|  |  |
| --- | --- |
| logo_ec_17_colors_300dpi | EUROPEAN COMMISSION  DIRECTORATE-GENERAL  TAXATION AND CUSTOMS UNION  Indirect Taxation and Tax administration  **Taxation systems & IT compliance** |

**SAF-MOSS XML Schema specifications  
 DG TAXUD**

**Table of Contents**

[1 Purpose of this document 3](#_Toc402885499)

[2 SAF-MOSS XML Schema 4](#_Toc402885500)

[2.1 SAF-MOSS Message 4](#_Toc402885501)

[2.2 Detail of the Header 5](#_Toc402885502)

[2.3 Detail of the MasterFiles element 6](#_Toc402885503)

[2.4 Detail of the ServiceTransactions element 7](#_Toc402885504)

[2.4.1 Detail of the ServiceTransaction element 8](#_Toc402885505)

[2.5 Constraints set on the XML Schema 17](#_Toc402885506)

[2.6 Common Elements 17](#_Toc402885507)

[2.6.1 Address 17](#_Toc402885508)

[2.6.2 Name 19](#_Toc402885509)

# Purpose of this document

This document is the technical description of the SAF-MOSS XML schema version 1.00. It is a complement to the “MOSS – Additional guidelines – auditing under the MOSS”.

Guideline d) stipulates that *the best method for the exchange of information should be agreed between the taxable person and the tax authority depending on the electronic means that are available to both parties. One possibility that could facilitate the exchange of information is the use of a standard audit file for MOSS, in xml format. Member States will accept the SAF-MOSS if a business chooses to use it to supply the requested information.*

The MOSS is a business facilitation measure and therefore tax authorities should do what they can to make it easy for businesses to comply. To this end a Standard Audit File for MOSS (SAF-MOSS) is designed in XML that may make the provision of information easier for the taxable person. The majority of the Member States agreed to accept the SAF-MOSS if a business chooses to use it to supply the requested information. However the Regulation only specifies that the information supplied must be supplied electronically. So if a business does not wish to use the SAF-MOSS described in this document, it will be necessary for tax authorities and MOSS businesses to work together to ensure that information is provided in a format that is available to the business and can be read by the tax authority.

The purpose of this document is to offer business opting to make use of the MOSS simplification arrangements a schema for submitting the information in a specified electronic format that is acceptable for most tax administrations. The schema is called the SAF MOSS XML schema.

# SAF-MOSS XML Schema

This Chapter will give an overview and description of each of the elements composing the SAF MOSS XML Schema

## SAF-MOSS Message

The overall structure of the message uses the following design.

Figure 1 depicts the overall structure, which consists of a Header part, a MasterFiles part and a ServiceTransactions part.

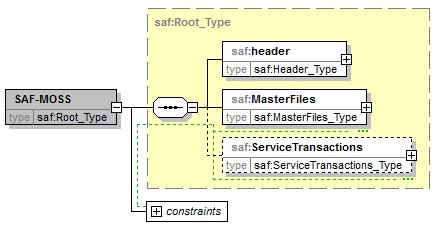


Figure 1: XML Schema Definition: SAF-MOSS Message

## Detail of the Header

Figure 2 depicts the structure of the Header.

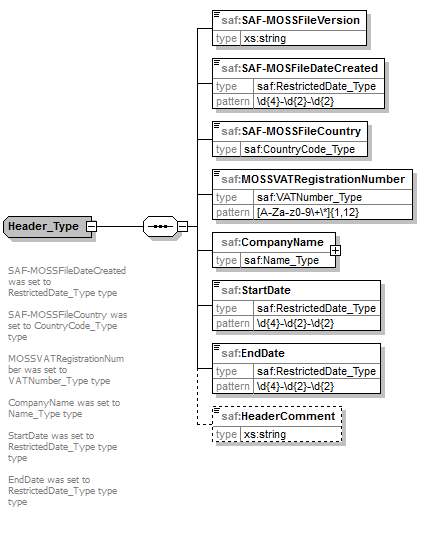


Figure 2: XML Schema Definition - Header

The Header contains the following elements:

