Norwegian SAF-T Financial data

Documentation

SAF-T Working group

V1.4 - 08.07.2019

Version	Description	Date
1.0	Initial version	17.03.2016
1.1	Added information on the use of Standard VAT Codes	29.04.2016
1.2	Enriched descriptions – see overview in chapter Important information	24.07.2017
1.3	Updated with changes by the Directorate of Taxes determination of the standardized electronic format.	23.03.2018
1.4	Updated with changes in Contact info	08.07.2019

General information and overview of resources available for accounting system developers.

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Introduction

Important information

Minor changes with full back compatibility in the XSD Schema v 1.1:

- Removed enumerations:
  <GeneralLedgerEntries><Journal><**JournalID**> and <Journal><**Type**>.
- Changed from Mandatory to Optional:
  <MasterFiles><GeneralLedgerAccounts><Account><**StandardAccountID**>.

The basis for the changes is to enhance flexibility:

- Use all the Journal data elements for systems with multiple ledgers.
- Support a choice between mapping the charts of accounts to either the standard account list, or the Income Statement. Municipalities can chose to map to the KOSTRA Arts.

Overview of changes in version 1.3 of the documentation:

- Options for mapping of accounts and VAT codes.
- Enriched description throughout the general documentation, and in particular the chapters describing Altinn and multiple SAF-T files (splitting) and use of VAT codes.
- Enriched descriptions of some of the XML elements in the technical description.
- Added document with Norwegian translation of data elements, and their legal basis.

Purpose of the SAF-T format

Norwegian SAF-T (Standard Audit File - Tax) is standard file format for exporting various types of accounting transactional data using the XML format.

This first version of the SAF-T Financial is limited to the general ledger level including customer and supplier transactions. Necessary master data is also included. Future versions of the SAF-T Financial will include source documents such as detailed invoice data and movements of goods and asset transactions. Furthermore, other data elements will be added to support SAF-T Financial as a format for migration of data between different accounting software.

The SAF-T Cash Register containing journal data from electronic cash register systems was finalized in 2016.

The primary purpose of the SAF-T Financial data format is to:

- Serve as an export format for accounting data after request from the Norwegian Tax Administration, public accountants and other parties.
- Serve as archiving format for the necessary accounting data for those who are obliged to keep accounts as stated in the Norwegian bookkeeping legislation.
- Serve as a format for moving data when changing accounting software.

- Serve as a format for moving data from accounting software to other financial systems such as year-end closing systems, tax computation systems, business intelligence software, advisory systems etc.

This documentation is intended for software developers and vendors who are to incorporate export functionality of SAF-T Financial data in their software.

Documentation of SAF-T Financial

Documents are available on the following page:

https://www.skatteetaten.no/bedrift-og-organisasjon/starte-og-drive/rutiner-regnskap-og-kassasystem/saf-t-regnskap/dokumentasjon/

- Norwegian SAF-T Financial data – Documentation (this document)
- Norwegian SAF-T Financial data – Technical description (XML elements)
- Diagrams (picture files) of the XSD Schema
- Norwegian SAF-T Standard VAT codes
- Norwegian SAF-T Financial data – Rettslig innplassering og oversettelse til NOB (legal basis in Norwegian and translation of element names to Norwegian Bokmål)

Technical XML resources are available at: www.github.com/skatteetaten/saf-t

- XML Schema – Norwegian_SAF-T_Financial_Schema_v_1.10.xsd
- General Ledger Standard Accounts – Code lists in csv/xml format
- Grouping Category and Grouping Codes – Code lists in csv/xml format
    - Income Statements (Næringsoppgaver) (RF-1167 etc)
    - KOSTRA Arts (KA)
- Standard Tax Codes (VAT) – Code lists in csv/xml format
- ExampleFile SAF-T Financial_999999999_20161125213512.xml
    - Same as example in Technical description
- ExampleFile SAF-T Financial_ SAF-T Financial_888888888_20180228235959.xml
    - Fictitious company Tøyen Toy Factory

For other information please see www.skatteetaten.no/saf-t

Background of the SAF-T

The Norwegian SAF-T is based upon the recommendation from the OECD to Revenue Bodies to establish a standard together with the accounting software developers and other stakeholders. The details can be found in OECD documents:

Version 1 http://www.oecd.org/tax/administration/guidancenote-guidancefordevelopersofbusinessandaccountingsoftwareconcerningtaxauditrequirements.htm

Version 2 http://www.oecd.org/tax/administration/ftaguidancenotesone-auditingstandards.htm

A project group gave their recommendations for implementing SAF-T in Norway in 2014. The group had representatives from The Tax Administration, The Confederation of Norwegian Enterprise (NHO), Accounting Norway (including representatives from accounting software vendors) and the Norwegian Institute of Public Accountants. Details can be found in the report sent to The Ministry of Finance June 2014. The complete report with attachments are available at www.skatteetaten.no/saf-t or by following this download link:

http://www.skatteetaten.no/globalassets/standardformat-regnskapsaf-t/saf-trapport2014finansdepartementet.zip

During the fall of 2015 a working group was set to make necessary adjustments and document the first version of the SAF-T Financial data, as well as conduct preliminary testing of the XSD. The basis for the work was the XSD from the OECD working group (version 2 from 2010).

The working group participants were:

- Geir Ove Klefsåsvold   Visma Software International AS
- Karl Erik Strømsholm   Zirius AS
- Terje Johansen   Poweroffice AS
- Truls Rødfjell   Poweroffice AS
- Gøran Thomassen   Poweroffice AS
- Steinar Berggren   Skatt øst (Tax Region Eastern Norway)
- Nonna Risnes   Skattedirektoratet (Directorate of Taxes)
- Rune Tystad   Skattedirektoratet (Directorate of Taxes)

Valuable contributions have also been received from associates of the above.

The standard VAT codes <StandardTaxCodes> are based on the work done by the project group in 2014, and valuable contributions during the revision in 2016 were received from Frode Nilsen and John Skogan in Sticos AS.

The SAF-T Schema authority is The Norwegian Tax Administration, see contact details in chapter Contact info - questions and answers.

In 2010 Hans Christian Ellefsen in Accounting Norway (Regnskap Norge) established "Regnskap Norge IT-forum", a meeting place for software vendors to the accounting industry in Norway. The aim for Regnskap Norge IT-forum is to strengthen the relationship between accountants and software developers and to ensure that the development of solutions is in line with accountants and their customer's needs.

One of the first topics to be addressed was the need for a standardized method to transfer accounting data from one system to another, and to ensure a backwards compatible storage method for mandatory long time storage of accounting information. A working group amongst members of Regnskap Norge IT-forum was established to discuss the issue and suggest a format. During this work, The Norwegian Tax Administration started to process the recommendation from OECD.

Due to prolonged close cooperation between Accounting Norway and The Norwegian Tax Administration, our efforts were soon coordinated to ensure that we developed one standard for both control and commercial purposes. Hence, the working group in Regnskap Norge IT-forum continued its work under the administrative leadership of The Norwegian Tax Administration.

Regnskap Norge is pleased with the result of the cooperation and the balance between governmental and private needs in the standardized format.

Changes and future versions of the SAF-T Financial data

The constitutive meeting in the administrative body of the Norwegian SAF-T standards (Financial & Cash Register) was held on June 9th 2017.

The objectives of the body are to manage the standards to suit the needs for both the private and public sector. The body consists of representatives from The Norwegian Tax Administration, Accounting Norway and The Norwegian Institute of Public Accountants.

Future changes will be done by recommendations of the administrative body. The principal consensus is to avoid changes to the formats until the first versions is well established and experiences have been gained.

