European Securities and Markets Authority

Reporting Instructions

FIRDS Transparency System

26 October 2016 | ESMA/2016/1523

Document revision history

Version	Date	Author	Comments
1	26/10/2016	ESMA	Version 1 for publication

Reference documents

Ref	Title	Version	Author	Date
1	MiFIR - REGULATION (EU) No 600/2014 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 15 May 2014 (Article 27)	600/2014	European Parliament Council of Europe	15 May 2014
2	MAR - REGULATION (EU) No 596/2014 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 April 2014 (Article 4)	596/2014	European Parliament Council of Europe	16 April 2014
3	Regulatory technical and implementing standards – MiFID II / MiFIR http://ec.europa.eu/finance/securities/docs/isd/mifid/its-rts-overview-table_en.pdf	28 Sep 2016	European Commission	28 Sep 2016

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Date: 26 October 2016
ESMA/2016/1523

1 Table of Contents

2 Introduction

2.1 Purpose

This document specifies the reporting instructions for the provision of data necessary to support the MiFIR transparency regime. The main purpose of this document is to lay down the characteristics of information required for the uploading interface between Trading Venue or National Competent Authorities systems and the Financial Instruments Reference Data System (FIRDS) for Transparency.

2.2 Intended audience

The intended audience of this document is National Competent Authorities, Trading Venues (TVs), Approved Publication Arrangements (APAs) and Consolidated Tape Providers (CTPs) who are going to implement system interfaces for the provision of data to the FIRDS – Transparency system.

2.3 Background

MiFIR introduces rules with respect to transparency obligations that require the publication of transparency thresholds applicable to each financial instrument. The Board of Supervisors decided on 17 December 2014 to delegate tasks to ESMA and launched in particular the Financial Instruments Reference Data System (FIRDS) project.

These interface specifications have been drafted based on MiFID II, MiFIR, the related draft RTS on equity transparency (RTS 1) and non-equity transparency (RTS 2), as well as on the related approved Business Requirement Document (BRD) and Functional Specification Document (FSD).

2.4 Scope

The scope of this document is the detailed drafting of the interface specifications for the collection of additional reference and quantitative data from NCAs, Trading Venues (TVs), Approved Publication Arrangements (APAs) and Consolidated Tape Providers (CTPs).

The FIRDS Reference Data system is out of the scope of these instructions but it is assumed that the article 27 reference data is available for use by the FIRDS Transparency system.

2.5 Definitions

Acronym	Definition
APA	Approved Publication Arrangement
BRD	Business Requirements Document
CA	Competent Authority
CTP	Consolidated Tape Provider
ESMA	European Securities and Markets Authority
FIRDS	Financial Instrument Reference Data System
ITMG	IT Management and Governance group
ITS	Implementing Technical Standards
MTF	Multilateral Trading Facility
NCA	National Competent Authority
NCA delegating data collection	A National Competent Authority who has signed a Delegation Agreement with ESMA in order to delegate the task of collecting data directly from Trading Venues, APAs and CTPs for the purpose of reference data provision (MiFIR Art.27) and transparency calculations
NCA delegating transparency calculations	A National Competent Authority who has signed a Delegation Agreement with ESMA in order to delegate the task of performing transparency calculations
Non-delegating NCA	A National Competent Authority who has not signed a Delegation Agreement with ESMA on the Instruments Reference Data Project
OTF	Organised Trading Facility
RCA / Relevant Competent Authority	The National Competent Authority that has the most relevant market in terms of liquidity as per MiFIR Article 26 under its jurisdiction
RM	Regulated Market
RTS	Regulatory Technical Standards
Trading Venue	In the context of this document, in accordance with RTS on Article 27, “trading venue” must be interpreted as “Segment MIC for the trading venue or systematic internaliser, where available, otherwise operating MIC”
RTS 23 / Field 11	Date of admission to trading or date of first trade of the instrument

RTS 23 / Field 12	Termination date of the instrument
TV	Trading Venue, covering Regulated Markets, Multilateral Trading Facilities, Organised Trading Facilities
SI	Systematic Internaliser
SWIFT	Society for Worldwide Interbank Financial Telecommunication
UTF-8	8-bit UCS/Unicode Transformation Format is a variable-length character encoding format. UTF-8 encodes each character (code point) in 1 to 4 octets (8-bit bytes), with the single–octet encoding used only for the 128 US-ASCII characters. Any business field in this format is represented in this document as 10(z) = 10 UTF-8 character string.
XML	Extensible Mark-up Language

3 System overview

TVs', APAs' and CTPs' source systems shall implement mechanisms to provide and submit the data required for FIRDS Transparency in the agreed format. The TV / APA / CTP or NCA sends the data to FIRDS through the EAMFT system by uploading files on HUBDE /HUBEX. NCAs use HUBEX while TVs, APAs and CTPs use HUBDE.

The FIRDS Transparency system receives the below files from the submitting entities:

- **Equity transparency reference data**, containing additional reference data for equity / equity-like financial instruments
- **Equity transparency quantitative data**, containing trading activity data for equity / equity-like financial instruments
- **Non-equity transparency reference data**, containing additional reference data for non-equity financial instruments
- **Non-equity transparency quantitative data**, containing trading activity for non-equity financial instruments
- **Transparency calculation results data for equity**, containing calculation results for equity / equity-like financial instruments (expected only from non-delegating NCAs, performing the calculations themselves)
- **Transparency calculation results data for non-equity**, containing calculation results for non-equity financial instruments (expected only from non-delegating NCAs, performing the calculations themselves)

All files undergo transmission validations, XML format validations, content validations and consistency validations against MiFIR Article 27 reference data. Relative feedback files are generated and sent back to the corresponding submitting entity.

Transparency reference and quantitative data are loaded and stored in the FIRDS Transparency database. After the necessary data manipulation and transformation, calculations take place depending on the information received and on percentiles and floors defined in the RTS. For equity and bonds' liquidity, results are calculated at ISIN level, whereas for bonds' LIS / SSTI thresholds and other non-equity the results are calculated initially at sub-class level and then each instrument inherits the result of the sub class it belongs to.

Calculation results are published on ESMA's website on predefined dates depending on the financial instrument's type. Publication takes place for the results received from NCAs performing the calculations themselves as well. The ESMA Data Managers can review and intervene where necessary by performing relevant actions like solving data consistency issues, trigger calculations and review results. The NCAs can also interact with the system by providing data for new instruments' estimates, triggering re-calculation of transparency results, designating up to five ISINs to be considered as liquid and by requesting transparency data collected by the system.

4 Main principles

4.1 Files specifications

Data must be submitted as **XML files** of the agreed format for all transparency files. The following prerequisites are critical:

- The submitted files have to comply with the XML schema applicable to the file type; reporting entities are expected to validate the files they intend to upload against the relevant XML schema, and check that this XML validation is passed before submitting the data to ESMA;
- The file names should comply with the agreed naming convention for each file;
- The number of records of each file should not exceed 500.000. In case more records have to be transferred, data should be split in several files with a maximum of 500.000 records each.

4.2 Transparency data collection

4.2.1 General instructions

Submitting entities must make sure that ESMA has received all applicable files on a daily basis by 23:59 CET.

Records where the reporting day is a non-working day[1] for a given MIC are not expected to be submitted and will be rejected during content validations. For example, on 25/Dec, a submitting entity should not submit a transparency reference data file. Nevertheless, the same does not apply to a transparency quantitative data file as this would include transactions executed on 18/Dec (7 days before – see paragraph 5.4.1). If the reporting entity has made a mistake in the provision of its list of non-working days, it shall report a corrected version of its non-working days for the concerned year, and then resubmit the transparency data previously rejected.

If a reporting entity needs to correct an erroneous file, the system allows it to submit an updated version of previously submitted records (with same ISIN / MIC / Reporting day combination as the original erroneous records) in new files. The corrected data have to be submitted as soon as possible so as not to affect the calculations. The FIRDS Transparency system will only take into account the latest record it received for each reporting day.

[1] Non-working days are reported by the reporting entity to the FIRDS “Reference data” system

Submitting entities should send files no later than the respective cut-off times. The cut-off date/times are the following:

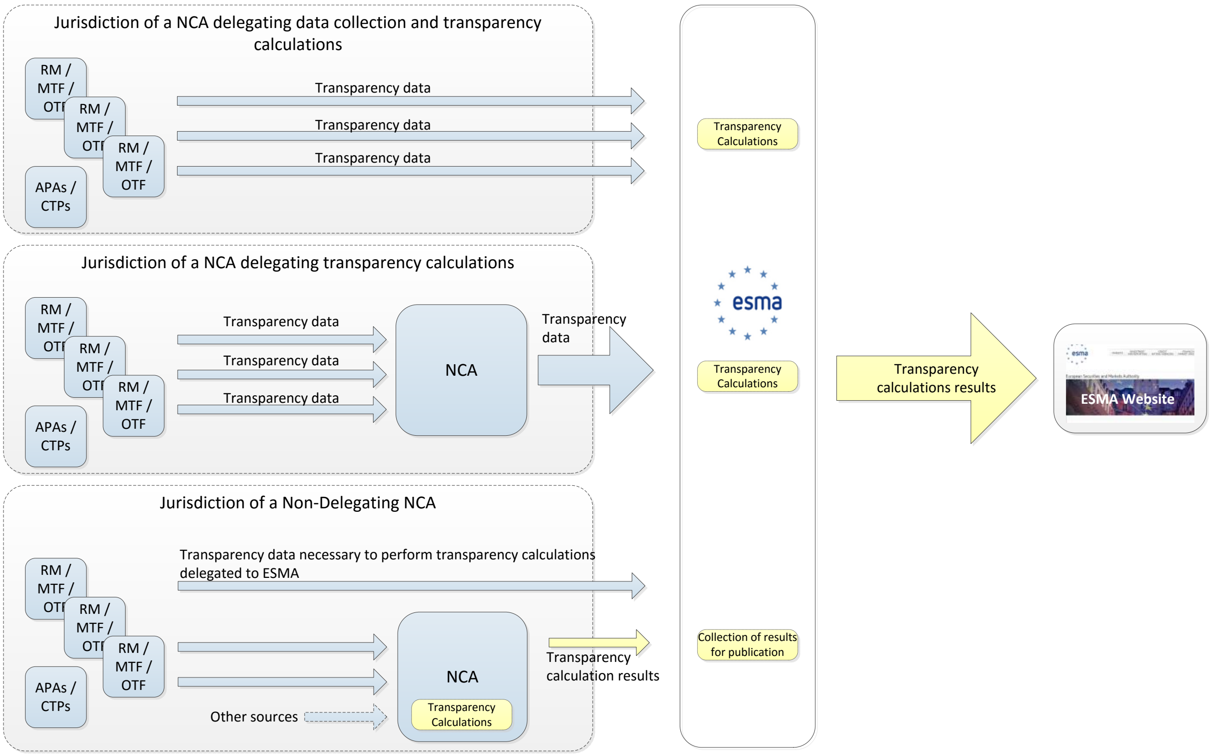
- For the **estimates** to be produced before trading commences: end of day on the day before the earliest "Date of admission to trading or date of first trade"
- For the calculations based on the **first 4 weeks of trading**: 7 calendar days after the end of the first 4-weeks-period starting from the earliest "Date of admission to trading or date of first trade"
- For the **quarterly** bond liquidity calculations: by the end of day of the next 07 January / 07 April / 07 July / 07 October following the quarter on which the calculations have to be performed
- For the **yearly** calculations: by 07 January end of day of the year when the calculations have to be performed.

The files that have to be submitted are:

Message Name	File type	ISO 20022 Message Definition Identifier
Equity Transparency Reference Data	DATETR	auth.032.001.01
Equity Transparency Quantitative Data	DATEQU	auth.040.001.01
Non-Equity Transparency Reference Data	DATNTR	auth.033.001.01
Non-Equity Transparency Quantitative Data	DATNQU	auth.041.001.01

The monetary values should be expressed in Euros. Original data expressed in other currencies should be converted to Euros by applying the foreign exchange reference rate applicable for the Reporting day, as published by the European Central Bank. For Bonds, where the issuance date differs to the reporting day, use the foreign exchange rate applicable at issuance date.

4.2.2 Data reporting flow



ESMA collects the data necessary to perform transparency calculations:

a) From NCAs delegating transparency calculations but not data collection in their jurisdiction;

b) Directly from TVs, APAs, CTPs under the jurisdiction of NCAs delegating data collection or under the jurisdiction of a Non-Delegating NCA.

In case **a)** each TV, APA or CTP has to send the submitted files to its respective NCA, using the method designated by the respective NCA. The NCA is responsible for submitting the file(s) to FIRDS Transparency system using EAMFT (HUBEX). For data received by TVs, NCAs have the option to either submit the data as received, thus sending one file per TV or aggregate the data and send one file containing data received from all TVs. In any case, the field "Trading venue" of the message body is used in order to differentiate records between trading venues. NCAs should not aggregate data received from APAs and CTPs. Respective TVs, APAs and CTPs have to be advised by the NCA to send the files sufficiently in advance, to give the possibility to the NCAs to comply with the 23:59 CET file submission deadline.

In case **b)** TVs, APAs or CTPs submitting data directly to ESMA have to place the submitted files to be transferred to FIRDS Transparency system in EAMFT (HUBDE). Prerequisite for the initiation of the integration process is the provision of access rights to HUBDE. In case credentials have not been provided, firds@esma.europa.eu should be contacted.

4.2.3 Reminders generation

On a daily basis, FIRDS Transparency system will cross-check with FIRDS Reference data system that it has received valid transparency reference data for all active instruments at least once. In case no transparency reference data was ever sent to the FIRDS Transparency system, for at least one instrument, a reminder message with error code RMD-003 will be sent to the corresponding submitting entity. If data is missing for more than one instrument, the reminder file will contain the list of all the instruments for which data is missing.

The FIRDS Transparency system will perform similar checks for quantitative data. On a daily basis, the system will check that it has received, by the end of day T, the quantitative data related to reporting day (T-7 calendar days). In case some of the data expected by the end of day T is missing, the system will generate and send one reminder message with error code RMD-004 to the submitting entity on the next day, containing the list of all instruments (both equity and non-equity) for which quantitative data for day T-7 was missing.

4.3 File naming convention

All files containing the instrument reference data list must use the following naming convention:

<Sender>_<FileType>_<Recipient>_<Key1>-<Key2>_<Year>.xml

<Sender> is a 5-character identifier of the sender of the data. Depending on the type of the entity sending the data, the identifier can be one of the following:

- ***NCAXX*** where XX is the ISO 3166 country code (2 alpha characters) of the NCA sending the data (e.g. NCADE, NCAPL, …)
- ***TXXXX*** where XXXX is the MIC code corresponding to the submitting Trading Venue (e.g. XPAR, XAMS, …)
- ***AXXXX*** where XXXX is the APA code corresponding to the submitting APA
- ***CXXXX*** where XXXX is the CTP code corresponding to the submitting CTP

<Filetype> is a 6-character field identifying the type of data contained in the file (see Annex 4).

<Recipient> is a 5-character field that identifies the receiver of the file. If the recipient is the ESMA system the attribute shall be set to **FIRDS**.

<Key1> is a 5-letter character code which is reused by the system when generating a feedback file related to this file.

Key1 can be used as needed by the Submitting Entity. For example, a NCA may want to populate it with T<MIC code of a TV> referring to the TV which originally submitted the file to the NCA; this way, the name of the ESMA feedback file will contain the identification of the TV under its jurisdiction which is concerned by the feedback file. If not needed by the submitting entity, any 5-letter character code can be used.

<Key 2> is a unique sequence number using 6 digits. This attribute is completed with zeros to fit to 6 characters (e.g. 000157). This sequence number does not depend on the file type, recipient or any other characteristic. It can start again at 000000 after 999999. This number shall be incremented each time a sender sends a new file (if the same file is sent again, a new sequence number must be provided). This number identifies uniquely a file. Should a problem occur in the sending of the dataset, the sequence number will help identifying the file.

<Year> is a 2-digit field. It is the year when the file was sent. It facilitates archiving.

4.4 Data validation

The FIRDS Transparency system will run data validations on all data received, whether from TVs / APAs / CTPs or NCAs. It will return one single feedback file for each file submitted by the submitting entity. This feedback file will report on the overall status of the submitted file, and, if the submitted file is partially accepted, list the records which did not pass the data content validations. The respective validation error codes can be found in Annex 3: Data validation codes.

