



ISO/PC 295/WG 1  
Audit Data Collection

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**NEN**

# ISO/PC 295 Audit data collection

## NEN Contributions

# NEN Comments CD1 ISO/PC 295

## Template NEN 001

### Comments

The standard should facilitate the exportation of inventory data-elements which are already registered, **including the data-elements registered on the level of product-batch**. Also links to transaction associated documents should be facilitated.

Auditors need this facilitations, in order to be able to make important deepening analyses.

### Proposed change

See Appendix 1:

Appendix 1 provides an elaboration of the proposed change, as well as the consequences for the tables.

We are willing to cooperate on further adaptation of the draft standard needed to facilitate the exportation of already registered data-elements

# ISO - CD1: Introduction

## Introduction

Accounting and Enterprise Resource Planning (ERP) software packages are widely used by various government organizations and business enterprises and external and internal auditors. However, due to the inconsistencies in designs, interfaces and data contents as well as format, financial, operational and management data cannot be swiftly and comprehensively collected by users, such as government supervision departments, external and internal auditors.

This International standard (ISO 21378) aims to resolve the common problems that auditors face when requesting data to perform their audit procedures. This standard will help to improve the accessibility and transparency of audit data, standardize the process of collecting audit data, avoid duplicated efforts and effectively save resources. The standardization of audit data contents and format at world-wide level will enhance the effectiveness and efficiency of government, internal and external audits, and provide benefits to related stakeholders.

ISO 21378 focuses on major business modules of typical accounting and ERP systems in various organizations.

**It takes into consideration major business processes related to the supply chain, aiming at regulating general data elements and output file formats of accounting and ERP software.**

ISO 21378 facilitates the use of analytics and enables regulatory bodies to better fulfil their responsibilities of supervision, external auditors to better perform their tasks of assurance, and internal auditors to assist

- management in making more informed decisions.
- ISO 21378:
  - provides guidelines and specifications for obtaining accounting data;
  - defines the content requirements of accounting data elements (e.g. fields and tables grouped into modules);
  - defines the format requirements of accounting data elements;
  - specifies data interface output files;
- covers eight modules, including: Base, General Ledger (GL), Sales, Accounts Receivable (AR), Purchase, Accounts Payable (AP), Inventory, Property Plant and Equipment (PPE);
- can serve as a foundation for local implementation, but will require customization for local regimes.

# ISO - CD1: Scope

## 1 Scope

The PC acknowledges the clarification brought to the scope of ISO 21378 as written:

This document provides information necessary to extract relevant data from accounting and ERP systems to conduct audit procedures. It applies to a general industry model and covers the areas of General Leger, Sales,

Accounts Receivable, Purchases, Accounts Payable, Inventory, and Property Plant and Equipment.

The purpose of this document is to improve the accessibility of audit data, and to enable auditors to focus their attention on analyzing the data obtained.

This document establishes common definitions of accounting data elements **to bridge understanding between the auditor, auditee, software developers and IT professionals**; and to create a mechanism for expressing the information, common to accounting, in a manner independent of accounting and ERP systems. This document can serve as a foundation for local data extraction efforts.

# Generic ERP solution for controlled extraction and exporting implementation

## Requirements of a standard for efficient implementation

### Vision of Infor supported by Oracle and SAP:

1. We want to offer our customers a generic functionality to create a standard format of an audit data file that can be handed over to users of such a file.
2. This file complies with the minimal requirements of the new standard. See for an example [Core-rulebook Sepa CAMT](#).
3. The output format can optionally .csz, xml, .txt etc.; depending on the requirements.
4. Per country/region deviations/additions can be asked above the standard, or just a subset.
5. The user should be helped by a configurable screen with a limited list of all the attributes from the ERP-database that are offered by the product standard.
6. The attributes can be selected, changed and sorted by a functional user, explicitly not a technical user, supported by a simple understandable user interface (Excel look and feel).
7. Boundary condition for this approach is that the database with transactions and master data is not to big. If it is necessary to 'cross validate' the data (e.g. VAT totals per country and code comparison with accountnumbers) and disparate data should be combined in 1 audit data file (e.g. inventory and VAT transactions), the described approach is not workable and hard to develop and maintain.
8. It is also possible to develop generic exports –based on the initial ISO standard- per category (e.g. payroll, fixed assets, inventory etc.) that can be selected by the user.

