INV_Transaction table.	1
3	Characteristic_Type	String	%60s	Standardized type of characteristic of the product in the transaction. The permitted values of Characteristic_Type should be determined by mutual agreement between the auditor and the auditee. EXAMPLE NL_VATSTATUS EU_COMCODE GEN_ALCPERC	1
4	Characteristic_Sequence_Number	String	%60s	The sequence number of a characteristic or group of related characteristics within the same Transaction_Document_ID and Transaction_Document_Line_ID combination. The sequence number is mandatory if there are multiple characteristics of the same type within the same Transaction_Document_ID and Transaction_Document_Line_ID combination.	1
5	Characteristic_UOM_Code	String	%80s	The standardized code of measurement of the value of the transaction characteristic, if applicable. Shall match the UOM_Code in the BAS_Measurement_Unit table. EXAMPLE PERC, KG	1
6	Characteristic_Value	String	%1000s	The value of the product characteristic on basis of the Characteristic UOM EXAMPLE — 0.125 in case of alcohol percentage of 12,5 of wine, — L in case of low-rated VAT product.	1
7	System_Characteristic_Value	String	%1000s	The value of the product characteristic as recorded in the source system of the organization to be audited, on basis of the Characteristic UOM Code. EXAMPLE — 0.125 in case of alcohol percentage of 12,5 of wine, — 1 in case of low-rated VAT product.	1

The primary key and reference identifiers, with the related referenced fields and tables, for INV_Transaction_CHAR are listed in Table 12.

Table 12 — Identifiers in INV_Transaction_CHAR

No.	Name	Identifier	Referenced field	Referenced table
1	Transaction_Document_ID	PK/REF	Transaction_Document_ID	INV_Transaction
2	Transaction_Document_Line_ID	PK/REF	Transaction_Document_Line_ID	INV_Transaction
3	Characteristic_Type	PK	not applicable	not applicable
4	Characteristic_Sequence_Number	PK	not applicable	not applicable
5	Characteristic_UOM_Code	PK/REF	UOM_Code	BAS_Measurement_Unit

Guidance on how to use Table 11 and Table 12 can be found in Annex A.

4.9.4 INV_Transaction_Associated_DOC

Reference information of a document which is associated with the inventory transaction is contained in Table 13. Examples include customs declaration. Table 13 is level 2.

Table 13 — INV_Transaction_Associated_DOC

No.	Name	Datatype	Representation	Description	Level
1	Transaction_Document_ID	String	%100s	The unique identifier for the picking ticket, shipping notice, or other document created upon or associated with movement. Typically, auto generated by the system. Shall match the Transaction_Document_ID in the INV_Transaction table.	1
2	Transaction_Document_Line_ID	String	%100s	The unique identifier for the line number for a document other than a customer order, or supplier purchase order. Typically, auto generated by the system. Shall match the Transaction_Document_Line_ID related to the Transaction_Document_ID in the INV_Transaction table.	1
3	Transaction_Submitted_System	String	%100s	The identifier of the system in which the inventory transaction associated document is submitted.	1
4	Document_Code	String	%80s	The code of the inventory transaction associated document. The permitted values of Document_Code should be determined by mutual agreement between the auditor and the auditee. EXAMPLE Customs Declaration Form.	1
5	Document_ID	String	%100s	The ID of the transaction associated referential document. For example, the number of the customs declaration form.	1
6	Document_Line_ID	String	%100s	The line ID of a line on the transaction associated referential document. For example, the line number on the customs declaration form.	1

The primary key and reference identifiers, with the related referenced fields and tables, for INV_Transaction_Associated_DOC are listed in Table 14.