4.4.1 Data transmission errors

When a NCA / TV / APA / CTP uploads a file through HUBEX / HUBDE, EAMFT performs preliminary checks based on the file naming convention (see File naming convention):

- The SenderCode in the file name must match the sender account;
- If the first check is passed, EAMFT tests that the file naming convention is respected (see section 4.3);
- If the test is conclusive, EAMFT checks that file size is lower than remaining disk quota size.

If one of these checks fails, EAMFT will reject the file and return a “permission denied” error.

The submitting entity will have to fix the error(s) and resubmit all the records contained in the file.

4.4.2 Data format errors

Trading Venues, APAs, CTPs, and NCAs shall only submit files after having performed successful XML-validation against the relevant XML-Schema. Additionally, the ESMA system will also perform XML validation of the files received. If an error is identified at this stage, a feedback is sent to notify the submitting entity, the processing of the file stops, and reporting is unsuccessful for all records contained in the file. The submitting entity will have to fix the source of the errors and resubmit all the records contained in the file.

Nota bene: for decimal numbers, decimal separator is '.' (full stop).

4.4.3 Data content errors

If the data transmission and data format tests are passed successfully, the FIRDS Transparency system will perform automated data quality checks. If an error is identified at this stage, the corresponding record will be rejected. The system will send feedback to the submitting entity on the rejected records (if any) and the reason for rejection. The submitting entity will have to fix the source of the errors and resubmit files containing the corrected records.

4.4.4 Data inconsistency errors

Some transparency data fields may be available for comparison from the FIRDS Article 27 Reference Data system. Where corresponding fields are populated in both the transparency data received and in the instruments reference database for the same ISIN, the system will check that they hold strictly the same values. In case of any difference, the system will reject the submitted record. The submitting entity will be requested to correct the error and resubmit the corresponding transparency data.

The transparency data fields expected to be checked for consistency against the instruments reference database are:

Field name in transparency data (RTS 2)	Field name in reference data (RTS 23)
Field 17 - Issuer of the underlying bond	Field 27 - Underlying issuer (the field 27 with the non-null value is used)
Field 8 - Maturity	Field 15 - Maturity date
Field 8- Maturity	Field 24 - Expiry date
Field 15 - Notional currency	Field 13 - Notional currency 1
Field 42 - Notional currency	Field 13 - Notional currency 1
Field 30 - Notional currency 1	Field 13 - Notional currency 1
Field 31 - Notional currency 2	Field 42 - Notional currency 2
Field 24 - Reference rate	Field 40 - Reference rate
Field 25 - IR Term of contract	Field 41 - IR Term of contract

4.4.5 Feedback files

Based on the result of transmission, format, content, consistency validations, a feedback message is generated.

If all records submitted in the file are valid and consistent, the ESMA System generates a feedback file of "Status Advice" type with status "**Accepted**". Only a reference to the file identifier is sent back to the submitting entity.

If a transmission or format error is encountered, the ESMA System generates a feedback file of "Status Advice" type and of status "**Rejected**" listing the error found. Only a reference to the file identifier is sent back since the system did not manage to process the records. The feedback file is put in ESMA's output folder on the HUBEX (resp. HUBDE) in case submitting entity is a NCA (resp. TV/APA/CTP). The error has to be corrected and the whole file has to be resubmitted as soon as possible.

If at least one record did not pass the content checks or is found as inconsistent, the system generates a feedback file of status "**Partially accepted**" listing for each erroneous record the status "Rejected" and the list of errors found (technical record identification, code and description). The feedback file is put in ESMA's output folder on the HUBEX (resp. HUBDE) in case submitting entity is a NCA (resp. TV/APA/CTP). The reporting entity has to ensure that the "technical record identification" provided in the files is unique in order to be able to achieve proper error handling. The errors have to be corrected and the submitting entity has to resubmit the file as soon as possible. The corrected file may contain all records initially submitted or only the ones corrected.

The feedback and reminder files fields are detailed below

Field name	**Reporting Instruction**	**XPath**
Message Status **[Mandatory]**	The Message Status details the status of the whole report received from a Submitting Entity ACPT File was accepted with no errors CRPT File is corrupted RJCT File was rejected due to file errors or to content errors RMDR Reminder PART Partially Accepted, in case some record doesn't pass the Content validations	BizData/Pyld/Document/FinInstrmRptgStsAdvc/StsAdvc/MsgSts/RptSts
Validation Rule **[Unbounded]**	The Validation Rule provides the details of the rule that could not be validated by the system The Id will contain the Error Code field	BizData/Pyld/Document/FinInstrmRptgStsAdvc/StsAdvc/MsgSts/VldtnRule

	described in the tables from section 9	
Record Status **[Unbounded]**	The Record Status provides per record status on the submitted report. The same record can be reported multiple times where different elements of the record have an issue.	BizData/Pyld/Document/FinInstrmRptgStsAdvc/StsAdvc/RcrdSts
Original Record Identification **[Mandatory]**	The field describes a unique and unambiguous technical identification of the original data record received by the ESMA system that is used internally by the system.	BizData/Pyld/Document/FinInstrmRptgStsAdvc/StsAdvc/RcrdSts/OrgnlRcrdId
Status **[Mandatory]**	This field defines the status of the reported record. ACPT Accepted RJCT Rejected WARN Warning	BizData/Pyld/Document/FinInstrmRptgStsAdvc/StsAdvc/RcrdSts/Sts
Validation Rule **[Unbounded]**	The Validation Rule provides the details of the rule that could not be validated for the record. The Id will contain the Error Code field described in the tables from section 9	BizData/Pyld/Document/FinInstrmRptgStsAdvc/StsAdvc/RcrdSts/VldtnRule

The feedback and reminder files' naming conventions follow the same pattern as in section 4.3 with:

- <Sender> set to FIRDS
- <Filetype> set to FDBxxx or RMDxxx as per Annex 4
- <Recipient> will be NCAxx, Txxxx, Axxxx, Cxxxx (see detailed rules in paragraph 4.3)
- <Key1> would be filled with <Key1> from the original file for feedback files or with the Submitting Entity expected to send the file for reminder files
- <Key 2> would be filled with <Key2> from the original file for feedback files or with a sequence number generated by FIRDS for reminder files
- <Year> will be the current year

5 Transparency data upload specifications

A more detailed description of the files collected is included in the sections below. Specificities are provided with regards to the file content and structure for Competent Authorities, Trading Venues, APAs and CTPs to submit data to FIRDS Transparency system.

5.1 Business data submission file

The business data submission file is the file which encapsulates the Business Application Header (BAH), Message Header (MHD) and Business Fields (BF).

In this file the following Xpaths are prepended to the XPaths defined in chapters 5.2 to 5.6:

- Business Application Header – “BizData/Hdr”
- Message Header – “BizData/Pyld”
- Business Fields - “BizData/Pyld”

For correct submission of the files the following namespaces need to be defined when creating the XML message (the example below is given for the Equity Transparency Quantitative Data message auth.040 - replace the references in yellow by the appropriate XSD references for other types of messages):

- <BizData xmlns="urn:iso:std:iso:20022:tech:xsd:head.003.001.01" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="urn:iso:std:iso:20022:tech:xsd:head.003.001.01 head.003.001.01.xsd">
- <AppHdr xmlns="urn:iso:std:iso:20022:tech:xsd:head.001.001.01" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="urn:iso:std:iso:20022:tech:xsd:head.001.001.01 head.001.001.01_ESMAUG_1.0.0.xsd">
- <Document xmlns="urn:iso:std:iso:20022:tech:xsd:DRAFT6auth.040.001.01" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="urn:iso:std:iso:20022:tech:xsd:DRAFT6auth.040.001.01 DRAFT6auth.040.001.01_ESMAUG_DATEQU_1.0.0.xsd">

5.2 Business Application Header (BAH)

In addition to the general information described previously, the submitting entities will have to provide file information which contains characteristics describing the file itself. This information should be included on the Business Application Header (BAH) and on the Message Header.

The information which needs to be filled on the BAH is:

From: Organisation Identification: Identification: Organisation Identification: Other

- Format: {ALPHANUM-35}

- XPath: **"**AppHdr/Fr/OrgId/Id/OrgId/Othr/Id"

- Definition: Id shall contain the MIC code of the Trading Venue or the 5-letter HUB sender code of the APA / CTP which sends the information or the 2-letter country code of the Competent Authority which submits the information.

- Standard: The trading venue should be identified by the ISO 10383 four-character MIC code. APA / CTP should use the 5-letter code used in the <Sender> part of the file name (4.3 File naming convention). The country code should be identified by the alpha 2 character 3166 ISO country code.

- **Note:** When a NCA acts as a router, receiving files from TV/APA/CTP under its jurisdiction and not performing any validation on them, the original sender (TV/APA/CTP) should fill this field.

To: Organisation Identification: Identification: Organisation Identification: Other

- Format: {ALPHANUM-35}

- XPath: **"**AppHdr/To/OrgId/Id/OrgId/Othr/Id"

- Definition: This field contains the identification of the receiving entity.

- Standard: The alpha 2 character 3166 ISO country code.

- **Validation:** It should be filled in with 'EU' as this corresponds to ESMA.

Business Message Identifier

- Format: {ALPHANUM-35}

- XPath: **"**AppHdr/BizMsgIdr"

- Definition: Unambiguously identifies the Business Message to the MessagingEndpoint that has created the Business Message.

- Note: It should be filled in with the "<Key1 >-<Key2>" part of the name of the file to be sent. When a NCA acts as a router, receiving files from TV/APA/CTP under their jurisdiction and not performing any validation on them this field should be filled in by the original sender (TV/APA/CTP) and not changed by the NCA.

Message Definition Identifier

- Format: {ALPHANUM-35}

- XPath: "AppHdr/MsgDefIdr"

- Definition: Contains the Message Identifier that defines the Business Message.

- **Validation:** It must contain a Message Identifier published on the ISO 20022 website.

- Note: It should be filled in with the message name as approved by ISO.

Creation Date

- Format: {DATE_TIME_FORMAT}

- XPath: "AppHdr/CreDt"

- Definition: Date and time when this message was created.

- Standard: The date should be sent in the ISO 8601 date format standard YYYY-MM-DDThh:mm:ss.ddddddZ. Dates and times must be reported in UTC.

5.3 Equity transparency reference data

5.3.1 File content

On a given day T, the file should contain:

1. All equity[2] financial instruments newly admitted to trading or traded on day T
2. All instruments for which the transparency reference data has significantly changed compared to previously submitted files

In the latter case, all fields applicable for the instrument have to be completed, including the ones that have unchanged values. Submitting entities have to report the reference data at least:

- Before the first day of trading
- On the last day of the first 4 weeks of trading
- On the last trading day of the preceding year

[2] Identification of equity financial instruments is defined in RTS1 – Annex III – Table 2

- Any time previously submitted data has changed: at the end of the day on which a corporate action is effective (corporate actions include, but are not limited to stock splits, bankruptcy, dividends, bonus right, mergers and acquisitions, class actions, delistings etc.)

In case of doubt, it is preferable that submitting entities proceed to sending the transparency reference data.

Transparency reference data for an instrument have to be initially submitted no later than on the day defined in RTS 23 / Field 11 with a “Reporting day” equal to RTS 23 / Field 11. These values are effective for this instrument until RTS 23 / Field 12 (if applicable) or until the “Reporting day” of the next received record with the same ISIN.

<u>Example – Initial submission</u>

<u>Case 1</u>

RTS 23 / Field 11: 17/1/2018

RTS 23 / Field 12: 16/1/2019

Submitted data for this ISIN

Reporting day	***Number of** outstanding **instruments***	***Other fields***
17/1/2018	*500*	*…*

The FIRDS Transparency system considers that the number of outstanding instruments for this specific ISIN is 500 from 17/1/2018 to 16/1/2019.

<u>Example – Changes submission</u>

<u>Case 1</u>

RTS 23 / Field 11: 17/1/2018

RTS 23 / Field 12: blank

The number of outstanding instruments was initially 500 but it changed to 520 on 25/8/2018.

Submitted data for this ISIN

Reporting day	***Number of outstanding instruments***	***Other fields***
17/1/2018	*500*	*…*
25/8/2018	*520*	*…*

The FIRDS Transparency system considers that the number of outstanding instruments is 500 from 17/1/2018 to 24/8/2018 and 520 from 25/8/2018 and forward.

Case 2

RTS 23 / Field 11: 17/1/2018

RTS 23 / Field 12: blank

The number of outstanding instruments was initially 500 but it changed to 510 on 31/12/2018 and again to 520 on 25/8/2019.

Submitted data for this ISIN

Reporting day	***Number of outstanding instruments***	***Other fields***
17/1/2018	*500*	*…*
31/12/2018	*510*	*…*
25/8/2019	*520*	*…*

The FIRDS Transparency system considers that the number of outstanding instruments is 500 from 17/1/2018 to 30/12/2018, 510 from 31/12/2018 to 24/8/2019 and 520 from 25/8/2018 and forward.

FIRDS Transparency system will accept resubmission of records with an already existing reporting day for data correction reasons. Extra caution has to be taken for erroneous records resubmission. In such cases, the submitting entity has to make sure it resends correct data for all “Reporting days” for which it has previously submitted erroneous records of the given instrument.

Example – Corrections submissions

Case 1

Submitted data

Reporting day	***Number of** outstanding **instruments***	***Other fields***
18/1/2018	*1,000*	*…*

On 26/1/2018, the reporting entity realizes that the information originally submitted is wrong and the "Number of outstanding instruments" should be 1,300 for the whole trading period. The record that has to be included in the next daily file to the FIRDS Transparency system in order to rectify the error is:

Reporting day	***Number of** outstanding **instruments***	***Other fields***
18/1/2018	*1,300*	*…*

Case 2

Submitted data

Reporting day	***Number of** outstanding **instruments***	***Other fields***
18/1/2018	*1,000*	*…*
25/1/2018	*1,500*	*…*

On 26/1/2018, the reporting entity realizes that the information originally submitted is wrong and the "Number of outstanding instruments" as of 25/1/2018 should be 1,300 instead of 1,500. The record that has to be included in the next daily file to FIRDS Transparency system in order to rectify the error is:

Reporting day	***Number of** outstanding **instruments***	***Other fields***
25/1/2018	*1,300*	*same values as above*

Case 3

Submitted data

Reporting day	***Number of** outstanding **instruments***	***Other fields***
18/1/2018	*1,000*	*…*
25/1/2018	*1,500*	*…*

On 26/1/2018, the reporting entity realizes that the information originally submitted is wrong and the "Number of outstanding instruments" should be 1,300 for the whole trading period. The records that have to be included in the next daily file to FIRDS Transparency system in order to rectify the error need to cover both 18/1/2018 and 25/1/2018 Reporting days:

Reporting day	***Number of** outstanding **instruments***	***Other fields***
18/1/2018	*1,300*	*same values as above*
25/1/2018	*1,300*	*same values as above*

Case 4

Submitted data

Reporting day	***Number of** outstanding **instruments***	***Other fields***
18/1/2018	*1,000*	*...*
25/1/2018	*1,500*	*...*

On 26/1/2018, the reporting entity realizes that the information originally submitted is wrong and the instrument started being traded on 17/1/2018 with "Number of outstanding instruments" being 1,300 for the whole trading period. The records that have to be included in the next daily file to FIRDS Transparency system in order to rectify the error are:

Reporting day	***Number of** outstanding **instruments***	***Other fields***
17/1/2018	*1,300*	*same values as above*
18/1/2018	*1,300*	*same values as above*
25/1/2018	*1,300*	*same values as above*

Within a given file, no more than one record should be provided for each (ISIN-MIC-Reporting day) combination, as the system will reject duplicate records. In case data is provided in multiple files for the same (ISIN-MIC-Reporting day) combination, the system will only take into account the latest record received in order to allow for corrections in the already submitted files.

