

Data delivery – Schemas – Request for processing feedback

Project to establish the National Incomes Register

Version history

| Version | Date | Description |
|---------|------------|--|
| 1.0 | 12/06/2017 | Document published. |
| 1.01 | 31/08/2017 | The Timestamps section in the General segment has been renamed as Dates and times. The processing of dates and times is clarified in the paragraph. |
| 1.02 | 14/11/2017 | Clarified the processing rule of the ProductionEnvironment element. |
| | | Added an electronic signature: data group Signature (Signature) at the main level of a record. |
| | | The xs:boolean data type was changed to the irct:trueOrFalse (IRCommonTypes.xsd) data type. |
| | | Clarified the interpretation rules of upper and lowercase characters in the General/Character set section. |
| | | Added the namespace of the XML signature schema in the General/Schema section. |
| 1.03 | 29/01/2018 | Clarified the processing rules related to data groups: Record owner (DeliveryDataOwner) Record creator (DeliveryDataCreator) Record submitter (DeliveryDataSender) Signature (Signature) |
| 1.04 | 11/06/2018 | Clarified the allowed character encoding for reference data under Character set. |
| 1.05 | 26/09/2018 | Specified in the section Dates and times that the example in the Finnish time zone concerns standard time: Example in the Finnish time zone (standard time, UTC+2) |

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1 GENERAL

1.1 Schema

The request for processing feedback is submitted to the Incomes Register using the **StatusRequestToIR** schema.

The namespaces of the schema are as follows:

| File name | Prefix | Namespace |
|------------------------|-------------|---|
| | xmlns:xs | http://www.w3.org/2001/XMLSchema |
| StatusRequestToIR | xmlns:srtir | http://www.tulorekisteri.fi/2017/1/StatusRequestToIR |
| StatusMessageTypes.xsd | xmlns:smt | http://www.tulorekisteri.fi/2017/1/StatusMessageTypes |
| IRCommonTypes.xsd | xmlns:irct | http://www.tulorekisteri.fi/2017/1/IRCommonTypes |
| xmlsig-core-schema.xsd | xmlns:ds | http://www.w3.org/2000/09/xmlsig# |

Empty elements are not allowed in the messages. If an element receives no value, the element is left out of the message entirely. Empty character strings are also not allowed, i.e., the minimum length of all values is 1.

1.2 Character set

The schemas of the Incomes Register use UTF-8, which is the default character set of XML. The file must not contain the Byte Order Mark (BOM) character.

The following table presents the requirements for the conversion of special characters appearing in messages.

| Character | Description | Presentation format as an entity |
|-----------|----------------|--|
| & | ampersand | & conversion is mandatory |
| < | less than | < conversion is mandatory |
| > | greater than | > conversion is not mandatory, but conforms with best practices |
| ' | apostrophe | ' conversion is not mandatory, but conforms with best practices |
| " | quotation mark | " conversion is not mandatory, but conforms with best practices |
| -- | double hyphen | This character must not appear in an XML file |
| /* | slash asterisk | This character must not appear in an XML file |
| &# | ampersand hash | This character must not appear in an XML file |

A limited character set is allowed for **reference data**. The allowed characters for the reference data listed below are the numbers 0-9, the letters a-z and A-Z and the symbols " _ " and "-".

- Record owner's record reference (DeliveryId)
- Payer's report reference (ReportId)
- Subscriber's primary subscription reference (MainSubscriptionId)
- Subscriber's secondary subscription reference (SubscriptionId)
- Sender's message reference (MessageId)

In the following data items, upper and lowercase characters are significant:

- Country codes in all data groups (for example, "DE" is interpreted to be a different code than "De").
- Customer IDs in all data groups (for example, "150172-999H" is interpreted to be a different ID than "150172-999h").

1.3 Dates and times

Dates (data type xs:date) must not include time zone information. Example of a date:

```
<StartDate>2017-05-11</StartDate>
```

Data elements containing times of day (data types xs:dateTime and xs:time) must include the time zone.

Example in the Finnish time zone (standard time, UTC+2):

```
<Timestamp>2017-05-11T08:00:00+02:00</Timestamp>
```

```
<Time>08:00:00+02:00</Time>
```

Example in UTC time (UTC+0):

```
<Timestamp>2017-05-11T6:00:00Z</Timestamp>
```

```
<Time>06:00:00Z</Time>
```

1.4 Document reading instructions

In the document diagrams, the 0 .. ∞ marking in the bottom right-hand corner of an element means that the element may appear several times, or not at all. The 1 .. ∞ marking means that the element may appear several times, but must always appear at least once. The mandatory elements are highlighted with a solid border line and voluntary elements with a dashed border line.