Minor changes as described in this document were recommended by the administrative body in their meeting on November 1. 2017.

Contact info - questions and answers

Issues on the GitHub repository can be used for exchange of experiences regarding the format between developers. The Norwegian Tax Administration will not moderate or be able to answer all issues there.

For questions regarding the SAF-T Financial format or legal aspects, please contact us via the link "Contact us" found on the bottom of all pages at Skatteetaten.no, https://www.skatteetaten.no/kontakt/ .

Please contact Skatt.Altinnlokalforvaltning@skatteetaten.no for questions regarding Altinn such as test users, logon information, technical aspects etc. For questions regarding integration services (machine to machine) between end user systems (accounting system) and Altinn, please use sluttbrukersystem@altinn.no

Exchange of SAF-T data files

SAF-T data file to the Tax Authorities

The primary channel for sending SAF-T Regnskap (Financial) files to the Tax Authorities is Altinn, and this is the preferred way.

When use of Altinn is not possible due to file size or other reason, the Tax Auditor by assistance of IT-audit specialized Auditor within the Tax Authorities, can facilitate other transfer of data by use of ShareFile (https://www.citrix.com/products/sharefile/)

General information on Altinn on SAF-T Financial submission:

https://www.altinn.no/skjemaoversikt/skatteetaten/saf-t-regnskap-saf-t-financial/

Information on integration services for end user systems and Altinn:

Norwegian documentation for implementation
https://altinn.github.io/docs/guides/integrasjon/sluttbrukere/

Information about participating in test submission via Altinn:

https://www.skatteetaten.no/bedrift-og-organisasjon/starte-og-drive/rutiner-regnskap-og-kassasystem/saf-t-regnskap/testinnsending/

SAF-T data file and the ASiC infrastructure

Associated Signature Container (ASiC) can be used for sending multi messages in an encrypted container. This can be an option for exchange of data with parties other than the Norwegian Tax Administration using the existing PEPPOL network.

More resources are available at:

https://www.etsi.org/deliver/etsi_ts/102900_102999/102918/01.01.01_60/ts_102918v010101p.pdf

https://github.com/difi/asic

https://github.com/difi/vefa-esubmission

Naming of the SAF-T data file

It is strongly advised to use the following naming convention to ensure necessary information in the filename. The purpose is to identify what data are in the file, the owner of the data, and to create a unique filename for each export.

<SAF-T export type>_<organization number of the vendor who the data represents>_<date and time(yyyymmddhh24hmise)>_<file number of total files>.xml

For example: SAF-T Financial_999999999_20160401235911_1_12.xml

Where:

- "SAF-T Financial" states the SAF-T type of file
- "999999999" represents the organization number belonging to the owner of the data.
- "20160401235911" represents the date and time when the file was created using a 24-hour clock.
- "1_12" represents file 1 of 12 total files in the export (same selection)

Altinn portal and file size limitations

Limitations in the Altinn portal is 200MB per attached file, and 2 GB of source XML data. All single XML files submitted must validate with the schema.

It is strongly advised to ZIP the files as this compresses the XML data file. Testing indicates that the file compression ratio using ZIP, reduces the file with approximately 95 percent of the original XML data file. The original filename of the SAF-T file submitted through Altinn is only included to the Tax Auditor when embedded in a ZIP archive.

A maximum of 10 files, ZIP or XML, can be attached per transmission. Each ZIP can contain single XML files of up to 2 GB, which is the maximum file size.

The limitation per submission with typical compression ratio, is a maximum total of 20 XML files and 40 GB of data. Se tables below.

Sending of multiple XML files is possible, by following the descriptions for splitting of files in chapter Principles for submission of multiple SAF-T data files . Each individual XML file must always validate with the schema. Example scenario of 2 ZIP files with 4 XML files:

ZIP_1_2

> SAF-T Financial_999999999_20160401235911_1_4.xml

> SAF-T Financial_999999999_20160401235915_2_4.xml

ZIP_2_2

> SAF-T Financial_999999999_20160401235920_3_4.xml

> SAF-T Financial_999999999_20160401235925_4_4.xml

Maximum data per submission with typical compression ratio

Testing indicates that 5% ratio can be expected.

Sum of raw XML	Compression ratio 5% of raw XML	Size limit for attachement
4 GB	200 MB in ZIP	200 MB
Attachment #	**Number of 2GB XML files**	**Number of GB data per ZIP**
ZIP 1 (200MB)	2	4
ZIP 2 (200MB)	2	4
ZIP 3 (200MB)	2	4
ZIP 4 (200MB)	2	4
ZIP 5 (200MB)	2	4
ZIP 6 (200MB)	2	4
ZIP 7 (200MB)	2	4
ZIP 8 (200MB)	2	4
ZIP 9 (200MB)	2	4
ZIP 10 (200MB)	2	4
Total files & GB	**20**	**40**

Maximum data per submission with theoretical compression ratio

The maximum submission is 32 GB of raw XML data, per attachment. This must comply with the limitation of 200 MB per attachment, and 2 GB file size per XML. The ratio of 0,625% is from the above limitations.

Sum of raw XML	Compression ratio 0,625% of raw XML	Size limit for attachement
32 GB	200 MB in ZIP	200 MB

Attachment #	Number of 2GB XML files	Number of GB data per ZIP
ZIP 1 (200MB)	16	32
ZIP 2 (200MB)	16	32
ZIP 3 (200MB)	16	32
ZIP 4 (200MB)	16	32
ZIP 5 (200MB)	16	32
ZIP 6 (200MB)	16	32
ZIP 7 (200MB)	16	32
ZIP 8 (200MB)	16	32
ZIP 9 (200MB)	16	32
ZIP 10 (200MB)	16	32
Total files & GB	**160**	**320**

Validation of the SAF-T data file

It is recommended to do XSD schema validation of SAF-T test data files, as part of development and testing. There are different solutions available for this purpose, also software that is free to use for own test environment.

SAF-T data sent via Altinn is validated with the XSD schema. There is no validation of the key references in conjunction with the automatic validation for files submitted through Altinn. For further reading on the latter, see the technical description document.

Altinn validates XML files when uploaded. For XML files embedded within a ZIP file, the validation process occurs shortly after submission.

Example of message from Altinn when uploading XML file who fails schema validation:

Example of messages from Altinn when uploading ZIP file which contains an XML file who fails schema validation:

Melding: Tilbakemelding: Innsending av SAF-T Regnskap (SAF-T Financial) for organisasjonsnummer 910949829 er avvist
Skattedirektoratet

Svar på innsendt skjema (AR3862977)

🕐 Aktivitetslogg   **mottatt:** 04.12.2017

Innsending er avvist.

📄 **tilbakemelding_saf-t_AR3862977.pdf** (last ned)

Tilbakemelding på innsending av SAF-T Regnskap (SAF-T Financial)

Innsendingen ble avvist

Siden innsendingen er avvist, anser vi den som ikke levert. Du må rette opp feilene og sende inn på nytt.

Fil: AR3862977-1_3862977_69da1b90-0fd4-41ab-82a6-73a8e83845ed.zip/SAF-T Financial Testfile Not Valid.xml

Avvikskode	Beskrivelse
MAGNET-000161	Filen inneholder formatfeil i henhold til XSD-definisjonen

Options for mapping of Accounts and mapping of VAT codes

The mapping of The Chart of Accounts must be by choice of one of the following:

- The SAF-T Financial Standard Accounts (2 or 4 digit).
- The Income Statement for the type of business.

For municipalities, the mapping of the accounts must be to the KOSTRA Arts accounts.