5.3.2 File fields

5.3.2.1 Message header (MHD)

5.3.2.1.1 Reporting entity

Xpath	Document/FinInstrmRptgEqtyTrnsprncyDataRpt/RptHdr/RptgNtty
Type of instrument	Any
Definition	Only one of the available options should be used depending on the submitting entity: **In case data is submitted directly by a Trading Venue to ESMA:** RptHdr/RptgNtty/MktdCd should be completed with the segment MIC for the trading venue or, where appropriate, operational MIC of the trading venue. **In case data is submitted directly by an APA / CTP to ESMA:** The type 'APPA' or 'CTPS' (RptHdr/RptgNtty/Othr/Tp) and the Id (RptHdr/RptgNtty/Othr/Id) have to be provided. **In case data is submitted by a NCA to ESMA:** • For data originating from a TV, the reporting entity can be a TV if the NCA just forwards the file without changes, or can be the NCA's country (RptHdr/NtlCmptntAuthrty) if the NCA submits data from several TVs in one

	file. • For data originating from an APA or CTP, NCAs should not submit data from several APA / CTP in the same file, and instead report one file per each APA / CTP ; reporting entity should be the APA / CTP (using RptHdr/RpgtNtty/Othr/Id and RptHdr/RpgtNtty/Othr/Tp)
Validation	The value provided as reporting entity corresponds to a valid segment or operating MIC in case of trading venues and the valid id for APAs and CTPs.The value provided as "Reporting entity" is the authority responsible for reporting the data of the "Trading venue"

5.3.2.1.2 Reporting period

Xpath	Document/FinInstrmRptgEqtyTrnsprncyDataRpt/RptHdr/RpgtPrd
Type of instrument	Any
Definition	If the data provided refer to a **certain day**, the reporting day has to be provided as a single date (RptHdr/RpgtPrd/Dt). If the data provided refer to more than one single day, the RptHdr/RpgtPrd/FrDtToDt block has to be used. From date (RptHdr/RpgtPrd/FrDtToDt/FrDt) and To date (RptHdr/RpgtPrd/FrDtToDt/ToDt) should be equal to the earliest and the latest Document/FinInstrmRptgEqtyTrnsprncyDataRpt/EqtyTrnsprncyData/RptgDt of the message respectively. The fields RptHdr/RpgtPrd/FrDt, RptHdr/RpgtPrd/ToDt and RptHdr/RpgtPrd/SubmissnDtTm are not currently used.
Validation	

5.3.2.2 Business Fields (BF) – Equity transparency report

The instructions for the field included in the message body are described in the table below:

RTS field #	Field name	Type of instruments	Reporting Instruction	Xpath	Data validation
	Technical record identification	All equity and equity-like instruments	Internal numbering of records. Should be unique for each record as it is used for error management and status advice messages. The field is mandatory.	Document/FinInstrmRptgEqtyTrnsprncyDataRpt/EqtyTrnsprncyData/TechRcrdId	
1	Instrument identification code	All equity and equity-like instruments	ISIN code used to identify the financial instrument. The field is mandatory	Document/FinInstrmRptgEqtyTrnsprncyDataRpt/EqtyTrnsprncyData/Id	ISIN code should pass checksum validation
2	Instrument full name	All equity and equity-like instruments	Full name of the financial instrument. The field is optional as the full name used as the reference for the ISIN is the one reported under RTS 23 / field 2.	Document/FinInstrmRptgEqtyTrnsprncyDataRpt/EqtyTrnsprncyData/FullNm	
3	Trading venue	All equity and equity-like instruments	This field should be populated with the segment MIC if available otherwise operating MIC of the trading venue to which the record relates. The field is mandatory.	Document/FinInstrmRptgEqtyTrnsprncyDataRpt/EqtyTrnsprncyData/TradgVn	1. The MIC provided should exist and be active for the reporting day 2. The value provided should correspond to the Reporting Entity provided in the header
5	Reporting day	All equity and equity-like instruments	Date for which the data is provided. The field is mandatory.	Document/FinInstrmRptgEqtyTrnsprncyDataRpt/EqtyTrnsprncyData/RptgDt	1. The date provided should not be a non-working day as reported by the Trading Venue to the FIRDS “Reference data” system 2. The date provided should be in line with the Reporting period reported in the message header 3. The date provided should be less or equal to the "Termination date of the instrument" (RTS 23 / Field

					12)
4	MiFIR identifier	All equity and equity-like instruments	Indicates whether the instrument is a share, ETF, depositary receipt, certificate, or other equity-like financial instrument. The field is mandatory	Document/FinInstrmRptgEqtyTrnsprncyDataRpt/EqtyTrnsprncyData/FinInstrmClssfctn	1. The value provided should be consistent with the CFI code (classification of financial instrument) provided in FIRDS reference data (RTS 23 / Field 3)
6	Number of outstanding instruments	Shares, depositary receipts and ETFs	*For shares and depositary receipts* The total number of outstanding instruments. *For ETFs* Number of units issued for trading.	Document/FinInstrmRptgEqtyTrnsprncyDataRpt/EqtyTrnsprncyData/NbOutsdngInstrms	The instrument should not be a certificate
7	Holdings exceeding 5% of total voting rights	Shares	The total number of shares corresponding to holdings exceeding 5% of total voting rights of the issuer unless such a holding is held by a collective investment undertaking or a pension fund. This field is to be populated only when actual information is available.	Document/FinInstrmRptgEqtyTrnsprncyDataRpt/EqtyTrnsprncyData/HldgsExcdgTtlVtngRghtThrshld	1. The instrument should be a share 2. The value provided should be less than the value provided as number of outstanding instruments.
9	Issuance size	Certificates	Issuance size of the certificate expressed in Euros	Document/FinInstrmRptgEqtyTrnsprncyDataRpt/EqtyTrnsprncyData/IssncSz	The instrument should be a certificate The Ccy attribute should be EUR
8	Price of instrument	Shares and depositary receipts	The price of the instrument at the end of the reporting day. The price should be expressed in euros.	Document/FinInstrmRptgEqtyTrnsprncyDataRpt/EqtyTrnsprncyData/InstrmPric	1. The instrument should be a share or a depositary receipt 2. The value should be provided in euros. The Ccy attribute should be EUR

5.4 Equity transparency quantitative data

5.4.1 File content

On a given day T, the transparency quantitative data to be sent by the submitting entities should be produced using all transactions executed on day T – (7 calendar days).

As an example, transparency quantitative data reported on Friday 15 September 2017 relates to all transactions executed on Friday 08 September 2017.

The file should consist of all the equity financial instruments that were involved in trading activity on T – (7 calendar days) for a given TV / APA / CTP. Number and volume of transactions that benefit from deferred publication shall be counted in the aggregates provided by the submitting entities, on the basis of the execution date, even during the period of deferred publication. Number and volume of transactions that were cancelled shall be excluded from the aggregates provided by the submitting entities.

The equity transparency quantitative data file should be sent on a daily basis. Correction of already submitted erroneous records can be achieved at a later date by resubmitting a record with the same "Reporting Day" (as described for equity reference data).

5.4.2 File fields

5.4.2.1 Message header (MHD)

Same as 5.3.2.1, except that the XPath should use Document/FinInstrmRptgEqtyTradgActvtyRpt instead of Document/FinInstrmRptgEqtyTrnsprncyDataRpt

5.4.2.2 Business Fields (BF) – Equity transparency report

Field name	Type of instruments	Reporting Instruction	Xpath	Data validation
Technical record identification	All equity and equity-like instruments	Internal numbering of records. Should be unique for each record as it is used for error management and status advice messages. The field is mandatory.	Document/FinInstrmRptgEqtyTradgActvtyRpt/EqtyTrnsprncyData/TechRcrdId	
Instrument identification code	All equity and equity-like instruments	ISIN code used to identify the financial instrument. The field is mandatory	Document/FinInstrmRptgEqtyTradgActvtyRpt/EqtyTrnsprncyData/Id	ISIN code should pass checksum validation
Reporting day	All equity and equity-like instruments	Date for which the data is provided. This field should be populated with the day for which the quantitative data is provided.	Document/FinInstrmRptgEqtyTradgActvtyRpt/EqtyTrnsprncyData/RptgDt	1. The date provided should not be a non-working day as reported by the Trading Venue to the FIRDS "Reference data" system 2. The date provided should be in line with the Reporting period reported in the message header 3. The date provided should be less or equal to the "Termination date of the instrument" (RTS 23 / Field 12) 4. The date provided is today or in the past
Trading venue	All equity and equity-like instruments	This field should be populated with the segment MIC if available otherwise operating MIC of the trading venue to which the record relates.	Document/FinInstrmRptgEqtyTradgActvtyRpt/EqtyTrnsprncyData/TradgVn	1. The MIC provided should exist and be active for the reporting day. 2. The value provided should correspond to the Reporting Entity provided in the header
Suspended instrument flag	All equity and equity-like instruments	Indicator of whether the instrument was suspended for trading on the respective TV / APA on the reporting day. Under transparency quantitative data, an instrument is characterised as suspended only if it is suspended during the whole day. If the instrument is suspended, transactions	Document/FinInstrmRptgEqtyTradgActvtyRpt/EqtyTrnsprncyData/Sspnsn	

		related fields should be zero.		
Transactions executed	All equity and equity-like instruments	**Number**: Total number of transactions executed on the reporting day. **Volume**: Total volume of transactions executed on the reporting day. The volume should be expressed in Euros. Transactions that have been cancelled should be excluded from the reported figure. Transactions that benefit from deferred publication shall be counted in the aggregates provided by the submitting entities, on the basis of the execution date. In all cases, the fields have to be populated with a value greater than or equal to zero For instruments that are suspended for the whole day, the fields should have zero values. Both Number and Volume are mandatory.	Document/FinInstrmRptgEqtyTradgActvtyRpt/EqtyTrnsprncyData/TxsExctd/Nb Document/FinInstrmRptgEqtyTradgActvtyRpt/EqtyTrnsprncyData/TxsExctd/Vol	1. The volume should be zero if the number of transactions is zero 2. The volume should not be zero if the number of transactions is not zero. 3. The Ccy attribute should be EUR
Transactions executed, excluding all transactions executed under pre-trade waivers of MiFIR Art 4(1) (a) to (c)	All equity and equity-like instruments	**Number**: Total number of transactions executed on the reporting day, excluding all transactions executed under pre-trade waivers of MiFIR Art 4(1) (a) to (c). **Volume**: Total volume of transactions executed on the reporting day, excluding all transactions executed under pre-trade waivers of MiFIR Art 4(1) (a) to (c). The volume should be expressed in euros. Transactions that have been cancelled should be excluded from the reported figures.	Document/FinInstrmRptgEqtyTradgActvtyRpt/EqtyTrnsprncyData/TxsExctdExcldgPreTradWvr/Nb Document/FinInstrmRptgEqtyTradgActvtyRpt/EqtyTrnsprncyData/TxsExctdExcldgPreTradWvr/Vol	1. The values should be less or equal to the number of respective values of the transactions executed. 2. The volume should be zero if the number of transactions is zero 3. The volume should not be zero if the number of transactions is not zero. 3. The Ccy attribute should be EUR

		In all cases, the fields have to be populated with a value greater than or equal to zero. For instruments that are suspended for the whole day, the fields should have zero values. Both Number and Volume are mandatory.		
Transactions executed, excluding those transactions executed under Large-In-Scale waiver (post-trade)	All equity and equity-like instruments	**Number**: Total number of transactions executed on the reporting day, excluding those transactions executed under Large-In-Scale waiver (post-trade). **Volume**: Total volume of transactions executed on the reporting day, excluding those transactions executed under Large-In-Scale waiver (post-trade). The volume should be expressed in euros. Transactions that have been cancelled should be excluded from the reported figures The fields are used for the determination of AVT. In all cases, the fields have to be populated with a value greater than or equal to zero. For instruments that are suspended for the whole day, the fields should have zero values. Both Number and Volume are mandatory.	Document/FinInstrmRptgEqtyTradgActvtyRpt/EqtyTrnsprncyData/TxsExctdExcldgPstTradLrgInScaleWvr/Nb Document/FinInstrmRptgEqtyTradgActvtyRpt/EqtyTrnsprncyData/TxsExctdExcldgPstTradLrgInScaleWvr/Vol	1. The values should be less or equal to the respective values of the transactions executed. 2. The volume should be zero if the number of transactions is zero 3. The volume should not be zero if the number of transactions is not zero. 3. The Ccy attribute should be EUR

5.5 Non-equity transparency reference data

5.5.1 File content

On a given day T, the file should contain:

1. All non-equity[3] financial instruments newly admitted to trading or traded on day T
2. All instruments for which the transparency reference data has changed compared to previously submitted files

In the latter case, all fields applicable for the instrument have to be completed, including the ones that have unchanged values.

Transparency reference data for an instrument has to be initially submitted no later than on the day defined in RTS 23 / Field 11 with a "Reporting day" equal to RTS 23 / Field 11. These values are effective for this instrument until RTS 23 / Field 12 (if applicable) or until the "Reporting day" of the next received record with the same ISIN.

Correction of erroneous records follows the same logic as for equity transparency reference data.

5.5.2 File fields

5.5.2.1 Message header (MHD)

Same as 5.3.2.1, except that the XPath should use Document/FinInstrmRptgNonEqtyTrnsprncyDataRpt instead of Document/FinInstrmRptgEqtyTrnsprncyDataRpt

[3] Identification of non-equity financial instruments is defined in RTS2 – Annex IV – Table 2

5.5.2.2 Business Fields (BF) – Non-Equity transparency report

RTS field #	Field name	Type of instruments	Reporting Instruction	Xpath	Data validation
	Technical record identification	All non-equity instruments	Internal numbering of records. Should be unique for each record as it is used for error management and status advice messages. The field is mandatory.	Document/FinInstrmRptgNonEqtyTrnsprncyDataRpt/NonEqtyTrnsprncyData/TechRcrdId	
1	Instrument identification code	All non-equity instruments	ISIN code used to identify the financial instrument. The field is mandatory	Document/FinInstrmRptgNonEqtyTrnsprncyDataRpt/NonEqtyTrnsprncyData/Id	ISIN code should pass checksum validation
2	Instrument full name	All non-equity instruments	Full name of the financial instrument. The field is optional as the full name used as the reference for the ISIN is the one reported under RTS 23 / field 2.	Document/FinInstrmRptgNonEqtyTrnsprncyDataRpt/NonEqtyTrnsprncyData/FullNm	
7	Trading venue	All non-equity instruments	This field should be populated with the segment MIC if available otherwise operating MIC of the trading venue to which the record relates. The field is mandatory.	Document/FinInstrmRptgNonEqtyTrnsprncyDataRpt/NonEqtyTrnsprncyData/TradgVn	1. The MIC provided should exist and be active for the reporting period 2. The value provided should correspond to the Reporting Entity provided in the header
6	Reporting day	All non-equity instruments	This field should be populated with the day for which the transparency reference data is provided. The field is mandatory.	Document/FinInstrmRptgNonEqtyTrnsprncyDataRpt/NonEqtyTrnsprncyData/RptgDt	1. The date provided should not be a non-working day as reported by the Trading Venue to the FIRDS “Reference data” system 2. The date provided should be in line with the Reporting period reported in the message header 3. The date provided should be less or equal to the "Termination date of the instrument" (RTS 23 / Field 12) 4. For bonds, the date provided should be greater than or equal to the respective issuance date and less than or equal to the respective maturity date of the bond. 5. For swaps, the date provided should be less than or equal to the respective maturity date

					of the swap.
8	Maturity date	Bonds or derivatives	The maturity date of the instrument In case of bonds, the field is mandatory for instruments with defined maturity; in case not present, it will be interpreted as a perpetual bond.	Document/FinInstrmRptgNonEqtyTrnsprncyDataRpt/NonEqtyTrnsprncyData/MtrtyDt	In case of bonds, the difference in days between the value provided and the issuance date should be greater than 397 days, otherwise the instrument is considered a money market instruments.
3	MiFIR identifier	All non-equity instruments	Indicates whether the instrument falls under the category of securitised derivatives, structured finance products, bonds, ETCs, ETNs, emission allowances or derivatives. The allowed values are: **'SDRV'** for Securitised derivatives **'SFPS'** for Structured Finance Products (SFPs) **'BOND'** for Bonds **'ETCS'** for ETCs **'ETNS'** for ETNs **'EMAL'** for Emission Allowances **'DERV'** for Derivatives	Document/FinInstrmRptgNonEqtyTrnsprncyDataRpt/NonEqtyTrnsprncyData/FinInstrmClssfctn	The value provided should be consistent with the respective CFI code (classification of financial instrument) provided in FIRDS reference data (RTS 23 / Field 3)
4	Asset class of the underlying	Derivatives and securitised derivatives	The asset class of the underlying in case of derivatives and securitized derivatives. The allowed values are: **'COMM'** for Commodity derivatives **'CRDT'** for Credit derivatives **'CURR'** for Currency derivatives **'EQUI'** for Equity derivatives **'INTR'** for Interest rate derivatives **'EMAL'** for Emission Allowances	Document/FinInstrmRptgNonEqtyTrnsprncyDataRpt/NonEqtyTrnsprncyData/UndrlygInstrmAsstClss	The value provided should be consistent with the respective CFI code (classification of financial instrument) provided in FIRDS reference data (RTS 23 / Field 3)

