



**Monthly Aggregated Amounts**

**Flat file Report**

**File format specifications**

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| --- | --- |
| Author | 4CB |
| Version | 0-0-1 |
| Date | 20/06/2019 |
| Status | Draft |
| Classification |  |
| Accessible |  |
| Classified until |  |

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**History of releases**

|  |  |  |  |
| --- | --- | --- | --- |
| Release | Date | Issues | Status[[1]](#footnote-1) |
| V0-0-1 | 20/06/2019 | First draft | Draft |
|  |  |  |  |

# Introduction

## Context

On the fourteenth business day of each month (considering as business days, T2S opening days), T2S shall perform the reporting of monthly aggregated amounts of penalties, that is, the bilateral net amounts per currency and per T2S party, for each of the counterparties, of the penalties computed for the business days of the previous month.

This report is generated as flat file if opted by CSDs, following a like-for-like approach to the report content of the already available XML versions **semt.044** **– Securities Transaction Penalties Report**, which will contain a signature only at DEP level and will be routed to a given Party Technical Address previously determined and configured by T2S Service Desk.

## Purpose

This document provides a description of the structure of the flat file for the **semt.044 Securities Transaction Penalties Report - Monthly Aggregated Amounts** sent by T2S to the CSDs.

# File Technical Specification

The file has a simple XML format (in order to allow for the network signature). All records are included into a single “store and forward” message conveyed by the VAN provider. No business signature is needed.

Within the message, the whole file is embedded in a single XML tag (<File> </File>).

Between these tags the file has fixed-length records, with a header and a footer. This header and this footer are the ones specified within the flat file specifications below, no business header is foreseen. If no activity has occurred (Activity Indicator = NO), the file will be empty between the header and the footer.

## Identification and Routing

T2S triggers the generation of Monthly Aggregated Amounts flat file reports based on a business event, i.e. MAGG (Monthly Aggregated Amounts Report). This flat file report is pushed in A2A mode and compressed when it exceeds the minimum size of 2KB, since compression for the reports is mandatory

All the information about the necessary attributes in each named category is stored as static data in T2S and influences the generation of the report. The privilege to configure these static data or to subscribe to this report is granted solely to the T2S Operator.

Each flat file report type provides information only on the default data scope of the concerned party (i.e. CSD). The data scope is indicated by the party for which it is configured and is limited to CSDs.

Flat file reports can only be configured at a system entity level, i.e. reports providing the CSD with information relating to all its CSD participants. The concerned party has to be specified, when the flat file report is configured for the first time.

A party configured to receive flat file reports cannot receive the equivalent reports through other channels. This does not, however, prevent CSD participants from receiving those reports through such channels, even if their CSD has opted for the flat file.

## Structure

### XML Schema for the Request

The following is the XML schema used to embed the file into a “store and forward” message:

<?xml version="1.0" ?>

<xs:schema xmlns="urn:T2S:MonthlyAggregatedAmountsFlatFile" xmlns:xs="http://www.w3.org/2001/XMLSchema"

targetNamespace="urn:T2S:MonthlyAggregatedAmountsFlatFile"

elementFormDefault="qualified">

<xs:simpleType name="RestrictedFileType">

<xs:restriction base="xs:string">

<xs:pattern value="(.{181,181}\n)+"/>

</xs:restriction>

</xs:simpleType>

<xs:element name="File" type="File"/>

<xs:complexType name="File">

<xs:simpleContent>

<xs:extension base="RestrictedFileType">

<xs:attribute name="fileId" type="xs:string" default="" />

</xs:extension>

</xs:simpleContent>

</xs:complexType>

</xs:schema>

### Example of XML file

<?xml version="1.0" encoding="UTF-8"?>

<File fileId = “T2Ssemt044FlatFile\_2020-06-30-11:35:24.123456” xmlns="urn:T2S:MonthlyAggregatedAmountsFlatFile">

**Header**

**Record Body 1**

**Record Details 1.1**

**Record Details 1.2**

**Record Body 2**

**…**

**Record Body n**

**Record Details n.1**

**…**

**Record Details n.n**

**Footer**

</File>

### Encoding

The encoding of the flat file is UTF-8 with no Byte Order Mark (BOM).