For Norwegian Governmental State Enterprises, the mapping must be to the standard accounts (2 or 4 digit). These enterprises uses a standard accounting plan that is similar.

Foreign companies with a bookkeeping obligation in Norway

Foreign companies registered for VAT purposes in Norway, map only the VAT codes for the Norwegian VAT purposes.

VAT transactions must be identified by either VAT codes that are mapped (TaxInformation for the accounting line), or by mapping of the accounts for VAT to the Standard Accounts for VAT.

It is not mandatory to include the foreign VAT codes for the transactions, but when the transactions are included as basis for the Norwegian annual accounts the transactions must be included in the SAF-T file.

Foreign branches of Norwegian enterprises

If the transactions for activities in the foreign branches are available for export along with the domestic transactions, they must be included in the SAF-T file. The minimum requirement is to include totals representing foreign branches to the SAF-T file. The mapping will be the same as for the domestic transactions to the Standard Accounts or the Income Statement.

VAT information for transactions representing VAT in foreign countries (branches), is voluntarily to include (no obligation exists). Mapping of VAT codes for these transactions to the Norwegian Standard VAT Tax codes is not of relevance.

Please find further information on the bookkeeping obligation for foreign branches of Norwegian enterprises in this report Chapter 3, sent for public consultation by the Ministry of Finance on June 8th 2009:

https://www.regjeringen.no/no/dokumenter/horing--forslag-til-endring-av-bokforing/id565203/

Standard Accounts <StandardAccountID>

The actual used account numbers, must be mapped to the standard account ID. It is recommended that the mapping of the accounts are done in conjunction with the user selection of the accounts overview in the application.

The actual used account number and account description is to be included in:

AccountID and **AccountDescription** (In schema: MasterFiles, GeneralLedgerAccounts, Account)

The account numbers and descriptions can be different from the Standard Account Overview.

The **StandardAccountID** must be on either a 2- or 4-digit level as stated in the General Ledger Standard Accounts code lists available on https://github.com/Skatteetaten/saf-t

Mapping of Accounts to Standard Accounts

When sending to the Norwegian Tax Administration, mapping of accounts can be limited to accounts with transactions or open balances for the selection period of the SAF-T file. It is only the companies chart of accounts that must be mapped, not the group chart of accounts (several companies).

When the Chart of Accounts is the same as the Standard Accounts, the mapping still must be done. In situations like this, the mapping can be by automatic process of the system.

Updating and deadlines for mapping:

The mapping must be available with historic mapping for the different periods and accounting years, in accordance with the legal requirements for keeping of accounting records. This means that the actual mapping can vary, between periods and accounting years.

Accounts with both VAT and non-VAT transactions:

The same sales account can hold both VAT and non-VAT transactions, and in the mapping a choice must be taken whether to map to the VAT or non-VAT standard account.

As long as the VAT tax codes make it possible to distinguish between the VAT and non-VAT transactions, the considered best mapping can be done. The consideration should be done based on what standard account who best will represent the majority of the transactions for the account.

Considerations between the 2- or 4 digit Standard Accounts selection for mapping:

Businesses with an existing Chart of Accounts that are similar to the 4 digit Standard Accounts should use this, as the work with mapping are considered to be done with limited use of time.

Businesses with an existing Chart of Accounts that deviates significantly with the Standard Accounts overview should use the 2 digit Standard Accounts.

Principle example of mapping with deviating accounts:

StandardAccountID (From 2 digit code list)	DescriptionNOB *(not included in SAF-T Financial data – included in code list*)	DescriptionENG *(not included in SAF-T Financial data – included in code lists)*	AccountID examples (Company Chart of Accounts)
30	Salgsinntekt, avgiftspliktig	Sales revenue, subject to VAT	9900100, 9900200 9910100, 9910200
31	Salgsinntekt, avgiftsfri	Sales revenue, not subject to VAT	9950100, 9950200 9960100, 9960200

The connection between the 2 digit list of Standard Accounts and mapping:

StandardAccountID (From 2 digit code list)	DescriptionNOB *(not included in SAF-T Financial data – included in code list)*	DescriptionENG *(not included in SAF-T Financial data – included in code list)*	AccountID examples (Company Chart of Accounts)
30	Salgsinntekt, avgiftspliktig	Sales revenue, subject to VAT	3000, 3001 … 3098, 3099
31	Salgsinntekt, avgiftsfri	Sales revenue, not subject to VAT	3100, 3101 … 3198, 3199

The connection between the 4 digit list of Standard Accounts and mapping:

StandardAccountID (From 4 digit code list)	DescriptionNOB *(not included in SAF-T Financial data – included in code list)*	DescriptionENG *(not included in SAF-T Financial data – included in code list)*	AccountID examples (Company Chart of Accounts)
3000	Salgsinntekt, avgiftspliktig	Sales revenue, subject to VAT	3000, 3001 … 3098, 3099
3100	Salgsinntekt, avgiftsfri	Sales revenue, not subject to VAT	3100, 3101 … 3198, 3199

Interim accounts and mapping:

Interim accounts that can not be mapped to any Standard Account or record in the Income Statement, must be given the value "NA".

Mapping of Accounts to Income Statement

For mapping of accounts to the corresponding records in the Income Statement, the Grouping Category and Grouping Code in the General Ledger Accounts section in MasterFiles is used. Code lists containing the category and codes are made available on https://github.com/Skatteetaten/saf-t

Grouping Category: Explains what type of category to group by.

Examples: RF-1167 = Income Statement 2   KA = KOSTRA Arts

Grouping Code: Contains the code for the type of category.

Examples: 1000, 3000, 4000

Principle example of mapping:

AccountID	GroupingCategory	GroupingCode
3000	RF-1167	3000

3010	RF-1167	3000
3100	RF-1167	3100
3110	RF-1167	3100
3980	RF-1167	3900

Common for all Income Statements:

Only the result and balance records (codes) must be mapped.

Annual updating of the mapping:

The deadline corresponds with the deadline for submission of the Income Statement.

Overview of Income Statements for mapping:

- # 1 (RF-1175)
- # 2 (RF-1167)
- # 3 (RF-1170)
- # 4 (RF-1173)
- Limited Company (RF-1342)
- Sole Proprietorships (RF-1349)
- Tax Return page 6-9 for entities comprised by Petroleumsskatteloven section 1 (RF-1323)

There is no mapping for the Income Statement for visual artists (RF-1242), who therefore need to map to Standard Accounts 2 digit when covered by the SAF-T Financial regulations.

Mapping of Accounts to KOSTRA Arts

For mapping of accounts to the corresponding KOSTRA Arts account number, the Grouping Category and Grouping Code in the General Ledger Accounts section are used. Code lists containing the category and codes are available on https://github.com/Skatteetaten/saf-t

Grouping Category: Explains what type of category to group by.

Example: KA = KOSTRA Arts

Grouping Code: Contains the KOSTRA Arts account number.

Examples: 190, 180, 370, 650

Principle examples of mapping:

AccountID	GroupingCategory	GroupingCode
650001	KA	650
190010	KA	190
190011	KA	190
190020	KA	190
190022	KA	190

The KOSTRA Arts codes covers operation and investment accounts, and the mapping will be present for both of the account classes.

Mapping of VAT codes to standard VAT Tax codes <StandardTaxCode>

In Norway it is common that codes are used for classification and calculation of value added tax (VAT). This is usually referred to as VAT codes. The standard VAT codes are based on VAT academic logic.

The standard codes are only applicable for mapping in the SAF-T Financial export format. Software vendors can use whatever VAT tax codes they prefer internally in their own systems, and export them to the XML document on transaction line level.