* The SAF-MOSSFileVersion element contains the version of the SAF-MOSS XML schema being used to produce the XML file;
* The SAF-MOSSFileDateCreated element contains the date of production of the XML file in the format YYYY-MM-DD;
* The SAF-MOSSFileCountry element identifies the originating country using the ISO-3166-1 alpha 2 codes;
* The MOSSVATRegistrationNumber element contains the VAT Registration Number from the Member State of Identification (MSI);
* The CompanyName element contains the official name of the company or taxpayer's name. Refer to 2.6.2.
* The StartDate element contains the date of the first day of the reporting period for this XML file in the format YYYY-MM-DD;
* The EndDate element contains the date of the last day of the reporting period for this XML file in the format YYYY-MM-DD;
* The HeaderComment element allows adding additional information regarding the XML file. This element is optional.

## Detail of the MasterFiles element

Figure 3 depicts the MasterFiles element, which provides the information regarding the Customers of the Company or Taxpayer mentioned in the Header for the given Tax Period (see 2.2).

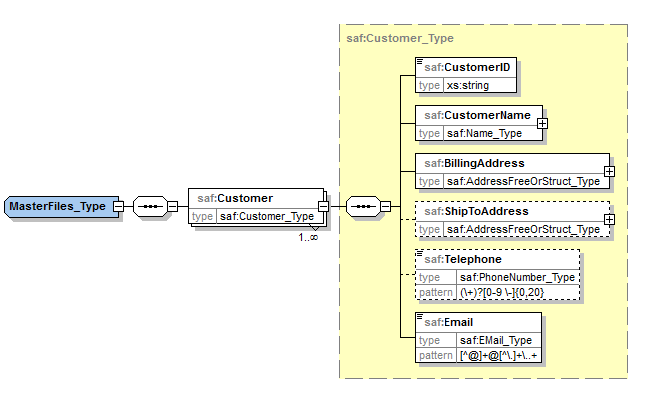


Figure 3: XML Schema Definition – MasterFiles

The MasterFiles contains the repeatable element Customer which is composed of:

* A CustomerId element which must contain a unique identifier for each Customer. This identifier should be unique in time and space;
* A CustomerName element (see 2.6.2). In case the name of the Customer is not known, the NameFree element should be filled with "unknown";
* A BilingAddress element (see 2.6.1). The sub-element Country should appear as per Council Regulation 967/2012 art. 63 a);
* A ShipToAddress element (see 2.6.1). This element is optional. If present, the sub-element Country should appear as per Council Regulation 967/2012 art. 63 a);
* A Telephone element which is restricted to a specific set of characters (digits, "+" and "-"). This element is optional;
* An Email element on which a restriction is applied to make the string entered matches the format of an email address.

## Detail of the ServiceTransactions element

Figure 4 depicts the ServiceTransactions element, which provides the information regarding the transactions related to each of the Customers of the Company or Taxpayer mentioned in the Header for the given Tax Period (see 2.2) along with specific element in order to control the consistency of the information provided.

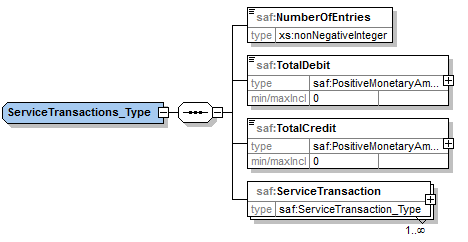


Figure 4: XML Schema Definition – ServiceTransactions

The ServiceTransactions element is composed of:

* A NumberOfEntries element which must contain the total number of transactions, including the cancelled ones. Always positive;
* A TotalDebit element which must contain the total amount of the DebitAmount (see 2.4.1.3) excluding the cancelled transactions. This element is always positive and has the following attribute:
  + Currency for which the value is fixed to EUR[[1]](#footnote-1);
* A TotalCredit element which must contain the total amount of the CreditAmount (see 2.4.1.3)excluding the cancelled transactions. This element is always positive and has the following attribute:
  + Currency for which the value is fixed to EUR;
* A ServiceTransaction element which contains the detail of all the transactions (see 2.4.1) related to the Customers in this XML file. This element is repeatable.