### Default Values

See Field Types.

### ISO 15022 Interoperability

In order to ensure the interoperability to the ISO 15022 standard the character set of all fields is restricted to the SWIFT X Character Set (see below).

### Character Set

All characters belong to the **SWIFT X Character Set**. The character set is as follows:

a b c d e f g h i j k l m n o p q r s t u v w x y z

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

0 1 2 3 4 5 6 7 8 9

/ - ? : ( ) . , ' + { }

CR LF Space

# Format of Structured Files

## Record Types

|  |  |  |
| --- | --- | --- |
| **Record Type** | **Description** | **Multiplicity** |
| Header | First row of the file contains Report general information, common to all data records. | 1 |
| Body | Each data record constitutes one instance of report information. I.e. Penalties grouped by Currency, Date, Party and Counterparty (the latter being the pair Counterparty BIC and Counterparty Account Servicer BIC). | Many |
| Details | Each data record constitutes one instance of the relevant record Body. I.e. each penalty details reported. | Many |
| Footer | Last row of the file. Acts as a trailer, marking the end of main body section. | 1 |

## Field Types

|  |  |
| --- | --- |
| **Field Type** | **Description** |
| O | Optional |
| M | Mandatory if the related record (block) is informed |

Whenever an optional field is not present, the position will be filled with spaces (#x20).

## Data Format Types

The report data values may appear in one of the formats described in the table below:

|  |  |  |
| --- | --- | --- |
| **Data Type** | **Format** | **Description** |
| DATE | YYYY-MM-DD |  |
| DATETIME | YYYY-MM-DD-hh:mm:ss.ssssss | Timestamp format |
| DATEMONTH | YYYY-MM |  |
| CHAR(n) | Filled with trailing blanks up to the maximum length | Alphanumeric string with exactly n characters. |
| NUMERIC(p) | Filled with leading zeroes up to the maximum length | Number with maximum p integer places and no decimal places. |

## Pagination

Pagination will be provided as in the ISO reports, indicating a sequential number and whether the file is the last one.

(Page Number, Last Page Indicator Number).

## Format of Records

A header will contain the following data:

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Record Type** | **Field Number** | **Field Name** | **Data Format** | **Length** | **Description** | **Field Type** | **Additional Information** |
| Header | 1 | Record Type | CHAR(n) | 1 | Identifies record as Header, Body or Footer. | M | Values: 'H': for Header |
| Header | 2 | Page Number | NUMERIC(p) | 5 | Sequence number of the concerned message within the set of divided messages recurring to pagination. | M |  |
| Header | 3 | Last Page Indicator | CHAR(n) | 5 | Indicator for last message within the set of divided messages recurring to pagination. | M | Possible values are:  ‘YES’ - Meaning 'Yes'  ‘NO’ - Meaning 'No' |
| Header | 4 | Report Identification | CHAR(n) | 16 | Reference common to all the pages of the report. | M |  |
| Header | 5 | Report Period Month | DATE MONTH | 7 | The month being aggregated | M |  |
| Header | 6 | Report Frequency | CHAR(n) | 4 | Frequency of the report. | M | ‘MNTH’ – Monthly: The report is generated once a month |
| Header | 7 | Report Activity Indicator | CHAR(n) | 3 | It indicates whether the message contains records or not. | M | Possible values are:  ‘YES’ - Meaning 'Yes'. ‘NO’ - Meaning 'No'.  E.g. if no aggregated amount is computed for a given month, the CSD will get from T2S a Monthly aggregated amounts of cash penalties report with activity “No”. |
| Header | 8 | Account Servicer BIC | CHAR(n) | 11 | Primary BIC of the CSD that shall be able to receive the Daily Cash Penalty List of each and every party under its scope. | M |  |
| Header | 9 | LF | CHAR(n) | 1 | Fixed Value: LF | M | LF = Line Feed (x'0A') |

