GUIDELINES

GUIDELINE (EU) 2022/971 OF THE EUROPEAN CENTRAL BANK

of 19 May 2022

on the Centralised Securities Database and the production of securities issues statistics and repealing Guideline 2012/689/EU (ECB/2012/21) and Guideline (EU) 2021/834 (ECB/2021/15) *(ECB/2022/25)*

THE GOVERNING COUNCIL OF THE EUROPEAN CENTRAL BANK,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to the Statute of the European System of Central Banks and of the European Central Bank, and in particular Articles 5.1, 12.1 and 14.3 thereof,

Having regard to Council Regulation (EC) No 2533/98 of 23 November 1998 concerning the collection of statistical information by the European Central Bank ([1]), and in particular Article 4 thereof,

Having regard to the contribution of the General Council of the European Central Bank,

Whereas:

(1) The Centralised Securities Database (CSDB) is a single information technology infrastructure operated jointly by the members of the European System of Central Banks (ESCB), including national central banks of the Member States whose currency is not the euro (hereinafter 'non-euro area NCBs') where such non-euro area NCBs voluntarily participate in the operation of the CSDB. The CSDB stores item-by-item data, in particular, data on securities, their issuers, prices and ratings. The main processes of the CSDB's operation comprise input data provision, processing of that input data, carrying out data quality management (DQM) and production and dissemination of output data consisting of item-by-item data and aggregate information. A number of changes to these processes require the adoption of a new Guideline to ensure that there are clear and certain arrangements for the governance of the CSDB. In the interest of legal certainty, Guideline 2012/689/EU of the European Central Bank (ECB/2012/21) ([2]) and Guideline (EU) 2021/834 of the European Central Bank (ECB/2021/15) ([3]) , which to date have governed the data quality management framework of the CSDB and the reporting of statistical information on securities issues, should be repealed.

(2) To enhance monetary policy and financial stability analyses for the euro area and the Union, to contribute to the production of secondary statistics, to fulfil the euro area reporting commitments on debt securities issuance statistics in the context of the G20 Data Gaps Initiative and to assess the role of the euro in international financial markets, monthly securities issues statistics covering stock and flow aggregates of securities issuances are produced from CSDB item-by-item data (hereinafter 'CSEC aggregate statistics'). Accordingly, CSEC aggregate statistics should be compiled in the CSDB, and national central banks of the Member States whose currency is the euro (hereinafter the 'NCBs') and the European Central Bank (ECB) should be responsible for the verification of CSEC aggregate statistics and for the DQM of the underlying CSDB item-by-item data.

([1]) OJ L 318, 27.11.1998, p. 8.
([2]) Guideline 2012/689/EU of the European Central Bank of 26 September 2012 on the data quality management framework for the Centralised Securities Database (ECB/2012/21) (OJ L 307, 7.11.2012, p. 89).
([3]) Guideline (EU) 2021/834 of the European Central Bank of 26 March 2021 on statistical information to be reported on securities issues (ECB/2021/15) (OJ L 208, 11.6.2021, p. 311).

(3) Providing input data for the CSDB involves collecting data from various sources and transmitting it to the ECB via the CSDB. This collection by the ECB is necessary in order to undertake the tasks of the ESCB, particularly those regarding monetary policy and the stability of the financial system. These sources include the NCBs and the non-euro area NCBs, ECB-internal sources, certain commercial data providers, administrative sources, and the public domain.

(4) To link the security-by-security data collected from different sources and to avoid duplicate records, all securities that are transmitted to the CSDB should be identified uniquely by an International Securities Identification Number (ISIN code).To ensure the correct grouping of the input data provided by NCBs and accurate linking of the CSDB data with other ESCB statistical information, NCBs should provide, as part of their input reference data on issuers, at least one linking entity identifier that is included in the Register of Institutions and Affiliates Database (RIAD). Furthermore, to facilitate the correct grouping of issuer reference data from different sources and accurate linking with other ESCB statistical information, a Legal Entity Identifier (LEI) should be provided when available.

(5) The overall quality of CSDB item-by-item data can only be assessed at the output level, rather than at the level of individual sets of input data. To ensure the completeness, accuracy and consistency of output data, it is necessary to define a DQM framework to be applied to output feed data, which is a subset of output data that can be used to support the production of statistics or other uses.

(6) The CSDB DQM framework should be applied to output feed data regardless of the source of input data. It should lay down the responsibilities of the NCBs and the ECB for the quality of output data in the CSDB. In order to ensure the high quality of output feed data and CSEC aggregate statistics, and to enable the ECB to provide snapshots of output feed data and the CSEC aggregate statistics in a timely manner, NCBs and the ECB should verify output feed data and CSEC aggregate statistics by a specified date.

(7) To ensure the high quality of CSDB item-by-item data and of historical CSEC aggregate statistics, and to support the alignment of NCBs' national security-by-security databases and the CSDB, NCBs that have improved their input data should provide revised input data files to the CSDB or use the CSDB system to correct the data.

(8) Since the CSDB is operated jointly by all ESCB members, they should all aim to follow the same DQM standards. Where an NCB would like to conduct DQM that affects the CSDB data related to residents in other countries, it should coordinate with the NCBs and the non-euro area NCBs and with the ECB, as relevant, to clearly define the boundaries of such DQM. Moreover, non-euro area NCBs are in the best position to carry out DQM on the data related to issuers residing in their respective Member States. While it is recognised that guidelines adopted by the ECB may not impose any obligations on non-euro area NCBs, Article 5 of the Statute of the European System of Central Banks and of the European Central Bank applies to both NCBs and non-euro area NCBs. This implies an obligation on non-euro area NCBs to therefore design and implement all the measures that they consider appropriate in order to carry out DQM of CSDB output data and CSEC aggregate statistics in accordance with this Guideline. In addition, for the purposes of enabling the ECB to obtain a comprehensive overview of the statistical information collected and to carry out relevant analyses, the national central banks of non-euro area Member States that adopt the euro should be required to provide the ECB with statistical information covering a specified period prior to their adoption of the euro.

(9) To improve the quality of output data, data source management (DSM) should be carried out with the aim of identifying and correcting repetitive and/or structural mistakes in input data. DSM should be carried out by the ECB in relation to input data provided by commercial data sources and by NCBs in relation to their own input data.

(10) Common rules should be established for the publication by NCBs of aggregate statistics using CSDB data to ensure an orderly release of the related key aggregates.

(11) It is necessary to set up a procedure to carry out technical amendments to the annexes to this Guideline in an effective manner, provided that such amendments neither change the underlying conceptual framework nor affect the reporting and DQM burden,

HAS ADOPTED THIS GUIDELINE:

Article 1

Definitions

For the purposes of this Guideline the following definitions shall apply:

(1) ‘Centralised Securities Database’ or ‘CSDB’ means the Centralised Securities Database set up by the European System of Central Banks (ESCB);

(2) ‘input data’ means any data provided to the CSDB from one or more of the following data sources: a) both national central banks of the Member States whose currency is the euro (hereinafter the ‘NCBs’) and national central banks of the Member States whose currency is not the euro (hereinafter the ‘non-euro area NCBs’; b) European Central Bank-internal sources; c) commercial data providers; d) administrative sources; e) the public domain;

(3) ‘input provision bracket’ means a period of working days each calendar month, which is defined by the European Central Bank (ECB) and during which the NCBs may provide input data to the CSDB;

(4) ‘output data’ means item-by-item data that are automatically derived in the CSDB by compounding input data into complete, high quality single data records;

(5) ‘output feed data’ means the subset of item-by-item output data and characteristics listed in Annex III to this Guideline that support the production of statistics or other uses;

(6) ‘CSEC aggregate statistics’ means aggregated securities issues statistics covering stock and flow aggregates of securities issuances produced from item-by-item CSDB output data as specified in Annex IV to this Guideline;

(7) ‘Data Quality Management’ or ‘DQM’ means the activity of ensuring, verifying and maintaining the quality of output feed data and CSEC aggregate statistics through the use and application of DQM targets, DQM metrics, DQM thresholds and specific DQM workflows;

(8) ‘Data Source Management’ or ‘DSM’ means the activity of identifying and correcting directly with a data provider repetitive and/or structural mistakes in input data;

(9) ‘initial DQM’ means DQM of item-by-item output feed data and CSEC aggregate statistics, covering the end-month preview for the most recent reference month and carried out on a monthly basis;

(10) ‘regular DQM’ means DQM of item-by-item output feed data and CSEC aggregate statistics, covering the reference months prior to the month covered by initial DQM and carried out on a monthly basis, taking into account non-CSDB benchmark data provided by various data sources with a view to ensuring that CSDB output data quality satisfies the requirements for CSDB feed data;

(11) ‘DQM target’ means a benchmark for assessing the quality of output feed data, as specified in Annex II to this Guideline;

(12) ‘DQM metric’ means a statistical indicator measuring the level to which a certain DQM target has been reached, as specified in Annex II to this Guideline;

(13) ‘DQM threshold’ means the minimum level of verification work to be conducted in order to satisfy the requirements of the DQM framework for a DQM target;

(14) ‘DQM exception’ means a possible data quality issue that is identified via a specified rule and for which the data needs to be confirmed or corrected in order to reach the respective DQM threshold;

(15) ‘DQM workflow’ means a technical process applied for the correction of input data in order to comply with a DQM threshold;

(16) ‘end-month preview’ means a daily update of output data and of DQM metrics which produces an approximation of output data for the forthcoming end-month status;

(17) ‘initial CSEC aggregate statistics’ means CSEC aggregate statistics covering the most recent reference month;

(18) ‘regular CSEC aggregate statistics’ means CSEC aggregate statistics covering the reference months prior to the month covered by initial CSEC aggregate statistics;

(19) 'CSEC priority series' means the lowest-level CSEC aggregate statistics that are subject to the DQM requirements, as specified in Annex II and Annex IV to this Guideline;

(20) 'reference month' means the calendar month to which the relevant data or statistics refer;

(21) 'working day' is a complete day which is not an ECB public holiday, as published on the ECB's website;

(22) 'verification' means the process of checking CSDB output feed data as well as CSEC aggregate statistics and, if necessary, correcting CSDB input data, hereby applying the DQM workflow;

(23) 'resident' has the meaning defined in Regulation (EU) No 549/2013 of the European Parliament and of the Council ([4]);

(24) 'ISIN code' means the International Securities Identification Number, as defined by the International Standards Organization (ISO) in ISO 6166;

(25) 'linking entity identifier' means an entity identifier that is included both in the CSDB and in the ESCB's Register of Institutions and Affiliates Data (RIAD) data set and that is either a RIAD code, another national entity identifier used by the relevant NCB or non-euro area NCB, a Legal Entity Identifier (LEI) defined by ISO 17442, or another entity identifier commonly accepted by the ECB and the relevant NCB or non-euro area NCB.

