



European Securities and
Markets Authority

FIRDS Transparency System

Instructions on download and use of full and delta transparency results



Document control:

Version	Date	Author	Comments
1	18/12/2017	ESMA	
1.1	30/01/2018	ESMA	Correction on period of application of results for non-equity when reporting period is 1/Jan – 31/Dec year Y
1.2	20/03/2020	ESMA	Insertion of information on ISIN level Systematic Internalisers related calculation result records XML Schema 1.1.0.zip update
1.3	25/08/2020	ESMA	Changes applicable to the major maintenance release planned Q4 2021 - Implementation of FULNCR schema to provide sub-asset class information along with the ISIN level non-equity result records and new sub-class/asset-class level result files for non-equity calculations: <ul style="list-style-type: none"> - General description of the new files (par.4.) - Full files content (par. 7b., 8., 9., 10.) - Timing of file generation (par. 12.) - Schema set update (par. 13.c) - File naming convention (par.17., 18.) - Access to the published files (par.20.) - Use of the new result files (par. 36-39.) Updated schema set: esma65-11-1192_annex_firds_transparency_xml_schema_1.2.0.zip
1.4	11/10/2021	ESMA	Clarifications on the new non-equity file types (par. 2.3.9 , 2.3.10, 3.1, 3.3.2 and 4.3)

Reference documents:

Ref	Title	Version	Author	Date
RTS1	COMMISSION DELEGATED REGULATION (EU) 2017/587 of 14 July 2016 supplementing Regulation (EU) No 600/2014 of the European Parliament and of the Council on markets in financial instruments with regard to regulatory technical standards on transparency	1	European Commission / ESMA	31/03/2017

	requirements for trading venues and investment firms in respect of shares, depositary receipts, exchange-traded funds, certificates and other similar financial instruments and on transaction execution obligations in respect of certain shares on a trading venue or by a systematic internaliser			
RTS2	COMMISSION DELEGATED REGULATION (EU) 2017/583 of 14 July 2016 supplementing Regulation (EU) No 600/2014 of the European Parliament and of the Council on markets in financial instruments with regard to regulatory technical standards on transparency requirements for trading venues and investment firms in respect of bonds, structured finance products, emission allowances and derivatives	1	European Commission / ESMA	31/03/2017
RTS23	COMMISSION DELEGATED REGULATION (EU) 2017/585 of 14.7.2016 supplementing Regulation (EU) No 600/2014 of the European Parliament and of the Council with regard to regulatory technical standards for the data standards and formats for financial instrument reference data and technical measures in relation to arrangements to be made by the European Securities and Markets Authority and competent authorities	1	European Commission / ESMA	31/03/2017
Reporting Instructions	FIRDS Transparency System – Reporting Instructions	1.1	ESMA	12/06/2017
		2.0	ESMA	19/10/2018
		2.1	ESMA	14/05/2020



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1 Introduction

1.1 Purpose and intended audience of this document

1. The purpose of this document is to provide details on the files containing transparency calculation results that ESMA will be publishing, how to access them, and how to use them.
2. The intended audience are the EU market participants and National Competent Authorities that need to make use of the results of transparency calculations for the purpose of MiFIR.

1.2 Scope

3. The scope of this document is the files published on ESMA website and containing transparency calculations results.

1.3 Abbreviations

Acronym	Definition
RM	Regulated Market
MTF	Multilateral Trading Facility
OTF	Organised Trading Facility
SI	Systematic Internaliser

2 Description of the transparency calculation results files generated by the FIRDS system

2.1 Full files / delta files

4. The system makes transparency calculation results available in the form of machine-readable files:
 - a. **Full files:**
 - i. **ISIN level calculation result files:** the equity (resp. non-equity) full files contain transparency calculation results for all equity (resp. non-equity) instruments for which the system has performed calculations. For each ISIN and Reporting Period, the file contains the latest version of the calculations performed by the system. Records older than 18 months are removed from the full files.
 - ii. **Sub-class/Asset-class level calculation result files:** related to non-equity sub-class transparency calculations and systematic internaliser related non-equity sub-class and asset-class calculation results for which the system performed calculations. For each sub-classes/asset-classes the files contains the latest version of the calculations for the Reporting period displayed in the file.
 - b. **Delta files:** the equity (resp. non-equity) delta files contain the transparency calculation results for which a change has occurred since the generation of the previous set of files, e.g. in the following situations
 - i. Calculations have been produced for a new instrument;
 - ii. Updated data has been received for the instrument;
 - iii. A non-equity instrument is getting closer to its maturity date, and as a result its time-to-maturity bucket changes and the instrument now belongs to a different non-equity sub-class;
 - iv. Calculation results have been updated following a specific action from a NCA User, or from an ESMA Data Manager.
5. Given the high volume of data, the files are split in several, in particular when they exceed 500,000 records, or based on the first letter of the CFI code in the case of the full files.

2.2 Equity transparency calculation results full and delta files

6. Equity transparency calculation results files contain, for each ISIN:
 - a. The MiFIR Identifier of the instrument¹;
 - b. A flag indicating whether the instrument is liquid²;
 - c. The type of calculation (Methodology)³;

¹ BizData/Pyld/Document/FinInstrmRptgEqtyTradgActvtyRslt/EqtyTrnsprncyData/FinInstrmClssfctn

² BizData/Pyld/Document/FinInstrmRptgEqtyTradgActvtyRslt/EqtyTrnsprncyData/Lqdy

³ BizData/Pyld/Document/FinInstrmRptgEqtyTradgActvtyRslt/EqtyTrnsprncyData/Mthdlgy

- d. The average daily turnover⁴;
- e. If the instrument is liquid, the average value of transactions⁵;
- f. If the instrument is liquid, the Standard Market Size (SMS)⁶;
- g. The average daily number of transactions⁷;
- h. The total number of transactions executed⁸ - this field is populated only for the systematic internalisers calculation result records (where the calculation methodology is 'SINT')
- i. The total volume of transactions executed⁹ - this field is populated only for the systematic internalisers calculation result records (where the calculation methodology is 'SINT')
- j. The most relevant market in terms of liquidity for the purpose of MiFIR Art.4(1)(a)¹⁰
- k. For shares and depositary receipts, the average daily number of transactions on the most relevant market in terms of liquidity¹¹;
- l. The Reporting Period describing the period of trading activity taken into account in order to derive the results.¹²