However, the internal VAT tax codes <TaxCode> must be mapped to the corresponding Norwegian SAF-T Standard VAT codes <StandardTaxCode> in schema location MasterFiles. In situations when mapping is not possible, please use "NA" as value for <StandardTaxCode>. Note that the <StandardTaxCode> must be rendered exactly as in the code list. Example: The Standard Tax Code for Input VAT deductible (domestic) is "1" and not "01" or "001".

An example of this is when the SAF-T Financial data export contains a mix of Tax Codes used for reporting both in Norway and other countries. Then the Tax Codes for other countries are not applicable for mapping to the Norwegian Standard Tax Codes.

Over time it is recommended to implement the usage of the standard VAT codes in the systems as well if that is possible.

Please see principle examples of presenting VAT codes <TAxCode> on transactions, in the document describing the standard VAT/Tax codes (Norwegian SAF-T Standard VAT/Tax codes).

Principle examples of mapping:

TaxCode	TaxPercentage	StandardTaxCode
100F	25	1
100G	25	1
110F	15	11
110G	15	11

Data model and clarifications

Principles for submission of multiple SAF-T data files

The figure below illustrates on what basis multiple SAF-T data files for the same company, can be submitted to the Tax Administration. The Tax Administration will do assembling of the data.

There are two main principles to consider and select from:

1. **One selection that results in one SAF-T data file that contains the complete dataset.**
    a. One complete file per selection period (accounting year or period)
    b. Containing all MasterFiles and Transactions

Example selection of one accounting year with 12 periods. All in one file:

File number	Contents of the AuditFile
1	Header, MasterFiles and GeneralLedgerEntries for 12 periods equal to one accounting year.

Example selection of one accounting period. All in one file:

File number	Contents of the AuditFile
1	Header, MasterFiles and GeneralLedgerEntries for period 1
2	Header, MasterFiles and GeneralLedgerEntries for period 2
3 … X	Header, MasterFiles and GeneralLedgerEntries for period X

Submission of one complete file for each of 12 accounting period, who in total will represent one accounting year by 12 complete files are possible but *should be avoided when possible*. The rationale is to limit repetition of MasterFiles data by splitting the selection as described below (2).

2. **One selection that results in multiple SAF-T data files, and they all together contains the complete dataset for the selection.**
    a. Multiple files for the selection period (accounting year or period)
    b. All MasterFiles in the first file, and the associated transactions in the subsequent files (flexible number of files).

Example selection of one accounting year with 12 periods. One file per period with transactions:

File number	Contents of the AuditFile
1	Header and MasterFiles
2 … 13	Header and GeneralLedgerEntries

When principle 2 is used, the number of the file must be included in the filename as described in this document. Multiple files for the same selections must be kept together, so they do not mix up with multiple files from other selections.
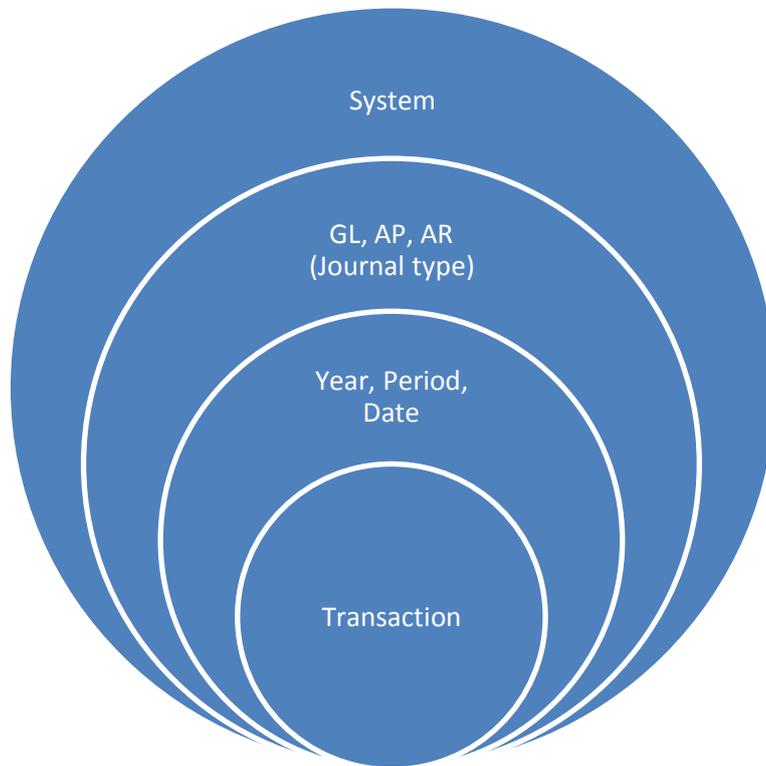
System:

If SAF-T data from multiple systems together will represent the all the transactions, the data files can be submitted per system, as for example:

- One or multiple systems holds only the Accounts Receivable/Payable (AR/AP) data
    o AR from system X in SAF-T data file 1
    o AR from system Y in SAF-T data file 2
- One or multiple systems holds the General Ledger data with or without the Accounts Receivable/Payable data
    o GL from system X in SAF-T data file 1
    o GL from system Y in SAF-T data file 2

MasterFiles will in general be "per system" or "per ledger", as they are connected to the coherent transactions "per system" or "per ledger".

GL, AP, AR:

If considered a preferred way, either due to different systems and/or to avoid large SAF-T data files, the files can be submitted *by their contents* in accordance with the requirements* limited to the ones listed below:

- General Ledger (GL) transactions only (account specification)
- Accounts Receivable (AR) transactions only (customer specification)
- Accounts Payable (AP) transactions only (supplier specification)

* Bookkeeping regulations, section 3-1 (1) nr 2,3,4 **, https://lovdata.no/SF/forskrift/2004-12-01-1558/§3-1**

Year, Period, Date:

If considered a preferred way, in typical to avoid large SAF-T data files, the files can be submitted on selections by:

- Year: <PeriodYear> The year of the Accounting Period.
- Period: <Period> Accounting Period.
- Date: <TransactionDate> The date of the accounting document/voucher.

Selections on date (in typical from and to date) can be done when selections by period will return to large SAF-T data files.

Transaction:

In scenarios when selections by date are not enough to result in an adequate file size, all transaction lines per transaction must be included in each file.

Detailed requirements and recommendations:

Requirements and recommendations when several SAF-T data files are produced and submitted are described in the following chapters:

- Important when dividing one selection to multiple SAF-T files from the same source/system
- Accounts Receivable (AR) or Accounts Payable (AP) as separate files
- AR and/or AP transactions and GL entries with batch totals from AR/AP

Important when dividing one selection to multiple SAF-T files from the same source/system

The description below are valid for one selection that results in multiple SAF-T data files, and all the files together contains the complete dataset for the selection.

One example is a selection of transactions covering a complete financial year, who consists of data from 12 accounting periods. It is then possible to write to one file who contains all MasterFiles data for the subsequent number of files containing the transactions.

Minimum selection per file split:

This should be done by accounting periods <Transaction><Period>, so that all transactions within the period are included. This is for easier validation and reconciliation of the received data.

Selections from date and to date can be done. However, one file must include all transaction lines for the transactions included in the file.

Valid example scenarios:

- 12 files in total, where the first file holds complete MasterFiles and transactions for period 1. File 2_12 holds only transactional data.
- 13 files in total, where the first file only holds complete MasterFiles (no transactions). File 2_13 holds only transactions for the selection periods.
- However, the number of files in total is flexible.