Article 2

Subject matter and scope

This Guideline establishes a framework for the production of securities data and securities issues statistics in the CSDB. The aim of this framework is to ensure the completeness, accuracy and consistency of CSDB output data and CSEC aggregate statistics by consistently applying rules on the provision of input data and DQM and DSM for such data.

Article 3

Role of the ECB and NCBs

1. The ECB, with the assistance of the NCBs, shall define the CSDB's operational processes; compile the CSEC aggregate statistics; and produce output data, including output feed data.

2. In accordance with this Guideline, the NCBs shall:

(a) provide input data on securities issued by residents in their Member States to the CSDB where they have such data readily available;

(b) conduct the DQM of the data related to issuers resident in their Member States;

(c) verify the CSEC aggregate statistics related to issuers resident in their Member States.

3. The ECB shall:

(a) conduct the DQM of data related to issuers resident outside the euro area, unless a non-euro area NCB has accepted the responsibility to conduct DQM for data related to issuers resident in its Member State;

(b) verify the CSEC aggregate statistics related to issuers resident outside the euro area, unless a non-euro area NCB has accepted the responsibility for verifying the CSEC aggregate statistics related to issuers resident in its Member State.

([4]) Regulation (EU) No 549/2013 of the European Parliament and of the Council of 21 May 2013 on the European system of national and regional accounts in the European Union (OJ L 174, 26.6.2013, p. 1).

Article 4

Provision of input data by NCBs

1. Where NCBs have readily available item-by-item data on securities issued by residents in their Member States, they shall provide these data to the CSDB on a regular basis.

2. Where NCBs have readily available item-by-item data on securities issued by residents of other countries, they may provide these data to the CSDB on a regular basis upon agreement with:

(a) the NCB responsible for the DQM of the data related to the relevant issuer in accordance with Article 3 of this Guideline; and

(b) the ECB for data related to issuers resident outside the euro area, unless a non-euro area NCB has accepted the responsibility for conducting the DQM for data related to issuers resident in its Member State.

3. When providing input data files to the CSDB, NCBs shall provide, as a minimum, information for the attributes covered by Table 1 of Annex I to this Guideline.

4. Input data on securities transmitted to the CSDB shall identify individual securities with their ISIN codes.

5. If an NCB has improved its input data, it shall provide revised input data files to the CSDB or use the CSDB system to correct any errors and omissions in its input data that were not corrected in the course of the verification of the data as specified in Article 5.

6. NCBs shall specify annually the input provision dates they will be using to provide input data files to the CSDB in accordance with the input provision brackets defined by the ECB.

7. In accordance with Article 26 of Guideline (EU) 2018/876 of the European Central Bank (ECB/2018/16) ([5]), NCBs shall ensure that resident issuers of securities are recorded in the ESCB's RIAD data set. NCBs that provide input data files to the CSDB shall include at least one linking entity identifier that is included in RIAD in their input data files.

Article 5

Data quality management

1. The ECB and NCBs shall carry out initial DQM and regular DQM. In doing so they shall verify item-by-item output feed data and CSEC aggregate statistics, regardless of the source of such data or statistics.

2. DQM shall be applied to DQM targets 1, 2, 3a and 3b and to the corresponding DQM metrics, as specified in Annex II to this Guideline. These metrics shall be based on end-month data that are updated by the ECB on a daily basis subject to the applicable ESCB service level requirements.

3. For the attributes covered by Annex II, the ECB and NCBs shall apply DQM thresholds at a level that ensures the quality of output feed data to support the uses for these attributes as set out in Annex III to this Guideline.

4. The ECB and NCBs shall verify output feed data to the extent that, pursuant to DQM metrics, all DQM exceptions for DQM targets 1, 3a and 3b have been verified to reach the DQM thresholds.

5. The ECB and NCBs shall verify the initial and regular CSEC aggregate statistics to the extent that all DQM exceptions for DQM target 2 have been verified to reach the DQM thresholds.

6. NCBs shall correct input data in accordance with the agreed DQM workflow by using the CSDB system or by providing input data files to the ECB, as appropriate.

([5]) Guideline (EU) 2018/876 of the European Central Bank of 1 June 2018 on the Register of Institutions and Affiliates Data (ECB/2018/16) (OJ L 154, 18.6.2018, p. 3).

Article 6

Initial DQM

1. Initial DQM shall be applied to the end-month preview data for the reference month of the current production round.

2. The ECB and NCBs shall verify DQM exceptions to ensure that, after initial DQM has been applied, output feed data and initial CSEC aggregate statistics reflect the most recent developments.

3. When conducting initial DQM, the ECB and NCBs shall rely solely on information that is readily available to them.

Article 7

Regular DQM

1. Regular DQM shall be applied to the data for the reference months prior to the month covered by initial DQM.

2. When conducting regular DQM, the ECB and NCBs shall take into account all currently available information.

Article 8

Timeline for initial and regular DQM

1. In accordance with the production timetable set out in Table 2 of Annex II to this Guideline, the ECB and NCBs shall verify:

(a) the end-month preview output feed data that are subject to initial DQM;

(b) the output feed data that are subject to regular DQM;

(c) the initial CSEC aggregate statistics;

(d) the regular CSEC aggregate statistics.

2. If the ECB and NCBs identify data quality issues during the verification process, they shall correct these issues in accordance with the same timetable.

Article 9

Data source management

1. When NCBs identify DSM issues related to commercial data sources, they shall report them to the ECB indicating the relevance of the issues by reference to both their magnitude, in terms of outstanding amounts or market capitalisation of the affected securities, and to the specific output feed data that is affected.

2. The ECB shall report high-relevance DSM issues related to commercial data sources to the respective data providers within one month of the date on which a DSM issue is reported to the ECB. Insofar as possible, the ECB shall use its best efforts to address high-relevance DSM issues in cooperation with the relevant data providers.

3. The ECB shall report DSM issues related to the input data provided by NCBs indicating the relevance of the respective DSM issues by reference to both their magnitude, in terms of outstanding amounts or market capitalisation of the affected securities, and to the specific output feed data that is affected. Within their means, NCBs shall use their best efforts to address high-relevance DSM issues in their input data in cooperation with the ECB.

Article 10

Compilation of CSEC aggregate statistics

1. The ECB shall implement arrangements with a view to ensuring that the joint compilation process for the CSEC aggregate statistics follows the compilation rules and methodology specified in Annex IV to this Guideline.

2. The ECB shall compile the monthly CSEC aggregate statistics in the CSDB on a daily basis, as specified in Annex IV to this Guideline, subject to the applicable ESCB service level requirements. CSEC aggregate statistics shall be compiled from reference month December 2020 onwards.

Article 11

Output data provision

1. The ECB shall make available to NCBs:

(a) a snapshot of monthly output feed data as specified in Annex III to this Guideline, on a monthly basis;

(b) a snapshot of the item-by-item data underlying the CSEC aggregate statistics, and the CSEC aggregate statistics for the previous reference month, on a monthly basis;

(c) for the previous reference day and on a best efforts basis, a snapshot of daily output feed data as specified in Annex III to this Guideline on a daily basis, covering the most relevant securities as agreed by the ESCB Statistics Committee.

2. The ECB shall also make available to NCBs any revisions to the:

(a) snapshot of output feed data as specified in Annex III to this Guideline;

(b) snapshot of the item-by-item data underlying the CSEC aggregate statistics and the CSEC aggregate statistics for at least the latest 12 reference months;

(c) snapshot of the item-by-item data underlying the CSEC aggregate statistics, and the CSEC aggregate statistics for at least the latest 36 reference months, but excluding any period prior to December 2020, on an annual basis.

3. The data referred to in paragraphs 1 and 2 are to be exclusively used for statistical purposes, including the production and compilation of statistics. For non-statistical usage of the data, the rules and procedures for the sharing of confidential statistical information approved by the Governing Council shall be followed.

4. The data referred to in paragraphs 1 and 2 shall be made available either via transmission or via other means commonly accepted by the ECB and the NCBs.

Article 12

Publication

1. NCBs shall not publish national aggregates or euro area aggregates of securities issues statistics compiled using CSDB data before the respective publication of CSEC aggregate statistics by the ECB. This shall not prevent NCBs from publishing national aggregates of securities issues statistics, whose compilation does not rely on CSDB data, in accordance with national publication timetables.

2. When publishing euro area aggregates of securities issues statistics, NCBs shall accurately reproduce the aggregates published by the ECB.

Article 13

Back data verification requirements in the event of adoption of the euro

Where a Member State whose currency is not the euro adopts the euro following the entry into force of this Guideline, the national central bank of that Member State shall use its best efforts to verify the CSEC aggregate statistics for that Member State at least from reference month December 2020 onwards or for three years prior to the date of the adoption of the euro, whichever date is later.

Article 14

Simplified amendment procedure

Taking account of the views of the ESCB Statistics Committee, the Executive Board of the ECB shall be entitled to make any necessary technical amendments to the Annexes to this Guideline, provided that such amendments neither change the underlying conceptual framework of the Guideline, including the division of responsibilities between the ECB and the NCBs, nor materially affect the reporting burden on NCBs. The Executive Board shall inform the Governing Council of any amendment to the Annexes to this Guideline without undue delay.

Article 15

Repeal

1. Guideline 2012/689/EU (ECB/2012/21) and Guideline (EU) 2021/834 (ECB/2021/15) are hereby repealed.

2. References to the repealed Guidelines shall be construed as references to this Guideline and shall be read in accordance with the correlation table in Annex V.

Article 16

Taking effect and implementation

1. This Guideline shall take effect on the day of its notification to the national central banks of the Member States whose currency is the euro.

2. The national central banks of the Member States whose currency is the euro and the ECB shall comply with this Guideline from 1 June 2022.

Article 17

Addressees

This Guideline is addressed to all Eurosystem central banks.

Done at Frankfurt am Main, 19 May 2022.