5	Contract type	Derivatives	The contract type of the derivative. The allowed values are: ‘**CFDS’** for Contracts for difference **'FORW'** for forwards **‘FFAS’** for Forwards Freight Agreements **‘FRAS’** for Forward Rate Agreements **'FWOS'** Forwards on a swap **‘FUTR’** for futures **‘FONS’** for Futures on a swap **'OPTN'** for options **'OTHR'** for other **'PSWP'** for portfolio swaps **'SPDB'** for spread betting **'SWAP'** for swaps **'SWPT'** for swaption	Document/FinInstrmRptg NonEqtyTrnsprncyDataRpt /NonEqtyTrnsprncyData/D erivCtrctTp	**CFDS’** for Contracts for difference **'FORW'** for forwards **‘FFAS’** for Forwards Freight Agreements **‘FRAS’** for Forward Rate Agreements **'FWOS'** Forwards on a swap **‘FUTR’** for futures **‘FONS’** for Futures on a swap **'OPTN'** for options **'OTHR'** for other **'PSWP'** for portfolio swaps **'SPDB'** for spread betting **'SWAP'** for swaps **'SWPT'** for swaption The value provided should be consistent with the respective CFI code (classification of financial instrument) provided in FIRDS reference data (RTS 23 / Field 3)
9	Bond type	Bonds	Bond type as specified in RTS2 / Annex III / Section 2 / Table 2.2	Document/FinInstrmRptg NonEqtyTrnsprncyDataRpt /NonEqtyTrnsprncyData/B d/Tp	
10	Issuance date of the bond	Bonds	Date on which a bond is issued and begins to accrue interest	Document/FinInstrmRptg NonEqtyTrnsprncyDataRpt /NonEqtyTrnsprncyData/B d/IssncDt	
11	Emission Allowances sub type	Emission allowances	The allowed values are: **CERE'** - CER **'ERUE'** - ERU **'EUAE'** - EUA **'EUAA'** - EUAA	Document/FinInstrmRptg NonEqtyTrnsprncyDataRpt /NonEqtyTrnsprncyData/E mssnAllwncTp	

12, 13, 14	Commodity derivatives class specific fields	Commodity derivatives (base product = freight or energy)	If the base product, as defined in Reference data, is **'Freight',** Transport Means Size (.../Sz) and Specific route or time charter average (.../AvrgTmChrtr) are populated If the base product, as defined in Reference data is **'Energy',** Delivery/Cash settlement location (.../SttlmLctn) are populated The fields are not applicable for other base products.	**Freight commodity derivatives:** Document/FinInstrmRptgNonEqtyTrnsprncyDataRpt/NonEqtyTrnsprncyData/Deriv/Cmmdty/ClssSpcfc/Frght/Sz Document/FinInstrmRptgNonEqtyTrnsprncyDataRpt/NonEqtyTrnsprncyData/Deriv/Cmmdty/ClssSpcfc/Frght/AvrgTmChrtr **Energy commodity derivatives:** Document/FinInstrmRptgNonEqtyTrnsprncyDataRpt/NonEqtyTrnsprncyData/Deriv/Cmmdty/ClssSpcfc/Nrgy/SttlmLctn	
15	Notional currency	Commodity derivatives	Currency in which the notional is denominated	Document/FinInstrmRptgNonEqtyTrnsprncyDataRpt/NonEqtyTrnsprncyData/Deriv/Cmmdty/NtnlCcy	

16	Underlying type for interest rate derivatives	Interest rate derivatives	If the contract type (NonEqtyTrnsprncyRpt/DerivCtrctTp) is 'SWAP', 'SWPT', 'FONS' or 'FWOS' the field NonEqtyTrnsprncyRpt/Deriv/IntrstRate/UndrlygTp/**SwpRltd** has to be populated. In all other cases, the field NonEqtyTrnsprncyRpt/Deriv/IntrstRate/UndrlygTp/**Othr** has to be populated	Document/FinInstrmRptg NonEqtyTrnsprncyDataRpt/NonEqtyTrnsprncyData/Deriv/IntrstRate/UndrlygTp/SwpRltd OR Document/FinInstrmRptg NonEqtyTrnsprncyDataRpt/NonEqtyTrnsprncyData/Deriv/IntrstRate/UndrlygTp/Othr	For **.../SwpRltd** the below values are valid: 'FFMC' for float to float multi-currency swaps 'XFMC' for fixed to float multi-currency swaps 'XXMC' for fixed to fixed multi-currency swaps 'OSMC' for OIS multi-currency swaps 'IFMC' for inflation multi-currency swaps 'FFSC' for float to float single-currency swaps 'XFSC' for fixed to float single-currency swaps 'XXSC' for fixed to fixed single-currency swaps 'OSSC' for OIS single-currency swaps 'IFSC' for inflation single-currency swaps For **.../Othr** the below values are valid: 'BOND' for bonds 'BNDF' for bond futures/forwards 'INTR' for interest rate 'IFUT' for interest rate futures/FRA
17	Issuer of the underlying bond	Interest rate derivatives where the underlying type is a bond or a bond future	The legal entity identifier (LEI) of the issuer of the direct or ultimate underlying bond	Document/FinInstrmRptg NonEqtyTrnsprncyDataRpt/NonEqtyTrnsprncyData/Deriv/IntrstRate/UndrlygBd/Issr	
18	Maturity date of the underlying bond	Interest rate derivatives where the underlying type is a bond or a bond future	To be populated with the date of maturity of the underlying bond. The field applies to debt instruments with defined maturity	Document/FinInstrmRptg NonEqtyTrnsprncyDataRpt/NonEqtyTrnsprncyData/Deriv/IntrstRate/UndrlygBd/MtrtyDt	
19	Issuance date of the underlying bond	Interest rate derivatives where the underlying type is a bond or a bond future	To be populated with the issuance date of the underlying bond.	Document/FinInstrmRptg NonEqtyTrnsprncyDataRpt/NonEqtyTrnsprncyData/Deriv/IntrstRate/UndrlygBd/IssncDt	

20	Notional currency of the swaption	Swaptions		Document/FinInstrmRptgNonEqtyTrnsprncyDataRpt/NonEqtyTrnsprncyData/Deriv/IntrstRate/SwptnNtnlCcy	
21	Maturity date of the underlying swap	Swaptions, futures on swaps and forwards on a swap		Document/FinInstrmRptgNonEqtyTrnsprncyDataRpt/NonEqtyTrnsprncyData/Deriv/IntrstRate/UndrlygSwpMtrtyDt	
22, 23	Inflation index	Swaptions	If the inflation index has an ISIN, the field NonEqtyTrnsprncyRpt/Deriv/IntrstRate/InfltnIndx/**ISIN** has to be populated with the ISIN for the inflation index. Otherwise, the field NonEqtyTrnsprncyRpt/Deriv/IntrstRate/InfltnIndx/**Nm** has to be populated with the name of the inflation index.	Document/FinInstrmRptgNonEqtyTrnsprncyDataRpt/NonEqtyTrnsprncyData/Deriv/IntrstRate/InfltnIndx/ISIN OR Document/FinInstrmRptgNonEqtyTrnsprncyDataRpt/NonEqtyTrnsprncyData/Deriv/IntrstRate/InfltnIndx/Nm	
24	Reference rate	Interest rate derivatives	If the reference rate has an index code, the field NonEqtyTrnsprncyRpt/Deriv/IntrstRate/Ref/RefRate/**Indx** has to be populated with the index code. Otherwise, the field NonEqtyTrnsprncyRpt/Deriv/IntrstRate/Ref/RefRate/**Nm** has to be populated with the name of the reference rate.	Document/FinInstrmRptgNonEqtyTrnsprncyDataRpt/NonEqtyTrnsprncyData/Deriv/IntrstRate/IntrstRateRef/RefRate/Indx OR Document/FinInstrmRptgNonEqtyTrnsprncyDataRpt/NonEqtyTrnsprncyData/Deriv/IntrstRate/IntrstRateRef/RefRate/Nm	
25	IR term of contract	Interest rate derivatives	The field NonEqtyTrnsprncyRpt/Deriv/IntrstRate/Ref/Term/**Unit** has to be populated with the unit of the term of the contract ('DAYS', 'WEEK', 'MNTH', 'YEAR'). The field NonEqtyTrnsprncyRpt/Deriv/IntrstRate/Ref/Term/**Val** has to be populated with the value of the term of the contract.	Document/FinInstrmRptgNonEqtyTrnsprncyDataRpt/NonEqtyTrnsprncyData/Deriv/IntrstRate/IntrstRateRef/Term/Unit AND Document/FinInstrmRptgNonEqtyTrnsprncyDataRpt	

			The combination of the fields should give the term of the contract. For instance if the term is 1 week: **.../Unit** should be populated with the value 'WEEK' and **.../Val** with the value 1.	/NonEqtyTrnsprncyData/Deriv/IntrstRate/IntrstRateRef/Term/Val	
26	Contract sub type	Foreign exchange derivatives	Field should be populated as to differentiate deliverable and non-deliverable forwards, options and swaps as defined in RTS2 / Annex III / Section 8 / Table 8.1	Document/FinInstrmRptgNonEqtyTrnsprncyDataRpt/NonEqtyTrnsprncyData/Deriv/FX/CtrctSubTp	The value provided corresponds to one of the below accepted values: 'DLVR' - Deliverable 'NDLV' - Non-deliverable
27	Underlying type for equity derivatives	Equity derivatives	If contract type is “SWAP” or “PSWP” and the underlying is a single name instrument (as per fields 26, 27, 28 of art.27 reference data), the value provided as underlying type (if any) corresponds to one of the following: • SHRS; • DVSE; • ETFS; • OTHR. If contract type is “SWAP” or “PSWP” and the underlying is an Index (as per fields 26, 27, 28 of art.27 reference data),the value provided as underlying type (if any) corresponds to one of the following: • STIX; • DIVI; • VOLI; • OTHR. If contract type is “SWAP” or “PSWP” and the underlying is a basket (as per fields 26, 27, 28 of art.27 reference data), the value provided as underlying type (if any) is BSKT. If contract type is different from “SWAP” and “PSWP”, the value provided as underlying type (if any) corresponds to one of the following: • STIX; • SHRS; • DIVI; • DVSE; • BSKT; • ETFS; • VOLI;	Document/FinInstrmRptgNonEqtyTrnsprncyDataRpt/NonEqtyTrnsprncyData/Deriv/Eqty/UndrlygTp/Bskt OR Document/FinInstrmRptgNonEqtyTrnsprncyDataRpt/NonEqtyTrnsprncyData/Deriv/Eqty/UndrlygTp/Indx OR Document/FinInstrmRptgNonEqtyTrnsprncyDataRpt/NonEqtyTrnsprncyData/Deriv/Eqty/UndrlygTp/SnglNm OR Document/FinInstrmRptgNonEqtyTrnsprncyDataRpt/NonEqtyTrnsprncyData/Deriv/Eqty/UndrlygTp/Othr	If contract type is “SWAP” or “PSWP” and the underlying is a single name instrument (as per fields 26, 27, 28 of art.27 reference data), the value provided as underlying type (if any) should correspond to one of the following: • SHRS; • DVSE; • ETFS; • OTHR. If contract type is “SWAP” or “PSWP” and the underlying is an Index (as per fields 26, 27, 28 of art.27 reference data),the value provided as underlying type (if any) should correspond to one of the following: • STIX; • DIVI; • VOLI; • OTHR. If contract type is “SWAP” or “PSWP” and the underlying is a basket (as per fields 26, 27, 28 of art.27 reference data), the value provided as underlying type (if any) should be BSKT. If contract type is different from “SWAP” and “PSWP”, the value provided as underlying type (if any) should correspond to one of the following: • STIX; • SHRS; • DIVI; • DVSE; • BSKT; • ETFS;

			• OTHR.		• VOLI; • OTHR.
28	Parameter	Equity derivatives with sub asset class of swaps, portfolio swaps		Document/FinInstrmRptg NonEqtyTrnsprncyDataRpt /NonEqtyTrnsprncyData/D eriv/Eqty/Param	The value provided corresponds to one of the below accepted values: 'PRBP' - Price return basic performance parameter 'PRDV' - Parameter return dividend 'PRVA' - Parameter return variance 'PRVO' - Parameter return volatility
29	Underlying type for CFDS/SPDB	Contracts for difference or spread betting	The accepted values are: 'CURR' - Currency 'EQUI' - Equity 'BOND' - Bonds 'FTEQ' - Futures on an equity 'OPEQ' - Options on an equity 'COMM' – Commodity 'EMAL' – Emission Allowances 'OTHR' - Other	Document/FinInstrmRptg NonEqtyTrnsprncyDataRpt /NonEqtyTrnsprncyData/D eriv/CtrctForDiff/UndrlygT p	
30	Notional currency 1	Contracts for difference or spread betting when underlying type is currency	Currency 1 of the underlying currency pair	Document/FinInstrmRptg NonEqtyTrnsprncyDataRpt /NonEqtyTrnsprncyData/D eriv/CtrctForDiff/NtnlCcy1	
31	Notional currency 2	Contracts for difference or spread betting when underlying type is currency	Currency 2 of the underlying currency pair	Document/FinInstrmRptg NonEqtyTrnsprncyDataRpt /NonEqtyTrnsprncyData/D eriv/CtrctForDiff/NtnlCcy2	

39	Issuer of sovereign and public type	Single name CDS and derivatives on a single name CDS	TRUE when the reference entity is a sovereign issuer as defined in RTS 2 / Annex III / Section 9 / Table 9.1, FALSE in other cases For **single name CDS**, the field Document/FinInstrmRptgNonEqtyTrnsprncyDataRpt/NonEqtyTrnsprncyData/Deriv/Cdt/SnglNmCdtDfltSwp/SvrgnIssr For **derivatives on a single name CDS**, the field Document/FinInstrmRptgNonEqtyTrnsprncyDataRpt/NonEqtyTrnsprncyData/Deriv/Cdt/SnglNmCdtDfltSwpDeriv/SnglNm/SvrgnIssr should be used	Document/FinInstrmRptgNonEqtyTrnsprncyDataRpt/NonEqtyTrnsprncyData/Deriv/Cdt/SnglNmCdtDfltSwp/SvrgnIssr OR Document/FinInstrmRptgNonEqtyTrnsprncyDataRpt/NonEqtyTrnsprncyData/Deriv/Cdt/SnglNmCdtDfltSwpDeriv/SnglNm/SvrgnIssr	
41	Reference entity	Single name CDS and derivatives on a single name CDS	If the reference entity of the CDS or the derivative is a country code, the field .../**Ctry** should be populated If the reference entity of the CDS or the derivative is a subdivision (2 character country code followed by dash "-" and up to 3 alphanumeric character country subdivision code), the field .../**CtrySubDvsn** should be populated If the reference entity of the CDS or the derivative has a LEI code, the field .../**LEI** should be populated	**Single name CDS** Document/FinInstrmRptgNonEqtyTrnsprncyDataRpt/NonEqtyTrnsprncyData/Deriv/Cdt/SnglNmCdtDfltSwp/RefPty/Ctry OR Document/FinInstrmRptgNonEqtyTrnsprncyDataRpt/NonEqtyTrnsprncyData/Deriv/Cdt/SnglNmCdtDfltSwp/RefPty/CtrySubDvsn OR Document/FinInstrmRptgNonEqtyTrnsprncyDataRpt/NonEqtyTrnsprncyData/Deriv/Cdt/SnglNmCdtDfltSwp/RefPty/LEI **Derivatives on a single name CDS** Document/FinInstrmRptgNonEqtyTrnsprncyDataRpt/NonEqtyTrnsprncyData/Deriv/Cdt/SnglNmCdtDfltSwpDeriv/SnglNm/RefPty/Ctry OR	

					Document/FinInstrmRptgNonEqtyTrnsprncyDataRpt/NonEqtyTrnsprncyData/Deriv/Cdt/SnglNmCdtDfltSwpDeriv/SnglNm/RefPty/CtrySubDvsn OR Document/FinInstrmRptgNonEqtyTrnsprncyDataRpt/NonEqtyTrnsprncyData/Deriv/Cdt/SnglNmCdtDfltSwpDeriv/SnglNm/RefPty/LEI	