The report details will contain the following information:

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Record Type** | **Field Number** | **Field Name** | **Data Format** | **Length** | **Description** | **Field Type** | **Additional Information** |
| **Record Type “Body”** (Not informed if the if Report Activity Indicator in the Header is ‘NO’) | | | | | | | |
| Body | 1 | Record Type | CHAR(n) | 1 | Identifies record as Header, Body or Footer. | M | Values: 'B': for Body |
| Body | 2 | Currency | CHAR(n) | 3 | Currency of the penalties reported. | M |  |
| Body | 3 | Party BIC | CHAR(n) | 11 | BIC of the Party reported as party imposed with the monthly net aggregated amount reported or party credited with the monthly net aggregated amount reported. | M | BIC of the party reported as the party to either pay or receive a net amount versus (to/from) the relevant counterparty. |
| Body | 4 | Party Type | CHAR(n) | 4 | It indicates the classification for the failing or the non-failing party of the modified penalty(ies) reported. | M | Possible values are:  ‘NCSD’ - Central Depository.  ‘CCPA’ – CCP.  ‘CSDP’ - CSD Participant.  ‘EXTE’ - External Depository. |
| Body | 6 | Counterparty Account Servicer BIC | CHAR(n) | 11 | Primary BIC of the CSD of the counterparty of the monthly aggregated amount reported. | M |  |
| Body | 7 | Counterparty BIC | CHAR(n) | 11 | BIC of the Counterparty of the monthly aggregated amount reported. | M |  |
| Body | 8 | Counterparty Type | CHAR(n) | 4 | It specifies the classification for the failing or the non-failing counterparty of the modified penalty. | M | Possible values are:  ‘NCSD’ - Central Depository.  ‘CCPA’ – CCP.  ‘CSDP’ - CSD Participant.  ‘EXTE’ - External Depository. |
| Body | 9 | Monthly Aggregated Net Amount | NUMERIC(p) | 14 | Bilateral monthly net aggregated amount between a party and the corresponding counterparty. | M | Monthly aggregated net amount of all the active penalties computed for the business days of the previous month, in the related currency for the relevant party and counterparty. |
| Body | 10 | Number of decimal digits  for the Monthly Aggregated Amount | NUMERIC(p) | 2 | Number of decimal digits of the Monthly Aggregated Amount | M |  |
| Body | 11 | Currency for the Monthly Aggregated Amount | CHAR(n) | 3 | Currency of the Monthly Aggregated Amount | M |  |
| Body | 12 | Credit / Debit Indicator for the Monthly Aggregated Amount | CHAR(n) | 4 | It indicates whether the party is either imposed with or entitled to receive the Monthly Aggregated Amount. | O | Possible values are:  ‘DBIT’ - The party is imposed with the Monthly Aggregated Amount .  ‘CRDT’ - The party is entitled to receive the Daily Aggregated Net Amount.  Not informed / Empty if the Monthly Aggregated Amount is zero. |
| Body | 13 | LF | CHAR(n) | 1 | Fixed Value: LF | M | LF = Line Feed (x'0A') |
| **Record Type “Details”** | | | | | | | |
| Details | 1 | Record Type | CHAR(n) | 1 | Identifies record as Header, Body, Details, Data or Footer. | M | Values: 'D': for Details |
| Details | 2 | Market Infrastructure Identification | CHAR(n) | 16 | Reference assigned by T2S to the penalty that is common for both the failing and the non-failing participant. | M | It is the common ID of each penalty reported between a party and counterparty, in a given currency and for a given business day.  The common Id provided will have a length of 15 digits, built as follows:  YYMMDDGGGGGGGGGS  Y - Year  M - Month  D - Day  G - Sequential number, upper limit being 999,999,999  S- Space |
| Details | 3 | Penalty Identification | CHAR(n) | 16 | Reference assigned by T2S that is the individual identification of the penalty for the relevant account owner. | M | It will be built by T2S by adding at the beginning of the Common ID an “F” or an “N” as prefix ("F" for the Failing if the Penalty is a Debit for the Party; "N" for the Non-failing if the Penalty is a Credit for the Party).  This reference does not change during the lifecycle of the Penalty (hence, in case there is a later Switch of the Failing and Non-Failing Parties, the “F” or the “N” are not updated). |