2.3 Non-Equity transparency calculation results full and delta files

7. Non-Equity transparency calculation results files publishing ISIN-level results will contain, for each ISIN:
 - a. The MiFIR Identifier of the instrument¹³
 - b. The sub-class information of the instrument¹⁴;
 - c. A flag indicating whether the instrument is liquid¹⁵;
 - d. The pre-trade Large-In-Scale threshold (LIS)¹⁶;
 - e. The post-trade Large-In-Scale threshold (LIS)¹⁷;
 - f. Pre-trade Size-Specific-to-the-Instrument threshold (SSTI)¹⁸;

⁴ BizData/Pyld/Document/FinInstrmRptgEqtyTradgActvtyRslt/EqtyTrnsprncyData/Sttstcs/AvrgDalyTrnvr

⁵ BizData/Pyld/Document/FinInstrmRptgEqtyTradgActvtyRslt/EqtyTrnsprncyData/Sttstcs/AvrgTxVal

⁶ BizData/Pyld/Document/FinInstrmRptgEqtyTradgActvtyRslt/EqtyTrnsprncyData/Sttstcs/StdMktSz

⁷ BizData/Pyld/Document/FinInstrmRptgEqtyTradgActvtyRslt/EqtyTrnsprncyData/Sttstcs/AvrgDalyNbOfTxs

⁸ BizData/Pyld/Document/FinInstrmRptgEqtyTradgActvtyRslt/EqtyTrnsprncyData/Sttstcs/TtlNbOfTxsExctd

⁹ BizData/Pyld/Document/FinInstrmRptgEqtyTradgActvtyRslt/EqtyTrnsprncyData/Sttstcs/TtlVolOfTxsExctd

¹⁰ BizData/Pyld/Document/FinInstrmRptgEqtyTradgActvtyRslt/EqtyTrnsprncyData/RlvntMkt/Id

¹¹ BizData/Pyld/Document/FinInstrmRptgEqtyTradgActvtyRslt/EqtyTrnsprncyData/RlvntMkt/AvrgDalyNbOfTxs

¹² BizData/Pyld/Document/FinInstrmRptgEqtyTradgActvtyRslt/EqtyTrnsprncyData/RptgPrd/FrDtToDt

¹³ BizData/Pyld/Document/FinInstrmRptgNonEqtyTradgActvtyRslt/NonEqtyTrnsprncyData/Id/IsinAndSubclass/FinInstrmClssfctn

¹⁴ BizData/Pyld/Document/FinInstrmRptgNonEqtyTradgActvtyRslt/NonEqtyTrnsprncyData/Id/IsinAndSubclass/DerivSubClss

¹⁵ BizData/Pyld/Document/FinInstrmRptgNonEqtyTradgActvtyRslt/NonEqtyTrnsprncyData/Lqdy

¹⁶ BizData/Pyld/Document/FinInstrmRptgNonEqtyTradgActvtyRslt/NonEqtyTrnsprncyData/PreTradLrgInScaleThrshld

¹⁷ BizData/Pyld/Document/FinInstrmRptgNonEqtyTradgActvtyRslt/NonEqtyTrnsprncyData/PstTradLrgInScaleThrshld

¹⁸ BizData/Pyld/Document/FinInstrmRptgNonEqtyTradgActvtyRslt/NonEqtyTrnsprncyData/PreTradInstrmSzSpfcThrshld

- g. Post-trade Size-Specific-to-the-Instrument threshold (SSTI)¹⁹;
 - h. The Reporting Period describing the period of trading activity taken into account in order to derive the results²⁰.
 - i. The total number of transactions executed²¹ - this field is populated only for the systematic internalisers calculation result records ;
 - j. The total volume of transactions executed²² - this field is populated only for the systematic internalisers calculation result records;
8. Non-Equity transparency calculation results files publishing results for classes of financial instruments will contain, for each sub-class or asset class:
- a. The MiFIR Identifier²³
 - b. Information about the sub-class of financial instruments to which the results relate²⁴ - this field is populated only for non-equity sub-asset class yearly calculation results and the non-equity sub-class systematic internalisers calculation results;
 - c. Information about the asset-class to which the results relate²⁵;
 - d. A flag indicating whether the sub-class is liquid²⁶ - this field is populated only for non-equity sub-asset class yearly calculation results;
 - e. The pre-trade Large-In-Scale threshold (LIS)²⁷ applicable to the sub-class - this field is populated only for non-equity sub-asset class yearly calculation results;
 - f. The post-trade Large-In-Scale threshold (LIS)²⁸ applicable to the sub-class - this field is populated only for non-equity sub-asset class yearly calculation results;
 - g. Pre-trade Size-Specific-to-the-Instrument threshold (SSTI)²⁹ applicable to the sub-class - this field is populated only for non-equity sub-asset class yearly calculation results;
 - h. Post-trade Size-Specific-to-the-Instrument threshold (SSTI)³⁰ applicable to the sub-class - this field is populated only for non-equity sub-asset class yearly calculation results;
 - i. The Reporting Period describing the period of trading activity taken into account in order to derive the results³¹.

¹⁹ BizData/Pyld/Document/FinInstrmRptgNonEqtyTradgActvtyRslt/NonEqtyTrnsprncyData/PstTradInstrmSzSpcfcThrshld

²⁰ BizData/Pyld/Document/FinInstrmRptgNonEqtyTradgActvtyRslt/NonEqtyTrnsprncyData/RptgPrd/FrDtToDt

²¹ BizData/Pyld/Document/FinInstrmRptgEqtyTradgActvtyRslt/NonEqtyTrnsprncyData/Sttstcs/TtlNbOfTxsExctd

²² BizData/Pyld/Document/FinInstrmRptgEqtyTradgActvtyRslt/NonEqtyTrnsprncyData/Sttstcs/TtlVolOfTxsExctd

²³

BizData/Pyld/Document/FinInstrmRptgNonEqtyTradgActvtyRslt/NonEqtyTrnsprncyData/Id/AsstClssAndSubclass/FinInstrmClssfctn