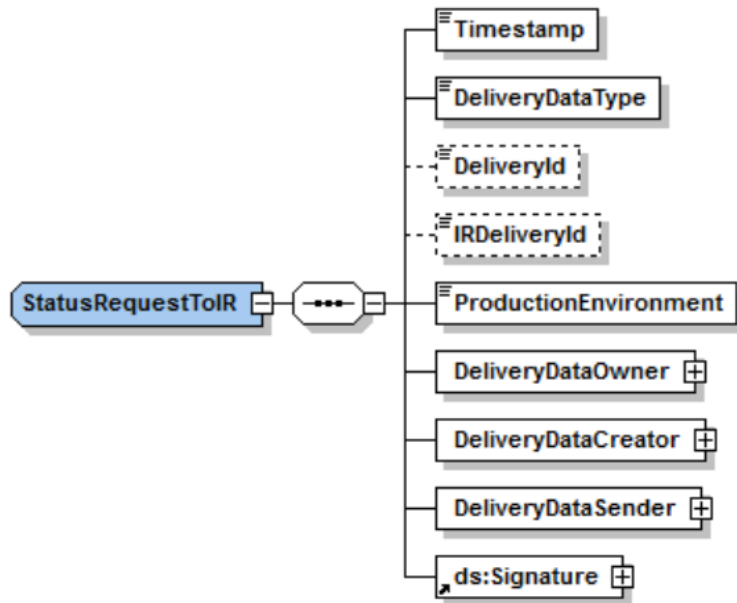
In the document tables, the mandatory or voluntary nature of the elements is depicted with the following markings:

| V/M | Description |
|-----|--|
| V | The element is always voluntary. |
| M | The element is mandatory if its "parent element" is included. |
| V/M | The element is conditionally mandatory. The data processing rules describe the situations in which the element is mandatory. |

In some elements, messages use a limited range of values, i.e. codes. The possible values for these codes are described in the "Codes" document. This document refers to the values presented in the codesets using the term "codes".



2 REQUEST FOR PROCESSING FEEDBACK (STATUSREQUESTTOIR)



Data group details:

| Data designation | Type | Allowed values | V/ M | Processing rule |
|--|------------------|---------------------------------|---------|---|
| Creation time of request for processing feedback (Timestamp) | xs:dateTime | | M | The date and time when the request was submitted. |
| Record type (DeliveryDataType) | xs:int | Codes: DeliveryDataType | M | The record type of the record being queried. |
| Record owner's record reference (DeliveryId) | irct:String40 | | V/M | The record search criterion must be set to either "Record owner's record reference" and/or "Incomes Register record reference". |
| Incomes Register record reference (IRDeliveryId) | irct:Guid | | V/M | The record search criterion must be set to either "Record owner's record reference" and/or "Incomes Register record reference". |
| Production environment (ProductionEnvironment) | irct:trueOrFalse | Codes: ProductionEnvironment | M | If the value is "true", the data must have been delivered to the Incomes Register's production environment. |

| | | | | |
|---------------------------------------|--------------------|--|-----|---|
| | | | | If the value is "false", the data must have been delivered to the Incomes Register's test environment. |
| Record owner (DeliveryDataOwner) | mtirt:Id | | M | Record owner, Record creator, Record submitter: The data must be identical to that submitted in the record whose processing feedback is requested. |
| Identifier type (Type) | xs:int | Codes: IdType | M | |
| Identifier (Code) | irct:String30 | | M | If the "Identifier type" is "Business ID", the identifier must exist (according to information from the Business Information System (YTJ)). If the "Identifier type" is "Finnish Personal Identification Number", the identifier must exist (according to information from the Population Information System (VTJ)). |
| Country code (CountryCode) | irct:String2 | A two-character code in accordance with the ISO 3166 country codes. If the country is unknown, the value "99" is entered. | V/M | Mandatory data if "Identifier type" is other than "Business ID" or "Finnish Personal Identification Number". |
| Country name (CountryName) | irct:String70 | | V/M | Mandatory data if "Country code" is "99". |
| Record creator (DeliveryDataCreator) | mtirt:Id | | M | The processing rules for Identifier type, Identifier, Country code and Country name are the same as in the Record owner (DeliveryDataOwner) data group. |
| Record submitter (DeliveryDataSender) | mtirt:Id | | M | The processing rules for Identifier type, Identifier, Country code and Country name are the same as in the Record owner (DeliveryDataOwner) data group. |
| Signature (Signature) | xsig:SignatureType | | M | The electronic signature of the record is delivered in this data group. The record must be signed using the certificate of the party specified as the Record creator. |