For the Governing Council of the ECB
The President of the ECB
Christine LAGARDE

ANNEX I

DATA ATTRIBUTES FOR INPUT DATA FOR THE CENTRALISED SECURITIES DATABASE (CSDB)

Where national central banks of the Member States whose currency is the euro (hereinafter the 'NCBs') provide input data to the CSDB via debt, equity or price input files they must provide, as a minimum, input information for the following attributes:

Table1

Input data attribute name	Description	Input files		
		Debt	Equity	Prices
International Security Identification Number (ISIN) code	ISIN security identifier	√	√	√
Is active flag	Technical flag required for processing of input records	√	√	√
European System of Accounts (ESA 2010) (1) instrument classification	Classification of the security pursuant to ESA 2010	√	√	
Primary asset classification 2	Primary classification of the instrument, e.g. indication of whether the instrument is a debt, equity or fund instrument with some further details	√	√	
Nominal currency	Nominal currency of the instrument (ISO 4217)	√	√	
Issue price quote convention	Quotation basis of the instrument, e.g. percentage of nominal or currency per share/unit	√		
Security status	Status of the instrument, indicating whether it is alive or not alive with some further details	√	√	
Security status date	Date corresponding to an event when the security's status changed	√	√	
Issuer source code	Issuer code of a CSDB input data source. For input data provided by NCBs, this is the linking entity identifier between the CSDB and the Register of Institutions and Affiliates Database (RIAD)	√	√	
Issuer source code type	Type of issuer source code	√	√	
Issuer domicile country	Country of legal incorporation (domicile) of the issuer of the security (ISO 3166)	√	√	
Issuer name	Complete name of the issuer	√	√	
ESA 2010 issuer sector	Institutional sector of the issuer pursuant to ESA 2010	√	√	
Price date	Date of the price information			√
Close price	Value of the security's price at close			√
Price quotation type	Type of price quotation, e.g. percentage of nominal value or currency per share/unit			√

Input data attribute name	Description	Input files		
		Debt	Equity	Prices
Price reference market	Market on which the price was quoted (ISO 10383)			√
Price currency	Currency, in which the price is quoted (only relevant when the quotation type is in currency)			√
Issuer LEI code	Legal entity identifier (LEI) of the issuer (ISO 17442), if the issuer has an LEI (*)	√	√	

([1]) As established by Regulation (EU) No 549/2013.
(*) The LEI must be reported if this information is available to the NCB.

NCBs that provide input data to the CSDB must use their best efforts to provide input information for the following attributes:

Table 2

Input data attribute name	Description	Input files		
		Debt	Equity	Prices
Amount outstanding	Outstanding amount (at face value)	√		
Number outstanding	Total number of individual shares or fund shares/units currently outstanding		√	
Issue price	Issue price of individual securities as paid by the investors	√	√	
Redemption price	Final redemption price of individual securities	√		
Issue date	Date on which the securities were delivered to the underwriter by the issuer against payment. This is the date when the securities were available for delivery to investors for the first time	√	√	
Maturity date	Original maturity date, i.e. the date of the final contractually scheduled principal payment as defined in the prospectus	√		
Tranche amount	Amount of the tranche (in nominal currency)	√		
Tranche date	Date when a new tranche of an existing security was issued	√		
Tranche price	Price at which a new tranche of an existing security was offered to the market	√		
Partial redemption amount	Amount of the partial redemption (in nominal currency)	√		
Partial redemption date	Date when an existing security was partially redeemed	√		
Partial redemption price	Price at which an existing security was partially redeemed	√		
Capital increase amount	Amount of the capital increase (in number of individual shares)		√	
Capital increase date	Date when the capital increase took place		√	

Input data attribute name	Description	Input files		
		Debt	Equity	Prices
Capital increase price	Price at which new shares were offered to the market		√	
Capital decrease amount	Amount of the capital decrease (in number of individual shares)		√	
Capital decrease date	Date when the capital decrease took place		√	
Capital decrease price	Price at which existing shares were bought back and subsequently cancelled		√	
Asset securitisation type	Type of securitised assets	√		
Instrument seniority type	Classification of whether the instrument is guaranteed or not, what rank/level it has, and whether it is secured or not	√		
Coupon-related attributes	Information on coupon payments including coupon type, coupon frequency, coupon dates, coupon rates and accrual start date	√		
Split factor	Split factor for stock splits (and reverse splits) of shares, defined as (number of shares before the split) / (number of shares after the split)		√	
Stock split date	Date when the stock split occurred		√	
Dividend amount	Amount of the last dividend payment (in currency units)		√	
Dividend amount type	Type of dividend distribution (e.g. in cash or in kind)		√	
Dividend currency	Currency of the last dividend payment (ISO 4217)		√	
Dividend settlement date	Date of the last dividend payment		√	
Dividend frequency	Frequency of dividend payments		√	
Income amount	Income attributable to fund investors, including dividends and retained earnings (ESA 2010 concept) - only relevant for fund shares/units		√	
Income currency	Currency of income attributable to fund investors (ISO 4217) - only relevant for fund shares/units		√	
Income date	Date to which the income amount refers to, i.e. the end of the month or end of the quarter - only relevant for fund shares/units		√	
Fund asset structure	Type of (majority of) underlying fund assets		√	
Fund geographical structure	Geographical split of (majority of) underlying fund assets		√	

Input data attribute name	Description	Input files		
		Debt	Equity	Prices
Fund type	Type of fund, i.e. classification as open or closed fund and of dividend policy (distributing or non-distributing)		√	
Instrument supplementary information	Information on whether the security is, e.g., stripped, is a depository receipt, is a warrant, or is relevant for securities issues statistics produced from CSDB item-by-item data (hereinafter 'CSEC aggregate statistics')	√	√	

ANNEX II

DATA QUALITY MANAGEMENT (DQM) TARGETS, IMPLEMENTATION OF EXCEPTIONS, ATTRIBUTES, DQM THRESHOLD BASIS AND TIMELINE

The Centralised Securities Database (CSDB) DQM framework is based, first, on DQM targets that represent benchmarks for assessing the quality of output feed data and, second, on DQM metrics that measure the level to which a certain DQM target has been reached and thereby identify and prioritise, for each respective DQM target, the output feed data that need to be verified. It is also based on DQM thresholds that define the minimum level of verification that needs to be conducted in relation to a DQM target and on DQM exceptions that are identified via a specified rule and that present (potential) data quality issues to be verified or corrected in order to reach the respective DQM threshold.

The DQM targets, DQM metrics, implementation of DQM exceptions, attributes and DQM threshold basis are specified in the following table. In the CSDB, a list of DQM exceptions will be made available for each DQM target that must be verified in order to reach the DQM threshold. The ECB and the national central banks of the Member States whose currency is the euro (hereinafter the 'NCBs') will verify the DQM exceptions defined in this Annex, for which DQM exception rules are implemented in the CSDB.

Table 1

DQM target	DQM metrics	Implementation of DQM exceptions	Output feed data attributes	DQM threshold basis
Target 1: **Data stability – stock data**	*Concept:* The metric will be defined for each country of residence/sector combination as a volume weighted 'index of change', weighted with monetary amounts. An index value of 1 indicates that the respective attribute has not changed for any of the underlying securities, while an index value of 0 indicates that the respective attribute has changed for all securities. If an index drops below 1, individual securities will be identified with the changed attribute that has caused the index drop with a view to verifying the change until the threshold is met.	Target 1 assesses the stability of stock data. Any month-on-month difference triggering an index change triggers a DQM exception for the output feed data attributes covered by Target 1. Unverified DQM exceptions must not decrease the share of stable data beyond the DQM threshold for each of the following European System of Accounts (ESA 2010) [2]issuer sectors: — S.11 'non-financial corporations' — S.121 'the central bank' — S.122 'deposit-taking corporations except the central bank'	Explicit attributes: Issue date, maturity date for debt, nominal currency, quotation basis, ESA 2010 instrument classification, primary asset classification 2, CSDB issuer identifier, issuer domicile country, [1] ESA 2010 issuer sector, issuer European Classification of Economic Activities (NACE) classification, entity status, amount outstanding, number outstanding, security status, coupon-related attributes, accrued income factor, price value, price value type, monthly average price, issue price, redemption price, instrument supplementary information, last split factor, last split date.	Amounts outstanding or market capitalisation in euro, expressed as share of stock data.

DQM target	DQM metrics	Implementation of DQM exceptions	Output feed data attributes	DQM threshold basis
	Events triggering an index change: For discrete attributes, any month-on-month difference in the attribute is considered to trigger an index change. For continuous attributes, any month-on-month difference larger than a specified threshold is considered to trigger an index change. *Coverage:* This DQM metric covers all investment fund shares, equity and debt securities including certificates.	— S.123 ‘money market funds (MMFs)’ — S.124 ‘non-MMF investment funds’ — S.125 ‘other financial intermediaries, except insurance corporations and pension funds’ — S.126 ‘financial auxiliaries’ — S.127 ‘captive financial institutions and money lenders’ — S.128 ‘insurance corporations (IC)’ — S.129 ‘pension funds (PF)’ — S.13 ‘general government’		
Target 2: **Data accuracy – CSEC aggregate statistics**	*Conceptual background:* CSEC aggregate statistics for end-month stocks and monthly flows are produced from CSDB output data on a daily basis, as specified in Annex IV to this Guideline. As CSEC aggregate statistics consist of a large number of different aggregates, including higher-level and overlapping aggregates, the verification of CSEC aggregate statistics must focus on sets of ‘CSEC priority series’, i.e. the lowest-level CSEC aggregate statistics that are subject to DQM requirements, as specified in Annex IV to this Guideline. Verifying the sets of priority series will ensure that all higher-level aggregates	Target 2 assesses the data quality of the CSEC aggregate statistics Any CSEC priority series for debt securities and listed shares triggers a DQM exception for Target 2. Unverified DQM exceptions shall not exceed the DQM threshold for debt securities and listed shares.	Implicit attributes: Issue date, maturity date for debt, nominal currency, quotation basis, ESA 2010 instrument classification, primary asset classification 2, issuer domicile country, [3] ESA 2010 issuer sector, entity status, amount outstanding, number outstanding, tranche amount, tranche issue date, tranche issue price, security status, coupon-related attributes, price value, issue price, redemption price, instrument supplementary information.	Stocks at market value of CSEC priority series expressed as a share of stocks at market value of the CSEC total economy aggregates of that country (separately calculated for debt securities and listed share aggregates).

DQM target	DQM metrics	Implementation of DQM exceptions	Output feed data attributes	DQM threshold basis
	that are based on these series and to a significant extent also related overlapping aggregates are verified as well. *Concept:* For each country, the metric must identify the 'CSEC priority series' and must relate them, as a percentage of amounts outstanding or market capitalisation, to the total economy aggregates for stocks at market value for that country. It must be possible to access disaggregated data at the level of the individual securities underlying the CSEC aggregate statistics. The sets of CSEC priority series must be verified and confirmed until the threshold is met. *Coverage:* The metric covers debt securities and listed shares that are within the scope of CSEC aggregate statistics.			
Target 3a: **Data accuracy – support correct sector allocation and data extraction by issuer**	*Conceptual background:* The CSDB links issuer and instrument information on a relational basis which can be described as 'one to many', i.e. one issuer can be related to many instruments, while each instrument is related to only one issuer. This instrument-issuer link is made via	Target 3a assesses the correct identification of the issuer population. Any disagreement on the issuer of an instrument, i.e. instruments in 'clash groups', triggers a DQM exception for Target 3a.	Explicit attributes: Issuer identifier used for grouping.	Amounts outstanding and market capitalisation in euro referring to instruments in clash groups, expressed as a percentage share of all instruments.