42	Notional currency	Credit derivatives	The currency in which the notional is denominated.	**Single name CDS** Document/FinInstrmRptgNonEqtyTrnsprncyDataRpt/NonEqtyTrnsprncyData/Deriv/Cdt/SnglNmCdtDfltSwp/NtnlCcy **CDS index** Document/FinInstrmRptgNonEqtyTrnsprncyDataRpt/NonEqtyTrnsprncyData/Deriv/Cdt/CdtDfltSwpIndx/NtnlCcy **Derivatives on a single name CDS** Document/FinInstrmRptgNonEqtyTrnsprncyDataRpt/NonEqtyTrnsprncyData/Deriv/Cdt/SnglNmCdtDfltSwpDeriv/SnglNm/NtnlCcy **Derivatives on a CDS index** Document/FinInstrmRptgNonEqtyTrnsprncyDataRpt/NonEqtyTrnsprncyData/Deriv/Cdt/CdtDfltSwpIndxDeriv/Indx/NtnlCcy	
35	Series	CDS index and derivatives on a CDS index	The series number of the composition of the index	**CDS index** Document/FinInstrmRptgNonEqtyTrnsprncyDataRpt/NonEqtyTrnsprncyData/Deriv/Cdt/CdtDfltSwpIndx/Srs **Derivatives on a CDS index** Document/FinInstrmRptgNonEqtyTrnsprncyDataRpt	

				/NonEqtyTrnsprncyData/Deriv/Cdt/CdtDfltSwpIndxDeriv/Indx/Srs	
36	Version	CDS index and derivatives on a CDS index	The version of the CDS index. A new version of a series is issued if one of the constituents defaults and the index has to be re-weighted to account for the new number of total constituents within the index	**CDS index** Document/FinInstrmRptgNonEqtyTrnsprncyDataRpt/NonEqtyTrnsprncyData/Deriv/Cdt/CdtDfltSwpIndx/Vrsn **Derivatives on a CDS index** Document/FinInstrmRptgNonEqtyTrnsprncyDataRpt/NonEqtyTrnsprncyData/Deriv/Cdt/CdtDfltSwpIndxDeriv/Indx/Vrsn	
37	Roll months	CDS index and derivatives on a CDS index	All months when the roll is expected as established by the index provider for a given year. Field should be repeated for each month in the roll.	**CDS index** Document/FinInstrmRptgNonEqtyTrnsprncyDataRpt/NonEqtyTrnsprncyData/Deriv/Cdt/CdtDfltSwpIndx/RollMnth **Derivatives on a CDS index** Document/FinInstrmRptgNonEqtyTrnsprncyDataRpt/NonEqtyTrnsprncyData/Deriv/Cdt/CdtDfltSwpIndxDeriv/Indx/RollMnth	
38	Next roll date	CDS index and derivatives on a CDS index	The next roll date of the index as established by the index provider	**CDS index** Document/FinInstrmRptgNonEqtyTrnsprncyDataRpt/NonEqtyTrnsprncyData/Deriv/Cdt/CdtDfltSwpIndx/NxtRollDt **Derivatives on a CDS index**	The value provided should be greater than the respective reporting day

				Document/FinInstrmRptgNonEqtyTrnsprncyDataRpt/NonEqtyTrnsprncyData/Deriv/Cdt/CdtDfltSwpIndxDeriv/Indx/NxtRollDt	
32	ISIN code of the underlying credit default swap	Derivatives on a single name CDS	The ISIN code of the underlying swap	Document/FinInstrmRptgNonEqtyTrnsprncyDataRpt/NonEqtyTrnsprncyData/Deriv/Cdt/SnglNmCdtDfltSwpDeriv/UndrlygNmId	
40	Reference obligation	Derivatives on a single name CDS	The ISIN of the reference obligation	Document/FinInstrmRptgNonEqtyTrnsprncyDataRpt/NonEqtyTrnsprncyData/Deriv/Cdt/SnglNmCdtDfltSwpDeriv/OblgtnId	
33	Underlying index code	Derivatives on a CDS index	The ISIN code of the index	Document/FinInstrmRptgNonEqtyTrnsprncyDataRpt/NonEqtyTrnsprncyData/Deriv/Cdt/CdtDfltSwpIndxDeriv/UndrlygIndxId	
34	Underlying index name	Derivatives on a CDS index	The standardised name of the index	Document/FinInstrmRptgNonEqtyTrnsprncyDataRpt/NonEqtyTrnsprncyData/Deriv/Cdt/CdtDfltSwpIndxDeriv/IndxNm	
43	Emission allowances sub type	Emission allowance derivatives	The allowed values are: **CERE'** - CER **'ERUE'** - ERU **'EUAE'** - EUA **'EUAA'** - EUAA **‘OTHR’** - Other	Document/FinInstrmRptgNonEqtyTrnsprncyDataRpt/NonEqtyTrnsprncyData/Deriv/EmssnAllwnc	

5.6 Non-equity transparency quantitative data

5.6.1 File content

On a given day T, the transparency quantitative data to be sent by the submitting entities should be produced using all transactions executed on day T – (7 calendar days).

As an example, transparency quantitative data reported on Friday 15 September 2017 relates to all transactions executed on Friday 08 September 2017.

The file should consist of all the non-equity financial instruments that were involved in trading activity on T – (7 calendar days) for a given TV / APA / CTP. Number and volume of transactions that benefit from deferred publication shall be counted in the aggregates provided by the submitting entities, on the basis of the execution date, even during the period of deferred publication. Number and volume of transactions that were cancelled shall be excluded in the aggregates provided by the submitting entities.

Quantitative data for a given instrument should be broken down by size-of-transaction bins of number of transactions and notional amount traded. The information has to be repeated for each bin for which there is at least one transaction executed on the trading venue for the instrument identified on the reporting day. The size-of-transaction is expressed in euros except for emission allowances and emission allowances derivatives where it is expressed in tons of carbon dioxide.

Bins' range should be one of the following *(in Euros, except for Emission Allowances and Emission Allowance derivatives: Tons of Carbon Dioxide)*

Bins up to 200,000: [4]
]0 - 100,000[,
[100,000 – 100,000],
]100,000 - 200,000[,

100k bins above 200,000 and up to 1 million:
[200,000 - 300,000[,
…,
[900,000 - 1,000,000[;

500k bins from 1 to 10 million:
[1,000,000 - 1,500,000[,

[4] This special case allows to accommodate the rule that for Bonds except ETC / ETN, transactions up to 100,000 inclusive should be excluded from the computation. Reporting of transactions below or equal to 100,000 is still required for these instruments for the publication of the total number and volume of transactions across EU.

[1,500,000 - 2,000,000[,
...,
[9,500,000 - 10,000,000[;

5 million bins from 10 to 100 million:
[10,000,000 - 15,000,000[,
[15,000,000 - 20,000,000[,
...,
[95,000,000 - 100,000,000[;

25 million bins from 100 million:
[100,000,000 - 125,000,000[,
[125,000,000 - 150,000,000[,
...

Example

Assuming that for a TV (MIC: XATH), the transactions of a specific instrument (ISIN: XS1078807390) on a given day (12 – Apr – 2018) are:

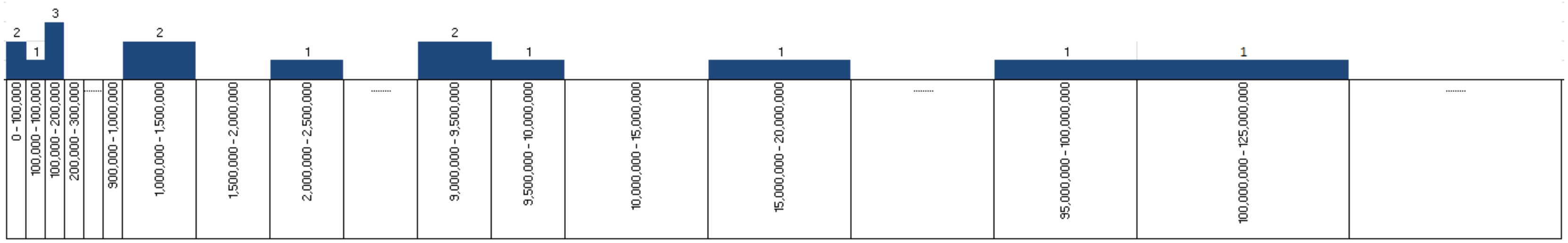
MIC	ISIN	Date	Amount
XATH	XS1078807390	12-Apr-18	80,000
XATH	XS1078807390	12-Apr-18	2,200,000
XATH	XS1078807390	12-Apr-18	20,000
XATH	XS1078807390	12-Apr-18	9,000,000
XATH	XS1078807390	12-Apr-18	100,000
XATH	XS1078807390	12-Apr-18	9,300,000
XATH	XS1078807390	12-Apr-18	120,000
XATH	XS1078807390	12-Apr-18	9,800,000
XATH	XS1078807390	12-Apr-18	180,000
XATH	XS1078807390	12-Apr-18	18,000,000
XATH	XS1078807390	12-Apr-18	150,000
XATH	XS1078807390	12-Apr-18	98,000,000
XATH	XS1078807390	12-Apr-18	1,200,000
XATH	XS1078807390	12-Apr-18	120,000,000
XATH	XS1078807390	12-Apr-18	1,000,000

The records that should be sent to FIRDS transparency system are:

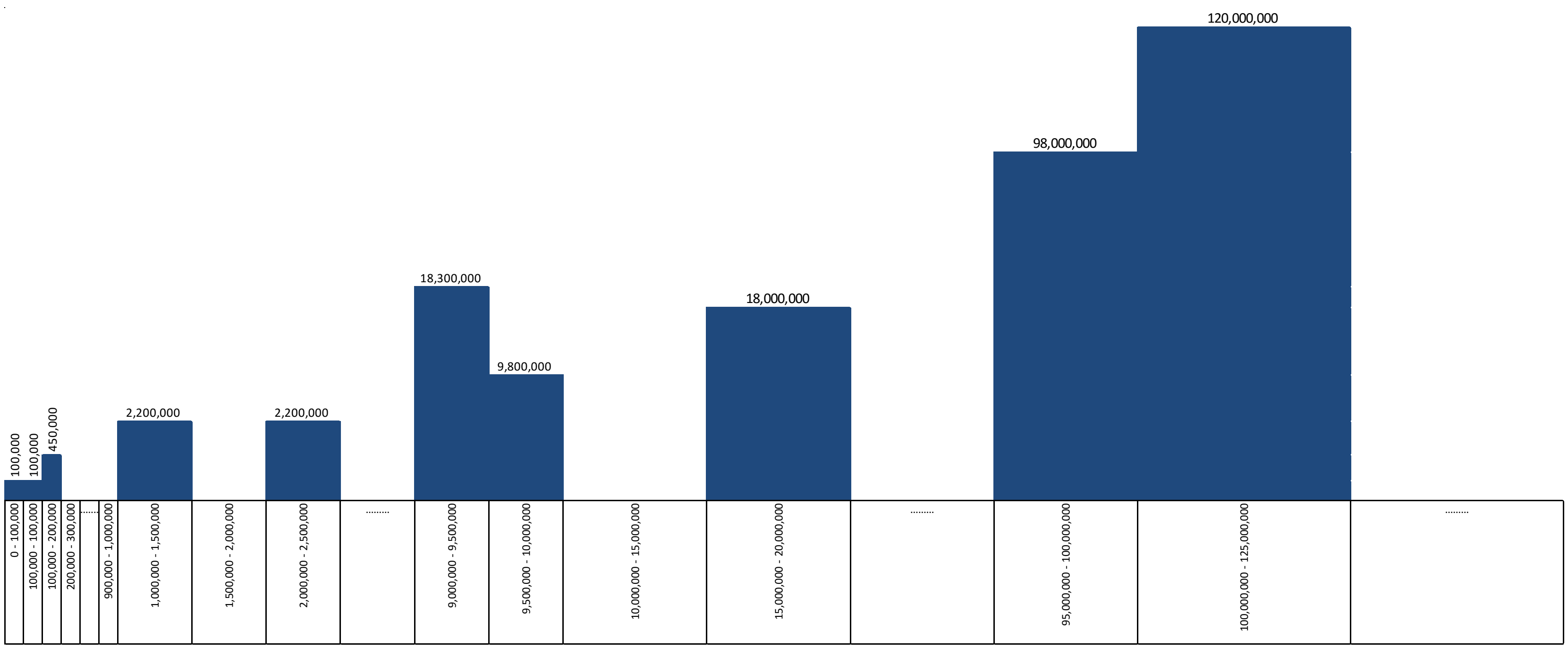
MIC	ISIN	Date	"Size of transaction" bin	Number of transactions executed for that bin	Total notional amount traded for that bin
XATH	XS1078807390	12-Apr-18	] 0 - 100,000 [	2	100,000
			[100,000 - 100,000]	1	100,000
			] 100,000 - 200,000 [	3	450,000
			[1,000,000 - 1,500,000 [	2	2,200,000
			[2,000,000 - 2,500,000 [	1	2,200,000
			[9,000,000 - 9,500,000 [	2	18,300,000
			[9,500,000 - 10,000,000 [	1	9,800,000
			[15,000,000 - 20,000,000 [	1	18,000,000
			[95,000,000 - 100,000,000 [	1	98,000,000
			[100,000,000 - 125,000,000 [	1	120,000,000

Visually, the example can be represented by the below histograms:

Number of transactions executed for that bin



Total notional amount traded for that bin



Correction of erroneous records follows the same logic as for equity transparency quantitative data.

5.6.2 File fields

5.6.2.1 Message header (MHD)

Same as 5.3.2.1, except that the XPath should use Document/FinInstrmRptgNonEqtyTradgActvtyRpt instead of Document/FinInstrmRptgEqtyTrnsprncyDataRpt