²⁴ BizData/Pyld/Document/FinInstrmRptgNonEqtyTradgActvtyRslt/NonEqtyTrnsprncyData/Id/IASstClssAndSubclass/DerivSubClss

²⁵ BizData/Pyld/Document/FinInstrmRptgNonEqtyTradgActvtyRslt/NonEqtyTrnsprncyData/Id/AsstClssAndSubClss/AsstClss

²⁶ BizData/Pyld/Document/FinInstrmRptgNonEqtyTradgActvtyRslt/NonEqtyTrnsprncyData/Lqqty

²⁷ BizData/Pyld/Document/FinInstrmRptgNonEqtyTradgActvtyRslt/NonEqtyTrnsprncyData/PreTradLrgInScaleThrshld

²⁸ BizData/Pyld/Document/FinInstrmRptgNonEqtyTradgActvtyRslt/NonEqtyTrnsprncyData/PstTradLrgInScaleThrshld

²⁹ BizData/Pyld/Document/FinInstrmRptgNonEqtyTradgActvtyRslt/NonEqtyTrnsprncyData/PreTradInstrmSzSpcfcThrshld

³⁰ BizData/Pyld/Document/FinInstrmRptgNonEqtyTradgActvtyRslt/NonEqtyTrnsprncyData/PstTradInstrmSzSpcfcThrshld

³¹ BizData/Pyld/Document/FinInstrmRptgNonEqtyTradgActvtyRslt/NonEqtyTrnsprncyData/RptgPrd/FrDtToDt

- j. The total number of transactions executed³² - this field is populated only for the systematic internalisers calculation result records ;
 - k. The total volume of transactions executed³³ - this field is populated only for the systematic internalisers calculation result records;
9. The sub-asset class information of the instruments contains the sub-asset class description³⁴ (as per RTS2 Annex), the criteria names³⁵ and the criteria values³⁶ that were used for the determination of the sub-asset class. The segmentation criteria list is the following:

auth.045.001.03 XML schema SgmttnCrit/ CritNm code	Segmentation criteria definition	Segmentation Criteria RTS field reference
BSPD	Base Product	RTS23 field 35
NCCO	Commodity Notional Currency	RTS2 field 15
CTYP	Contract Type	RTS2 field 5
INC1	IRD Notional Currency 1	RTS23 field 13
INC2	IRD Notional Currency 2	RTS23 field 42
DCSL	Delivery Cash Location	RTS2 field 14
DTYP	Delivery Settlement Type	RTS23 field 34
EQUIT	Equity Underlying Type	RTS2 field 27
FSPD	Further Sub Product	RTS23 field 37
IIND	Inflation Index Code Name	RTS2 field 22 or RTS2 field 23
IOUB	Underlying Bond Issuer	RTS2 field 17
IRTC	Interest Rate Term Of Contract	RTS2 field 25
ISIN	ISIN	RTS2 field 1
ISPT	Sovereign And Public Type Issuer	RTS2 field 39
CNC1	CFD Notional Currency 1	RTS2 field 30
FNC1	FEX Notional Currency 1	RTS23 field 13
CNC2	CFD Notional Currency 2	RTS2 field 31
FNC2	FEX Notional Currency 2	RTS23 field 47
NCSW	Swaption Notional Currency	RTS2 field 20
PRMT	Parameter	RTS2 field 28
REOU	Underlying Reference Entity	RTS2 field 41

³² BizData/Pyld/Document/FinInstrmRptgEqtyTradgActvtyRslt/NonEqtyTrnsprncyData/Sttstcs/TtlNbOfTxExctd

³³ BizData/Pyld/Document/FinInstrmRptgEqtyTradgActvtyRslt/NonEqtyTrnsprncyData/Sttstcs/TtlVolOfTxExctd

³⁴ BizData/Pyld/Document/FinInstrmRptgNonEqtyTradgActvtyRslt/NonEqtyTrnsprncyData/Id/IsinAndSubclass/DerivSubClss/tDesc

³⁵

BizData/Pyld/Document/FinInstrmRptgNonEqtyTradgActvtyRslt/NonEqtyTrnsprncyData/Id/IsinAndSubclass/SgmttnCrit/DerivSubClss/CritNm

³⁶

BizData/Pyld/Document/FinInstrmRptgNonEqtyTradgActvtyRslt/NonEqtyTrnsprncyData/Id/IsinAndSubclass/DerivSubClss/SgmttnCrit/CritVal

auth.045.001.03 XML schema SgmttnCrit/ CritNm code	Segmentation criteria definition	Segmentation Criteriaia RTS field reference
NCCR	Credit Notional Currency	RTS2 field 42
SACL	Sub Asset Class Identification	na
SBPD	Sub Product	RTS23 field 36
SRTC	Specific Route Time Charter Average	RTS2 field 13
SSRF	Size Specification Related To Freight Subtype	RTS2 field 12
TOUB	Underlying Bond Term	Based on the RTS2 field 18 or RTS23 field 15
TTMB	Time To Maturity Bucket	Based on RTS2 field 8
TTMO	Option Time To Matury Bucket	Based on RST2 field 8
TTMS	Swap Time To Maturity Bucket	Based on RTS2 field 21
UINS*	Underlying Instrument Identification (Underlying Instrument Code)	RTS23 field 26
UIDX	Underlying Index Identification - Underlying Index Code - Underlying Index Name	RTS23 field 26c or RTS23 field 28 RTS23 field 28
UIRT	Underlying Interest Rate	RTS2 field 24
UISC	Underlying Index CDS Sub Class Identification	na
UTYP	Underlying Type	RTS2 field 16

* Regarding segmentation criteria UINS: in case the underlying is a basket, the segmentation criteria will be repeated in the message for each constituent of the basket (sorted in ascending alphanumerical order).

The SACL (Sub Asset Class Identification) criteria code is referring to the sub asset classes defined by the RTS.

The order of the segmentation criteria related to a sub-asset class follows the order implemented in the ESMA system.