DQM target	DQM metrics	Implementation of DQM exceptions	Output feed data attributes	DQM threshold basis
	individual issuer identifiers provided by the different input data providers. These identifiers differ between the data providers as there is, so far, no common standard but they should be consistent. If input data providers provide inconsistent (clashing) issuer identifiers for the same instrument, i.e. if they disagree on the issuer, the instrument cannot be allocated to a definite issuer and ends up in a 'clash group'. Clash groups can still be classified correctly by country and sector but there is no consistent link to the relevant issuer of the instrument. Instruments in clash groups prevent the consistent and reliable extraction of all instruments issued by a certain issuer. Instruments in clash groups increase the risk of misclassification by country of residence or sector. *Concept:* For each country of residence the metric must identify the instruments in clash groups and relate them as a percentage share in terms of counts or in terms of monetary amounts to all instruments for that country.	Where there is a DQM exception, the instruments for this exception must not exceed the DQM threshold.		

DQM target	DQM metrics	Implementation of DQM exceptions	Output feed data attributes	DQM threshold basis
	Coverage: The metric covers all instruments in the CSDB.			
Target 3b: **Data accuracy – support correct sector allocation and data extraction by issuer**	*Conceptual background:* The CSDB links issuer and instrument information on a relational basis which may be described as 'one to many', i.e. one issuer can be related to many instruments while each instrument is related to only one issuer. This instrument-issuer link is made via individual issuer identifiers which are provided by the different input data providers. These identifiers differ between the data providers as there is, so far, no common standard but they should be consistent. If no data provider provides an issuer identifier for a given instrument, there is a risk that this instrument will not be allocated to a definite issuer and will end up in a 'stand-alone group' consisting only of this instrument. Stand-alone groups may still be classified correctly by country and sector but there is no consistent link to the relevant issuer of the instrument. Instruments in stand-alone groups prevent the consistent and reliable extraction of all instruments issued by a certain issuer.	Target 3b assesses the correct identification of the issuer population. Any lack of reliable information on the issuer of an instrument, i.e. instruments in 'stand-alone groups', triggers a DQM exception for Target 3b. Where there is a DQM exception, the instruments for this exception must not exceed the DQM threshold.	Explicit attributes: Issuer identifier used for grouping.	Amounts outstanding and market capitalisation in euro referring to instruments in stand-alone groups, expressed as a percentage share of all instruments.

DQM target	DQM metrics	Implementation of DQM exceptions	Output feed data attributes	DQM threshold basis
	Instruments in stand-alone groups increase the risk of misclassification by country of residence or sector, given that they are often provided with incomplete information. *Concept:* For each country of residence the metric must identify the instruments in stand-alone groups and relate them as a percentage share in terms of counts or in terms of monetary amounts to all instruments for that country. *Coverage:* The metric covers all instruments in the CSDB.			

(1) Input data for issuer attributes is transmitted to the CSDB from the Register of Institutions and Affiliates Database (RIAD) data set on a regular basis in accordance with Article 4 of this Guideline.
(2) As established by Regulation (EU) No 549/2013.
(3) Input data for issuer attributes is transmitted to the CSDB from the RIAD data set on a regular basis. RIAD input data is linked with the CSDB data in accordance with Article 4(7) of this Guideline.

When performing their tasks under Article 8 of this Guideline, the ECB and NCBs must adhere to the following timetable for the verification of DQM exceptions and correction of data quality issues for DQM targets 1, 2, 3a and 3b:

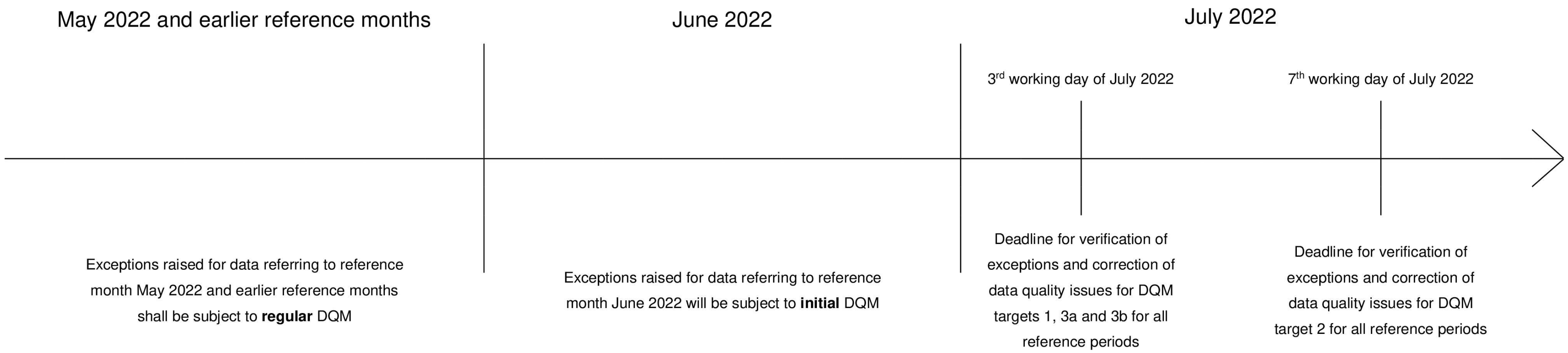
Table 2

Type of DQM	Reference months subject to DQM	Type of data subject to DQM	DQM targets, for which exceptions must be verified and data quality issues be corrected	Deadline for verification of all exceptions to reach the DQM thresholds
Initial DQM	Reference month of current production round	End-month preview output feed data	DQM targets 1, 3a and 3b	End of the third working day following the reference month subject to initial DQM
		Initial CSEC aggregate statistics	DQM target 2	End of the seventh working day following the reference month subject to initial DQM
Regular DQM	All earlier reference months	Output feed data	DQM targets 1, 3a and 3b	End of the third working day following the reference month subject to initial DQM
		Regular CSEC aggregate statistics	DQM target 2	End of the seventh working day following the reference month subject to initial DQM

A specific example of the timetable for the verification of DQM exceptions and correction of data quality issues for DQM targets 1, 2, 3a and 3b is provided in the following diagram. The example illustrates the case of the production round for reference month June 2022. In this case, the ECB and NCBs must conduct **initial** DQM of DQM exceptions referring to reference month June 2022 by the third working day of July 2022 in the case of DQM exceptions for DQM targets 1, 3a and 3b and by the seventh working day of July 2022 in the case of DQM exceptions for DQM target 2. Similarly, the ECB and NCBs must conduct the **regular** DQM of DQM exceptions referring to reference month May 2022 and any earlier reference months by the third working day of July 2022 in the case of DQM exceptions for DQM targets 1, 3a and 3b and by the seventh working day of July 2022 in the case of DQM exceptions for DQM target 2.

Figure

Example of the timeline for the verification of DQM exceptions for reference month June 2022.



ANNEX III

FEEDS AND OUTPUT FEED DATA ATTRIBUTES COVERED BY THE DATA QUALITY MANAGEMENT (DQM) FRAMEWORK

Monthly output feed data: The DQM framework covers the following monthly item-by-item output feeds which support the production of statistics:

— CSEC feed supporting CSEC aggregate statistics, which are securities issues statistics produced from output data from the Centralised Securities Database (CSDB), (hereinafter the ‘CSEC feed’)

— External feed supporting external statistics (hereinafter the ‘EXT feed’)

— Financial vehicle corporations (FVCs) feed supporting statistics on financial vehicle corporations (hereinafter the ‘FVC feed’)

— Investment fund feed supporting statistics on investment funds (hereinafter the ‘IF feed’)

— Securities holdings feed supporting securities holdings statistics (hereinafter the ‘SHS feed’)

— Government securities funding feed supporting statistics on government securities funding (hereinafter the ‘GSF feed’)

— Insurance corporations feed supporting statistics on insurance corporations (hereinafter ‘IC feed’)

— Pension funds feed supporting statistics on pension funds (hereinafter ‘PF feed’)

Daily output feed data: The DQM framework covers the following daily item-by-item output feeds which support different uses and for which the European Central Bank (ECB) national central banks of the Member States whose currency is the euro (hereinafter the ‘NCBs’) will use their best efforts in ensuring the quality of the output feed data:

— Feed supporting collateral management (hereinafter ‘CM feed’)

— Feed supporting money market statistical reporting (hereinafter ‘MM feed’)

— Feed supporting securities financing transactions data store (hereinafter ‘SFT feed’)

Output feed data attributes covered by the DQM framework:

Output feed data attribute name	Description	Applicable feed										
		CSEC	EXT	FVC	IF	SHS	GSF	IC	PF	CM	MM	SFT
International Securities Identification Number (ISIN) code	ISIN security identifier (ISO 6166).	√	√	√	√	√	√	√	√	√	√	√
Classification of Financial Instruments (CFI) code	CFI code of the instrument (ISO 10962).									√	√	√
Central securities depository	Code of the central securities depository, i.e. where the material or immaterial security is actually stored and managed									√		

Output feed data attribute name	Description	Applicable feed										
		CSEC	EXT	FVC	IF	SHS	GSF	IC	PF	CM	MM	SFT
European System of Accounts (ESA 2010) instrument classification	Classification of the security pursuant to ESA 2010.	√	√	√	√	√	√	√	√			√
Debt type	Type of debt instrument.					√	√			√		
Primary asset classification 2	Primary classification of the instrument (e.g. indicating whether the instrument is a debt security, equity security or fund with some further details)	√								√	√	√
Security is included in CSDB-based securities issues statistics (hereinafter ‘CSEC’)	An attribute which can be used to identify securities that should be included in ‘current outstanding amounts’, in line with the scope of CSEC aggregate statistics.	√					√			√		
Instrument supplementary information	Supplementary attribute indicating whether an instrument should be included in CSEC or not.	√					√	√	√	√		
Security status	Status of the instrument. This attribute indicates whether an instrument is alive or not.	√					√	√	√	√		
Security status date	Attribute indicating the date at which the security status attribute has changed from alive to not-alive (or from non-alive to alive).	√						√	√	√		