### Detail of the ServiceTransaction element

Figure 5 depicts the ServiceTransaction element, which provides the information regarding the transactions related to each of the Customers of the Company or Taxpayer mentioned in the Header for the given Tax Period (see 2.2).

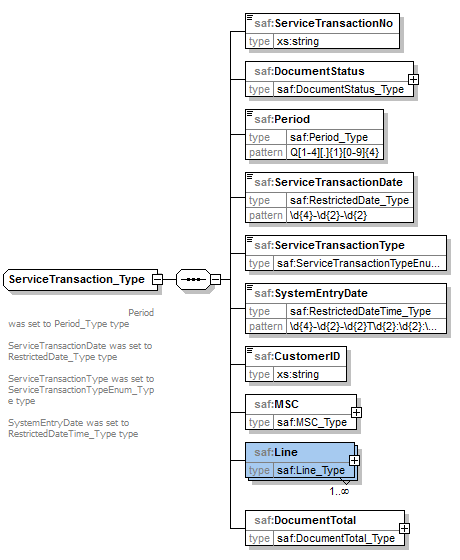


Figure 5: XML Schema Definition – ServiceTransaction

The ServiceTransaction element is composed of:

* A ServiceTransactionNo element which must contain an identifier for the current transaction;
* A DocumentStatus element which contains the status of the current transaction (see 2.4.1.1) ;
* A Period element which contains the quarter of the transaction period in which the transaction occurred in the format QX.yyyy;
* A ServiceTransactionDate element which contains the sale transaction's issue date;
* A ServiceTransactionType element which contains one of the following code:
  + **TR** – Transaction
  + **IN** – Invoice
  + **DN**- Debit Note
  + **CN** - Credit Note
* A SystemEntryDate element which contains the last time the document was saved in the system in the format YYYY-MM-DDThh:mm:ss;
* A CustomerId element which contains the identifier of the Customer with which the transaction was performed. It must match one of the CustomerId values in the MasterFiles element (see 2.3);
* A MSC element which provides the information related to the place of consumption of the service subject to the transaction (see 2.4.1.2);
* A Line element which provides the information regarding each line of the document (e.g: invoice) describing the transaction (see 2.4.1.3);
* A DocumentTotal element which provides the information regarding the payment of the transaction in terms of Gross and Taxable Amount (see 2.4.1.4).

#### Detail of the DocumentStatus element

Figure 6 depicts the DocumentStatus element, which provides the status information of the current transaction.

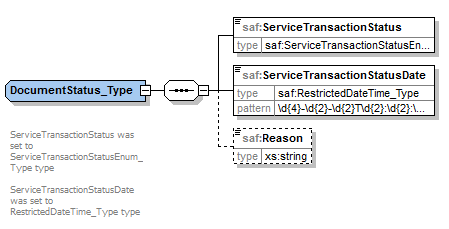


Figure 6: XML Schema Definition – DocumentStatus

The DocumentStatus element is composed of:

* A ServiceTransactionStatus element which contains the status of the current transaction. This element can have the following values:
  + **N** – Normal
  + **C** - Cancelled;
* A ServiceTransactionStatusDate element which contains the last date on which the status has been updated in the format YYYY-MM-DDThh:mm:ss;
* A Reason element which explains why the status has been changed. This element is optional.

#### Detail of the MSC element

Figure 7 depicts the MSC element, which provides the status information of the current transaction.