MasterFiles:

MasterFiles data (GeneralLedgerAccounts etc.), *MUST ONLY* be included in the first file. This is to avoid the MasterFiles data to be repeated for the different files in the selection.

The first file must include all MasterFiles data for the selection period, including the one regarding the subsequent files with transactional data for different periods.

We are aware that this will deviate from the key references in the XSD schema, but the Altinn validation will not fail.

Naming of the files:

When dividing one export/selection to several files, care must be taken to name the files in order so they can be treated properly when assembled by the party receiving the files. See chapter Naming of the SAF-T data file.

Declaration of <NumberOfEntries>:

As there is *one selection* that is divided to multiple files, all the files should list the complete number of entries for the selection in total.
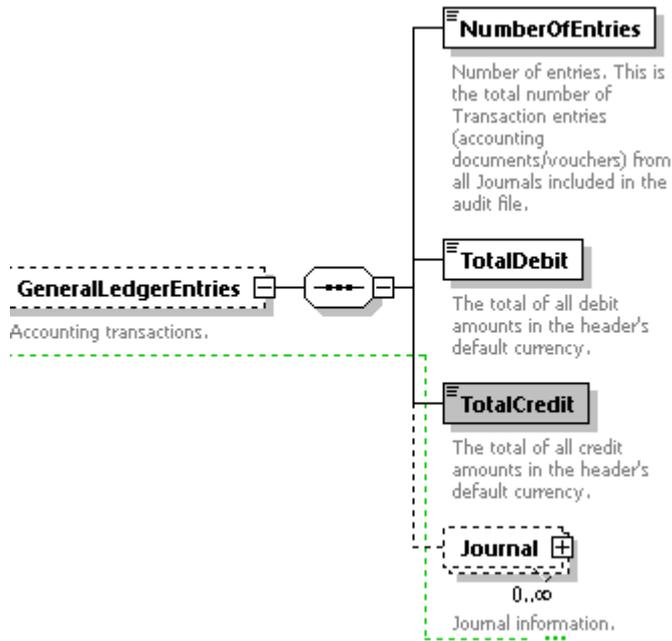
Accounts Receivable (AR) or Accounts Payable (AP) as separate files

Systems used to process and present customer or supplier specifications can be separated from the system holding the General Ledger (GL). This can be the situation with different modules in the same ERP solution, or by third parties (off site) solutions.

The system containing the GL transactions will typical hold batch totals from the AR/GL system.

The sub ledger transactions can be exported as separate files, as long as an audit trail to the sub system and the corresponding GL entry are included.

This document describes examples on how audit trail can be included. Other ways of including the audit trail is possible, to ensure the flexibility to adapt to different system configurations and spesifications.

SAF-T Export:
Detailed transactions with batch ID's and references to systems

Accounts Receivable (AR)

System X

Accounts Payable (AP)

System Y

Batch totals with batch ID's and reference to System X

Batch totals with batch ID's and reference to System Y

General Ledger (GL)

System Z

SAF-T Export:
Batch totals with batch ID's and references to systems

22
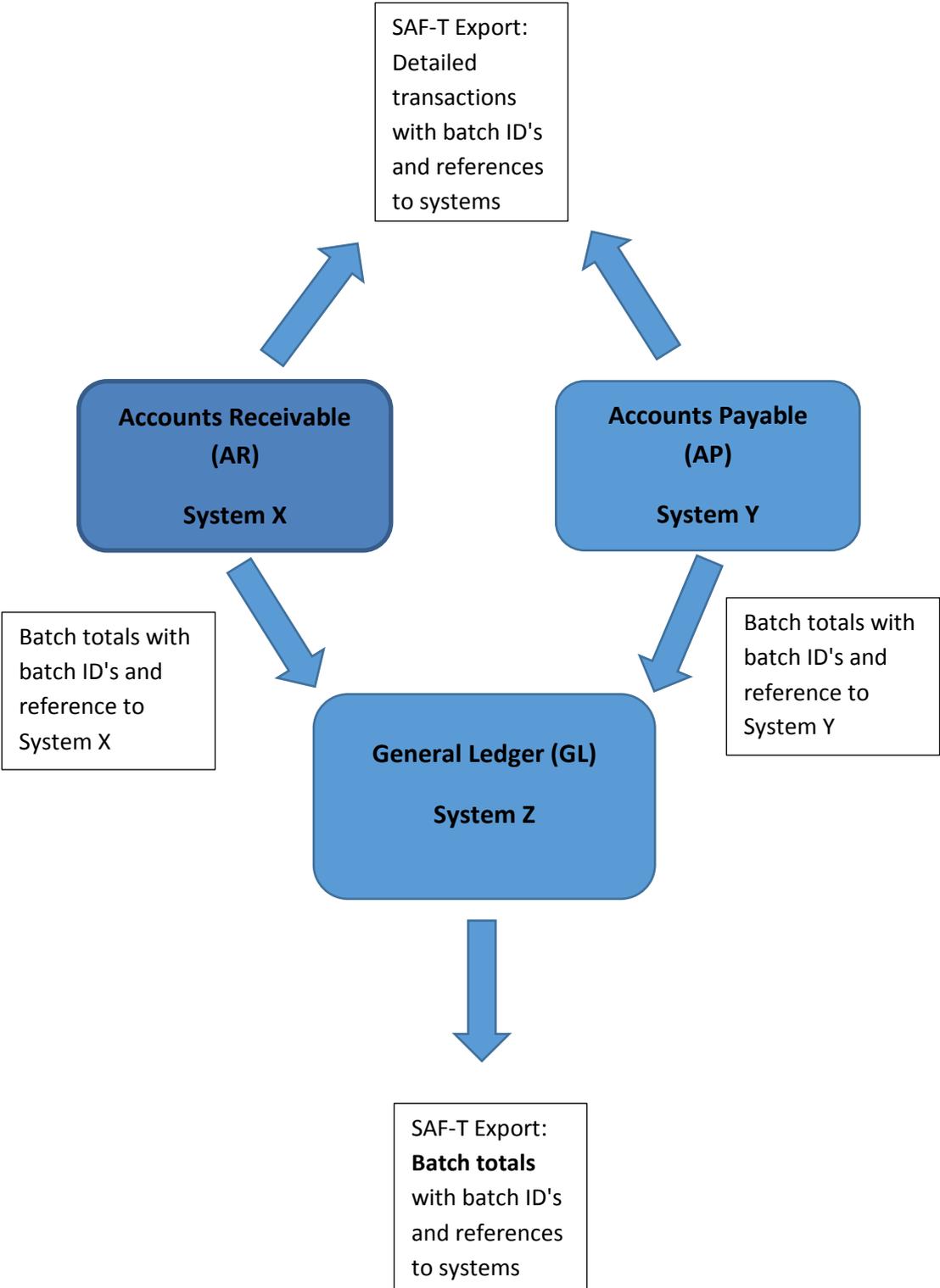
Data elements to ensure audit trail for this type of selection:

Header

The element <Header><HeaderComment> should contain description of the type of transactions in the audit file:

- "Subledger transactions, Accounts Receivable"
- "Subledger transactions, Accounts Payable"

MasterFiles

As shown by the figure below (dotted line), all MasterFiles in schema are optional elements. Therefore they do not need to be filled out for schema compliance. This is the main principle.

This makes it possible to produce SAF-T Financial files with different selections, for example General Ledger entries or Source Documents that will include different types of MasterFiles.

General Ledger Accounts

GeneralLedgerAccounts
The general ledger accounts of a company.