Examples for the sub-asset class information of an ISIN-level or Sub-class level result record in the different file types:

a.) ISIN-level result files:

```

<NonEqTyTrnsprncyData>
  <TechRcrdId>1</TechRcrdId>
  <Id>
    <ISINAndSubCls>
      <ISIN>GB00H0MSSX40</ISIN>
      <DerivSubCls>
        <Desc>Metal commodity futures/forwards</Desc>
        <SgmttnCrit>
          <CritNm>SACL</CritNm>
          <CritVal>COM01</CritVal>
        </SgmttnCrit>
        <SgmttnCrit>
          <CritNm>SBPD</CritNm>
          <CritVal>NPRM</CritVal>
        </SgmttnCrit>
        <SgmttnCrit>
          <CritNm>FSPD</CritNm>
          <CritVal>TINN</CritVal>
        </SgmttnCrit>
        <SgmttnCrit>
          <CritNm>NCCO</CritNm>
          <CritVal>USD</CritVal>
        </SgmttnCrit>
        <SgmttnCrit>
          <CritNm>TMBS</CritNm>
          <CritVal>1</CritVal>
        </SgmttnCrit>
      </DerivSubCls>
      <FinInstrmClsfctn>DERV</FinInstrmClsfctn>
    </ISINAndSubCls>
  </Id>
  <FullNm>aaa</FullNm>
  <RptgPrd>
    <FrDtToDt>
      <FrDt>2020-01-01</FrDt>
      <ToDt>2020-12-31</ToDt>
    </FrDtToDt>
  </RptgPrd>
  <Lqdy>true</Lqdy>
  <PreTradLrgInScaleThrshld>
    <Amt Ccy="EUR">500000</Amt>
  </PreTradLrgInScaleThrshld>
  <PstTradLrgInScaleThrshld>
    <Amt Ccy="EUR">1000000</Amt>
  </PstTradLrgInScaleThrshld>
  <PreTradInstrmSzSpfcThrshld>
    <Amt Ccy="EUR">250000</Amt>
  </PreTradInstrmSzSpfcThrshld>
  <PstTradInstrmSzSpfcThrshld>
    <Amt Ccy="EUR">750000</Amt>
  </PstTradInstrmSzSpfcThrshld>
</NonEqTyTrnsprncyData>

```

b.) Sub-class level non-equity yearly calculation result file:

```

<NonEqTyTrnsprncyData>
  <Id>
    <AsstClsAndSubCls>
      <AsstCls>EQDV</AsstCls>
      <DerivSubCls>
        <Desc>Stock index options</Desc>
        <SgmttnCrit>
          <CritNm>SACL</CritNm>
          <CritVal>EQD01</CritVal>
        </SgmttnCrit>
        <SgmttnCrit>
          <CritNm>UINS</CritNm>
          <CritVal>TCF000001810</CritVal>
        </SgmttnCrit>
        <SgmttnCrit>
          <CritNm>UIDX</CritNm>
          <CritVal>NameIndxUnd</CritVal>
        </SgmttnCrit>
      </DerivSubCls>
      <FinInstrmClsfctn>DERV</FinInstrmClsfctn>
    </AsstClsAndSubCls>
  </Id>
  <RptgPrd>
    <FrDtToDt>
      <FrDt>2019-10-01</FrDt>
      <ToDt>2020-03-31</ToDt>
    </FrDtToDt>
  </RptgPrd>
  <Lqdy>true</Lqdy>
  <PreTradLrgInScaleThrshld>
    <Amt Ccy="EUR">20000000</Amt>
  </PreTradLrgInScaleThrshld>
  <PstTradLrgInScaleThrshld>
    <Amt Ccy="EUR">160000000</Amt>
  </PstTradLrgInScaleThrshld>
  <PreTradInstrmSzSpfcThrshld>
    <Amt Ccy="EUR">15000000</Amt>
  </PreTradInstrmSzSpfcThrshld>
  <PstTradInstrmSzSpfcThrshld>
    <Amt Ccy="EUR">150000000</Amt>
  </PstTradInstrmSzSpfcThrshld>
</NonEqTyTrnsprncyData>

```

c.) SI-related sub-class level calculation result file:

```

<NonEqtyTrnsprncyData>
  <Id>
    <AsstClsAndSubCls>
      <AsstCls>COMD</AsstCls>
      <DerivSubCls>
        <Desc>Energy Commodity swaps</Desc>
        <SgmttnCrit>
          <CritNm>SACL</CritNm>
          <CritVal>COM06</CritVal>
        </SgmttnCrit>
        <SgmttnCrit>
          <CritNm>SBPD</CritNm>
          <CritVal>COAL</CritVal>
        </SgmttnCrit>
        <SgmttnCrit>
          <CritNm>DCSL</CritNm>
          <CritVal>Financial Coal Swaps</CritVal>
        </SgmttnCrit>
        <SgmttnCrit>
          <CritNm>NCCO</CritNm>
          <CritVal>EUR</CritVal>
        </SgmttnCrit>
        <SgmttnCrit>
          <CritNm>DTYP</CritNm>
          <CritVal>CASH</CritVal>
        </SgmttnCrit>
        <SgmttnCrit>
          <CritNm>TMB</CritNm>
          <CritVal>1</CritVal>
        </SgmttnCrit>
      </DerivSubCls>
      <FinInstrmClsfctn>DERV</FinInstrmClsfctn>
    </AsstClsAndSubCls>
  </Id>
  <RptgPrd>
    <FrDtToDt>
      <FrDt>2019-10-01</FrDt>
      <ToDt>2020-03-31</ToDt>
    </FrDtToDt>
  </RptgPrd>
  <Sttstcs>
    <TtlNbOfTxsExctd>123456</TtlNbOfTxsExctd>
    <TtlVolOfTxsExctd>1234567890</TtlVolOfTxsExctd>
  </Sttstcs>
</NonEqtyTrnsprncyData>

```

10. The codelist and description of the asset-classes and subasset-classes are the following:

ASCL Codes (auth.045.001.03 XML schema AsstClsAndSubclass/AsstCls)	Asset-Class Definition	SACL codes	Subasset-class description
IRDV	Interest Rate Derivatives	IRD01	Bond Futures/Forward
		IRD02	Bond options
		IRD03	IR futures and FRA
		IRD04	IR options
		IRD05	Swaptions
		IRD06	Swaps and futures/forwards on swaps
		IRD07	Other Interest Rate Derivatives
BOND	Bond	BOND1	Sovereign bond
		BOND2	Public bond
		BOND3	Convertible bond
		BOND4	Covered Bond
		BOND5	Corporate bond
		BOND6	Other bonds
ETCS	Exchange Traded Commodity	ETC	Debt / ETC