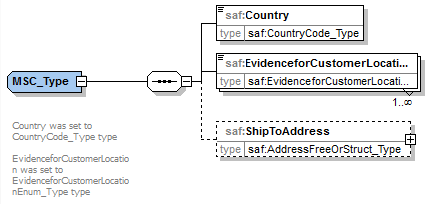


Figure 7: XML Schema Definition – MSC

The MSC element is composed of:

* A Country element which contains the ISO 3166-1 alpha 2 country code of the country in which the transaction occurred. This element provides for Council Regulation 967/2012 art. 63 e);
* A EvidenceforCustomerLocation element which is repeatable and can take a value among the following list:
  + **A** – Billing Address of the Customer;
  + **B** – IP address or geolocation;
  + **C** – Bank Details;
  + **D** – Mobile Country Codes or SIM card used by customer;
  + **E** – Location of the fixed landline used for service;
  + **F** – Other Means;

This element provides for Council Regulation 967/2012 art. 63 l).

* A ShipToAddress element which contains the address of the Customer (see 2.6.1). This element is optional.

#### Detail of the Line element

Figure 8 depicts the Line element, which provides the information of the current transaction.

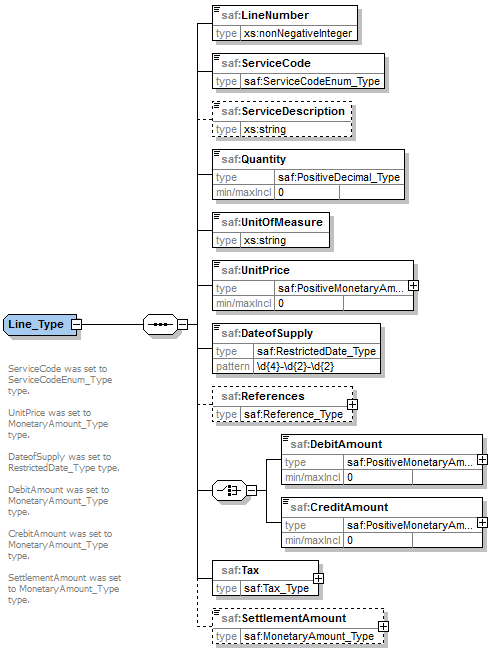


Figure 8: XML Schema Definition – Line

The Line element is composed of:

* A LineNumber element which contains the number of the current line in the transaction. The lines should be exported following the same order than the original and must be unique within the transaction. Always positive;
* A ServiceCode element which gives the classification of the service provided in this line of transaction. This element provides for Council Regulation 967/2012 art. 63 b). The value must be one among the following list:
  + **BA** - radio or television programmes transmitted or retransmitted over a radio or television network;
  + **BB** - radio or television programmes distributed via the Internet or similar electronic network (IP streaming) if broadcast live or simultaneous to their being transmitted or retransmitted over a radio or television network;
  + **TA** - fixed and mobile telephone services for the transmission and switching of voice, data and video, including telephone services with an imaging component, otherwise known as videophone services;
  + **TB** - telephone services provided through the Internet, including voice over Internet Protocol (VoIP);
  + **TC** - voice mail, call waiting, call forwarding, caller identification, three-way calling and other call management services;
  + **TD** - paging services;
  + **TE** - audiotext services;
  + **TF -** facsimile, telegraph and telex;
  + **TG** - telephone helpdesk services by which assistance is provided to users in case of problems with their radio or television network, Internet or similar electronic network;
  + **TH** - access to the Internet, including the World Wide Web;
  + **TI** - private network connections providing telecommunications links for the exclusive use of the client;
  + **TJ** - private network connections providing telecommunications links for the exclusive use of the client;
  + **TK -**  the onward supply of the audio and audio-visual output of a media service provider via communications networks by someone other than the media service provider;
  + **SA** - website supply, web-hosting, distance maintenance of programmes and equipment;
  + **SB** - supply of software and updating thereof;
  + **SC** - supply of images, text and information and making available of databases;
  + **SD** - supply of music, films and games, including games of chance and gambling games, and of political, cultural, artistic, sporting, scientific and entertainment broadcasts and events;
  + **SE** - supply of distance teaching;
* A ServiceDescription element which contains a description of the service provided in this transaction line. This element is optional;
* A Quantity element which contains the "quantity" of services provided in this line of transaction. This element is related to the UnitOfMeasure and UnitPrice elements below. Always positive;
* An UnitOfMeasure element which contains a textual description of the unit in which the quantity of services provided in this line of transaction is accounted for;
* An UnitPrice element which provides the price of one UnitOfMeasure regarding the service provided in this line of transaction. Always positive;
* A DateOfSupply element which contains the of the delivery of the service in the format YYYY-MM-DD. This element provides for Council Regulation 967/2012 art. 63 c);
* A References element which allows providing references (see 2.4.1.3.1) to other documents related to the service. This element is optional.This element provides for Council Regulation 967/2012 art. 63 e);
* A DebitAmount element which represents the debit entry line in the sales account (issued credit notes). This element is always positive and has the following attribute:
  + Currency for which the value is fixed to EUR.