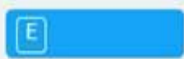
From - To

Account period
General Ledger
Accounts Receivable
Accounts Payable
Payment
File name
Folder name

Chart of accounts
Customer master tbl
Supplier master tbl
Output file format

- 1-SAF-T
2-L 47 A
3-L 47 A with header
4-GST Audit file
5-Mexico trial balance
6-Mexico auxiliary accounts
7-Mexico period journals
8-SAF-T version 2

Table with columns: Item, Status, Creation date, and other fields. Includes rows for Header Information, Master tables, Chart of accounts, Customer master tbl, Supplier master tbl, VAT code percentages, General Ledger, Accounts Receivable, Accounts Payable, and Payment.



# NEN Comments CD1 ISO/PC 295

## Appendix 1

# Summary of our proposal



# NEN Comments CD1 ISO/PC 295

## Appendix 1 – Core of proposal (1)

The first two items of our proposal:

1. For master data: exchange additional characteristics of articles, at article level and at batch/lot level if applicable;
2. For transactions: exchanging data on inventory transactions at batch/lot level when there is a batch or lot administration.

**Why** the proposed extension:

- The goal is to be able to support the Finance Audit when accounts are audited of companies that have a significant flow of goods. For example, for assessing the valuation of inventory in the financial statements.
- Those companies use stock registration at the combination article-batch (or lot) level for their own business operations.
- When transactions are registered in this way by the auditee for their own business operations, the finance auditor should be facilitated to receive the data at the same granular level.

**Benefits** of our proposal:

- Fits in the scope of the standard
- Facilitates finance auditors adequately
- Is reducing the administrative burden, because the already available data as registered can be delivered with the same press on the button

**Don't worry about the work**, NEN offers support for the extra creation and review work to change the CD1 version

# NEN Comments CD1 ISO/PC 295

## Appendix 1 – Core of proposal (2)

3. For transactions: exchanging data referring to source documents (internal and external documents) so that the auditor is able to monitor efficiently and decisively.

The starting point for this proposal is that the data are registered and that the standard by naming them facilitates that they can be requested.

### Extension for reference to source documents

To match transactional information out of the ERP system with data from another system, e.g. Governmental, Food regulators, Quality Surveyors, etc. referential information is needed.

Some examples:

- Reference to declaration systems (in international perspective)
- Reference to other controlling government bodies, think of test reports Reference to private monitoring bodies, e. g. surveyors
- The external numbers assigned by a buyer or seller or contract partner

**Don't worry about the work**, NEN offers support for the extra creation and review work to change the CD1 version

## ***NEN Comments CD1 ISO/PC 295 – Appendix 1***

### ***1. Core of the proposal***

Below you will find a proposal that provides for an extension of the current design related to stock movements. The proposal provides for the exchange of data at a more granular level when transactions are registered in this way by the auditee for their own business operations. The audit should use the same concept. Where relevant, data on stock movements can be exchanged at article/batch level and, if not applicable, still at article level. The proposal takes this into account and does not weigh on the current draft standard. The extension focus on three items:

1. For master data: exchange additional characteristics of articles, at article level and at batch/lot level if applicable;
2. For transactions: exchanging data on inventory transactions at batch level / lot level when there is a batch or lot administration, and
3. For transactions: exchanging data referring to source documents (internal and external documents) so that the auditor is able to monitor efficiently and decisively.

### ***2. Ratio***

The current design of ADCS contains a section for stock movements. This is important, because it is now possible to apply very useful data analyses when auditing accounts of companies that have a significant flow of goods. For example, for assessing the valuation of inventory in the financial statements.

The most detailed level of the current design is the goods at article level. For many companies this is not granular enough; they use stock registration at the combination article/batch (or lot) level for their own business operations. They do so if the goods of the same article are not completely interchangeable. This applies for example in the commodity trade industry where quality differences can occur per batch. Batch level registration is also required for goods with a best-before or expiry date such as medicines, food and dairy products, and for safety aspects such as aircraft industry, automotive industry and chemicals.

To illustrate the desirability of our proposal, we have worked out three examples to illustrate the need.