ASCL Codes (auth.045.001.03 XML schema AsstClsAndSubclass/AsstCls)	Asset-Class Definition	SACL codes	Subasset-class description
ETNS	Exchange Traded Notes	ETN	Debt / ETN
COMD	Commodity Derivatives	COM01	Metal commodity futures/forwards
		COM02	Metal commodity options
		COM03	Metal commodity swaps
		COM04	Energy commodity futures/forwards
		COM05	Energy commodity options
		COM06	Energy commodity swaps
		COM07	Agricultural commodity futures/forwards
		COM08	Agricultural commodity options
		COM09	Agricultural commodity swaps
		COM10	Other Commodity Derivatives
C10D	C10 Derivatives	C1001	Freight derivatives
		C1002	Other C10 derivatives
EADV	Derivatives on Emission Allowances	DEA01	Derivatives on emission allowances - EUA
		DEA02	Derivatives on emission allowances - EUAA
		DEA03	Derivatives on emission allowances - CER
		DEA04	Derivatives on emission allowances - ERU
		DEA05	Other derivatives on emission allowances
EQDV	Equity Derivatives	EQD01	Stock index options
		EQD02	Stock index futures/forwards
		EQD03	Stock options
		EQD04	Stock futures/forwards
		EQD05	Stock dividend options
		EQD06	Stock dividend futures/forwards
		EQD07	Dividend index options
		EQD08	Dividend index futures/forwards
		EQD09	Volatility index options
		EQD10	Volatility index futures/forwards
		EQD11	ETF options
		EQD12	ETF futures/forwards
		EQD13	Swaps
		EQD14	Portfolio swaps
		EQD15	Other equity derivatives
FEXD	FX Derivatives	FEX01	Non-deliverable forwards
		FEX02	Deliverable forwards

ASCL Codes (auth.045.001.03 XML schema AsstClsAndSubclass/AsstCls)	Asset-Class Definition	SACL codes	Subasset-class description
		FEX03	Non-deliverable FX options
		FEX04	Deliverable FX options
		FEX05	Non-deliverable FX swaps
		FEX06	Deliverable FX swaps
		FEX07	FX futures
		FEX08	Other foreign exchange derivatives
EMAL	Emission Allowance	EA01	Emission allowances - EUA
		EA02	Emission allowances - EUAA
		EA03	Emission allowances - CER
		EA04	Emission allowances - ERU
		EA05	Other emission allowances
SDRV	Securitized Derivatives	SDRV	Securitized derivatives
CRDV	Credit derivatives	CRE01	Index CDS
		CRE02	Single name CDS
		CRE03	CDS Index options
		CRE04	Single name CDS options
		CRE05	Other credit derivatives
CFDS	Contract for Difference	CFD01	Currency CFD
		CFD02	Commodity CFD
		CFD03	Equity CFD
		CFD04	Bond CFD
		CFD05	CFD on equity future/forward
		CFD06	CFD on an equity option
		CFD07	Other contracts for difference
SFPS	Structured Finance	SFP01	Structured finance - passed Test1
		SFP02	Other structured finance

11. LIS and SSTI thresholds are expressed in EUR (under element <Amt>) except for emission allowances and derivatives on emission allowances, where they are expressed in tons of carbon dioxide (under element <Nb>).



3 Instructions to download full and delta transparency results files from ESMA website

3.1 Timing of generation

12. The files published by ESMA on its website are generated:
- on a weekly basis for the Full Files containing ISIN-level results (every Saturday)
 - on a daily basis for the Delta Files containing ISIN-level results ; in case there is no change to publish on that day, no delta file is generated.
 - on a quarterly basis for the files containing sub-class/asset class³⁷ level results of systematic internalisers related calculations;
 - on a yearly (or ad-hoc) basis for the yearly derivative sub-class level calculation results and yearly bond LIS / SSTI thresholds calculation results file ;

3.2 XML Format

13. The transparency calculation results files produced by FIRDS are structured as follows:
- Encapsulation of a Business Application Header (BAH), and a Payload as per XML Schema head.003.001.01.xsd
 - The Business Application Header is generated as per XML Schema head.001.001.01_ESMAUG_1.0.0.xsd
 - The payload is generated as per XML Schema
auth.044.001.02_ESMAUG_DATECR_1.1.0.xsd for Equity calculation results full files (FULECR) and delta files (DLTECR) and
auth.045.001.03_ESMAUG_FULNCR_1.2.0.xsd for Non-Equity calculation results full files (FULNCR) and delta files (DLTNCR)
14. Link to XML Schema: https://www.esma.europa.eu/sites/default/files/library/esma65-11-1192_annex_firds_transparency_xml_schema_1.2.0.zip

3.3 File naming conventions

3.3.1 ISIN level calculation results files:

15. The full files will follow the following naming convention:
- For Equities: FULECR_<Date>_<CFI 1st letter>_<Key1>of<Key2>.zip
- For Non-Equities: FULNCR_<Date>_<CFI 1st letter>_<Key1>of<Key2>.zip
- Where:
- <Date> =YYYYMMDD.
- <Key1> = The number of the file in the range produced for that day and that CFI 1st letter.

³⁷ ESMA has not yet started the publication of the Systematic Internaliser related asset-class level results. The first publication of this type of results will be communicated officially in a timely manner.

<Key2> = The total number of files produced for that day and that CFI 1st letter.

Examples:

FULECR_20171104_E_1of1.zip
FULNCR_20171104_D_1of1.zip
FULNCR_20171104_O_1of2.zip
FULNCR_20171104_O_2of2.zip

16. The delta file will follow the following naming convention.

For Equities: DLTECR_<Date>_<Key1>of<Key2>.zip

For Non-Equities: DLTNCR_<Date>_<Key1>of<Key2>.zip

Where:

<Date> =YYYYMMDD

<Key1> = The number of the file within the range produced for that day.

<Key2> = The total number of files produced for that day.

Examples:

DLTECR_20171106_01of01.zip
DLTNCR_20171106_01of01.zip

3.3.2 Sub-class/asset-class level calculation results files (only for non-equities)³⁸:

17. Sub-class level calculation results full file will follow the following naming convention:

(Exists for non-equities yearly sub-class level calculation results only.)