This element provides for Council Regulation 967/2012 art. 63 e);

* A CreditAmount element which represents the credit entry line in the sales account (issued Transactions or invoices and debit notes). This element is always positive and has the following attribute:
  + Currency for which the value is fixed to EUR;

This element provides for Council Regulation 967/2012 art. 63 e);

* A Tax element which allows detailing the tax (see 2.4.1.3.2) applied regarding the delivery of this service.;
* A SettlementAmount element which contains the amount of line discount and proportional global discount. This element is optional and has the following attribute:
  + Currency for which the value is fixed to EUR.

This element provides for Council Regulation 967/2012 art. 63 e)

##### Detail of the References element

Figure 9 depicts the Line element, which allows providing reference to other documents related to the provision of the service in the current line of the transaction.

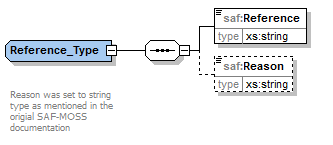


Figure 9: XML Schema Definition – Reference

The Reference element is composed of:

* A Reference element which should contain, in case of credit or debit notes, reference to the invoicing documents based on the identification if it exists in the respective systems;
* A Reason element which contain the reason explaining the debit or credit operation. This element is optional.

##### Detail of the Tax element

Figure 10 depicts the Line element, which provides the information on the Taxes paid for the service in the current line of the transaction.

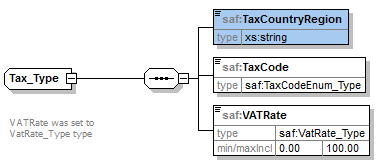


Figure 10: XML Schema Definition – Tax

The Tax element is composed of:

* A TaxCountryRegion element which contains the country or the region of the Tax being applied. It is based on the ISO-3166-2 which allows indicating a specifc region inside a country. For example: FR-RE refers to the French Reunion island and US-AS refers to US Samoa;
* A TaxCode element which contain one of the following values:
  + **RED** – Reduced;
  + **STD** – Standard Tax Rate.

This element provides for Council Regulation 967/2012 art. 63 f);

* A VATRate element which contains the Tax Rate in the format of a number with 2 digits after the decimal point and in the range 0.00 to 100.00. This element provides for Council Regulation 967/2012 art. 63 f).

#### Detail of the DocumentTotal element

Figure 11 depicts the DocumentTotal element, which provides information related to the amounts paid in the current transaction.

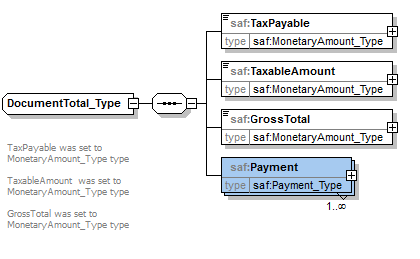


Figure 11: XML Schema Definition – DocumentTotal

The DocumentTotal element is composed of:

* A TaxPayable element which contains the amount of Taxes payable for the current Transaction. This element has the following attribute:
  + Currency for which the value is fixed to EUR.