Output feed data attribute name	Description	Applicable feed										
		CSEC	EXT	FVC	IF	SHS	GSF	IC	PF	CM	MM	SFT
Asset securitisation type	Type of securing asset.			√		√				√		
Instrument seniority type	Attribute indicating whether the instrument is guaranteed or not, its rank/level, and whether it is secured or not.									√		
Security is included in the Collateral and Counterparties Database	Attribute indicating whether an instrument is eligible to be pledged as collateral for Eurosystem credit operations.					√				√		
Nominal currency	Nominal currency of the instrument (ISO 4217).	√	√	√	√	√	√	√	√	√		
Issue Date	The date on which the securities are delivered to the underwriter by the issuer against payment. This is the date when the securities were available for delivery to investors for the first time Note: For a strip, this column indicates the date on which the coupon/principal is stripped.	√	√	√	√	√	√	√	√			√
Maturity date	Original maturity date, i.e. the date of the final contractually scheduled principal payment as defined in the prospectus.	√	√	√	√	√	√	√	√	√		√

Output feed data attribute name	Description	Applicable feed										
		CSEC	EXT	FVC	IF	SHS	GSF	IC	PF	CM	MM	SFT
Original maturity	The original maturity of an instrument in days calculated at the date the output data were produced. Empty if no maturity date is available.	√										√
Residual maturity	The residual maturity of an instrument in days calculated on the date the output data are produced.	√					√					√
Issuer name	Name of the issuer									√	√	√
Issuer organisation alias code	Issuer's source alias code or issuer's external alias code according to the alias type.									√		
Issuer organisation alias type	Issuer organisation alias type indicating the data provider that has provided the alias code or external alias code.									√		
ESCB issuer identifier	An issuer identification code loaded via a dedicated list corresponding to a type defined in the ESCB issuer identifier type code list.									√		
ESCB issuer identifier type	The type of ESCB issuer identifier indicating the official ECB code list the identifier is part of (e.g. monetary financial institution (MFI) list, investment fund (IF) list, financial vehicle corporation (FVC) list, or insurance									√		

Output feed data attribute name	Description	Applicable feed										
		CSEC	EXT	FVC	IF	SHS	GSF	IC	PF	CM	MM	SFT
	corporations and pension funds (ICPF) list)											
Issuer domicile country	Country of legal incorporation (domicile) of the issuer of the security (ISO 3166).	√	√	√	√	√	√	√	√	√	√	√
ESA 2010 issuer sector	Institutional sector of the issuer pursuant to ESA 2010.	√	√	√	√	√	√	√	√	√	√	√
Issuer European Classification of Economic Activities (NACE) classification	Main economic activity pursuant to NACE.		√					√	√	√		√
Entity status	Entity status of the issuer of the instrument. This attribute indicates whether an issuer is alive or not.	√										
Entity status date	Attribute indicating the date on which the entity status attribute changed from alive to not-alive (or from not-alive to alive).	√										
Issuer legal entity identifier (LEI)	LEI code of the issuer (ISO 17442).									√	√	√
Issuer MFI code	MFI code of the issuer.									√		√
Amount issued	Amount of the debt instrument that has been raised at issue (in face value).						√			√		

Output feed data attribute name	Description	Applicable feed										
		CSEC	EXT	FVC	IF	SHS	GSF	IC	PF	CM	MM	SFT
	For a strip, this column indicates the amount the coupon/principal was stripped at. For a security issued in tranches, under the same ISIN, this column indicates the cumulative amount issued so far. The amount issued is denominated in nominal currency.											
Amount outstanding	Outstanding amount (in face value). For a security issued in tranches, under the same ISIN, this column indicates the cumulative amount issued so far, net of redemptions. Values are given in nominal currency. Amount outstanding is denominated in nominal currency. If nominal currency is missing, the amount outstanding is denominated in euro.	√	√			√	√	√	√	√		√
Amount outstanding in euro	Amount outstanding converted into euro using the euro exchange rate vis-à-vis nominal currency valid at the date the output data were produced.	√				√	√	√	√			√

Output feed data attribute name	Description	Applicable feed										
		CSEC	EXT	FVC	IF	SHS	GSF	IC	PF	CM	MM	SFT
Amount outstanding type	Attribute indicating whether the amount outstanding attribute captures total outstanding amounts or the number of instruments outstanding.	√								√		√
Market capitalisation	Latest available market capitalisation. Market capitalisation is denominated in nominal currency. If nominal currency is missing, market capitalisation is denominated in euro.	√				√		√	√			
Market capitalisation in euro	Market capitalisation converted into euro using the euro exchange rate vis-à-vis nominal currency valid at the date the output data were produced.	√						√	√			√
Tranche issue date	Date on which a new tranche of an existing security was issued.	√										
Tranche issue price	Price at which a new tranche of an existing security was offered to the market.	√										
Partial redemption date	Date on which an existing security was partially redeemed.	√										
Partial redemption price	Price at which an existing security was partially redeemed.	√										

Output feed data attribute name	Description	Applicable feed										
		CSEC	EXT	FVC	IF	SHS	GSF	IC	PF	CM	MM	SFT
Capital increase date	Date on which the capital increase took place	√										
Capital increase price	Price at which new shares were offered to the market	√										
Capital decrease date	Date on which the capital decrease took place	√										
Capital decrease price	Price at which existing shares were bought back and subsequently cancelled	√										
Yield to maturity	Security specific yield to maturity in percentage terms.					√	√					√
Short name	Short name of the instrument, defined on the basis of the characteristics of the issue and any available information.						√			√	√	
Pool factor	For mortgage backed securities, pool factor or remaining principal balance factor is the outstanding principal balance of the mortgage pool underlying the security divided by original principal balance.		√	√	√	√	√	√	√	√		
Has embedded options	Attribute indicating whether the instrument has an embedded redemption option.									√		

Output feed data attribute name	Description	Applicable feed										
		CSEC	EXT	FVC	IF	SHS	GSF	IC	PF	CM	MM	SFT
Quotation basis	Quotation basis of the instrument, e.g. percentage of nominal (percent) or currency per share/unit (units).	√	√	√	√	√	√	√	√	√		√
Price date	Date that the price information provided in 'Price value' refers to.	√								√		√
Price value	Last available representative price of the instrument at the reference date expressed in the quotation basis and the nominal currency, if applicable, of the instrument. For interest bearing securities, the clean price is provided, i.e. excluding accrued interest.	√	√	√	√	√	√	√	√	√		√
Price value type	Nature of price value, i.e. if it represents a market valuation, estimated or a default value.		√	√	√	√	√	√	√	√		√
Monthly average price	Average of normalised prices of the instrument available in the last 30 calendar days up to the reference date expressed in the quotation basis and the nominal currency, if applicable, of the instrument.	√	√			√				√		

Output feed data attribute name	Description	Applicable feed										
		CSEC	EXT	FVC	IF	SHS	GSF	IC	PF	CM	MM	SFT
Issue price	Issue price of individual securities as paid by the investors.	√										
Redemption type	Redemption type, e.g. whether it is bullet, perpetual, structured, annuity, serial, irregular, or stepped.						√			√		
Redemption frequency	Number of redemptions per year for a debt instrument.						√			√		
Redemption currency	Currency of the payment of the principal (ISO 4217).	√								√		
Redemption price	Final redemption price of individual securities.	√					√			√		
Accrual start date	Date on which the interest starts to accrue for interest paying debt instruments	√								√		√
Accrued interest	Interest accrued since the last coupon payment or since the accrual start date. For interest bearing securities, adding this value to the price value results in the so-called 'dirty price'.	√	√	√	√		√	√	√	√		√
Accrued income factor	Daily security specific income factor in percentage, calculated following the debtor approach. The factor is based on accruals, i.e. giving the combined effect	√	√	√	√	√		√	√	√		√

Output feed data attribute name	Description	Applicable feed										
		CSEC	EXT	FVC	IF	SHS	GSF	IC	PF	CM	MM	SFT
	of accrued interest and income due to difference in issue and redemption price.											
Accrued income (Creditor)	Daily, security specific income, in %, calculated following the creditor approach.									√		
Coupon type	Type of coupon, e.g. whether it is fixed, floating, stepped etc.	√				√	√	√	√	√		√
Last coupon rate	Last coupon rate in percentage per annum actually paid (annualised rate).	√	√	√	√	√		√	√	√		
Last coupon date	Date of last coupon rate actually paid. The attribute allows for identification of whether the last coupon rate actually paid falls within the reporting period or not.	√	√	√	√	√		√	√	√		
Last coupon frequency	Frequency per year at which the last coupon rate is paid out.	√	√	√	√	√		√	√	√		
Coupon currency	Coupon currency (ISO 4217).	√						√	√	√		
Dividend amount	Amount of the last dividend payment per share (in dividend amount type) before tax (gross dividend).		√		√	√		√	√			√

Output feed data attribute name	Description	Applicable feed										
		CSEC	EXT	FVC	IF	SHS	GSF	IC	PF	CM	MM	SFT
Dividend amount type	Dividend amount per share may be denominated in dividend currency or in number of shares.		√		√	√		√	√			
Dividend currency	Currency of the last dividend payment (ISO 4217).		√		√	√		√	√			√
Dividend Settlement date	Settlement date of the last dividend payment. The attribute permits to identify whether the dividend amount paid falls within the reporting period or not.		√		√	√		√	√			√
Last split factor	Split factor for stock splits (and reverse splits) of shares, defined as (number of shares before the split) / (number of shares after the split).	√	√		√	√		√	√			
Last split date	Date as of which the stock split becomes effective.	√	√		√	√		√	√			
Fund asset structure type	Type of (majority of) underlying assets of the fund.							√	√			

ANNEX IV

CSEC AGGREGATE STATISTICS

Introduction

Centralised Securities Database (CSDB)-based securities issues statistics (hereinafter 'CSEC') provide stock and flow aggregates on securities issuances by residents of the Member States whose currency is the euro (hereinafter the 'euro area Member States') and of the Member States whose currency is not the euro (hereinafter the 'non-euro area Member States') in all currencies, as well as by residents of the rest of the world (RoW) in euro, broken down by sector of the issuer, instrument type, interest rate type, maturity, and currency of denomination.

National central banks of the Member States whose currency is the euro (hereinafter the 'NCBs') are responsible for verifying CSEC aggregate statistics related to issuers resident in their countries. The ECB is responsible for verifying CSEC aggregate statistics related to issuers resident outside the euro area, unless an NCB of a Member State whose currency is not the euro (hereinafter a 'non-euro area NCB') has accepted the responsibility of verifying the CSEC aggregate statistics related to issuers resident in its Member State.