Account
1..∞
General ledger account information.
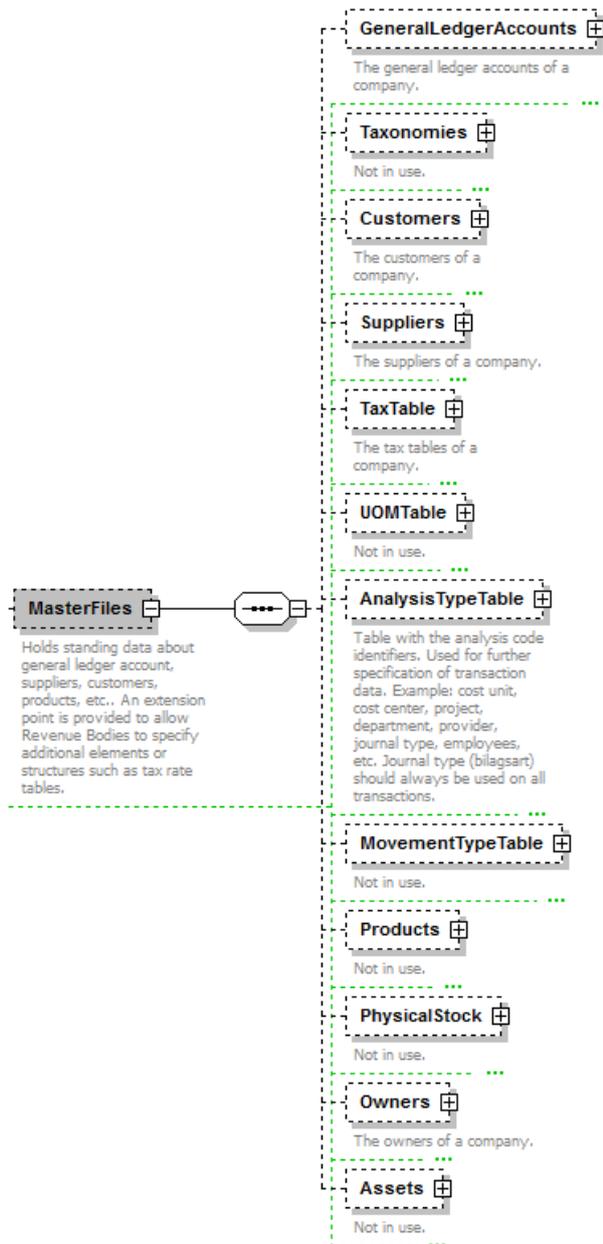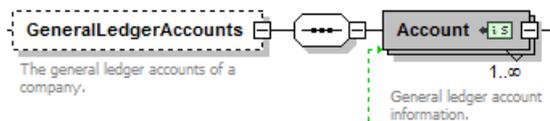
This element is not in use when only exporting AR or AP subledger transactions.

However if available and feasible, the Account information used in the GL system/module for the Suppliers & Customers can be included. For mandatory elements as Opening and Closing Balances please use "0.00" as value. This will reflect the AccountID on Suppliers & Customers as show below.

Suppliers & Customers

AccountID:

In cases where this exists in the AR/AP system, this element must be filled out with the accounts used in the GL system/module.

This is limited to balance accounts used for the customers or suppliers.

Opening and Closing Balances:

Must be filled out according to the selection period with balances from the AR/AP system.
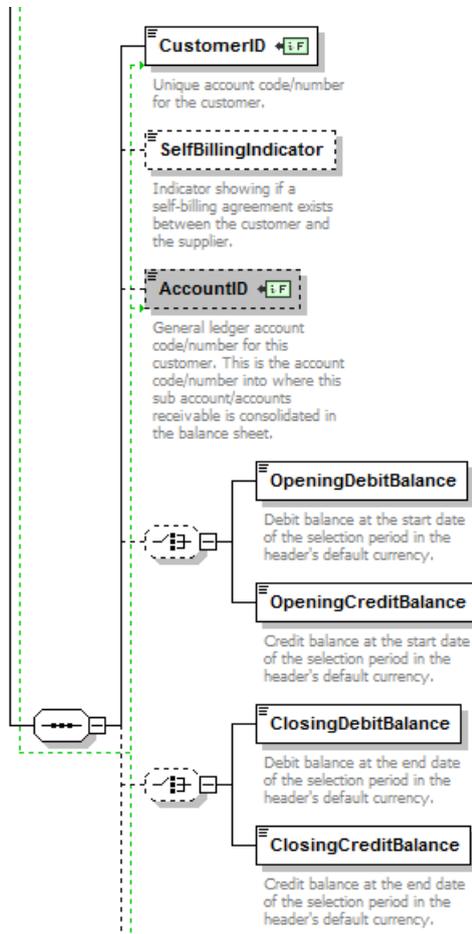
Figure shows some of the elements for Suppliers & Customers in MasterFiles.

TaxTable

If VAT codes are available and used for VAT calculation purposes in the AR/AP system, they must be included. This is regardless of whether VAT codes are available in the GL system or not.

GeneralLedgerEntries

Journal

JournalID, Description, Type:

For <Type> please use the examples from the Technical Description:

"AR" for Accounts Receivable or "AP" for Accounts Payable

Please also read chapter **Accounts Receivable (AR) or Accounts Payable (AP) included along with GL entries**

TransactionID

This should be the voucher number per definition from the AR/AP system.

SourceID

This must identify the AR/AP system that the transactions originate from.

BatchID

This should identify the batch the transaction is included in, when transferred to the GL system in batch totals. This is for audit trail purposes.

GLPostingDate

This should be the same date as the batch the transaction are included in, are transferred to the GL system (date posting to the general ledger account).

SystemID

This should be unique ID/numbers created by the AR/AP system.

Line

AccountID

Use the same account code as this ledger/sub account are consolidated to in the balance sheet (GeneralLedgerAccounts, AccountID)

TaxInformation

This must be filled out if available and used, the same as for the TaxTable in Masterfiles.

This is regardless of whether VAT codes are available in the GL system or not.

AR and/or AP transactions and GL entries with batch totals from AR/AP

The element <Header><HeaderComment> should contain description of the type of transactions in the audit file as for example:

- "Subledger transactions, Accounts Receivable and/or Accounts Payable and General Ledger transactions with batch totals from subledgers"

The «Journal» level must be used to divide the ledgers from each other. This is important to make it possible to sort the ledgers and totals of them.

For <Type> please use the examples from the Technical Description:

- GL = General Ledger Journals
- AR = Accounts Receivable Journals
- AP = Accounts Payable Journals

Submission of multiple AR/AP/GL for the same company

As long as the prerequisites in the Standard NBS 8 are met, multiple files can be submitted.

http://wpstatic.idium.no/www.regnskapsstiftelsen.no/2014/10/2015-04-NBS-8-Sideordnede-spesifikasjoner-vedtatt-april-2015.pdf

Multiple AR/AP:

There must be possible to identify the same customers/vendors across the different files. This is for the purpose of compiling the party, independent of the files.

This should be done by the unique identifier of the party:

<RegistationNumber> Organization number from The Brønnøysund Register Centre (Brønnøysundregistrene) or

<TaxRegistrationNumber> The company's VAT (MVA) number.

Identifying on <CustomerID> or <SupplierID> is possible if the same code is used per party across the different files.

<u>Multiple GL:</u>

They must be submitted as separate complete dataset, each with its own MasterFiles etc.

Use of professional systems for bank, insurance and finance businesses

Bank, insurance and finance businesses that use professional systems for compilations of Accounts Receivable Journals and Accounts Payable Journals, ref. the Bookkeeping Regulations section 8-13-3 or section 8-14-3, may state the transactions accumulated per accounting period in the general ledger.