This element provides for Council Regulation 967/2012 art. 63 g).

* A TaxableAmount element which contains the total amount without the taxes. This element has the following attribute:
  + Currency for which the value is fixed to EUR.

This element provides for Council Regulation 967/2012 art. 63 d).

* A GrossTotal element which contains the total amount including taxes. This element has the following attribute:
  + Currency for which the value is fixed to EUR;
* A Payment element which is repeatable and contains information related to the Payment (see 2.4.1.4.1) of the current transaction.

##### Detail of the Payment element

Figure 12 depicts the Payment element, which provides the information of the payment related to the current transaction.

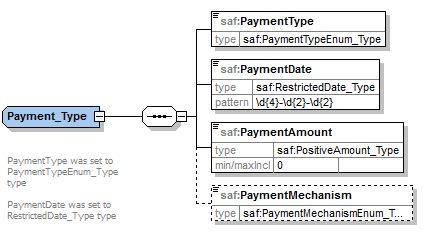


Figure 12: XML Schema Definition – Payment

The Payment element is composed of:

* A PaymentType element which contains the type of payment made. Its value must appear in the following list:
  + **AP** - Advanced Payment;
  + **PP** – Partial Payment;
  + **TP** – Total Payment;
* A PaymentDate element which contains the date of the payment in the format YYY-MM-DD. This element provides for Council Regulation 967/2012 art. 63 h).
* A PaymentAmount element which contains the total amount of a specific payment. This element is always positive and has the following attribute:
  + Currency for which the value is fixed to EUR.

This element provides for Council Regulation 967/2012 art. 63 h).

* A PaymentMechanism which refers to the mean of payment used for this payment. This element is optional. Its value must appear in the following list:
  + **CH** – Cheque;
  + **DC** – Debit card;
  + **CC** – Credit card;
  + **BT** – Bank transfer;
  + **PP** - PayPal;
  + **OT** - Other;
  + **MP** - Mobile Phone.

## Constraints set on the XML Schema

Figure 13 depicts the Constraints applied on the XML schema.

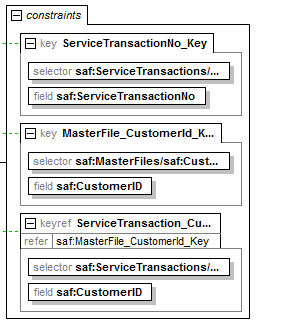


Figure 13: XML Schema Definition – Constraints

These constraints are:

* The ServiceTransactionNo\_Key ensures that within one XML file each value of the ServiceTransactionNo element under ServiceTransactions/ServiceTransaction is unique;
* The MasterFile\_CustomerId\_Key ensures that within one XML file each value of the CustomerId element under MasterFiles/Customer is unique;
* The ServiceTransaction\_CustomerId\_RefKey ensures that the values of the CustomerId element under ServiceTransactions/ServiceTransaction refer to an existing value of the CustomerId element under MasterFiles/Customer in the scope of the XML file.

## Common Elements

This section describes common elements of the XML schema definition.

### Address

An address can be given in free format, structured format or both. Figure 14 depicts the structure of the address and Table 1 describes the elements.