### **3. Examples**

#### **3.1. Example 1 - Stock valuation**

For companies with a flow of goods, such as trading and production companies, stocks of raw materials, work-in-progress, finished goods and trade stocks are often a significant item on the balance sheet. The financial auditor assesses the stocks on various aspects such as

- Presence/existence of stocks;
- Valuation of the stock on various aspects such as purchase price, level of marketability, etc.

In order to form an efficient and adequate opinion of these items, the financial auditor can make various analyses if data on goods and movements are available, such as

- the turnover rate of items in relation to the stock held for that item;
- the degree of (un)sale ability for an article for which the expiry date has passed;
- the extent to which natural products are unmarketable due to deterioration caused by the passage of time;
- the degree of (un)sale ability due to production errors, political reasons related to country of origin, etc.;
- the adjustment/development of the market price in relation to the cost price, and
- A detailed inventory composition of the stock that preferably comes from the ADCS data set or can be connected with the ADCS data set is welcome. Ratio: assessment of the status of the changes in the ERP system.

Detailed data are required for the above analyses. Otherwise, the financial auditor can only form an opinion on inventory valuation in generals/totals or through time-consuming specific verification work.

For these analyses, mutations are not only necessary at article level, but often also at batch/lot level (table inventory\_batch). In addition, master data is needed in which the characteristics for that data are present. For example, expiry date, composition of goods, quality, country of origin. These data should be present in the table of stock characteristics.

#### **3.2. Example 2 - Assessment of the degree of traceability**

For some goods, it is important to know exactly where the goods come from, when the production date was, in which batch the goods were produced or purchased, what the quality of the goods (batch) is, what composition the goods consist of (especially in the case of natural products, the presence of harmful substances etc.). The number of goods that have to be tracked because of laws and regulations, from the industry, safety or social point of view, is increasing. Examples are REACH (chemicals), the many sustainability labels, automotive industry, aircraft industry, food industry (soya, corn, etc.).

The extent to which a company can trace the goods increases in importance for the financial auditor in order to assess the continuity of the company. This could include recall actions of products and the establishment of a compensation provision. Detailed information makes it possible for the financial auditor to analyze this. The data described can also be used well for assessing the process and the company's ability to meet these obligations.

### **3.3. Example 3 - Tracking goods for (temporary) exemptions**

Within many countries there is the possibility of transferring goods from one exempt zone to another exempt zone without having to pay indirect taxes and similar levies at that time. Examples include Free Trade zones, customs warehouses and tax warehouses where the liability of indirect taxes, levies, import duties etc. is shifted to a later point in time or even entirely absent. It is necessary for the auditor to be able to monitor not only the goods in the company accounts but also the status of the goods. For example, for products subject to excise duty, it is necessary to know whether (i) they are a product subject to excise duty, (ii) the alcohol percentage and (iii) the unit of packaging. This may vary per batch, location/country. The financial impact in case of improper application of the statutory rules can be substantial with an impact on the financial statements where disclosure in balance sheet or off-balance sheet may be necessary as a result of liabilities arising from claims on future levies. In extreme cases, even the continuity of the company may be at stake. The auditor should monitor these risks when they are current. Ideally, the financial auditor should use the same consistent data used by a supervisory authority as Customs. Some of the risks are:

- If the customer has not confirmed receipt of the goods, the customer will be obliged to pay excise duty due from the supplier;
- an obligation to pay excise duty in the event of stock losses and production differences that cannot be explained;
- Incorrect parameters in master data of alcohol percentage, resulting in underpayment of excise duty;
- a difference of product at transaction level if the measurement shows a lower alcohol percentage resulting in lower indebtedness.

These are only a few examples to underline the importance of exchanging data at the right level. There are a multitude of other examples that can be used in the annual accounts audit or for similar audits such as tax and Customs. We emphasize that this level of data exchange is only necessary when relevant and therefore does not prevent other forms of data exchange. It will also be easy to match transactions at the right level with the controlled transactions. It records the data at this more specific level.