The methodology for compiling CSEC aggregate statistics follows as closely as possible the international standards defined in the 'Handbook on Securities Statistics' of the Bank for International Settlements, the European Central Bank (ECB) and the International Monetary Fund ([1]) and in the ESA 2010 ([2]). Exceptional cases where the methodology deviates from these statistical standards are specifically highlighted. The detailed CSEC calculation rules will be defined in the compilation guide agreed by the ESCB Statistics Committee and published in the ECB's website.

1. Coverage and classifications

1.1. *Residency of the issuer*: CSEC aggregate statistics cover issuances by residents of euro area and non-euro area Member States in all currencies, as well as by residents of the RoW in euro. Issuances by residents of euro area and/ non-euro area Member States are broken down by issuer country and other criteria. In addition, euro area and Union level aggregates also cover issuances by supranational institutions deemed resident in the euro area and the Union as a whole respectively.

1.2. *Sectors:* CSEC aggregate statistics cover issuances by the following issuer sectors:

— S1: total economy (all sectors combined)

— S11: non-financial corporations

— S12: financial corporations

— S121: central banks

— S122: deposit taking corporations except the central bank

— S12M: financial corporations other than deposit taking corporations

— S12P: financial corporations other than deposit taking corporations, insurance corporations and pension funds

— S124: non-money market fund investment funds

— S125: other financial intermediaries, except insurance corporations and pension funds

— S125A: financial vehicle corporations engaged in securitisation

— S125W: other financial intermediaries except insurance corporations and pension funds (excluding financial vehicle corporations engaged in securitisation)

— S126: financial auxiliaries

— S127: captive financial institutions and money lenders

— S12Q: insurance corporations and pension funds

([1]) Available on the International Monetary Fund's website at www.imf.org.
([2]) As established by Regulation (EU) No 549/2013.

— S13: general government

— S1311: central government (excluding social security funds)

— S13M: state and local government (excluding social security funds)

— S1314: social security funds

— S1M: households and non-profit institutions serving households

1.3. *Instrument type:* CSEC aggregate statistics cover issuances of debt securities and listed shares [3]. Issuances of unlisted shares, other equity, shares/units issued by money market funds (MMF) and shares/units issued by non-MMF investment funds are excluded.

Issuances of debt securities and listed shares include only securities identified with an International Securities Identification Number (ISIN) code. Issuances of non-negotiable instruments including loans, transactions in securities as part of repurchase agreements, and government investments in the capital of international organisations that are legally constituted as corporations with share capital are excluded.

1.4. *Interest rate type:* CSEC aggregate statistics cover issuances of debt securities of all interest rate types with the following breakdowns:

— Fixed coupon: Debt securities for which at the date of issue the contractual nominal coupon payments are fixed in terms of the currency of denomination for the life of the debt security and the principal repayment is fixed in terms of the currency of denomination and time. This includes stepped debt securities for which at the date of issue different coupons are prefixed throughout the life of the security.

— Zero coupon: Single-payment debt securities without coupon payments, usually sold at a discount.

— Inflation-linked variable rate: Debt securities for which coupon or principal payments are linked to price indices.

— Interest rate-linked variable rate: Debt securities for which coupon or principal payments are linked to interest rate benchmarks or bond yields.

— Asset price-linked variable rate: Debt securities for which coupon or principal payments are linked to any other financial assets, commodities, or indices different from price indices or interest rate benchmarks. This includes debt securities linked to baskets of securities, currencies, business events such as issuer defaults, and other types of assets or events.

Debt securities that contain a variable coupon combined with a fixed coupon are classified under the relevant variable interest rate category.

1.5. *Maturity:* CSEC aggregate statistics cover issuances of debt securities of all maturities. The maturity breakdown for issuances of debt securities classifies debt securities by original maturity and to some extent by residual maturity.

1.6. *Currency of denomination:* CSEC aggregate statistics cover issuances by euro area residents broken down into euro and ‘other currencies’, issuances by residents of non-euro area Member States broken down into euro, ‘national currency other than euro’ and ‘other currencies’, and issuances by RoW residents in euro. The table below summarises the currency breakdowns.

Currency of denomination	Issuances by euro area residents	Issuances by non-euro area Member State residents	Issuances by RoW residents
In euro	✓	✓	✓
In national currency other than euro	N/A	✓	
In other currencies	✓	✓	

[3] Categories F.3 and F.511 of the ESA 2010.

2. **Stock and flow concepts**

CSEC aggregate statistics provide information on stocks (i.e. outstanding amounts) and flows (i.e. gross issuances, redemptions, revaluations, and other changes in volume including reclassifications). The equation below illustrates the link between stocks and flows:

Stocks (t) = Stocks (t-1) + Gross issuances (t) - Redemptions (t) + Revaluations (t) + Other changes in volume (t)

2.1. *Stocks:* CSEC aggregate statistics on stocks cover positions of debt securities and listed shares that are outstanding at the end of the reference period.

2.2. *Gross issuances:* CSEC aggregate statistics on gross issuances cover new issuances of debt securities and listed shares during the reference period. Issuances refer to the situation where an issuer sells newly created debt securities or listed shares to holders. A security is considered to have been issued when the issuer transfers it to a holder, usually in exchange for currency or transferable deposits, or when it has been effectively issued but retained by the original issuer ([4]). In addition, for aggregates on debt securities at nominal and market value, gross issuances also include accrued interest. Gross issuances are not recorded in the event of a sole listing of a corporation on a stock exchange where no new capital is raised ([5]). Issues of securities which can later be converted into other instruments must be recorded as issues in their original instrument category; on conversion they are to be recorded as having been redeemed from this instrument category, with an identical amount then treated as gross issues in a new category.

2.3. *Redemptions:* CSEC aggregate statistics on redemptions cover cancellations of debt securities and listed shares during the reference period. Redemptions include debt securities that have reached their maturity date or have been redeemed early, as well as listed shares that have been formally cancelled. In addition, for aggregates of debt securities at nominal and market value redemptions also include paid coupon. Redemptions are not recorded in the event of a sole delisting from a stock exchange ([6]).

2.4. *Revaluations:* CSEC aggregate statistics on revaluations cover revaluations for debt securities and listed shares accrued during the reference period. Revaluations may occur as a result of market developments of prices and exchange rates.

2.5. *Other changes in volume:* CSEC aggregate statistics on other changes in volume cover other changes in volume for debt securities and listed shares due to changes in the quantity or physical characteristics of securities or changes in the classification of securities. Changes in classification comprise changes in the institutional sector of the issuer, changes of the reference area in which an issuer is domiciled, changes to the structure of institutional units, and changes in the classification of assets. Other changes in volume are derived as a residual from the stock-flow equation.

The detailed calculation rules for stocks and flows will be defined in the compilation guide agreed by the ESCB Statistics Committee and published on the ECB's website.

3. **Statistical treatment of specific instrument categories**

In compiling CSEC aggregate statistics, the following treatment of specific instrument categories should be applied:

Depository receipts: To avoid double counting, issuances of depository receipts must be excluded from CSEC aggregate statistics.

([4]) Securities are considered as effectively issued (even if they have not been sold to another entity before) when: (i) they are recorded in the accounting balance sheet of the issuer; or (ii) they are used or are available for use by the issuer for market operations.

([5]) By contrast, the ESA 2010 (5.150) theoretically allows the recording of such transactions, as it states: 'Listing is recorded as an issuance of listed shares, and as a redemption of unlisted shares […] *where appropriate*.'

([6]) By contrast, the ESA 2010 (5.150) theoretically allows the recording of such transactions, as it states: '[…] de-listing is recorded as a redemption of listed shares, and an issuance of unlisted shares *where appropriate*.'

Issuances with multiple ISIN codes: To avoid double counting, issuances, which are identified by multiple ISIN codes (e.g. because different portions of a security are issued under different regulatory rules or deposited with different depositories), must be included in CSEC aggregate statistics only to the extent that the respective outstanding amounts are not already covered under a different ISIN code.

Stripped debt securities: To avoid double counting, issuances of stripped debt securities must be included in CSEC aggregate statistics only to the extent that the respective outstanding amounts are not already covered by the respective original debt security.

Holdings of own securities: CSEC aggregate statistics must be compiled on a gross basis and cover own holdings of securities, including (i) securities sold in the market and bought back by the issuer and (ii) securities which have been effectively issued but retained by the issuer ([7]).

4. **Valuation**

For debt securities and listed shares, CSEC aggregate statistics are compiled at market value. For debt securities only, CSEC aggregate statistics are also compiled at face value and for stocks of debt securities at nominal value. The table below summarises the valuation methods used for compiling CSEC aggregate statistics:

Type of instrument	Stocks and flows at market value	Stocks and flows at face value	Stocks at nominal value
Debt securities	✓	✓	✓
Listed shares	✓	N/A	N/A

5. **Overview of breakdowns**

For the issuances of each individual euro area Member State, and of the euro area as a whole, CSEC aggregate statistics are measured in euro and compiled in accordance with the breakdowns defined in the following tables. The sector codes used in the tables have the meanings defined in Section 1 on ‘Coverage and classifications’.

([7]) See footnote 4.

Table A1

Debt securities hierarchy 1 – Main maturity and interest rate type breakdowns for individual euro area Member States and the euro area as a whole

Sector

Currency of denomination, maturity, instrument type
Currency denomination, maturity, instrument type

Currency of denomination	Maturity	Instrument type	S1	S11	S12	S121	S122	S12M	S12P	S124	S125	S125A	S125W	S126	S127	S12Q	S13	S1311	S13M	S1314	S1M
All currencies	All maturities	All interest rate types																			
	Short-term at original maturity	All interest rate types																			
	Long-term at original maturity	All interest rate types																			
		Fixed coupon																			
		Zero coupon																			
		Variable interest rate																			
EUR	All maturities	All interest rate types																			
	Short-term at original maturity	All interest rate types		L*		L*	L*			L*		L*	L*	L*	L*	L*		L*	L*	L*	L*
	Long-term at original maturity	All interest rate types																			
		Fixed coupon		L*		L*	L*			L*		L*	L*	L*	L*	L*		L*	L*	L*	L*
		Zero coupon		L*		L*	L*			L*		L*	L*	L*	L*	L*		L*	L*	L*	L*
		Variable interest rate		L		L	L			L		L	L	L	L	L		L	L	L	L
Other currencies	All maturities	All interest rate types																			
	Short-term at original maturity	All interest rate types		L*		L*	L*			L*		L*	L*	L*	L*	L*		L*	L*	L*	L*
	Long-term at original maturity	All interest rate types																			
		Fixed coupon		L*		L*	L*			L*		L*	L*	L*	L*	L*		L*	L*	L*	L*
		Zero coupon		L*		L*	L*			L*		L*	L*	L*	L*	L*		L*	L*	L*	L*
		Variable interest rate		L		L	L			L		L	L	L	L	L		L	L	L	L

Notes: Each cell of the table must be compiled for stocks, gross issuances, redemptions, revaluations and other changes in volume at market and face value as well as for stocks at nominal value. Cells marked as 'L' are lowest-level aggregates that cannot be broken down any further at the level of individual euro area Member States. Cells marked as 'L*' are lowest-level aggregates used to identify CSEC priority series, which are subject to the data quality management (DQM) for CSEC aggregate statistics in this Annex. All other cells in the table are higher-level aggregates that are created by aggregating up the lowest-level aggregates.