Table 14 — Identifiers in INV_Transaction_Associated_DOC

No.	Name	Identifier	Referenced field	Referenced table
1	Transaction_Document_ID	PK/ REF	Transaction_Document_ID	INV_Transaction
2	Transaction_Document_Line_ID	PK/ REF	Transaction_Document_Line_ID	INV_Transaction
3	Transaction_Submitted_System	PK	not applicable	not applicable
4	Document Code	PK	not applicable	not applicable
5	Document ID	PK	not applicable	not applicable
6	Document Line ID	PK	not applicable	not applicable

Guidance on how to use Table 13 and Table 14 can be found in Annex A.

Annex A
(informative)

Guidance on how to use the extension for customs audits

A.1 General

This annex explains how and which tables of audit data collection, together with the additional tables defined in this document, can be used for customs audits.

A.2 Customs audits recommendations

The most detailed level of information about goods in ISO 21378 is at product/serial or product/lot level. For many companies, this is not granular enough; they use registration of product characteristic information at the combination of product/serial or lot number level on a certain date or within a certain period. For instance, the alcohol percentage of a liquid can be changed after a certain date, which can change the amount of excise duty (tax).

Characteristic information about goods and products on the level of product/serial number or product/lot number and on a certain date or during a certain period, can be required for auditing goods movements, including import and export.

Also, the reference to source documents can be required. The purpose is matching transactional information with data from another system, for instance governmental, food regulators, quality surveyors, etc.

Product characteristics and reference information may be added to the ISO 21378 inventory module by the tables defined in this document, without changing the existing tables in the inventory module.

Dutch customs authority prefers to receive a part of the ISO 21378 that is focused on the control work of customs.

In general, customs checks the initial stock of the selected period, the final stock and the transactions on the products within the period.

In addition, customs checks the data related to the product, such as the corresponding purchase invoice, sales invoice, customer, supplier, history of the product characteristics, balance values and references to related external documents.

A.3 ADC subset for customs audits

The purpose of the ADC subset for customs is to assess the quality of the administration of goods movements and to check the connection to the administration of the customs authority. A customs subset may be specified for that purpose.

The applied selection period and selection ID, which is the name of the type of subset, should be included in the BAS_Selection_Period (Table 2).

An ADC subset for Dutch customs for instance, contains the following tables:

— BAS_Profile

— BAS_Selection_Period

— BAS_User

— BAS_Customer_Type

— BAS_Customer

— BAS_Supplier_Type

— BAS_Supplier

— BAS_Accounting_Period

— BAS_Currency

— BAS_Measurement_Unit

— BAS_Project

— BAS_Tax_Type

— SAL_Invoices_Generated

— SAL_Invoices_Generated_Details

— PUR_Invoices_Received

— PUR_Invoices_Received_Details

— INV_Location

— INV_Product_Type

— INV_Product

— INV_Product_CHAR

— INV_On_Hand

— INV_Transaction

— INV_Transaction_CHAR

— INV_Transaction_Associated_DOC

— INV_Physical_Inventory

— INV_Period_Balance

Which dates should fall within the selection period is agreed between auditee and auditors. Dutch customs audits concern the dates relating to goods movements and stock levels in the ISO 21378 tables INV_Transaction, INV_On_Hand, INV_Physical_Inventory and INV_Period_Balance.

In the case of the invoices, it can be possible that the invoice date falls outside the selection period, but the details of this invoice should be included in the subset for verification purposes.

A.4 Characteristics relevant for customs audits

Table INV_Product_CHAR (Table 9) should add characteristic information upon the basis product information. If possible, this information should be delivered on the most granular level, which is at product level for individual items, and when possible, on product/serial level or product/lot level. The characteristic information should include the validity start date and time.

Start_Date, Start_Time, End_Date and End_Time can be required attributes, as the applicability of master data can change over time and the exchanged data set should reflect these changes. An example is the change of the commodity code for a product due to new classification rules. Another example is the change of a VAT rate, as the tax authorities can have decided to reduce the tax rate for the item concerned.

Characteristic information can change during the reporting period. Therefore, basic characteristic information on product/serial or product/lot level is not sufficient. Also, on Inventory Transaction level the product characteristic information can be required when the transaction affects one of the possible characteristics.