FULNCR_ <date>_<Calculation type>_<Asset-class>_<Key1>of <Key2>.zip

Where:

<Date> =YYYYMMDD.

<Calculation type> = 'NYAR' in case sub-class level non-equity yearly transparency calculation results

= 'SISC' in case sub-class level non-equity systematic internaliser related calculation results

<Asset-Class> = asset-class information of the sub-classes as per defined in paragraph 10.

<Key1> = The number of the file in the range produced for that day and that Asset-class.

<Key2> = The total number of files produced for that day and that Asset-class.

Examples:

³⁸ Currently the sub-class level results are published in Excel formatted files at the following page: [Annual transparency calculations for non-equity instruments \(europa.eu\)](#). The new XML files will be published first following the go-live of the M3 changes of FITRS. after the go-live, expected in Q1 2022, There will be a transition period, when both the Excel and the XML format version of the sub-class level result files will be published. During this period the Excel files remain the official version. The duration of the transition period has not been determined yet.

FULNCR_20210401_NYAR_IRD_1of1.zip
 FULNCR_20210401_NYAR_EQD_1of2.zip
 FULNCR_20210701_SISC_IRD_1of1.zip
 FULNCR_20210701_SISC_EQD_1of2.zip

18. Asset-class level calculation results full file will follow the following naming convention³⁹:

(Exists for non-equities asset-class level systematic internaliser calculation results only.)

FULNCR_ <date>_<Calculation type>_<Key1>of <Key2>.zip

Where:

<Date> =YYYYMMDD.

<Calculation type> = 'SIAC' in case asset- class level non-equity systematic internaliser related calculation results;

<Key1> = The number of the file in the range produced for that day and that Calculation type.

<Key2> = The total number of files produced for that day and that Calculation type.

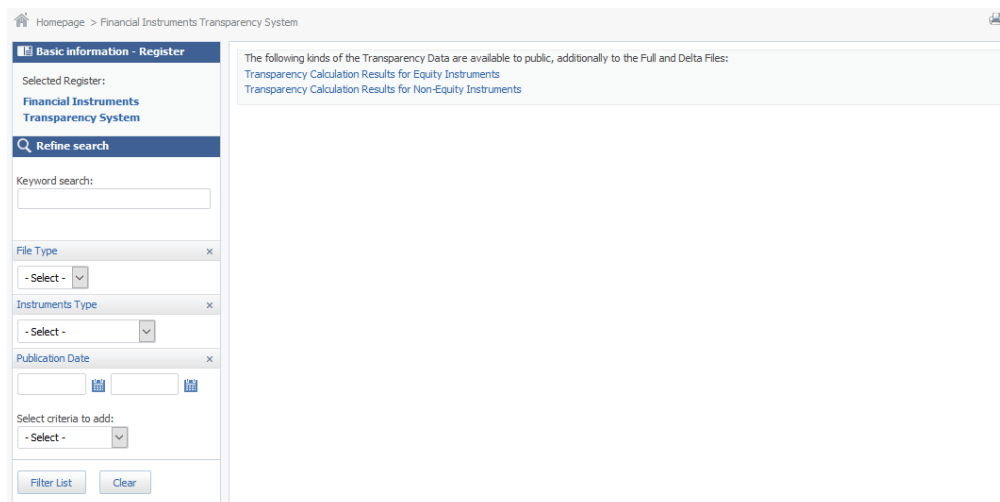
Example:

FULNCR_20210701_SIAC_1of1.zip

3.4 Access to the files published (human interface)

19. Go to <https://registers.esma.europa.eu/publication/> select register “Financial Instrument Transparency System” ; or go directly to

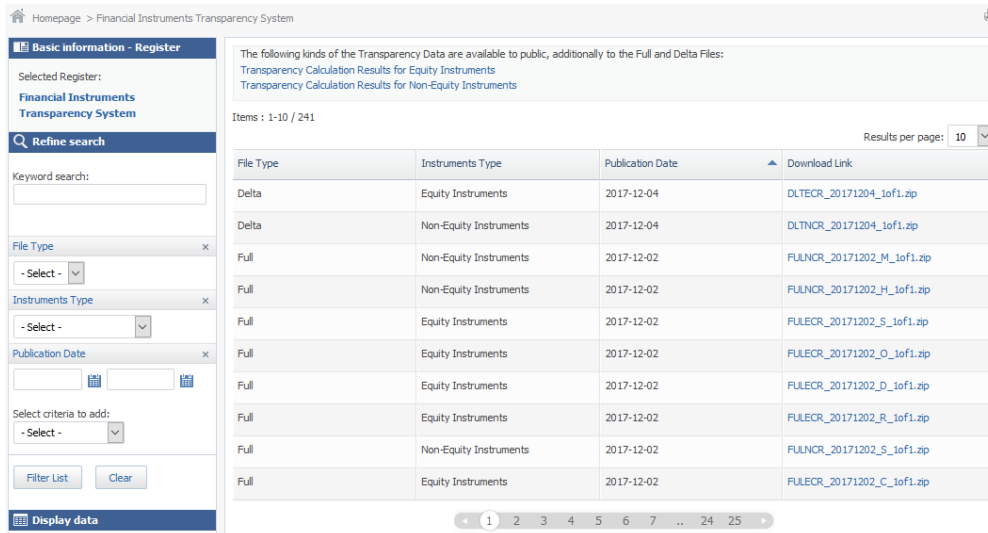
https://registers.esma.europa.eu/publication/searchRegister?core=esma_registers_fitrs_files



20. Use the Publication Date filter on the left hand side and click on “Filter list” to list all files published within the specified period. Additional filters are available to further refine the list (

³⁹ ESMA has not yet started the publication of the Systematic Internaliser related asset-class level results. The first publication of this type of results will be communicated officially in a timely manner.