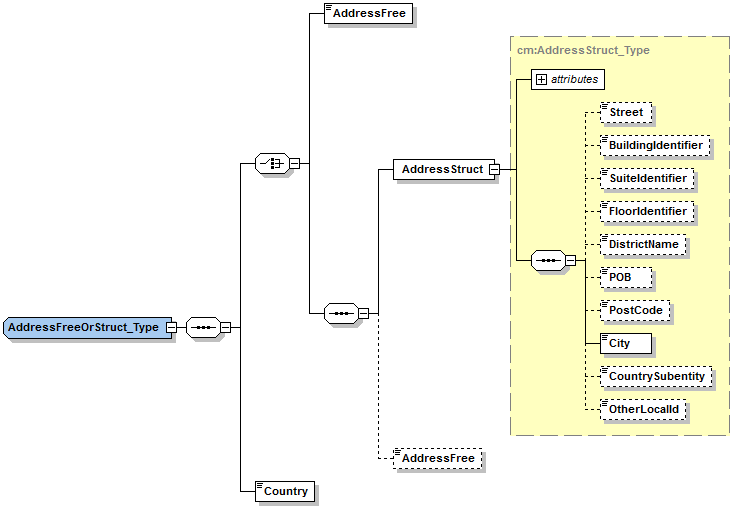


Figure : XML Schema Definition – AddressFreeOrStruct\_Type

| **Element** | **Description** |
| --- | --- |
| AddressFree | The address in free format (this must include the postal code if available).  The AddressFree, if present, must contain the address as it should appear on an envelope with each line separated by a carriage return character. |
| Street | The street name. |
| BuildingIdentifier | The identifier of the building on the street, typically a number. |
| SuiteIdentifier | The identifier of an office or similar part of a building. |
| FloorIdentifier | The identifier of a floor within a building. |
| DistrictName | The name of the district of the address. |
| POB | The post office box. |
| PostCode | The postal code (this must be provided if available). |
| City | The city is the only mandatory part of a structured address. |
| CountrySubentity | A geographic area of the country larger than district or city, for example a county, département, Land, canton. |
| OtherLocalId | Some other component of the address. |
| Country | The two letter country code of the address. |

Table 1: XML Schema Definition – Elements of an address

The definition of the AddressStruct element includes an attribute to indicate the type of the address – this attribute must not be used in the Mini-1SS.

### Name

Figure 15 depicts the structure of a personal name and Table 2 describes the elements. A name can be given in free format, structured format or both. In the Structured format, only the FirstName and LastName are mandatory. If the other elements not required, they will not appear in the XML message.

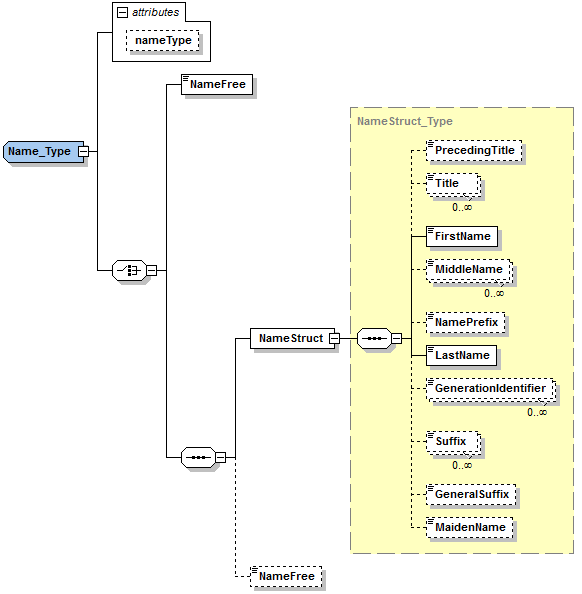


Figure : XML Schema Definition – NameStruct\_Type

| **Element** | **Description** |
| --- | --- |
| nameType | The type of the name - this attribute is not relevant to the current system and must be omitted. |
| NameFree | The name in free format. |
| PrecedingTitle | Preceding title for example Her Excellency. |
| Title | The list of titles, for example Mr, Frau, Doctor. |
| FirstName | The first name. |
| MiddleName | The list of middle names. |
| NamePrefix | The name prefix for example "von". |
| LastName | The last name/family name. |
| GenerationIdentifier | The list of generation identifiers, for example Junior, Senior, XIII. |
| Suffix | The list of suffices, for example, PhD, UOM. |
| GeneralSuffix | A general suffix (for example, "Retired"). |
| MaidenName | A prior surname, for example before marriage. |

Table 2: XML Schema Definition – Elements of a name

1. All amounts in SAF-MOSS should be stated in EURO. [↑](#footnote-ref-1)