Therefore, table INV_Transaction_CHAR (Table 11) should add transaction characteristics to table INV_Transaction.

Customs organizations can determine the type of product characteristics and type of transaction characteristics themselves, in consultation with the supplying parties of the audit data. Characteristics can be subdivided into general characteristics, regional specific characteristics and country specific characteristics. Examples of characteristics are:

— status of the product;

— gross weight minus the tare weight of the packaging;

— commodity code according to the tariff of the goods used; commodity code is also referred as TARIC code;

— alcohol percentage;

— owner goods;

— invoice owner goods;

— VAT status;

— customs country of origin;

— customs status;

— customs indicator legal statement;

— customs transfer;

— customs value;

— customs quantity.

A.5 Associated documents relevant for customs audits

Reference information to associated source documents is contained in INV_Transaction_Associated_DOC (Table 13). The purpose is matching transactional information out of the ERP system with data from another system, for instance governmental, food regulators, quality surveyors, etc. Not only auditors working for regulators, but also auditors of the company itself (conformation of compliance, check on completeness of dealing with liabilities) should be able to check the regulatory requirements of any kind. The most far-reaching regulation of the US Securities and Exchange Commission (SEC) is the Dodd-Frank act (issued the rule that requires companies to report publicly on their due diligence and to have their reports independently audited). Multiple documents can be associated with one transaction. Therefore, there should be the possibility for references to more than one document.

Some examples are as follows:

— reference to declaration systems (in international perspective);

— reference to other controlling government bodies, e.g. test reports;

— reference to private monitoring bodies, e.g. surveyors;

— the external numbers assigned by a buyer or seller or contract partner.

EXAMPLE Customs declaration form.

A.6 Example: customs audit

A.6.1 General

The example consists of two parts. The first part consists of the receipt of customs goods in a bonded warehouse (see A.6.2). The second part deals with the importation of part of that lot (see A.6.3).

Company "XYZ" is established in country "ABC". In country "ABC", customs legislation is based on a suspension system. Company "XYZ" uses several customs procedures, and the stock can be distinguished from customs into:

— free goods: goods that are free of customs duties in country "ABC";

— excise goods: goods that are free of customs duties in country "ABC" with the exception that excise duty (or consumption tax) has not yet been paid (i.e. suspended);

— customs goods: goods under customs supervision, all applicable duties have not yet been paid (i.e. suspended).

Excise duty can seem strange. Not just that countries can call this a consumption tax. There are countries also where this cannot be a task for customs. In the latter case, this part of the example shows that other auditors (consumption tax) can easily match the proposed structure of the characteristics tables.

In the examples, a classification system for characteristics is applied. The characteristics are subdivided into general (GEN), regional (e.g. EU), and country specific (e.g. NL). In addition, there is a subdivision by type of supervision (e.g. CUST, VAT). The characteristic type code is compiled on this basis, using capital letters and underscores to separate the classification layers; for example, GEN_ALCOHOLPERC is a general alcohol percentage; NL_CUST_COMMODITYCODE is a commodity code determined by Dutch customs.

A.6.2 Part 1: inbound

Company “XYZ” receives a consignment of product “AB4567B” (lot number ENT001). These are customs goods and company “XYZ” stores these goods in its bonded warehouse. In order to store the goods in the bonded warehouse, company “XYZ” should submit a customs declaration. For the storage of customs goods, company “XYZ” should fill all three tables from the customs extension (module Inventory) with the corresponding characteristics. As stated earlier, it is assumed that the tables INV_Product and INV_Transaction are filled in accordance with ISO 21378. Table A.1 and Table A.2 show a few fields that are required for the completion of this example.