File type: ISIN-level results Full file/ISIN-level results Delta file/Sub-class level yearly calculation results/Sub-class level SI calculation results/Asset-class level SI calculation results , Instruments type: Equity / Non-Equity instruments)



The screenshot shows the ESMA Financial Instruments Transparency System interface. On the left, there is a sidebar with navigation options like 'Basic information - Register', 'Selected Register: Financial Instruments Transparency System', and 'Refine search'. The main area displays a list of 241 items. The table below shows the first 10 items:

File Type	Instruments Type	Publication Date	Download Link
Delta	Equity Instruments	2017-12-04	DLTECR_20171204_1of1.zip
Delta	Non-Equity Instruments	2017-12-04	DLTNCR_20171204_1of1.zip
Full	Non-Equity Instruments	2017-12-02	FULNCR_20171202_M_1of1.zip
Full	Non-Equity Instruments	2017-12-02	FULNCR_20171202_H_1of1.zip
Full	Equity Instruments	2017-12-02	FULECR_20171202_S_1of1.zip
Full	Equity Instruments	2017-12-02	FULECR_20171202_O_1of1.zip
Full	Equity Instruments	2017-12-02	FULECR_20171202_D_1of1.zip
Full	Equity Instruments	2017-12-02	FULECR_20171202_R_1of1.zip
Full	Non-Equity Instruments	2017-12-02	FULNCR_20171202_S_1of1.zip
Full	Equity Instruments	2017-12-02	FULECR_20171202_C_1of1.zip

21. Click on the Download Link for any of the files returned, in order to download the corresponding file.

3.5 Access to the files published (machine-to-machine interface)

- 22. To support automated download of the files, it is possible to list the files published on a specific date by sending an HTTP request.
- 23. The following HTTP request will return the list of the files published by ESMA on 24 November 2017

https://registers.esma.europa.eu/solr/esma_registers_fitrs_files/select?q=*&fq=creation_date:%5B2017-11-24T00:00:00Z+TO+2017-11-24T23:59:59Z%5D&wt=xml&indent=true&start=0&rows=100

24. The below table explains each aspect of the above query so that it can be modified as required to meet necessary usage requirements

Query component	Description
q=*	This is the general query part of the request and tells the response to return all columns for a given result if one exists
fq=creation_date:%5B2017-11-24T00:00:00Z+TO+2017-11-24T23:59:59Z%5D	fq means the filtered query and supports restricting the data that is being search for. For the filtered query here, we are restricting by date – note both the latest date and earliest date are present and follow the ISO date format. Change the date to look for files from a different day or range of days
wt=xml	Response type e.g. xml, json

indent=true	Not necessary but assists to make the output more readable
start=0	The result to start outputting from. 0 works best but any number can be here and corresponds to which set of records to start outputting from
rows=100	The number of results to return. Default is 10

25. The combination of start and row is used to assist cycling over the results when multiple results are returned e.g. more than 100. To read a secondary list (100+) change start to 100 and leave rows as 100. The number of records that the query returns is given by attributes of the resultsFound list.
26. The response is an XML document. The URL to the files are located under the following XPath:
`/response/result/doc/str[@name='download_link']`
27. Note that the number of returned files returned will usually be greater than 1 for a given date.

4 Use of full and delta transparency calculation results files

4.1 Calculation results files for equity instruments (FULECR and DLTECR files)

28. FULECR / DLTECR records with empty Reporting Period⁴⁰ and tagged with “ESTM” methodology⁴¹ correspond to estimates; they apply from the day the instrument starts being traded, until six calendar weeks thereafter.
29. FULECR / DLTECR records with a Reporting Period⁴² of four calendar weeks and tagged with “FFWK” methodology correspond to calculations produced on the basis of the first four weeks of trading ; they apply from six calendar weeks after the day when the instrument started being traded, until the next yearly calculation⁴³. The Reporting Period holds the first four weeks of trading of the instrument, as known by the system at the time of performing the calculations.

Date of first trade (first day of the Reporting Period)	Four-weeks calculation results apply until	First yearly calculation
From 3 December year (Y) to 2 December year (Y+1)	31 March year (Y+2)	Performed in year (Y+2) based on year (Y+1) trading activity

30. FULECR / DLTECR records with a Reporting Period of a full year (Y) and tagged with “YEAR” methodology correspond to calculations produced on the basis of a year of trading ; they apply from 1 April of year (Y+1) until 31 March of year (Y+2).
31. FULECR / DLTECR records with a Reporting Period of 6-month and tagged with “SINT” methodology correspond to total number of transactions and total volume of trading over the last 6-months, used for the purpose of the SI regime for equity/equity-like instruments.
32. In summary, FULECR / DLTECR records can be in one of the following cases

Reporting period	Type of calculation	Type of instrument	Period of application
Empty	Estimates	Equity / Equity-like	Liquidity and LIS/SMS thresholds apply from first trading date for six weeks Calculation results may be updated e.g. when refined estimates are provided NCAs or ESMA.
Four calendar weeks	Calculations based on first four weeks of trading	Equity / Equity-like	Liquidity and LIS/SMS thresholds apply from six calendar weeks after the first

⁴⁰ No < RptgPrd> element under /BizData/Pyld/Document/FinInstrmRptgEqtyTradgActvtyRslt/EqtyTrnsprncyData

⁴¹ /BizData/Pyld/Document/FinInstrmRptgEqtyTradgActvtyRslt/EqtyTrnsprncyData/Mthdlgy

⁴² /BizData/Pyld/Document/FinInstrmRptgEqtyTradgActvtyRslt/EqtyTrnsprncyData/RptgPrd

⁴³ For instruments which start trading before 2/Dec of year Y, the next yearly calculations will be the yearly calculations performed on year (Y+1) and applicable from 1 April (Y+1), whereas for instruments which start trading after 3/Dec of year Y, the next yearly calculations will be those performed on year (Y+2) and applicable from 1 April (Y+2)

Reporting period	Type of calculation	Type of instrument	Period of application
			trading date, until the next yearly calculation as per table 24
1/Jan/Y – 30/Jun/Y or 1/Apr/Y – 30/Sep/Y or 1/Jul/Y – 31/Dec/Y or 1/Oct/Y – 31/Mar/(Y+1)	SI regime calculations	Equity / Equity-like	The total number of transactions and total volume of trading over the last 6-months, used for the purpose of the SI regime.
1/Jan/Y – 31/Dec/Y	Yearly calculations	Equity / Equity-like	Liquidity and LIS/SMS thresholds apply from 1 April of year (Y+1) until 31 March of year (Y+2)

4.2 Calculation results files for non-equity instruments (FULNCR and DLTNCR files)

33. For non-equity instruments other than bonds, the system publishes results which correspond to calculations produced on the basis of a year of trading. Reporting Period is a full year (Y), and liquidity results are provided along with LIS / SSTI thresholds. The results apply from 1 June of year (Y+1) until 31 May of year (Y+2).