Table A2

Debt securities hierarchy 2 – Detailed interest rate type breakdowns for individual euro area Member States and the euro area as a whole

Currency of denomination	Maturity	Instrument type	S1	S11	S12	S121	S122	S12M	S12P	S124	S125	S125A	S125W	S126	S127	S12Q	S13	S1311	S13M	S1314	S1M
All currencies	All maturities	All interest rate types																			
		Fixed interest rate																			
		Fixed coupon																			
		Zero coupon																			
		Variable interest rate																			
		Inflation-linked variable rate																			
		Interest rate-linked variable rate																			
		Asset price-linked variable rate																			
EUR	All maturities	All interest rate types																			
		Fixed interest rate																			
		Fixed coupon		L		L	L			L		L	L	L	L	L		L	L	L	L
		Zero coupon		L		L	L			L		L	L	L	L	L		L	L	L	L
		Variable interest rate																			
		Inflation-linked variable rate		L*		L*	L*			L*		L*	L*	L*	L*	L*		L*	L*	L*	L*
		Interest rate-linked variable rate		L*		L*	L*			L*		L*	L*	L*	L*	L*		L*	L*	L*	L*
		Asset price-linked variable rate		L*		L*	L*			L*		L*	L*	L*	L*	L*		L*	L*	L*	L*
Other currencies	All maturities	All interest rate types																			
		Fixed interest rate																			
		Fixed coupon		L		L	L			L		L	L	L	L	L		L	L	L	L
		Zero coupon		L		L	L			L		L	L	L	L	L		L	L	L	L
		Variable interest rate																			
		Inflation-linked variable rate		L*		L*	L*			L*		L*	L*	L*	L*	L*		L*	L*	L*	L*
		Interest rate-linked variable rate		L*		L*	L*			L*		L*	L*	L*	L*	L*		L*	L*	L*	L*
		Asset price-linked variable rate		L*		L*	L*			L*		L*	L*	L*	L*	L*		L*	L*	L*	L*

Notes: Each cell of the table must be compiled for stocks, gross issuances, redemptions, revaluations and other changes in volume at market and face value as well as for stocks at nominal value. Cells marked as 'L' are lowest-level aggregates that cannot be broken down any further at the level of individual euro area Member States. Cells marked as 'L*' are lowest-level aggregates used to identify CSEC priority series, which are subject to the DQM for CSEC aggregate statistics in this Annex. All other cells in the table are higher-level aggregates that are created by aggregating up the lowest-level aggregates.

Table A3

Debt securities hierarchy 3 – Detailed original maturity breakdowns for individual euro area Member States and the euro area as a whole

Sector Currency of denomination, maturity, instrument type																					
Currency of denomination	Maturity	Instrument type	S1	S11	S12	S121	S122	S12M	S12P	S124	S125	S125A	S125W	S126	S127	S12Q	S13	S1311	S13M	S1314	S1M
All currencies	All maturities	All interest rate types																			
	Short-term at original maturity	All interest rate types																			
	Original maturity > 1 year and ≤ 2 years	All interest rate types																			
	Original maturity > 2 years and ≤ 5 years	All interest rate types																			
	Original maturity > 5 years and ≤ 10 years	All interest rate types																			
	Original maturity > 10 years	All interest rate types																			
EUR	All maturities	All interest rate types																			
	Short-term at original maturity	All interest rate types		L		L	L			L		L	L	L	L	L		L	L	L	L
	Original maturity > 1 year and ≤ 2 years	All interest rate types		L		L	L			L		L	L	L	L	L		L	L	L	L
	Original maturity > 2 years and ≤ 5 years	All interest rate types		L		L	L			L		L	L	L	L	L		L	L	L	L
	Original maturity > 5 years and ≤ 10 years	All interest rate types		L		L	L			L		L	L	L	L	L		L	L	L	L
	Original maturity > 10 years	All interest rate types		L		L	L			L		L	L	L	L	L		L	L	L	L
Other currencies	All maturities	All interest rate types																			
	Short-term at original maturity	All interest rate types		L		L	L			L		L	L	L	L	L		L	L	L	L
	Original maturity > 1 year and ≤ 2 years	All interest rate types		L		L	L			L		L	L	L	L	L		L	L	L	L
	Original maturity > 2 years and ≤ 5 years	All interest rate types		L		L	L			L		L	L	L	L	L		L	L	L	L
	Original maturity > 5 years and ≤ 10 years	All interest rate types		L		L	L			L		L	L	L	L	L		L	L	L	L
	Original maturity > 10 years	All interest rate types		L		L	L			L		L	L	L	L	L		L	L	L	L

Notes: Each cell of the table must be compiled for stocks, gross issuances, redemptions, revaluations and other changes in volume at market and face value as well as for stocks at nominal value. Cells marked as 'L' are lowest-level aggregates that cannot be broken down any further at the level of individual euro area Member States. All other cells in the table are higher-level aggregates that are created by aggregating up the lowest-level aggregates.

Table A4

Debt securities hierarchy 4 – Detailed residual maturity breakdowns for individual euro area Member States and the euro area as a whole

Currency of denomination	Maturity	Instrument type	S1	S11	S12	S121	S122	S12M	S12P	S124	S125	S125A	S125W	S126	S127	S12Q	S13	S1311	S13M	S1314	S1M
All currencies	All maturities	All interest rate types																			
	Short-term at original maturity	All interest rate types		L		L	L			L		L	L	L	L	L		L	L	L	L
	Long-term original maturity with residual maturity ≤ 1 year	All interest rate types		L		L	L			L		L	L	L	L	L		L	L	L	L
	Long-term original maturity with residual maturity > 1 year and ≤ 2 years	All interest rate types		L		L	L			L		L	L	L	L	L		L	L	L	L
	Long-term original maturity with residual maturity > 2 years	All interest rate types		L		L	L			L		L	L	L	L	L		L	L	L	L
EUR	All maturities	All interest rate types																			
	Short-term at original maturity	All interest rate types		L		L	L			L		L	L	L	L	L		L	L	L	L
	Long-term original maturity with residual maturity ≤ 1 year	All interest rate types		L		L	L			L		L	L	L	L	L		L	L	L	L
	Long-term original maturity with residual maturity > 1 year and ≤ 2 years	All interest rate types		L		L	L			L		L	L	L	L	L		L	L	L	L
	Long-term original maturity with residual maturity > 2 years	All interest rate types		L		L	L			L		L	L	L	L	L		L	L	L	L
Other currencies	All maturities	All interest rate types																			
	Short-term at original maturity	All interest rate types		L		L	L			L		L	L	L	L	L		L	L	L	L
	Long-term original maturity with residual maturity ≤ 1 year	All interest rate types		L		L	L			L		L	L	L	L	L		L	L	L	L
	Long-term original maturity with residual maturity > 1 year and ≤ 2 years	All interest rate types		L		L	L			L		L	L	L	L	L		L	L	L	L
	Long-term original maturity with residual maturity > 2 years	All interest rate types		L		L	L			L		L	L	L	L	L		L	L	L	L

Notes: Each cell of the table must be compiled for stocks, gross issuances, redemptions, revaluations and other changes in volume at market and face value as well as for stocks at nominal value. Cells marked as ‘L’ are lowest-level aggregates that cannot be broken down any further at the level of individual euro area Member States. All other cells in the table are higher-level aggregates that are created by aggregating up the lowest-level aggregates.

Table A5

Listed shares breakdowns for individual euro area Member States and the euro area as a whole

Currency of denomination \ Sector	S1	S11	S12	S121	S122	S12M	S12P	S124	S125	S125A	S125W	S126	S127	S12Q	S13	S1311	S13M	S1314	S1M
All currencies								N/A		N/A					N/A	N/A	N/A	N/A	N/A
EUR		**L***		**L***	**L***			N/A		N/A	**L***	**L***	**L***	**L***	N/A	N/A	N/A	N/A	N/A
Other currencies		**L***		**L***	**L***			N/A		N/A	**L***	**L***	**L***	**L***	N/A	N/A	N/A	N/A	N/A

Notes: Each cell of the table must be compiled for stocks, gross issuances, redemptions, revaluations and other changes in volume at market value. Cells marked as ‘L’ are lowest-level aggregates that cannot be broken down any further at the level of individual euro area Member States. Cells marked as ‘L*’ are lowest-level aggregates used to identify the CSEC priority series, which are subject to the DQM for CSEC aggregate statistics in this Annex. All other cells in the table (except for those marked as “N/A”, which indicate sectors that typically do not issue listed shares) are higher-level aggregates that are created by aggregating up the lowest-level aggregates.

For the debt securities issuances of the non-euro area rest of the world, CSEC aggregate statistics must be measured in euro and be compiled in accordance with the breakdowns defined in the following tables. The sector codes used in the tables have the meanings defined in Section 1 on ‘Coverage and classifications’.

Table A6

Debt securities hierarchy 1 – Main maturity and interest rate type breakdowns for the non-euro area rest of the world

Currency of denomination	Maturity	Instrument type	S1	S11	S12	S121	S122	S12M	S12P	S124	S125	S125A	S125W	S126	S127	S12Q	S13	S1311	S13M	S1314	S1M
EUR	All maturities	All interest rate types																			
	Short-term at original maturity	All interest rate types		L*		L*	L*			L*		L*	L*	L*	L*	L*		L*	L*	L*	L*
	Long-term at original maturity	All interest rate types																			
		Fixed coupon		L*		L*	L*			L*		L*	L*	L*	L*	L*		L*	L*	L*	L*
		Zero coupon		L*		L*	L*			L*		L*	L*	L*	L*	L*		L*	L*	L*	L*
		Variable interest rate		L		L	L			L		L	L	L	L	L		L	L	L	L

Notes: Each cell of the table must be compiled for stocks, gross issuances, redemptions, revaluations and other changes in volume at market and face value as well as for stocks at nominal value. Cells marked as 'L' are lowest-level aggregates that cannot be broken down any further at the level of the non-euro area rest of the world. Cells marked as 'L*' are lowest-level aggregates used to identify CSEC priority series, which are subject to the DQM for CSEC aggregate statistics in this Annex. All other cells in the table are higher-level aggregates that are created by aggregating up the lowest-level aggregates.