## 4. Redesign inventory\_batch and stock\_characteristics

### 4.1. Extension of Stock characteristics

As far as Stock\_Characteristics is concerned, it should be borne in mind that it may be useful and even necessary to report article characteristics not only at product or batch/lot level, but also at transaction level. The proposal is therefore to include stock\_characteristics:

4.8.4 Inventory Product Master

4.8.6 Inventory Transaction

N.B. They are already included in the Inventory\_Batch Master (see below)

This is the next block of fields:

| No | Name  | Data-type | Representation | Description   | L |
|----|---|-----------|----------------|---|---|
|    | Stock_Characteristics_1                             | String    | %60s           | User definable characteristics of the goods. Example: alcohol percentage  | 2 |
|    | Stock_Characteristics_Value_1                       | String    | %60s           | The value of the Stock_Characteristic. Example: 20  | 2 |
|    | Stock_Characteristics_Value_Measurement_Unit_Code_1 | String    | %80s           | The code of measurement of the value of the Stock_Characteristic, if applicable. Must match a Measurement_Unit_Code in the Measurement_Unit file.<br>Example:       | 2 |
|    | Stock_Characteristics_2                             | String    | %60s           | User definable characteristics of the goods. Example: content   | 2 |
|    | Stock_Characteristics_Value_2                       | String    | %60s           | The value of the Stock_Characteristic. Example: 0,7   | 2 |
|    | Stock_Characteristics_Value_Measurement_Unit_Code_2 | String    | %80s           | The code of measurement of the value of the Stock_Characteristic, if applicable. Must match a Measurement_Unit_Code in the Measurement_Unit file.<br>Example: litre | 2 |
|    | Stock_Characteristics_3                             | String    | %60s           | User definable characteristics of the goods. Example: content of sales package  | 2 |
|    | Stock_Characteristics_Value_3                       | String    | %60s           | The value of the Stock_Characteristic. Example: 6   | 2 |
|    | Stock_Characteristics_Value_Measurement_Unit_Code_3 | String    | %80s           | The code of measurement of the value of the Stock_Characteristic, if applicable. Must match a Measurement_Unit_Code in the Measurement_Unit                         | 2 |

| No | Name  | Data-type | Representation | Description   | L |
|----|---|-----------|----------------|---|---|
|    |   |           |                | file.<br>Example: bottles   |   |
|    | Stock_Characteristic_4                              | String    | %60s           | User definable characteristics of the goods. Example: excise-type   | 2 |
|    | Stock_Characteristics_Value_4                       | String    | %60s           | The value of the Stock_Characteristic. Example: wine category A   | 2 |
|    | Stock_Characteristics_Value_Measurement_Unit_Code_4 | String    | %80s           | The code of measurement of the value of the Stock_Characteristic, if applicable. Must match a Measurement_Unit_Code in the Measurement_Unit file.<br>Example: | 2 |

#### **4.2. More granular data stock movements if applicable**

The proposal is basically that a level between the level of Product (In CD1 table 4.8.4 Inventory\_Product\_Master) and the level of stock and/or transaction reporting (the latter e. g. in CD1 table 4.8.6 Inventory\_Transaction) should be inserted, i. e. Inventory\_Batch\_Master, in which the specific characteristics of a batch or lot can be defined.

The key to this table is the combination of Inventory\_Product\_Product\_ID (which refers to the key of Table 4.8.4 Inventory\_Product\_Master) and Inventory\_Batch\_Number, the batch/lot designation.

In the other inventory tables, the Inventory\_Batch\_Number is already present. However, reference should be made to this (now missing) master table.

In order to be able to report sufficient article characteristics (stock\_characteristics) required in the context of the audit at batch level, a flexible structure would be desirable. For pragmatic reasons, it is proposed to opt for the "solution" also chosen for Tax Information, namely the inclusion of four groups of stock\_characteristics.

In summary, this leads to the following proposal.