Reporting Period	Period of application of the results
1/Jan – 31/Dec year Y	1/June year (Y+1) – 31/May year (Y+2)

34. For bond instruments, two different processes with separate timings (quarterly vs yearly) are required for the liquidity assessment on one hand, and for the determination of LIS / SSTI thresholds on the other hand. As a consequence, liquidity and LIS / SSTI thresholds will be found in separate records
- a. Results which Reporting Period is a full year (Y) correspond to calculations produced on the basis of a year of trading ; for bond instruments, they only hold LIS / SSTI threshold and the liquidity flag is empty. The LIS / SSTI thresholds apply from 1 June of year (Y+1) until 31 May of year (Y+2).

Reporting Period	Period of application of the results
1/Jan – 31/Dec year Y	1/June year (Y+1) – 31/May year (Y+2)

- b. Results which Reporting Period⁴⁴ is a quarter correspond to quarterly liquidity assessment for bonds; they apply for three months from the sixteenth day of the second month of the following quarter, as per table below.

Reporting Period	Period of application of the results
1/Jan – 31/March year Y	16/May – 15/Aug year Y

⁴⁴ /BizData/Pyld/Document/FinInstrmRptgNonEqtyTradgActvtyRsIt/NonEqtyTrnsprncyData/RptgPrd

1/Apr – 30/June year Y	16/Aug – 15/Nov year Y
1/July – 30/Sep year Y	16/Nov year Y – 15/Feb year (Y+1)
1/Oct – 31/Dec year Y	16/Feb year (Y+1) – 15/May year (Y+1)

- c. Results with empty Reporting Period⁴⁵ only contain the liquidity flag for new bond instruments ; they apply from the day the instrument starts being traded, until the next quarterly liquidity assessment for the bond, as per table below;

Date of first trade	Records with information on liquidity for new bonds apply until	First quarterly liquidity assessment
1/March – 31/May year Y	15/August year Y	Quarterly liquidity calculations made on the basis of Reporting Period 1/April – 30/June year Y
1/June – 31/August year Y	15/November year Y	Quarterly liquidity calculations made on the basis of Reporting Period 1/July – 30/September year Y
1/September – 30/November year Y	15/February year (Y+1)	Quarterly liquidity calculations made on the basis of Reporting Period 1/October – 31/December year Y
1/December year Y – end of February year (Y+1)	15/May year (Y+1)	Quarterly liquidity calculations made on the basis of Reporting Period 1/January – 31/March year (Y+1)

- d. Records with a Reporting Period of 6-month to total number of transactions and total volume of trading over the last 6-months, used for the purpose of the SI regime for non-equity instruments.

35. In summary, FULNCR / DLTNCR records can be in one of the following cases

Reporting period	Liquidity flag	Type of instrument	Period of application
1/Jan/Y – 31/Dec/Y	True or false (not empty)	Non-equity instrument other than bond	Liquidity and LIS/SSTI thresholds apply from 1/June year (Y+1) – 31/May year (Y+2) Calculation results may be updated over time e.g. when the instrument changes time-to-maturity bucket, in which case the

⁴⁵ No <RptgPrd> element under /BizData/PyId/Document/FinInstrmRptgNonEqtyTradgActvtyRsIt/NonEqtyTrnsprncyData

			new results need to be applied.
	(empty)	Bond	LIS/SSTI thresholds apply from 1/June year (Y+1) – 31/May year (Y+2)
1/Jan/Y – 30/Jun/Y or 1/Apr/Y – 30/Sep/Y or 1/Jul/Y – 31/Dec/Y or 1/Oct/Y – 31/Mar/(Y+1)	(empty)	Bond	The total number of transactions and total volume of trading over the last 6-months, used for the purpose of the SI regime.
Quarter	True or false (not empty)	Bond	Liquidity flag applies from sixteenth of a month for three month as per table 28.b
Empty	True or false (not empty)	Bond	Liquidity flag applies from first trading date until sixteenth of a month as per table 28.c

4.3 Calculation results files for non-equity sub-classes/asset-classes (FULNCR files)

36. For non-equity sub-classes the system publishes results which correspond to calculations produced on the basis of a year of trading. Reporting Period is a full year (Y), and the published results contains:
- the LIS/SSTI thresholds for bonds;
 - the liquidity flag/LIS/SSTI thresholds for derivatives.

The results apply from 1 June of year (Y+1) until 31 May of year (Y+2) or as communicated in case of an adhoc publication.

Reporting Period	Period of application of the results
1/Jan – 31/Dec year Y	1/June year (Y+1) – 31/May year (Y+2) or as communicated in case of an ad-hoc publication;

37. Sub-class result records with a Reporting Period of 6-month to total number of transactions and total volume of trading over the last 6-months, used for the purpose of the SI regime for non-equity instruments.

38. Asset-class result records with a Reporting Period of 6-month to total number of transactions and total volume of trading over the last 6-months, used for the purpose of the SI regime for non-equity instruments.⁴⁶
39. In summary, records providing results at sub-class or asset-class levels can be in one of the following cases:

Reporting period	Liquidity flag	Type of result record	Period of application
1/Jan/Y – 31/Dec/Y	True or false	Non-equity sub-class yearly transparency calculation result records	Liquidity (for derivatives only) and LIS/SSTI thresholds apply from 1/June year (Y+1) – 31/May year (Y+2) or as communicated in case of an ad-hoc publication;
1/Jan/Y – 30/Jun/Y or 1/Apr/Y – 30/Sep/Y or 1/Jul/Y – 31/Dec/Y or 1/Oct/Y – 31/Mar/(Y+1)	(empty)	Non-equity sub-class/asset-class level SI-related calculation result records	The total number of transactions and total volume of trading over the last 6-months, used for the purpose of the SI regime.

⁴⁶ ESMA has not yet started the publication of the Systematic Internaliser related asset-class level results. The first publication of this type of results will be communicated officially in a timely manner.