Table A.1 — Example of INV_Product

Inventory_Product_ID	Inventory_Product_Code	Lot_Number
PRENT001	AB4567B	ENT001

Table A.2 — Example of INV_Transaction

Transaction_Document_ID	Transaction_Document_Line_ID	Transaction_Type	Transaction_Quantity	Inventory_Product_ID	Lot_Number
VM98765	0001	RECEIPT	40	PRENT001	ENT001

Table INV_Product_CHAR (Table 9) lists the characteristics that apply to the product and are important for the customs. Multiple characteristics can apply to a product from table INV_Product. A characteristic at the level of a product, missing in ISO 21378, is the customs status – in this case – of product “AB4567B”. In this example the customs status is “bonded warehouse”. The result is shown in Table A.3 and Table A.4.

Table A.3 — Example of INV_Product

Inventory_Product_ID	Inventory_Product_Code	Lot_Number
PRENT001	AB4567B	ENT001

Table A.4 — Example of INV_Product_CHAR

Product_ID	Characteristic_Type	Characteristic_Sequence_Number	Characteristic_UOM_Code	Characteristic_Value
PRENT001	NL_CUST_STATUS	1		BONDED WAREHOUSE

This is just an example of one characteristic. Which characteristics apply depends on, for example, the applied customs procedure. For example, it is possible that in a certain situation the country of origin is a characteristic. In this example the characteristic is preceded by the letters NL. This addition stands for the Netherlands. This makes the use of characteristics flexible and dependent on a country (or other area). Another country (or union or region) may include its own characteristics. The naming of the characteristic is very important for the development of analysis tools. In anticipation of the continuation of the example, it has now become apparent that this structure / principle may also be applied to indirect taxes.

In addition to the characteristics at the level of the product, there are also characteristics applicable at the level of the transaction. Table INV_Transaction_CHAR (Table 11) lists the characteristics that apply to the transaction and are important for customs. Multiple characteristics can apply to a transaction from table INV_Transaction. A characteristic at the level of a transaction, missing in ISO 21378, is the customs commodity code – in this case – of product "AB4567B". The result is shown in Table A.5 and Table A.6

Table A.5 — Example of INV_Transaction

Transaction_Document_ID	Transaction_Document_Line_ID
VM98765	0001

Table A.6 — INV_Transaction_CHAR

Transaction_Document_ID	Transaction_Document_Line_ID	Characteristic_Type	Characteristic_Sequence_Number	Characteristic_UOM_Code	Characteristic_Value	System_Characteristic_Value
VM98765	0001	NL_CUST_COMMODITYCODE	1		2204568090	2204568090

Table INV_Transaction_Associated_DOC (Table 13) lists the data needed to establish a relationship between the transaction and the customs administration. This includes only three data elements; first, the system (customs declaration system) in which the customs declaration has been submitted; next the declaration number and finally the declaration line number. In this way the relationship can be established. The result is shown in Table A.7 and Table A.8.

Table A.7 — Example of INV_Transaction

Transaction_Document_ID	Transaction_Document_Line_ID
VM98765	0001

Table A.8 — Example of INV_Transaction_Associated_DOC

Transaction_Document_ID	Transaction_Document_Line_ID	Transaction_Submitted_System	Document_Code	Document_ID	Document_Line_ID
VM98765	0001	DMS	EU_DMSIMPORT	NL275ABD98AB62	0002

This example shows that customs know that these are customs goods, and customs have the data to be able to establish a relationship with the data (the customs declaration), because customs have it in their document management system.

A.6.3 Part 2: import

In table INV_Transaction_CHAR (Table 11), a distinction is made between two values, a standard value and a system value. This example (import) focuses on this distinction.

Company "XYZ" sells half of product "AB4567B" with lot number "ENT001". This part is imported before the outbound takes place. Company "XYZ" submits a customs declaration, in accordance with the legislation. Excise duty (or consumption tax) also applies to these goods, as well as VAT (or GST).