Difference between Mandatory and Optional data elements

What data are stored in the database varies between various accounting software. For this reason several data elements are stated as optional.

It is important to emphasize that as long as the optional data elements are available in the database, it must be written to the XML file. The SAF-T Financial data format will not extend the requirements for documentation for the traders obliged to prepare accounts.

Mandatory data elements cannot be empty, and sometimes they must have enumerated values. This is necessary for the XML data file to validate with the schema.

The mandatory elements mainly represent the data necessary to produce the specifications that are obliged by the Norwegian Bookkeeping Act. In addition, other essential data in the XML file must by nature be mandatory, such as the header data elements.

Database availability:

Optional data elements available from the same source (database/system) along with other mandatory elements from applications that facilitate the SAF-T export should be included.

What determines the availability depends on whether logical access to a shared database or the different databases exists.

- Are the possibilities of including optional elements in the same export considered feasible, compared to the mandatory elements?

The file size alone is not decisive. The assessment must be made based on whether the information can be retrieved from the same request.

The following demonstrates how to produce a correct SAF-T export in various scenarios.

Example scenarios:

1. Export of GL transactions (without AR and AP sub ledger transactions) in an instance where the ERP system shares access to both GL and AR/AP data.

If only GL transactions are included in the SAF-T export, the optional elements out of the scope of the export must not be included. Examples are MasterFiles related to customers and suppliers.

2. Export of AR/AP sub ledger transactions (without GL transactions) in an instance where the ERP system shares access to both GL and AR/AP data.

This follows the same principles as the first scenario. The MasterFiles related to GeneralLedgerAccounts are not required (out of relevance). This can also be the case with TaxTable in MasterFiles, depending on whether the TaxTables and calculations of VAT are within the GL or AR/AP.

3. GL transactions are held in one system/database while AR/AP transactions are in other systems/databases. No logical access to export data from both systems at once is feasible.

This follows the same principles as the former scenarios. Only data that is held by the different systems is to be exported.

If, however, both the GL and AR/AP system contain MasterFiles for customers/suppliers a choice must be made between the two systems. It is not necessary to assemble a complete dataset from both systems.

The choice should be the same as above, unless this would result in the mandatory elements not being included in the SAF-T export.

4. Use of data warehouse

For some businesses the use of data warehouse (DW) would make it more feasible to export SAF-T data from the DW instead of exports from the operational systems holding the GL, AR or AP. This is considered an appropriate solution for facilitating SAF-T Financial export.

<u>Mandatory data elements does not exists or is not available for export from the ERP system:</u>

Mandatory elements must be included in the SAF-T XML file as the file will not validate when submitted through the Altinn portal. For most of the occurrences the mandatory elements represents information that are obliged to keep by regulations.

Circumstances in which elements is not available for export, must be dealt with explicit in each situation and carried out only with acceptance from the Norwegian Tax Administration. This can be done by applying for exemptions from the regulations.

For mandatory elements with no values, the following data must be written:

- String elements: Use "NotAvailable" or "NA" as element value
- Date and/or time elements: Use "0001-01-01" as date value and "00:00:00" as time value.
- Amount elements: Use "0.00" as element value.

Changes in MasterFiles data

The SAF-T export should include MasterFiles data available at the time of export. This can lead to situations as for example, where a general ledger account description has changed, or a customer has changed address information.

If historical data elements are available, they must be included in accordance with the schema. For example, an address element can be repeated for a customer, and a TaxCode can be repeated.

AnalysisTypeTable in MasterFiles and Analysis in GeneralLedgerEntries

AnalysisTypeTable

The AnalysisTypeTable can be limited to the entries which represent the transactions for the selection period and the reporting company.

The use of analysis code identifiers varies between different systems and businesses. This are based on either legal demands, or derived by the business own needs for specifications of transactional data.

There are difficult to list up any minimum level of analysis types to include in the SAF-T export file. As long as data are specified on dimensions, they are considered to be of value for the business.

Therefore the analysis code identifiers can be of value for audit purposes, depending on the scope for the audit. They can be used for various break downs of financial data.
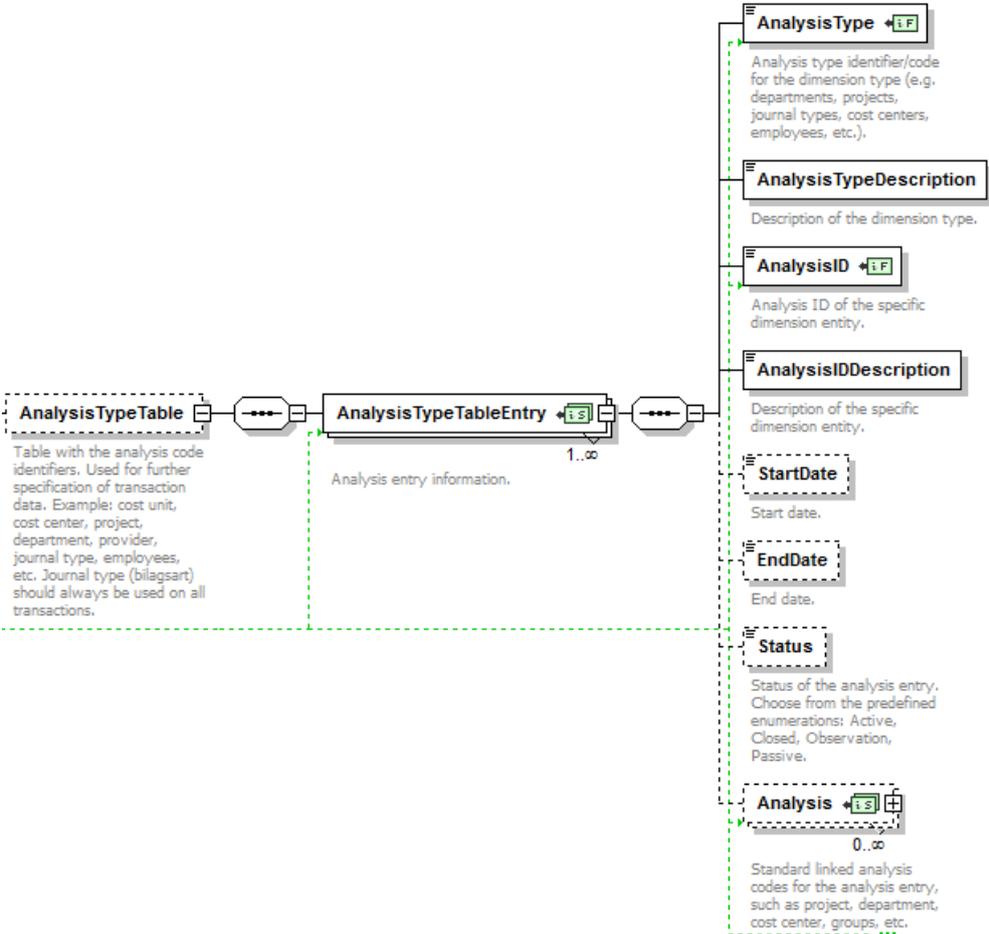
Analysis

The <Analysis> can be repeated for the same transaction line <Line>. Therefore <AnalysisAmount> can be included for such as several cost units, and can be "repeated" several times showing allocation of the line amount for the different cost units, departments etc. Either by splitting of the line amount or by repeating the same line amount. In general the SAF-T file should include the analysis amount in the way it is stored in the ERP system.