| Details | 4 | Reallocation Market Infrastructure Identification | CHAR(n) | 16 | Reference assigned by T2S to the penalty in case of reallocation that is common for both the failing and the non-failing participant. | O | Provided if the penalty has been re-allocated.  It is the Common Reference of either the penalty from which the reported penalty was re-allocated or the penalty to which the reported penalty has been re-allocated. |
| Details | 5 | Penalty Type Code | CHAR(n) | 4 | Type of Penalty | M | Possible values are:  ‘SEFP’ - Settlement Fail Penalty.  ‘LMFP’ - Late Matching Fail Penalty. |
| Details | 6 | Computed Amount | NUMERIC(p) | 14 | Computed Amount of the Penalty | M | Amount computed for the penalty.  Each Computed Amount for a penalty is formed by the corresponding Sub-amounts reported below.  In case of SEFPs, it is equal to the Sub-amount computed in the detection date of the penalty, provided there is no missing reference data on that business day.  In case of LMFPs, it is the sum of each Sub-amount computed in each and every applicable day of the penalty when there is no missing reference data |
| Details | 7 | Number of decimal digits  of the Computed Amount | NUMERIC(p) | 2 | Number of decimal digits of the Computed Amount | M |  |
| Details | 8 | Currency of the Computed Amount | CHAR(n) | 3 | Currency of the Computed Amount | M |  |
| Details | 9 | Credit / Debit Indicator of the Computed Amount | CHAR(n) | 4 | It indicates whether the participant is either imposed with or entitled to receive the computed penalty amount. | M | Possible values are:  ‘DBIT’ – The computed penalty amount is due by the participant.  ‘CRDT’ – The participant is entitled to receive the computed penalty amount. |
| Details | 10 | Calculation Method | CHAR(n) | 4 | Calculation rule used to compute the penalty. | M | Possible values are:  ‘SECU’ - The Penalty is based on the quantity of securities failed to be delivered and security penalty rate of the relevant Asset type.  ‘MIXE’ - The Penalty is based on the quantity of securities failed to be delivered and penalty rate is the discount rate of the relevant currency.  ‘CASH’ - Penalty is based on the amount of cash failed to be delivered and the penalty rate is the discount rate of the relevant currency  ‘BOTH’ - Penalty is the sum of SECU and CASH. I.e. the sum of:  - The penalty based on the quantity of securities failed to be delivered and security penalty rate of the relevant Asset type; and  - The penalty based on the amount of cash failed to be delivered and the discount rate of the currency. |
| Details | 11 | Number of Days | NUMERIC(p) | 4 | It indicates the number of days the penalty is applicable to. | M | In case of SEFPs it is always 1.  In case of LMFPs it is the number of business days when the penalty applies. |
| Details | 12 | LF | CHAR(n) | 1 | Fixed Value: LF | M | LF = Line Feed (x'0A') |

A footer will contain the following data:

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Record Type** | **Field Number** | **Field Name** | **Data Format** | **Length** | **Description** | **Field Type** | **Additional Information** |
| Footer | 1 | Record Type | CHAR(n) | 1 | Identifies record as Header, Body or Footer | M | Values: 'F': for Footer |
| Footer | 2 | Number Of Records | NUMERIC(p) | 18 | Total number of data records in the file. | M | Number: integer representation,18 digits long. |
| Footer | 3 | LF | CHAR(n) | 1 | Fixed Value: LF | M | LF = Line Feed (x'0A') |

**End of Document**

1. Status value : Draft, Open, Final, Dismiss [↑](#footnote-ref-1)