1. Adding a separate table Inventory\_Batch\_Master
2. Include the Inventory\_Batch\_Number in all relevant Inventory tables with a reference to the Inventory\_Batch\_Master.
3. Include in all relevant Inventory tables of 4 groups with data on Stock\_Characteristics (each group contains the Stock\_Characteristic, the Stock\_Characteristic\_Value and the Stock\_Characteristic\_Value\_Measurement\_Unit\_Code).

elaborated in detail:

| No | Name  | Data-type | Representation | Description   | L |
|----|---|-----------|----------------|---|---|
| 1  | Unique_Inventory_ID                                 | String    | %75s           | Unique code; may be a concatenation of Business_Unit, Inventory_Identifier and Location_ID.   | 1 |
| 2  | Inventory_Product_ID                                | String    | %75s           | Unique identifier of inventory item. Must match an Inventory_Product_ID in the Inventory_Product_Master file  | 1 |
| 3  | Inventory_Batch_Number                              | String    | %60s           | Unique identifier of the batchnumber of the inventory   | 1 |
| 4  | Owner_Account_ID                                    | String    | %60s           | The unique identifier of the owner of goods.  | 2 |
| 5  | Stock_Characteristic_1                              | String    | %60s           | User definable characteristics of the goods. Example: alcohol percentage  | 2 |
| 6  | Stock_Characteristics_Value_1                       | String    | %60s           | The value of the Stock_Characteristic. Example: 20  | 2 |
| 7  | Stock_Characteristics_Value_Measurement_Unit_Code_1 | String    | %80s           | The code of measurement of the value of the Stock_Characteristic, if applicable. Must match a Measurement_Unit_Code in the Measurement_Unit file.<br>Example:         | 2 |
| 8  | Stock_Characteristic_2                              | String    | %60s           | User definable characteristics of the goods. Example: content   | 2 |
| 9  | Stock_Characteristics_Value_2                       | String    | %60s           | The value of the Stock_Characteristic. Example: 0,7   | 2 |
| 10 | Stock_Characteristics_Value_Measurement_Unit_Code_2 | String    | %80s           | The code of measurement of the value of the Stock_Characteristic, if applicable. Must match a Measurement_Unit_Code in the Measurement_Unit file.<br>Example: litre   | 2 |
| 11 | Stock_Characteristic_3                              | String    | %60s           | User definable characteristics of the goods. Example: content of sales package  | 2 |
| 12 | Stock_Characteristics_Value_3                       | String    | %60s           | The value of the Stock_Characteristic. Example: 6   | 2 |
| 13 | Stock_Characteristics_Value_Measurement_Unit_Code_3 | String    | %80s           | The code of measurement of the value of the Stock_Characteristic, if applicable. Must match a Measurement_Unit_Code in the Measurement_Unit file.<br>Example: bottles | 2 |
| 14 | Stock_Characteristic_4                              | String    | %60s           | User definable characteristics of the goods. Example: excise-type   | 2 |



| No  | Name  | Data-type | Representation | Description  | L |
|-----|---|-----------|----------------|--|---|
| 15  | Stock_Characteristics_Value_4                       | String    | %60s           | The value of the Stock_Characteristic. Example: wine category A  | 2 |
| 16  | Stock_Characteristics_Value_Measurement_Unit_Code_4 | String    | %80s           | The code of measurement of the value of the Stock_Characteristic, if applicable. Must match a Measurement_Unit_Code in the Measurement_Unit file.<br>Example:  | 2 |
| 17  | Valid_From_Date                                     | Date      | %10c           | Date this entry became valid into the system.  | 1 |
| 18  | Valid_From_Time                                     | Time      | %4c            | The time this entry became valid into the system. ISO 8601:2000, Data elements and interchange formats - Information interchange - Representation of dates and times representing time in 24-hour time (hhmm) (for example, 1:00 PM = 1300) shall be complied with.  | 2 |
| 19  | Entered_By  | String    | %100s          | User_ID (from the User_Listing table) for the person who created the record.   | 2 |
| 20  | Entered_Date  | Date      | %10c           | Date the batch record was entered into the system. This is sometimes referred to as the creation date. This should be a system generated date (rather than user-entered date), when possible.  | 2 |
| 21  | Entered_Time  | Time      | %4c            | The time this record was entered into the system. ISO 8601:2000, Data elements and interchange formats - Information interchange - Representation of dates and times representing time in 24-hour time (hhmm) (for example, 1:00 PM = 1300) shall be complied with.  | 2 |
| 22  | Last_Modified_By                                    | String    | %100s          | User_ID (from the User_Listing table) for the last person modifying this entry.  | 2 |
| 23  | Last_Modified_Date                                  | Date      | %10c           | The date the record was last modified.   | 2 |
| 24  | Last_Modified_Time                                  | Time      | %4c            | The time the entry was last modified. ISO 8601:2000, Data elements and interchange formats - Information interchange - Representation of dates and times representing time in 24-hour time (hhmm) (for example, 1:00 PM = 1300) shall be complied with. ISO 8601 representing time in 24-hour time (hhmm) (for example, 1:00 PM = 1300). | 2 |
| 25  | Business_Segment_X                                  | String    | %60s           | Reserved field that can be used for business segments / structures. One number for each unique reference level.  | 1 |
| Key |   |           |                |  |   |