Example to illustrate: Amount split on two departements:

<Line><DebitAmount> = 1000

<Line><Analysis>

                    <AnalysisType> = DEP

                    <AnalysisID> = 10

                    <AnalysisAmount> = 500

                    <AnalysisType> = DEP

                    <AnalysisID> = 20

                    <AnalysisAmount> = 500

Example to illustrate: Amount repeated for a department and a project:

<Line><DebitAmount> = 1000

<Line><Analysis>

                    <AnalysisType> = DEP

                    <AnalysisID> = 10

                    <AnalysisAmount> = 1000

                    <AnalysisType> = PRO

                    <AnalysisID> = 20

                    <AnalysisAmount> = 1000

Owners in Master Files

Always show all owners of the reporting company, if this is available and stored in the database. One reason for storing owner information in an accounting system, is based on the regulations to specify sales and withdrawals to owners.

This is also the primary reason for this being included in SAF-T Financial from a tax-audit perspective. For use of the format for other purposes, the relevance of it to be included can vary.

However the provision can be met by including owner(s) as customer(s) instead.

For further information see the regulations (5. And 6.)

https://lovdata.no/forskrift/2004-12-01-1558/§3-1

Use of VAT codes in Master Files and Transactions

General principles for input and output VAT on Transactions

The <TaxInformation> element is to be filled out on transaction lines representing the basis for VAT. It is not to be included on both the basis and the VAT transaction line for the corresponding VAT account.

There is exceptions for codes 14 & 15, who are used on the VAT account transaction.

The VAT code <TaxCode> must be included when it is used for calculation of VAT and/or stored in the database. The <TaxAmount> is a mandatory numeric field and can be filled with zero value "0.00" or calculated along with the generation of the SAF-T datafile.

This first example shows how to fill out <TaxInformation>, when the <TaxAmount> per line is not present in the database. TaxAmount must be set to 0.00 as this element is Mandatory when TaxInformation is used.

Example where the TaxAmount are set to 0.00 because it is a Mandatory Field but it is not stored per line in the database.							
			TaxInformation -->>				
AccountID	AccountDescription*	Amount	TaxType	TaxCode	TaxPercentage**	TaxBase***	TaxAmount
2400	Trade creditors - AP	-65000					
2711	Input VAT	13000					
4000	Purchase of X	12000	MVA	1	25	12000	0
4010	Purchase of Y	25000	MVA	1	25	25000	0
4020	Purchase of Z	15000	MVA	1	25	15000	0
		0					
	*For illustration purpose - element is not on line level						
	** If applicable fill inn percentage						
	*** If applicable fill inn amount						

The second example shows when complete <TaxInformation> are available for export to SAF-T:

AccountID	AccountDescription*	Amount	TaxType	TaxCode	TaxPercentage**	TaxBase***	TaxAmount
			TaxInformation -->>>				
1500	Trade debtors - AR	65000					
2700	Output VAT	-6250					
2700	Output VAT	-3000					
2700	Output VAT	-3750					
3000	Sales of X	-12000	MVA	3	25	12000	3000
3010	Sales of Y	-25000	MVA	3	25	25000	6250
3020	Sales of Z	-15000	MVA	3	25	15000	3750
		0					
	*For illustration purpose - element is not on line level						
	** If applicable fill inn percentage						
	*** If applicable fill inn amount						

Example where complete TaxInformation are available in the database per line of the transaction

Partial deduction of VAT in Master Files

Partial deduction of VAT is shown by use of the <BaseRate> element. Standard is 100, when the whole amount is deductible. All standard base rates being used for the tax code, must be listed in <Masterfiles><TaxTable>.

The table below shows all mandatory fields in <TaxCodeDetails>, showing full (100) and proportional deductions (50,20). In this example all TaxCode's listed are mapped to the same StandardTaxCode.

TaxCode	TaxPercentage	Country	StandardTaxCode	BaseRate
140	25	NO	1	100
141	25	NO	1	50
142	25	NO	1	20

By design of the schema, the same <TaxCode> can be shown with multiple <BaseRate> values. This as an alternative to use different tax codes for different partial deductions. The table below illustrates this.

TaxCode	TaxPercentage	Country	StandardTaxCode	BaseRate
140	25	NO	1	100, 50, 20

This gives a choice between the two ways of representing the Tax Codes and partial deduction. Please select the best representation of the usage and meaning of the tax codes in the system.

Partial deduction of VAT on Transactions

There is a based on the bookkeeping regulations a choice between two ways of representing partial deduction. For each of the choices, the examples below shows the TaxInformation structure and line debit amount.

The example transaction is goods bought applicable of 25% VAT, where 50% of the VAT is deductible.

Invoice Amount exclusive of VAT: 1000

25% VAT of Invoice Amount: 250

Partial deduction of 50% of the VAT amount: 125

The basis for the deducted VAT amount: 500

Example 1:

Example shows when the TaxCode includes a proportional deduction of the TaxBase for the relevant TaxPercentage.

Please note that TaxPercentage will not conform with TaxBase, thereby showing partial deduction. DebitAmount is matching TaxBase.

DebitAmount	TaxType	TaxCode	TaxPercentage	TaxBase	TaxAmount
1125.00	MVA	1	25.00	1125.00	125.00

Example 2:

Example shows when the TaxBase for the proportional deduction is stated separately.

The transaction is split to two transaction lines for the expenses. Please note that for the first line, the TaxPercentage will conform with TaxBase, thereby showing full (100%) deduction. For the second line, no TaxInformation is shown.

DebitAmount	TaxType	TaxCode	TaxPercentage	TaxBase	TaxAmount
500.00	MVA	1	25.00	500.00	125.00
625.00	-	-	-	-	-

If the TaxCode for "No VAT treatment" is included, however not mandatory to do so, the table below shows the correct values:

DebitAmount	TaxType	TaxCode	TaxPercentage	TaxBase	TaxAmount
500.00	MVA	1	25.00	500.00	125.00
625.00	MVA	0	0.00	0.00	0.00

Import of goods at 25% VAT

Transaction 1: Invoice from supplier (with amount = 9800) with full deduction of VAT:

AccountID	DebitAmont	CreditAmount	TaxType	TaxCode	TaxPercentage	TaxBase	TaxAmount
4300	9800.00		MVA	21	25.00		0.00
2400		9800.00					

Note: <TaxAmount> must be set to "0.00" as this is a mandatory field (schema validation requires it).

As there is no VAT deductible for this transaction, there is no TaxBase who is an optional field.

Transaction 2: Customs Invoice on VAT (Statistical value = 10000) with full deduction of VAT:

AccountID	DebitAmont	CreditAmount	TaxType	TaxCode	TaxPercentage	TaxBase	TaxAmount
4300	10000.00		MVA	81	25	10000.00	2500.00
2715	2500.00						
4300		10000.00	MVA	81	25	10000.00	2500.00
2705		2500.00					

Accounts overview:

AccountID	Account Description
2704	VAT on services from abroad – outgoing
2705	Import VAT – outgoing
2714	VAT on services from abroad – ingoing
2715	Import VAT – ingoing
2400	Supplier debt
4300	Purchase goods abroad for domestic sales
6715	Purchase of IT services from abroad

Purchase of services capable of remote delivery from abroad at 25% VAT

Transaction 1: Invoice from supplier (with amount = 10000) with full deduction of VAT

AccountID	DebitAmont	CreditAmount	TaxType	TaxCode	TaxPercentage	TaxBase	TaxAmount
6715	10000.00		MVA	86	25	10000.00	0.00
2714	2500.00						
2704		2500.00					
2400		10000.00					

Note: As the basis for both ingoing and outgoing are on the same entry line (the first in the table above), the tax amount is set to "0.00".