5.6.2.2 Business Fields (BF) – Non-Equity transparency report

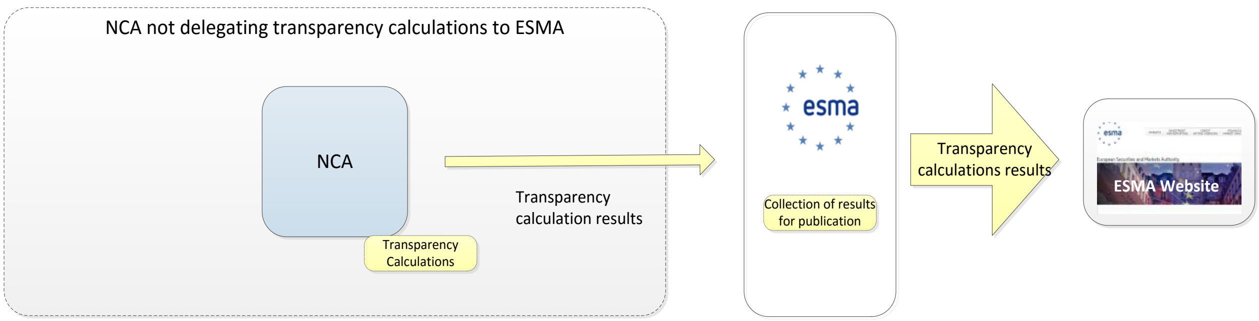
Field name	Type of instruments	Reporting Instruction	Xpath	Data validation
Technical record identification	All non-equity instruments	Internal numbering of records. Must be unique for each record as it is used for error management and status advice messages	Document/FinInstrmRptgNonEqtyTradgActvtyRpt/NonEqtyTrnsprncyData/TechRcrdId	
Instrument identification code	All non-equity instruments	ISIN code used to identify the financial instrument.	Document/FinInstrmRptgNonEqtyTradgActvtyRpt/NonEqtyTrnsprncyData/Id	ISIN code should pass checksum validation
Reporting day	All non-equity instruments	This field should be populated with the day for which the additional quantitative data is provided.	Document/FinInstrmRptgNonEqtyTradgActvtyRpt/NonEqtyTrnsprncyData/RptgDt	1. The date provided should not be a non-working day as reported by the Trading Venue to the FIRDS "Reference data" system 2. The date provided should be in line with the Reporting period reported in the message header 3. The date provided should be less or equal to the "Termination date of the instrument" (RTS 23 / Field 12) 4. The date provided is today or in the past
Trading venue	All non-equity instruments	This field should be populated with the segment MIC of the trading venue to which the record relates, if available, otherwise with the operating MIC.	Document/FinInstrmRptgNonEqtyTradgActvtyRpt/NonEqtyTrnsprncyData/TradgVn	1. The value provided should exist and be active for the reporting period 2. The value provided should correspond to the Reporting Entity provided in the header
Suspended instrument flag	All non-equity instruments	Indicator of whether the instrument was suspended for trading on the respective TV / APA on the reporting day. Under transparency quantitative data, an instrument is characterised as	Document/FinInstrmRptgNonEqtyTradgActvtyRpt/NonEqtyTrnsprncyData/Sspnsn	

		suspended only if it is suspended during the whole day. If the instrument is suspended for the whole day, transactions related fields should be zero.		
Total number of transactions executed	All non-equity instruments	Total number of transactions executed on the reporting day for the instrument. Transactions that have been cancelled should be excluded from the reported figure. Transactions that benefit from deferred publication shall be counted in the aggregates provided by the submitting entities, on the basis of the execution date. In all cases, the field has to be populated with a value greater than or equal to zero. For instruments that are suspended for the whole day, the field should have zero value.	Document/FinInstrmRptgNonEqtyTradgActvtyRpt/NonEqtyTrnsprncyData/NbTxs	
“Size of transaction” bin range	All non-equity instruments	Minimum size (inclusive – from 200,000) and maximum size of transactions (exclusive – from 200,000) defining which transactions should be counted in the reported number of transactions executed and total notional amount traded for that bin. Size should be expressed in Euros except for Emission Allowances and Emission Allowance derivatives (Tons of Carbon Dioxide). If the instrument is suspended, no bins need to be reported.	Document/FinInstrmRptgNonEqtyTradgActvtyRpt/NonEqtyTrnsprncyData/AggtdQttvData/Rg/FrQty AND Document/FinInstrmRptgNonEqtyTradgActvtyRpt/NonEqtyTrnsprncyData/AggtdQttvData/Rg/ToQty	The “Size of transaction bin range should have one of the below values: *]0 - 100,000[,* *[100,000 – 100,000],* *]100,000 - 200,000[,* *[200,000 - 300,000[,* *..., (step=+100,000)* *[900,000 - 1,000,000[,* *[1,000,000 - 1,500,000[,* *[1,500,000 - 2,000,000[,* *..., (step=+500,000)* *[9,500,000 - 10,000,000[,* *[10,000,000 - 15,000,000[,* *[15,000,000 - 20,000,000[,* *..., (step=+5,000,000)* *[95,000,000 - 100,000,000[* *[100,000,000 - 125,000,000[,* *[125,000,000 - 150,000,000[,* *... (step=+25,000,000)*

Number of transactions executed for that bin	All non-equity instruments	Total number of transactions executed on the reporting day which size lies in the bin's range. Transactions that have been cancelled should be excluded from the reported figure. Transactions that benefit from deferred publication shall be counted in the aggregates provided by the submitting entities, on the basis of the execution date.	Document/FinInstrmRptgNonEqtyTradgActvtyRpt/NonEqtyTrnsprncyData/AggtdQttvData/NbOfTxs	
Total notional amount traded for that bin	All non-equity instruments	Total notional amount traded represented by all transactions executed on the reporting day which size lies in the bin's range, in Euros (except for Emission Allowance and Emission Allowance derivatives: Tons of carbon dioxide). Transactions that have been cancelled should be excluded from the reported figure. Transactions that benefit from deferred publication shall be counted in the aggregates provided by the submitting entities, on the basis of the execution date.	Document/FinInstrmRptgNonEqtyTradgActvtyRpt/NonEqtyTrnsprncyData/AggtdQttvData/TtlNtnlAmt	1. The value provided should be between the range [”Size of transaction bin range (From Quantity)” x “Number of transactions executed for that bin” , “Size of transaction bin range (To Quantity)” x “Number of transactions executed for that bin”]. 2. The value provided should be zero if “Number of transactions for that bin” is zero 3. The value provided should not be zero if “Number of transactions for that bin” is not zero.

6 Collection of transparency results from Non-delegating NCAs

This paragraph is for National Competent Authorities only, and more specifically for NCAs not delegating transparency calculations to ESMA.



Message Name	File type	Direction from ESMA System point of view	ISO 20022 Message Definition Identifier
Equity Transparency Results	DATECR	Incoming	auth.044.001.01
Non-Equity Transparency Results	DATNCR	Incoming	auth.045.001.01

The ESMA system will collect transparency calculation results from Non-Delegating NCAs for all instruments for which they have the responsibility to perform transparency calculations. On a daily basis, the non-delegating NCAs should consult the FIRDS reference data system in order to extract the list of ISINs for which they are the relevant competent authority (RCA).

Non-delegating NCAs will have the possibility to provide such results every day by 23:59 CET. Results on ISINs for which transparency results were provided previously will be updated accordingly.

6.1 Equity transparency calculation results

6.1.1 Message header

Same as 5.3.2.1, except that the XPath should use Document/FinInstrmRptgEqtyTradgActvtyRslt instead of Document/FinInstrmRptgEqtyTrnsprncyDataRpt

6.1.2 Equity calculation results report

Field name	Reporting Instruction	Xpath	Data validation
Technical record identification	Internal numbering of records. Should be unique for each record as it is used for error management and status advice messages. The field is mandatory.	Document/FinInstrmRptgEqtyTradgActvtyRslt/EqtyTrnsprncyData/TechRcrdId	
Instrument identification code	ISIN code used to identify the financial instrument. The field is mandatory	Document/FinInstrmRptgEqtyTradgActvtyRslt/EqtyTrnsprncyData/Id	ISIN code must pass checksum validation The ISIN exists in the FIRDS Reference Data view and it corresponds to an equity financial instrument
Instrument full name	Full name of the financial instrument. The field is optional as the full name used as the reference for the ISIN is the one reported under RTS 23 / field 2.	Document/FinInstrmRptgEqtyTradgActvtyRslt/EqtyTrnsprncyData/FullNm	
Reporting period	Period to which the reported data relate. For records that refer to new instruments estimates (ESTM) the field should not be reported. For records that refer to the first four weeks of trading (FFWK), the field must be populated with the exact 4-week period For records that refer to calculations for the systematic internalisers regime (SINT) the field must be populated with the period that corresponds to the data used for the calculation, even if the instrument has started being traded after the start of the period or was terminated before the end of the period. The periods are:	Document/FinInstrmRptgEqtyTradgActvtyRslt/EqtyTrnsprncyData/RptgPrd/FrDtToDt/FrDt Document/FinInstrmRptgEqtyTradgActvtyRslt/EqtyTrnsprncyData/RptgPrd/FrDtToDt/ToDt	

	1/Jul/Y - 31/Dec/Y 1/Oct/Y - 31/Mar/Y 1/Jan/Y - 30/Jun/Y 1/Apr/Y - 30/Sep/Y For records that refer to yearly calculations (YEAR), the field must be populated with the full year period (1/Jan/Y – 31/Dec/Y), even if the instrument has started being traded after the start of the period or was terminated before the end of the period.		
Liquidity	Flag indicating if this ISIN is liquid or not according to transparency calculations results. Mandatory when methodology is 'ESTM', 'FFWK' or 'YEAR'.	Document/FinInstrmRptgEqtyTradgActvtyRslt/EqtyTrnsprncyData/Lqdty	
Methodology	Methodology that has been used to calculate the result. The acceptable values are: 'ESTM' for the estimated results 'FFWK' for the results after the first four weeks of trading 'YEAR' for the yearly calculation results 'SINT' for calculations related to the systematic internalisers regime	Document/FinInstrmRptgEqtyTradgActvtyRslt/EqtyTrnsprncyData/Mthdlgy	
Average daily turnover	Average Daily Turnover for the instrument in Euros Mandatory when methodology is 'ESTM', 'FFWK' or 'YEAR'.	Document/FinInstrmRptgEqtyTradgActvtyRslt/EqtyTrnsprncyData/Sttstcs/AvrgDalyTrnvr	The Ccy attribute should be EUR
Average transaction value	Average value of the transactions for the instrument in Euros Mandatory when methodology is 'ESTM', 'FFWK' or 'YEAR'.	Document/FinInstrmRptgEqtyTradgActvtyRslt/EqtyTrnsprncyData/Sttstcs/AvrgTxVal	The Ccy attribute should be EUR
Average daily number of transactions	Average daily number of transactions that have been performed on this market	Document/FinInstrmRptgEqtyTradgActvtyRslt/EqtyTrnsprncyData/Sttstcs/AvrgDalyNbOfTxs	
Total number of transactions executed	Total number of transactions that have been performed on this market Mandatory when methodology is 'SINT'.	Document/FinInstrmRptgEqtyTradgActvtyRslt/EqtyTrnsprncyData/Sttstcs/TtlNbOfTxsExctd	

Total volume of transactions executed	Total volume of transactions that have been performed on this market in Euros. Mandatory when methodology is 'SINT'.	Document/FinInstrmRptgEqtyTradgActvtyRslt/EqtyTrnsprncyData/Sttstcs/TtlVolOfTxsExctd	
Total number of trading days	Total number of trading days on which the calculation results were based	Document/FinInstrmRptgEqtyTradgActvtyRslt/EqtyTrnsprncyData/Sttstcs/TtlNbOfTradgDays	
Relevant market identification	Most relevant market in terms of liquidity as defined in Article 4(1)(a) of Regulation (EU) No 600/2014 Mandatory when methodology is 'ESTM', 'FFWK' or 'YEAR'.	Document/FinInstrmRptgEqtyTradgActvtyRslt/EqtyTrnsprncyData/RlvntMkt/Id	
Relevant market average daily number of transactions	Average daily number of transactions that have been performed on the most relevant market in terms of liquidity Mandatory when methodology is 'ESTM', 'FFWK' or 'YEAR'.	Document/FinInstrmRptgEqtyTradgActvtyRslt/EqtyTrnsprncyData/RlvntMkt/AvrgDalyNbOfTxs	

6.2 Non-Equity transparency calculation results

6.2.1 Message header

Same as 5.3.2.1, except that the XPath should use Document/FinInstrmRptgEqtyTradgActvtyRslt instead of Document/FinInstrmRptgEqtyTrnsprncyDataRpt

6.2.2 Non-Equity calculation results report

Field name	Reporting Instruction	Xpath	Data validation
Technical record identification	Internal numbering of records. Must be unique for each record as it is used for error management and status advice messages. The field is mandatory.	Document/FinInstrmRptgNonEqtyTradgActvtyRslt/NonEqtyTrnsprncyData/TechRcrdId	
Instrument identification code	ISIN code used to identify the financial instrument. The field is mandatory	Document/FinInstrmRptgNonEqtyTradgActvtyRslt/NonEqtyTrnsprncyData/Id	ISIN code must pass checksum validation The ISIN exists in the FIRDS Reference Data view and it corresponds to an equity financial instrument
Instrument full name	Full name of the financial instrument. The field is optional as the full name used as the reference for the ISIN is the one reported under RTS 23 / field 2.	Document/FinInstrmRptgNonEqtyTradgActvtyRslt/NonEqtyTrnsprncyData/FullNm	
Reporting period	Period to which the quantitative data fields relate. For records that refer to new instruments results (allocation to a subclass) the field should not be reported. For records that refer to bonds' quarterly liquidity calculations, the field must be populated with the period that corresponds to the data used for the calculation, even if the instrument has started being traded after the start of the period or was terminated before the end of the period. The periods are: 1/Jan/Y - 31/Mar/Y 1/Apr/Y - 30/Jun/Y 1/Jul/Y - 30/Sep/Y 1/Oct/Y - 31/Dec/Y For records that refer to calculations for the systematic internalisers regime, the field must be populated with the period that corresponds to the data used for the calculation, even if the instrument has started being traded after the start of the period or was terminated before the end of the period. The periods are:	Document/FinInstrmRptgNonEqtyTradgActvtyRslt/NonEqtyTrnsprncyData/RptgPrd/FrDtToDt/FrDt Document/FinInstrmRptgNonEqtyTradgActvtyRslt/NonEqtyTrnsprncyData/RptgPrd/FrDtToDt/ToDt	

	1/Jul/Y - 31/Dec/Y 1/Oct/Y - 31/Mar/Y 1/Jan/Y - 30/Jun/Y 1/Apr/Y - 30/Sep/Y For records that refer to yearly calculations, the field must be populated with the full year period (1/Jan/Y – 31/Dec/Y), even if the instrument has started being traded after the start of the period or was terminated before the end of the period		
Liquidity	Flag indicating if this ISIN is liquid or not according to transparency calculations. Mandatory to report bonds' quarterly liquidity results, or to report other non-equity transparency calculation results. Not to be reported when reporting results of calculations related to systematic internalisers regime, or when reporting bonds' transparency calculations results other than liquidity.	Document/FinInstrmRptgNonEqtyTradgActvtyRslt/NonEqtyTrnsprncyData/Lqdty	
Pre Trade Large In Scale threshold	The pre-trade Large in Scale threshold. In case the financial instrument corresponds to Emission Allowances, the field **.../Nb** should be populated with the threshold in tons of carbon dioxide. In all other cases the field **.../Amt** should be populated and reported in EUR. Mandatory except when reporting bonds' quarterly liquidity results or when reporting results of calculations related to systematic internalisers regime.	Document/FinInstrmRptgNonEqtyTradgActvtyRslt/NonEqtyTrnsprncyData/PreTradLrgInScaleThrshld/Nb OR Document/FinInstrmRptgNonEqtyTradgActvtyRslt/NonEqtyTrnsprncyData/PreTradLrgInScaleThrshld/Amt	When using Amt, the Ccy attribute should be EUR
Post Trade Large In Scale threshold	The post-trade Large in Scale threshold. In case the financial instrument corresponds to Emission Allowances, the field **.../Nb** should be populated with the threshold in tons of carbon dioxide. In all other cases the field **.../Amt** should be populated and reported in EUR. Mandatory except when reporting bonds' quarterly liquidity results or when reporting results of calculations related to systematic internalisers regime.	Document/FinInstrmRptgNonEqtyTradgActvtyRslt/NonEqtyTrnsprncyData/PstTradLrgInScaleThrshld/NbOR Document/FinInstrmRptgNonEqtyTradgActvtyRslt/NonEqtyTrnsprncyData/PstTradLrgInScaleThrshld/Amt	When using Amt, the Ccy attribute should be EUR

Pre Trade Instrument Size Specific Threshold	The pre-trade Size Specific to an Instrument threshold. In case the financial instrument corresponds to Emission Allowances, the field **.../Nb** should be populated with the threshold in tons of carbon dioxide. In all other cases the field **.../Amt** should be populated and reported in EUR. Mandatory except when reporting bonds' quarterly liquidity results or when reporting results of calculations related to systematic internalisers regime.	Document/FinInstrmRptgNonEqtyTradgActvtyRslt/NonEqtyTrnsprncyData/PreTradInstrmSzSpcfcThrshld/Nb OR Document/FinInstrmRptgNonEqtyTradgActvtyRslt/NonEqtyTrnsprncyData/PreTradInstrmSzSpcfcThrshld/Amt	When using Amt, the Ccy attribute should be EUR
Post Trade Instrument Size Specific Threshold	The post-trade Size Specific to an Instrument threshold. In case the financial instrument corresponds to Emission Allowances, the field **.../Nb** should be populated with the threshold in tons of carbon dioxide. In all other cases the field **.../Amt** should be populated and reported in EUR. Mandatory except when reporting bonds' quarterly liquidity results or when reporting results of calculations related to systematic internalisers regime.	Document/FinInstrmRptgNonEqtyTradgActvtyRslt/NonEqtyTrnsprncyData/PstTradInstrmSzSpcfcThrshld/Nb OR Document/FinInstrmRptgNonEqtyTradgActvtyRslt/NonEqtyTrnsprncyData/PstTradInstrmSzSpcfcThrshld/Amt	When using Amt, the Ccy attribute should be EUR
Total number of transactions executed	Total number of transactions that have been performed on this market. Mandatory when reporting results of calculations related to systematic internalisers regime.	Document/FinInstrmRptgNonEqtyTradgActvtyRslt/NonEqtyTrnsprncyData/Sttstcs/TtlNbOfTxsExctd	
Total volume of transactions executed	Total volume of transactions that have been performed on this market. This total volume must be reported in EUR. Mandatory when reporting results of calculations related to systematic internalisers regime.	Document/FinInstrmRptgNonEqtyTradgActvtyRslt/NonEqtyTrnsprncyData/Sttstcs/TtlVolOfTxsExctd	