| No  | Name | Data-type | Representation | Description | L |
|---|------|-----------|----------------|-------------|---|
| L: Level 1 means required field. Level 2 means optional field. Cell(s) in column L with grey shading means the corresponding field is a unique identifier or the corresponding fields is a joint unique identifier. |      |           |                |             |   |

The Inventory\_Batch\_Number is listed in CD1 in the following Inventory tables:

4.8.5 Inventory\_On\_Hand

4.8.6 Inventory\_Transaction

4.8.7 Physical\_Inventory

4.8.8 Inventory\_Account\_Summary

The description needs to be changed. Add the sentence "Must match a Inventory\_Batch\_Number in the Inventory\_Batch\_Master table.

### 4.3. Extension for reference to source documents

To match transactional information out of the ERP system with data from another system, e.g. Governmental, Food regulators, Quality Surveyors, etc. referential information is needed.

Not only auditors working for regulators, but also auditors of the company itself (conformation of compliance, check on completeness of dealing with liabilities) have to be able to check the regulatory requirements of any kind. The most far-reaching regulation of the SEC is the Dodd Frank act (The US Securities and Exchange Commission (SEC) issued the rule that requires companies to report publicly on their due diligence and to have their reports independently audited).

Multiple document can be associated with the transaction. Therefore there should be the possibility for at least 4 (external) references / documents.

#### Add in 4.8.6. Inventory\_Transaction:

| No | Name  | Data-type | Representation | Description   | L |
|----|---|-----------|----------------|---|---|
|    | Transaction_associated_Referential_Document_Code_1    | String    | %20s           | The code of the transaction_associated_referential_document. To be agreed with the auditee. | 2 |
|    | Transaction_Associated_Referential_Document_ID_1      | String    | %100s          | The ID (Number) of the transaction_associated_referential_document.                         | 2 |
|    | Transaction_Associated_Referential_Document_Line_ID_1 | String    | %100s          | The line-number of the transaction_associated_referential_document.                         | 2 |

| No | Name  | Data-type | Representation | Description   | L |
|----|---|-----------|----------------|---|---|
|    | Transaction_associated_Referential_Document_Code_2    | String    | %20s           | The code of the transaction_associated_referential_document. To be agreed with the auditee. | 2 |
|    | Transaction_Associated_Referential_Document_ID_2      | String    | %100s          | The ID (Number) of the transaction_associated_referential_document.                         | 2 |
|    | Transaction_Associated_Referential_Document_Line_ID_2 | String    | %100s          | The line-number of the transaction_associated_referential_document.                         | 2 |
|    | Transaction_associated_Referential_Document_Code_3    | String    | %20s           | The code of the transaction_associated_referential_document. To be agreed with the auditee. | 2 |
|    | Transaction_Associated_Referential_Document_ID_3      | String    | %100s          | The ID (Number) of the transaction_associated_referential_document.                         | 2 |
|    | Transaction_Associated_Referential_Document_Line_ID_3 | String    | %100s          | The line-number of the transaction_associated_referential_document.                         | 2 |
|    | Transaction_associated_Referential_Document_Code_4    | String    | %20s           | The code of the transaction_associated_referential_document. To be agreed with the auditee. | 2 |
|    | Transaction_Associated_Referential_Document_ID_4      | String    | %100s          | The ID (Number) of the transaction_associated_referential_document.                         | 2 |
|    | Transaction_Associated_Referential_Document_Line_ID_4 | String    | %100s          | The line-number of the transaction_associated_referential_document.                         | 2 |

Some examples:

- Reference to declaration systems (in international perspective)
- Reference to other controlling government bodies, think of test reports
- Reference to private monitoring bodies, e. g. surveyors
- The external numbers assigned by a buyer or seller or contract partner