The product is already known in the administration. As a result, there is no new registration in tables INV_Product and INV_Product_CHAR (Table 9). Company "XYZ" records the transaction in the INV_Transaction table (Transaction_Document_ID = TR123456 and Transaction_Document_Line ID = 0001). Because the product is under customs supervision (the goods are customs goods), the tables INV_Transaction_CHAR (Table 11) and INV_Transaction_Associated_DOC (Table 13) apply. The result is shown in Table A.9 and Table A.10.

Table A.9 — Example of INV_Transaction

Transaction_Document_ID	Transaction_Document_Line_ID
TR123456	0001

Table A.10 — Example of INV_Transaction_CHAR

Transaction_Document_ID	Transaction_Document_Line_ID	Characteristic_Type	Characteristic_Sequence_Number	Characteristic_UOM_Code	Characteristic_Value	System_Characteristic_Value
TR123456	0001	NL_CUST_COMMODITYCODE	1		2204568090	2204568090
TR123456	0001	GEN_ALCOHOLPERC	1	PERC	0.125	12.5
TR123456	0001	NL_ACCCAT	1		23	W3
TR123456	0001	NL_VATSTATUS	1		S	1

Only the characteristics that matter in a transaction are added. Further, the unit of measurement is also only filled if applicable (alcohol percentage). The representation depends on the characteristic type.

For some characteristics, there is a choice of whether the characteristic is part of table INV_Product_CHAR (Table 9) or INV_Transaction_CHAR (Table 11) (not all characteristics have that choice). The commodity code is an example where the choice exists. In principle, the commodity code is a fixed item of information, which is linked to the product. However, commodity codes can change. When the commodity code is recorded as part of table INV_Product_CHAR (Table 9) (at the moment of receipt or at an earlier time), this characteristic and value shall no longer be included in table INV_Transaction_CHAR (Table 11). If then the commodity code changes, it is possible to make a change in table INV_Product_CHAR (Table 9) with a new record and a new start date. If the commodity code changes regularly, it is easier to include this characteristic in table INV_Transaction_CHAR (Table 11) (every transaction).

This choice also offers another option. The alcohol percentage is a good example. It is possible that a percentage of 12,5 % is written on all underlying documents (invoice, bill of lading, etc.). Company "XYZ" includes this data as a characteristic in table INV_Product_CHAR (Table 9). One month later and again two months later, parts of this lot are released. Company XYZ conducts a lab test before the goods are released to determine the actual alcohol percentage. The first result shows a percentage of 12,3 % and the second a percentage of 12,6 %.

It is possible to change the value for the characteristic (alcohol percentage) in table INV_Product_CHAR (Table 9), every time after a lab test. In that situation, the question is still if it is correct. With the knowledge that the alcohol percentage is recorded in table INV_Product_CHAR (Table 9), it is also possible to record the alcohol percentage in table INV_Transaction_CHAR (Table 11), if it deviates from the value for that characteristic in table INV_Product_CHAR (Table 9). The characteristic in table INV_Transaction_CHAR

(Table 11) overrules the value of that characteristic in table INV_Product_CHAR (Table 9), just for that specific transaction.

Table INV_Transaction_Associated_DOC (Table 13) lists the data needed to establish a relationship between the transaction and the customs administration. In this case, a reference is included to the system in which the declaration is included. This also applies to sales tax (VAT).

The result of the table INV_Transaction and INV_Transaction_Associated_DOC (Table 13) is shown in Table A.11 and Table A.12.

Table A.11 — Example of INV_Transaction

Transaction_Document_ID	Transaction_Document_Line_ID
TR123456	0001

Table A.12 — Example of INV_Transaction_Associated_DOC

Transaction_ Document_ID	Transaction_Docu-ment_Line_ID	Transac-tion_Submit-ted_System	Document_Code	Document_ID	Document_ Line_ID
TR123456	0001	DMS	NL_DMSIMPORT	NL273ABD98AB62	0002
TR123456	0001	DMS	NL_VATMONTHLY	2021-04	0038