Table A7

Debt securities hierarchy 2 – Detailed interest rate type breakdowns for the non-euro area rest of the world

Currency of denomination	Maturity	Instrument type	S1	S11	S12	S121	S122	S12M	S12P	S124	S125	S125A	S125W	S126	S127	S12Q	S13	S1311	S13M	S1314	S1M
EUR	All maturities	All interest rate types																			
		Fixed interest rate																			
		Fixed coupon		**L**		**L**	**L**			**L**		**L**	**L**	**L**	**L**	**L**		**L**	**L**	**L**	**L**
		Zero coupon		**L**		**L**	**L**			**L**		**L**	**L**	**L**	**L**	**L**		**L**	**L**	**L**	**L**
		Variable interest rate																			
		Inflation-linked variable rate		**L***		**L***	**L***			**L***		**L***	**L***	**L***	**L***	**L***		**L***	**L***	**L***	**L***
		Interest rate-linked variable rate		**L***		**L***	**L***			**L***		**L***	**L***	**L***	**L***	**L***		**L***	**L***	**L***	**L***
		Asset price-linked variable rate		**L***		**L***	**L***			**L***		**L***	**L***	**L***	**L***	**L***		**L***	**L***	**L***	**L***

Notes: Each cell of the table must be compiled for stocks, gross issuances, redemptions, revaluations and other changes in volume at market and face value as well as for stocks at nominal value. Cells marked as 'L' are lowest-level aggregates that cannot be broken down any further at the level of the non-euro area rest of the world. Cells marked as 'L*' are lowest-level aggregates used to identify CSEC priority series, which are subject to the DQM for CSEC aggregate statistics in this Annex. All other cells in the table are higher-level aggregates that are created by aggregating up the lowest-level aggregates.

Table A8

Debt securities hierarchy 3 – Detailed original maturity breakdowns for the non-euro area rest of the world

Currency of denomination	Maturity	Instrument type	S1	S11	S12	S121	S122	S12M	S12P	S124	S125	S125A	S125W	S126	S127	S12Q	S13	S1311	S13M	S1314	S1M
EUR	All maturities	All interest rate types																			
	Short-term at original maturity	All interest rate types		L		L	L			L		L	L	L	L	L		L	L	L	L
	Original maturity > 1 year and ≤ 2 years	All interest rate types		L		L	L			L		L	L	L	L	L		L	L	L	L
	Original maturity > 2 years and ≤ 5 years	All interest rate types		L		L	L			L		L	L	L	L	L		L	L	L	L
	Original maturity > 5 years and ≤ 10 years	All interest rate types		L		L	L			L		L	L	L	L	L		L	L	L	L
	Original maturity > 10 years	All interest rate types		L		L	L			L		L	L	L	L	L		L	L	L	L

Notes: Each cell of the table must be compiled for stocks, gross issuances, redemptions, revaluations and other changes in volume at market and face value as well as for stocks at nominal value. Cells marked as 'L' are lowest-level aggregates that cannot be broken down any further at the level of the non-euro area rest of the world. All other cells in the table are higher-level aggregates that are created by aggregating up the lowest-level aggregates.

Table A9

Debt securities hierarchy 4 – Detailed residual maturity breakdowns for the non-euro area rest of the world

Currency of denomination	Maturity	Instrument type	S1	S11	S12	S121	S122	S12M	S12P	S124	S125	S125A	S125W	S126	S127	S12Q	S13	S1311	S13M	S1314	S1M
EUR	All maturities	All interest rate types																			
	Short-term at original maturity	All interest rate types		L		L	L			L		L	L	L	L	L		L	L	L	L
	Long-term original maturity with residual maturity ≤ 1 year	All interest rate types		L		L	L			L		L	L	L	L	L		L	L	L	L
	Long-term original maturity with residual maturity > 1 year and ≤ 2 years	All interest rate types		L		L	L			L		L	L	L	L	L		L	L	L	L
	Long-term original maturity with residual maturity > 2 years	All interest rate types		L		L	L			L		L	L	L	L	L		L	L	L	L

Notes: Each cell of the table must be compiled for stocks, gross issuances, redemptions, revaluations and other changes in volume at market and face value as well as for stocks at nominal value. Cells marked as 'L' are lowest-level aggregates that cannot be broken down any further at the level of the non-euro area rest of the world. All other cells in the table are higher-level aggregates that are created by aggregating up the lowest-level aggregates.

6. **Compilation process for CSEC aggregate statistics**

CSEC aggregate statistics are centrally and automatically compiled based on the item-by-item data included in the CSDB. The compilation process produces the lowest-level aggregates indicated in Tables A1 to A9 (cells identified with the letter 'L' or 'L*'). All other aggregates defined in Tables A1 to A9 are produced by further aggregating up these lowest-level aggregates.

7. **Verification and DQM of CSEC aggregate statistics**

The ECB will use its best efforts to compile and make available the CSEC aggregate statistics on a daily basis to enable the regular verification of the aggregates.

Verification of initial and regular aggregates

In accordance with the timetable in Table 2 of Annex II to this Guideline, the ECB and the NCBs must verify the initial and regular CSEC aggregate statistics by the end of the seventh working day of the calendar month following the reference month of the current production round to ensure that all sets of CSEC priority series have been verified.

The ECB and NCBs must use their best efforts in verifying the initial CSEC aggregate statistics based on information that is readily available to them and must examine the respective aggregates for their plausibility. Initial CSEC aggregate statistics must be flagged as 'provisional values' in the disseminated data.

The ECB and NCBs must thoroughly verify the regular CSEC aggregate statistics based on all currently available information including other benchmark data available outside the CSDB. Regular CSEC aggregate statistics must be flagged as 'normal values' in the disseminated data.

Prioritisation of verification work

In order to ensure an efficient verification workflow and to avoid duplication of verification work, the verification of CSEC aggregate statistics must focus on the 'CSEC priority series', i.e. the most relevant lowest-level CSEC aggregate statistics. Verifying the priority series will ensure that all higher-level aggregates that are based on these series, and to a significant extent also any related overlapping aggregates, are verified as well.

CSEC priority series represent the most relevant CSEC aggregate statistics for a country as measured by their outstanding amounts expressed as a share of amounts outstanding to the CSEC total economy aggregates for debt securities and as measured by their market capitalisation expressed as a share of market capitalisation to the CSEC total economy aggregates for listed shares. Priority series are defined as those lowest-level CSEC aggregate statistics for stocks at market value that are required to reach the Target 2 DQM threshold for that country.

For debt securities, CSEC aggregate statistics cover four overlapping hierarchies as defined in Tables A1 to A4 and A6 to A9. In order to avoid duplication of work, the identification of CSEC priority series for debt securities is based on the lowest-level 'short-term at original maturity' aggregates and 'long-term at original maturity' aggregates for 'fixed coupon' and 'zero coupon' as defined in Tables A1 and A6, as well as the lowest-level 'inflation-linked variable rate', 'interest rate-linked variable rate' and 'asset price-linked variable rate' aggregates as defined in Tables A2 and A7. This ensures a detailed verification of the breakdowns by instrument type as well as a high-level verification of the breakdowns by maturity (i.e. short-term vs. long-term at original maturity).

For listed shares, the identification of CSEC priority series is based on the lowest-level aggregates defined in Table A5.

The CSEC aggregate statistics must be verified at the level of 'sets of series', consisting of the related aggregates for the three valuation methods (i.e. market, nominal, and face value) and the five series types (i.e. stocks, gross issuances, redemptions, revaluations, and other changes in volume), which share the remaining breakdowns. This means that the verification of CSEC priority series must always cover the full set of series related to the respective CSEC priority series ('sets of CSEC priority series') for stocks at market value.

If sets of CSEC priority series exhibit a significant change in total outstanding amounts or market capitalisation after they have been verified but before the deadline for verification as defined by the timetable in Table 2 of Annex II to this Guideline, the CSDB must highlight the respective sets of series and the respective sets of series must be verified again.

DQM of CSEC aggregate statistics

In verifying and confirming the CSEC priority series, the ECB and NCBs must examine the time-series of the related sets of series for the following possible data quality issues:

— Outliers, i.e. values that differ significantly from the other values of the respective time-series;

— Stock-flow inconsistencies, i.e. reference periods during which current stocks do not equal the sum of previous stocks plus gross issuances minus redemptions plus revaluations, which could either be due to other changes in volume or data quality issues.

If the ECB and NCBs identify relevant statistical data quality issues during the verification of the initial and regular CSEC aggregate statistics, they must correct these issues in the underlying CSDB item-by-item data in due course but no later than the deadline specified in the timetable in Table 2 of Annex II to this Guideline. Corrections of the underlying item-by-item data will be reflected in the CSEC aggregate statistics that are compiled in the overnight processing for the following day.

ANNEX V

CORRELATION TABLE

Guideline 2012/689/EU (ECB/2012/21)	Guideline (EU) 2021/834 (ECB/2021/15)	This Guideline
Article 1	—	Article 1
Article 2	—	Article 2
—	—	Article 3(1)
Article 3(1)	—	Article 3(2)
Article 3(2)	—	Article 3(3)
—	—	Article 4(1), (2), (3) and (4)
Article 8	—	Article 4(5)
—	—	Article 4(6) and (7)
Article 4(1)	—	Article 5(1)
Article 4(2), Article 5(1) and (2), and Article 6(1)	—	Article 5(2)
Article 4(3)	—	Article 5(3)
Article 5(4)	—	Article 5(4)
—	—	Article 5(5)
Article 5(6) and Article 6(3)	—	Article 5(6)
Article 5(4)	—	Article 6(1)
Article 5(3)	—	Article 6(2)
Article 5(5)	—	Article 6(3)
Article 6(2)	—	Article 7
Article 5(4) and Article 6(2)	—	Article 8
Article 7(1)	—	Article 9(1)
Article 7(2)	—	Article 9(2)
—	—	Article 9(3)
—	—	Article 10
—	—	Article 11
—	Article 9	Article 12

Guideline 2012/689/EU (ECB/2012/21)	Guideline (EU) 2021/834 (ECB/2021/15)	This Guideline
—	Article 5	Article 13
Article 10	Article 10	Article 14
—	—	Article 15
Article 11	Article 11	Article 16
Article 12	Article 12	Article 17
—	—	Annex I
Annex I	—	Annex II
Annex II	—	Annex III
—	—	Annex IV