7 Annex 1: Field type definitions

SYMBOL	DATA TYPE	DEFINITION
{ALPHANUM-n}	Up to n alphanumerical characters	Free text field.
{COUNTRYCODE_2}	2 alphanumerical characters	2 letter country code, as defined by ISO 3166-1 alpha-2 country code
{CURRENCYCODE_3 }	3 alphanumerical characters	3 letter currency code, as defined by ISO 4217 currency codes
{DATE_TIME_FORMAT}	ISO 8601 date and time format	- Date and time in the following format: YYYY-MM-DDThh:mm:ss.ddddddZ. - 'YYYY' is the year; - 'MM' is the month; - 'DD' is the day; - 'T' – means that the letter 'T' shall be used - 'hh' is the hour; - 'mm' is the minute; - 'ss.dddddd' is the second and its fraction of a second; - Z is UTC time. Dates and times shall be reported in UTC.
{DATEFORMAT}	ISO 8601 date format	Dates shall be formatted by the following format: YYYY-MM-DD.
{DECIMAL-n/m}	Decimal number of up to n digits in total of which up to m digits can be fraction digits	Numerical field for both positive and negative values. - decimal separator is '.' (full stop); - negative numbers are prefixed with '-' (minus); - values are rounded and not truncated.
{INDEX}	4 alphabetic characters	'EONA' – EONIA 'EONS' - EONIA SWAP 'EURI' - EURIBOR 'EUUS'-EURODOLLAR 'EUCH' - EuroSwiss 'GCFR' - GCF REPO 'ISDA' - ISDAFIX 'LIBI' - LIBID 'LIBO' - LIBOR 'MAAA' – Muni AAA

		'PFAN' - Pfandbriefe 'TIBO' - TIBOR 'STBO' - STIBOR 'BBSW' - BBSW 'JIBA' - JIBAR 'BUBO' - BUBOR 'CDOR' - CDOR 'CIBO' - CIBOR 'MOSP' - MOSPRIM 'NIBO' - NIBOR 'PRBO' - PRIBOR 'TLBO' - TELBOR 'WIBO' – WIBOR 'TREA' – Treasury 'SWAP' – SWAP 'FUSW' – Future SWAP
{INTEGER-n}	Integer number of up to n digits in total	Numerical field for both positive and negative integer values.
{ISIN}	12 alphanumerical characters	ISIN code, as defined in ISO 6166
{LEI}	20 alphanumerical characters	Legal entity identifier as defined in ISO 17442
{MIC}	4 alphanumerical characters	Market identifier as defined in ISO 10383

8 Annex 2: File format: XML schemas

9 Annex 3: Data validation codes

9.1 Transmission Validation Rules

When a submitting entity uploads a file into HUBEX/HUBDE, preliminary transmission checks are performed based on the file naming convention (4.3 File naming convention) as follows:

- Check that <Sender> matches the sender account (It is not possible for an entity to submit a file on behalf of another),
- If OK, check that the file naming convention is respected,
- If OK, check that the sender is allowed to send files to the receiver, and
- If OK, check that file size is lower than remaining disk quota size.

Then, if all those checks are passed, the ESMA system performs the following transmission checks.

Error code	Error Message	Control
FIL-101	The file cannot be decompressed.	All files on the ESMA System are compressed in zip format. When treating a file, the first step is the decompression of the zip file. This error is returned by the system if the file cannot be decompressed.
FIL-102	The file contains more than 1 XML file.	Once the file is decompressed, the ESMA system checks that the decompressed container zip file contains exactly one XML file. This error is returned by the system when no XML or more than one file is found.

FIL-103	The name of the XML file is not consistent with the name of its container ZIP file.	Once the file is decompressed and that exactly only one XML file is submitted, the ESMA System checks that the sender code, the file type code, the sequence number code, the receiver code and the year code of the XML file and the ZIP file are equal. This error is returned by the system when at least one of those fields is not equal.

9.2 Format Validation Rules

Error code	Error Message	Control
Feedback messages related to file validation		
FIL-104	The ISO 20022 Message Identifier in the BAH must refer to the latest approved schema.	Check whether the ISO 20022 Message Identifier in the BAH (*.xsd) is valid. If not, proceed with error.
FIL-105	The file structure does not correspond to the XML schema: [result of XML validation]	Validate that the file sent fits to the corresponding XML schema. For information purposes, if there is an error in the validation, the error message produced by the XML parser is displayed in place of [result of XML validation].
FIL-107	File <Filename> has already been submitted once	When a file is received, the system checks whether a file with the same sender code, file type code, sequence number code, receiver code and year code of the XML has already been submitted to the ESMA system. The system rejects the file existing in the reporting files table.
FIL-106	The “Reporting Entity” is not registered at ESMA or the Submitting Entity is not responsible for submitting its data.	Validate the file as follows: 1. Extracts from the Reporting Flow view the Submitting entity identification associated to the Reporting entity identifier code in the Reporting header of the submitted file. 2. Checks that the Submitting entity identification extracted in step 1 is equal to the sender code of the submitted file.

ETR-001 / ETQ-001 / NTR-001 / NTQ-001	The identification code of the "Reporting entity" is not valid.	Check whether the value provided as reporting entity exists in the FIRDS Trading Venues mapping table in case of trading venue, the APA register in case of APA, the CTP register in case of CTP and the Reporting Day is within the period defined by the Validity start and end date. If not, proceed with error.

9.3 Content Validation Rules for equity transparency reference data

Error	Field	Error Message	Control executed by the system
ETR-002	"Trading Venue"	The MIC code of the trading venue is not valid.	Check whether the MIC code exists in the FIRDS Trading Venues mapping table in case of trading venue or CTP[5]and the Reporting Day is within the period defined by the Validity start and end date. If not, proceed with error.
ETR-003	"Reporting entity" / "Trading Venue" combination	The reporting entity does not match with the respective trading venue.	Check whether the values provided as "Reporting entity" and "Trading venue" exist in the same record of FIRDS Reporting Flow View If not, proceed with error.
ETR-004	"Trading Venue" / "Reporting date" combination	The reporting entity (MIC) is not open for trading on that reporting day.	Check whether the MIC belongs to a TV which is opened to trading based on the Non-Working Days table. If not, proceed with error.
ETR-005	"Reporting period" / "Reporting date" combination	The reporting date does not correspond to the reporting period submitted in the header.	Check whether the "Reporting date" submitted in the message body corresponds to the "Reporting period" submitted in the message header. If not, proceed with error.
The following validations shall only be performed if the above checks are successful.			
ETR-006	"Reporting date" / field 12 (art. 27) "Termination date of the instrument"	Reporting date is greater than the instrument's termination date for ***MIC**.*	Check whether the date provided as a reporting day for the additional reference data is less or equal to the termination date of the instrument. If not, proceed

[5] In case of APA, trades should be OTC and no Trading Venue information is expected to be reported

	combination		with error.
ETR-007	“Instrument identification code” / “Reporting entity” / “Reporting date” combination	The following records are reported twice in the same file.	Check that a record (ISIN, MIC, Reporting day) is not reported twice in the same file. If it is, proceed with error.
ETR-008	“Financial instrument classification” / field 3 (art. 27) “Instrument classification” combination	The MiFIR identifier does not correspond to the CFI code received by ESMA under Article 27	Check whether the value provided as MiFIR identifier corresponds to the CFI code provided in art.27 reference data for the same instrument. If not, proceed with error.
ETR-009	“Number of outstanding instruments”	Number of outstanding instruments is less than the acceptable threshold	Check whether the value provided as number of outstanding instruments is greater than or equal to the acceptable. If not, proceed with error.
ETR-010	“Price of the instrument”	Price of the instrument is less than the acceptable threshold	Check whether the value provided as price of instrument is greater than or equal to the acceptable threshold. If not, proceed with error.
ETR-011	“Holdings exceeding total voting right threshold”	Holdings exceeding 5% of total voting rights is less than the acceptable threshold.	Check whether the value provided as Holdings exceeding 5% of total voting rights is greater than or equal to than the acceptable threshold. If not, proceed with error.
ETR-012	“Issuance size”	Issuance size is less than the acceptable threshold	Check whether the value provided as issuance size is greater than or equal to the acceptable threshold. If not, proceed with error.
ETR-013	“Number of outstanding instruments” / “Holdings exceeding total voting right threshold”	Holdings exceeding 5% of total voting rights cannot be more that the total number of outstanding instruments.	Check whether the value provided as holdings exceeding 5% of total voting rights is less than the number of outstanding instruments. If not, proceed with error.
ETR-014	“Price of the instrument” currency	The price should be expressed in Euros.	Check whether the currency provided together with the price of the instruments is EUR. If not, proceed with error.

9.4 Content Validation Rules for equity transparency quantitative data

Error	Field	Error Message	Control executed by the system
ETQ-002	"Trading Venue"	The MIC code of the trading venue is not valid.	Check whether the MIC code exists in the FIRDS Trading Venues mapping table in case of trading venue or CTP and the Reporting Day is within the period defined by the Validity start and end date. If not, proceed with error.
ETQ-003	"Reporting entity" / "Trading Venue" combination	The reporting entity does not match with the respective trading venue.	Check whether the values provided as "Reporting entity" and "Trading venue" exist in the same record of FIRDS Reporting Flow View. If not, proceed with error.
ETQ-004	"Trading Venue" / "Reporting date " combination	The reporting entity (MIC is not open for trading on that reporting day.	Check whether the MIC belongs to a which is open for trading based on the Non-Working Days table. If not, proceed with error.
ETQ-005	"Reporting period" / "Reporting date" combination	The reporting date does not correspond to the reporting period submitted in the header.	Check whether the "Reporting date" submitted in the message body corresponds to the "Reporting period" submitted in the message header. If not, proceed with error.
The following validations shall only be performed if the above checks are successful.			
ETQ-006	"Reporting date"	The reporting day is a future date.	Check whether the date provided as a reporting day is today or in the past. If not, proceed with error.
ETQ-007	"Reporting date" / field 12 (art.27)"Termination date of the instrument" combination	Reporting day is greater than the instrument's termination date.	Check whether the date provided as a reporting day is less or equal to the termination date of the instrument. If not, proceed with error.
ETQ-008	"Instrument identification code" / "Reporting entity" / "Reporting date" combination	The following records are reported twice in the same file.	Check that a record (ISIN, MIC, Reporting day) is not reported twice in the same file. If it is, proceed with error.
ETQ-009	"Number of transactions executed" against "Volume of transactions executed"	Volume of transactions executed should be zero (given that the number of transactions executed is zero).	If "Number of transactions executed" is zero check that "Volume of transactions executed" is zero as well. If not, proceed with error.
ETQ-010	"Number of transactions executed"	Volume of transactions executed cannot be zero (given that the	If "Number of transactions executed" is not zero check that "Volume of transactions executed" is not zero as

	against "Volume of transactions executed"	number of transactions executed is not zero).	well. If it is, proceed with error.
ETQ-011	"Volume of transactions executed" currency	The volume of transactions executed should be expressed in Euros.	Check whether the currency provided together with the volume of transactions executed is EUR. If not, proceed with error.
ETQ-012	"Number of transactions executed, excluding all transactions executed under **pre-trade** waivers of MiFIR Art 4(1) (a) to (c)."	Number of transactions executed, excluding all transactions executed under **pre-trade** waivers of MiFIR Art 4(1) (a) to (c) is higher than the total number of transactions executed	Check whether number of transactions executed, excluding all transactions executed under **pre-trade** waivers of MiFIR Art 4(1) (a) to (c) is lower or equal than the "Number of transactions executed" If not, proceed with error.
ETQ-013	"Volume of transactions executed, excluding all transactions executed under **pre-trade** waivers of MiFIR Art 4(1) (a) to (c)."	Volume of transactions executed, excluding all transactions executed under **pre-trade** waivers of MiFIR Art 4(1) (a) to (c) is higher than the total volume of transactions executed	Check whether volume of transactions executed, excluding all transactions executed under **pre-trade** waivers of MiFIR Art 4(1) (a) to (c) is lower or equal than the "Volume of transactions executed" If not, proceed with error.
ETQ-014	"Volume of transactions executed, excluding all transactions executed under **pre-trade** waivers of MiFIR Art 4(1) (a) to (c)." currency	The volume of transactions executed, excluding all transactions executed under **pre-trade** waivers of MiFIR Art 4(1) (a) to (c). should be expressed in Euros.	Check whether the currency provided together with the volume of transactions executed, excluding all transactions executed under **pre-trade** waivers of MiFIR Art 4(1) (a) to (c). is EUR. If not, proceed with error.
ETQ-015	"Number of transactions executed, excluding all transactions executed under **pre-trade** waivers of MiFIR Art 4(1) (a) to (c)." against "Volume of transactions executed, excluding all transactions executed under **pre-trade** waivers of MiFIR Art 4(1) (a) to (c)."	"Volume of transactions executed, excluding all transactions executed under **pre-trade** waivers of MiFIR Art 4(1) (a) to (c)." cannot be zero (as per "Number of transactions executed, excluding all transactions executed under **pre-trade** waivers of MiFIR Art 4(1) (a) to (c).").	If "Number of transactions executed, excluding all transactions executed under **pre-trade** waivers of MiFIR Art 4(1) (a) to (c)."is zero check whether "Volume of transactions executed, excluding all transactions executed under **pre-trade** waivers of MiFIR Art 4(1) (a) to (c)." is zero as well. If not, proceed with error.
ETQ-016	"Number of transactions executed,	"Volume of transactions executed, excluding all	If "Number of transactions executed, excluding all transactions executed under **pre-trade** waivers of MiFIR

	excluding all transactions executed under **pre-trade** waivers of MiFIR Art 4(1) (a) to (c).” against “Volume of transactions executed”	transactions executed under **pre-trade** waivers of MiFIR Art 4(1) (a) to (c).” should be zero (as per “Number of transactions executed, excluding all transactions executed under **pre-trade** waivers of MiFIR Art 4(1) (a) to (c).”).	Art 4(1) (a) to (c).”is not zero check whether “Volume of transactions executed, excluding all transactions executed under **pre-trade** waivers of MiFIR Art 4(1) (a) to (c).” is not zero as well. If it is, proceed with error.
ETQ-017	“Number of transactions executed, excluding those transactions executed under Large-In-Scale waiver (**post-trade**).”	Number of transactions executed, excluding those transactions executed under Large-In-Scale waiver (**post-trade**) is higher than the total number of transactions executed	Check whether number of transactions executed, excluding those transactions executed under Large-In-Scale waiver (**post-trade**) is lower or equal than the “Number of transactions executed” If not, proceed with error.
ETQ-018	“Volume of transactions executed, excluding those transactions executed under Large-In-Scale waiver (**post-trade**).”	Volume of transactions executed, excluding those transactions executed under Large-In-Scale waiver (**post-trade**) is higher than the total volume of transactions executed	Check whether volume of transactions executed, excluding those transactions executed under Large-In-Scale waiver (**post-trade**) is lower or equal than the “Volume of transactions executed” If not, proceed with error.
ETQ-019	“Volume of transactions executed, excluding those transactions executed under Large-In-Scale waiver (**post-trade**).” currency	The volume of transactions executed, excluding those transactions executed under Large-In-Scale waiver (**post-trade**). should be expressed in Euros.	Check whether the currency provided together with the volume of transactions executed, excluding those transactions executed under Large-In-Scale waiver (**post-trade**). is EUR. If not, proceed with error.
ETQ-020	“Number of transactions executed, excluding those transactions executed under Large-In-Scale waiver (**post-trade**).”against “Volume of transactions executed, excluding those transactions executed under Large-In-Scale waiver (**post-trade**).”	“Volume of transactions executed, excluding those transactions executed under Large-In-Scale waiver (**post-trade**).”cannot be zero (as per “Number of transactions executed, excluding those transactions executed under Large-In-Scale waiver (**post-trade**).”).	If ““Number of transactions executed, excluding those transactions executed under Large-In-Scale waiver (**post-trade**).”” is zero check whether “Volume of transactions executed, excluding those transactions executed under Large-In-Scale waiver (**post-trade**).” is zero as well. If not, proceed with error.

ETQ-021	"Number of transactions executed, excluding those transactions executed under Large-In-Scale waiver (**post-trade**)."against "Volume of transactions executed, excluding those transactions executed under Large-In-Scale waiver (**post-trade**)."	"Volume of transactions executed, excluding those transactions executed under Large-In-Scale waiver (**post-trade**)."should be zero (as per "Number of transactions executed, excluding those transactions executed under Large-In-Scale waiver (**post-trade**).").	If ""Number of transactions executed, excluding those transactions executed under Large-In-Scale waiver (**post-trade**)."" is not zero check whether "Volume of transactions executed, excluding those transactions executed under Large-In-Scale waiver (**post-trade**)." is not zero as well. If it is, proceed with error.
ETQ-022	"Suspended instrument flag"	Number and volume of transactions have to be zero for suspended instruments	If "Suspended instrument flag" is TRUE check whether "Number of transactions executed" and "Volume of transactions executed" and "Number of transactions executed, excluding all transactions executed under pre-trade waivers of MiFIR Art 4(1) (a) to (c)." and "Volume of transactions executed, excluding all transactions executed under pre-trade waivers of MiFIR Art 4(1) (a) to (c)" and "Number of transactions executed, excluding those transactions executed under Large-In-Scale waiver (post-trade)" and "Volume of transactions executed, excluding those transactions executed under Large-In-Scale waiver (post-trade)" is zero. If not, proceed with error.

9.5 Content Validation Rules for non-equity transparency reference data

Error	Field	Error Message	Control executed by the system
NTR-002	"Trading Venue"	The MIC code of the trading venue is not valid.	Check whether MIC code exists in the FIRDS Trading Venues mapping table in case of trading venue or CTP and the Reporting Day is within the period defined by the Validity start and end date. If not, proceed with error.

NTR-003	"Reporting entity" / "Trading Venue" combination	The reporting entity does not match with the respective trading venue.	Check whether the values provided as "Reporting entity" and "Trading venue" exist in the same record of FIRDS Reporting Flow View. If not, proceed with error.
NTR-004	"Trading Venue" / "Reporting date" combination	The reporting entity (MIC) is not open for trading on that reporting day.	Check whether the MIC belongs to a TV which is opened for trading based on the Non-Working Days table. If not, proceed with error.
NTR-005	"Reporting period" / "Reporting date" combination	The reporting date does not correspond to the reporting period submitted in the header.	Check whether the "Reporting date" submitted in the message body corresponds to the "Reporting period" submitted in the message header. If not, proceed with error.
The following validations shall only be performed if the above checks are successful.			
NTR-006	"Reporting date" /field 12 (art.27) "Termination date of the instrument" combination	Reporting date is greater than the instrument's termination date for ***MIC***.	Check whether the date provided as a reporting day for the additional reference data is less or equal to the termination date of the instrument. If not, proceed with error.
NTR-007	"Instrument identification code" / "Reporting entity" / "Reporting date" combination	The following records are reported twice in the same file.	Check that a record (ISIN, MIC, Reporting day) is not reported twice in the same file. If it is, proceed with error.
NTR-008	"MiFIR identifier" / field 3 (art.27) "Instrument classification" combination	The MiFIR identifier does not correspond to the CFI code provided in art. 27 reference data.	Check whether the value provided as MiFIR identifier corresponds to the CFI code provided in art.27 reference data for the same instrument. If not, proceed with error.
NTR-009	"Asset class of the underlying" / field 3 (art.27) "Instrument classification" combination	The asset class of the underlying does not correspond to the CFI code provided in art. 27 reference data.	Check whether the value provided as asset class of the underlying corresponds to the CFI code provided in art.27 reference data for the same instrument. If not, proceed with error.
NTR-010	"Contract type" / field 3 (art.27) "Instrument classification" combination	The contract type does not correspond to the CFI code provided in art. 27 reference data.	Check whether the value provided as contract type corresponds to the CFI code provided in art.27 reference data for the same instrument. If not, proceed with error.
NTR-011	"Bond issuance date" / "Maturity date" combination	The bond's issuance date is greater than its maturity date.	Check whether the bond's issuance date is less than the bond's maturity date. If not, proceed with error.
NTR-012	"Bond issuance date" / "Maturity date"	The system does not take into consideration Money Market	Check whether the bond's [issuance date+397 days] is less than the bond's maturity date. If not, proceed with

	combination	instruments.	error.
NTR-013	"Bond issuance date" / "Reporting date" combination	The bond's issuance date is greater than the reporting day.	Check whether the bond's issuance date is less than or equal to the reporting day for the additional reference data. If not, proceed with error.
NTR-014	"Maturity date" / "Reporting date" combination	Reporting is greater than the instrument's maturity date.	Check whether the date provided as a reporting day is less or equal to the maturity date of the instrument. If not, proceed with error.
NTR-015	"IR derivative underlying type"	The underlying type is not corresponding to the contract type of the derivative.	If contract type **is** "SWAP", "SWPT", "FONS" or "FWOS", check whether the value provided as underlying type (if any) corresponds to one of the following, as defined by the Non-Equity Transparency RTS: • FFMC; • XFMC; • XXMC; • OSMC; • IFMC; • FFSC; • XFSC; • XXSC; • OSSC; • IFSC. .If contract type **is different** from "SWAP", "SWPT", "FONS" or "FWOS", check whether the value provided as underlying type (if any) corresponds to one of the following, as defined by the Non-Equity Transparency RTS: • BOND; • BNDF; • INRT; • IFUT. If false, proceed with error.
NTR-016	"Maturity date of the underlying bond"/ "Reporting date" combination	Reporting day is greater than the maturity date of the underlying bond.	Check whether the date provided as the "Reporting Day" is less or equal to the maturity date of the underlying bond. If not, proceed with error.
NTR-017	"Maturity of the underlying swap" / "Reporting date" combination	Reporting day is greater than the maturity date of the underlying swap.	Check whether the date provided as the "Reporting Day" is less or equal to the maturity date of the underlying swap. If not, proceed with error.

NTR-018	"Equity derivative underlying type"	The underlying type is not corresponding to the contract type or the segmentation criterion of the derivative.	If contract type is "**SWAP**" or "**PSWP**" and the underlying is a single name instrument (as per fields 26, 27, 28 of art.27 reference data), check whether the value provided as underlying type (if any) corresponds to one of the following, as defined by the Non-Equity Transparency RTS: • SHRS; • DVSE; • ETFS; • OTHR. If contract type is "**SWAP**" or "**PSWP**" and the underlying is an Index (as per fields 26, 27, 28 of art.27 reference data), check whether the value provided as underlying type (if any) corresponds to one of the following, as defined by the Non-Equity Transparency RTS: • STIX; • DIVI; • VOLI; • OTHR. If contract type is "**SWAP**" or "**PSWP**" and the underlying is a basket (as per fields 26, 27, 28 of art.27 reference data), check whether the value provided as underlying type (if any) is "BSKT, as defined by the Non-Equity Transparency RTS. If contract type **is different** from "SWAP" and "PSWP", check whether the value provided as underlying type (if any) corresponds to one of the following, as defined by the Non-Equity Transparency RTS: • STIX; • SHRS; • DIVI; • DVSE; • BSKT; • ETFS; • VOLI; • OTHR. If false, proceed with error.

NTR-019	"Next roll date" / "Reporting date" combination	Reporting day is greater than the next roll date of the index.	Check whether the date provided as a reporting day is less or equal to the next roll date of the index. If not, proceed with error.

9.6 Content Validation Rules for non-equity transparency quantitative data

Error	Field	Error Message	Control executed by the system
NTQ-002	"Trading Venue"	The MIC code of the trading venue is not valid.	Check whether the MIC code exists in the Trading Venues mapping table in case of trading venue or CTP and the Reporting Day is within the period defined by the Validity start and end date. If not, proceed with error.
NTQ-003	"Reporting entity" / "Trading Venue" combination	The reporting entity does not match with the respective trading venue.	Check whether the values provided as "Reporting entity" and "Trading venue" exist in the same record of the FIRDS Reporting Flow View If not, proceed with error.
NTQ-004	"Trading Venue" / "Reporting date" combination	The reporting entity (MIC is not open for trading on that reporting day.	Check whether the MIC belongs to a trading venue which is open for trading based on the Non-Working Days table. If not, proceed with error.
NTQ-005	"Reporting period" / "Reporting date" combination	The reporting date does not correspond to the reporting period submitted in the header.	Check whether the "Reporting date" submitted in the message body corresponds to the "Reporting period" submitted in the message header. If not, proceed with error.
The following validations shall only be performed if the above checks are successful.			
NTQ-006	"Reporting date"	The reporting day data is a future date.	Check whether the date provided as a reporting day is today or in the past. If not, proceed with error.
NTQ-007	"Reporting date" / field 12 (art.27) "Termination date of the instrument" combination	Reporting date is greater than the instrument's termination date.	Check whether the date provided as a reporting day is less or equal to the termination date of the instrument. If not, proceed with error.
NTQ-008	"Instrument identification code" /	The following records are reported twice in the same file.	Check that a record (ISIN, MIC, Reporting day) is not reported twice in the same file. If it is, proceed with

	"Reporting entity" / "Reporting date" combination		error.
NTQ-009	"Size of transaction bin range" / "Number of transactions executed for that bin" / "Total Notional Amount Traded for that bin" combination	Average transaction size out of the bin range.	Check whether the "Total notional amount traded for that bin" is between the range [lowest value of "Size of transaction bin range" x "Number of transactions executed for that bin" , highest value of "Size of transaction bin range" x "Number of transactions executed for that bin"]. If not, proceed with error.
NTQ-010	"Size of transaction bin range"	Size of transaction bin range is not valid.	Check whether the "Size of transaction bin range" has one of the below values:]0 - 100,000[, [100,000 – 100,000],]100,000 - 200,000[, [200,000 - 300,000[, …, *(step=+100,000)* [900,000 - 1,000,000[, [1,000,000 - 1,500,000[, [1,500,000 - 2,000,000[, ..., *(step=+500,000)* [9,500,000 - 10,000,000[, [10,000,000 - 15,000,000[, [15,000,000 - 20,000,000[, ..., *(step=+5,000,000)* [95,000,000 - 100,000,000[[100,000,000 - 125,000,000[, [125,000,000 - 150,000,000[, ... *(step=+25,000,000)*
NTQ-011	"Number of transactions executed for that bin" / "Total notional amount traded for that bin" combination	Total notional amount traded for that bin cannot be zero (as per number of transactions executed for that bin).	If "Number of transactions executed for that bin" is zero check whether "Total notional amount traded for that bin" is zero as well. If not, proceed with error.
NTQ-012	"Number of transactions executed for that bin" / "Total notional amount traded for that bin" combination	Total notional amount traded for that bin should be zero (as per number of transactions executed for that bin).	If "Number of transactions executed for that bin" is not zero check whether "Total notional amount traded for that bin" is not zero as well. If it is, proceed with error.
NTQ-013	"Suspended instrument flag"	Bins should not be populated for suspended instruments	If "Suspended instrument flag" is TRUE check whether bins are populated. If yes, proceed with error.

9.7 Content Validation Rules for calculation results file

Error	Field	Error Message	Control executed by the system
ETR-001 NTR-001	ISIN	Instrument is unknown or terminated	If the ISIN cannot be found in the FIRDS Reference Data view, or if Field 12 (Termination Date) of the instrument is in the past compared to the reporting date, the system rejects the record.
The following validations shall only be performed if the above checks are successful.			
ETR-002 NTR-002	"Submitting entity" / RTS23 – "RCA" combination	Warning: The results won't be published until the submitting entity becomes the relevant competent authority for this ISIN	Check whether the entity who submits data is the RCA for this ISIN. If not, proceed with warning.
ETR-003	ISIN	Instrument is not an Equity / Equity-like instrument	If the ISIN refers to an instrument which "Equity / Non-Equity flag" is "N" in the Instruments Reference metadata table for the latest Reporting Day, the system rejects the record.
ETR-004	Reporting period	The reporting period does not correspond to any methodology type	The period, if populated, is: 1/Jul/Y - 31/Dec/Y 1/Oct/Y - 31/Mar/Y 1/Jan/Y - 30/Jun/Y 1/Apr/Y - 30/Sep/Y 1/Jan/Y – 31/Dec/Y or a 4-week period. If not proceed with error.
ETR-005	Reporting period / Methodology combination	The reporting period does not correspond to the methodology used for the calculation.	For "ESTIM", the period should not be populated. For "4WEEK" the period should correspond to 4 weeks. For "EYEAR", the period should be 1/Jan/Y – 31/Dec/Y For "ESINT", the period should be 1/Jul/Y - 31/Dec/Y,

			1/Oct/Y - 31/Mar/Y, 1/Jan/Y - 30/Jun/Y or 1/Apr/Y - 30/Sep/Y
NTR-003	ISIN	Instrument is not a Non-Equity instrument	If the ISIN refers to an instrument which “Equity / Non-Equity flag” is “E” in the Instruments Reference metadata table for the latest Reporting Day, the system rejects the record.
NTR-004	Reporting period	The reporting period does not correspond to any methodology type	The period, if populated, is: 1/Oct/Y - 31/Dec/Y 1/Jan/Y - 31/Mar/Y 1/Apr/Y - 30/Jun/Y 1/Jul/Y - 30/Sep/Y 1/Jul/Y - 31/Dec/Y 1/Oct/Y - 31/Mar/Y 1/Jan/Y - 30/Jun/Y 1/Apr/Y - 30/Sep/Y 1/Jan/Y – 31/Dec/Y If not proceed with error.

9.8 Conditional completeness table for equity transparency reference data

MiFIR Identifier	Number of outstanding instruments	Price of the instrument	Holdings exceeding total voting right threshold	Issuance size of the certificate
SHRS	mandatory	mandatory	optional	N/A
ETFS	mandatory	N/A	N/A	N/A
DPRS	mandatory	mandatory	N/A	N/A
CRTF	N/A	N/A	N/A	mandatory
OTHR	N/A	N/A	N/A	mandatory

9.9 Conditional completeness table for non-equity transparency reference data

Non equity
reference data cond

9.10 Reminder files error messages

Code	Code description
RMD-003	No transparency reference data was ever reported for that instrument.
RMD-004	No transparency quantitative data was reported for Reporting day *“T-8”* for that instrument.

10 Annex 4: XML file types

All incoming files will be validated against

- head.003.001.01.xsd,
- head.001.001.01_ESMA_UG_1.0.0.xsd,
- and against the XML Schema corresponding to its HUB File Type as per table below.

Message Component	HUB File type using the Message Component	Direction from ESMA System point of view	XML Schema used for validation (ISO 20022 derived message)	ISO 20022 BaseMessage Definition Identifier
Business Application Header	All	Incoming / Outgoing	head.001.001.01_ESMAUG_1.0.0.xsd	head.001.001.01
BAH and business message encapsulation	All	Incoming / Outgoing	head.003.001.01.xsd	head.003.001.01
Equity Transparency Reference Data	DATETR	Incoming	DRAFT5auth.032.001.01_ESMAUG_DATETR_1.0.0.xsd	auth.032.001.01
Equity Transparency Quantitative Data	DATEQU	Incoming	DRAFT6auth.040.001.01_ESMAUG_DATEQU_1.0.0.xsd	auth.040.001.01
Equity Transparency Results	DATECR	Incoming	DRAFT6auth.044.001.01_ESMAUG_DATECR_1.0.0.xsd	auth.044.001.01
Non-Equity Transparency Reference Data	DATNTR	Incoming	DRAFT5auth.033.001.01_ESMAUG_DATNTR_1.0.0.xsd	auth.033.001.01
Non-Equity Transparency Quantitative Data	DATNQU	Incoming	DRAFT5auth.041.001.01_ESMAUG_DATNQU_1.0.0.xsd	auth.041.001.01
Non-Equity Transparency Results	DATNCR	Incoming	DRAFT5auth.045.001.01_ESMAUG_DATNCR_1.0.0.xsd	auth.045.001.01
Feedback files	FDBETR FDBNTR	Outgoing		auth.031.001.01

	FDBEQU FDBNQU FDBECR FDBNCR		DRAFT4auth.031.001.01_ESMAUG_FDB_1.0.0.xsd	
Reminder	RMDETR RMDNTR RMDEQU RMDNQU RMDECR RMDNCR	Outgoing	DRAFT4auth.031.001.01_ESMAUG_RMD_1.0.0.xsd	auth.031.001.01