

# GUIDELINES

## GUIDELINE OF THE EUROPEAN CENTRAL BANK

of 26 September 2012

on the data quality management framework for the Centralised Securities Database

(ECB/2012/21)

(2012/689/EU)

THE GOVERNING COUNCIL OF THE EUROPEAN CENTRAL BANK,

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 <sup>(1)</sup>,

Whereas:

applied to output feed data, a subset of output data that can be used to support the production of statistics or other uses. Output feed data is provided to NCBs no later than seven working days following the end of each calendar month.

(1) The Centralised Securities Database (CSDB) is a single information technology infrastructure, which is operated jointly by the members of the European System of Central Banks (ESCB), including national central banks (NCBs) of non-euro area Member States where such NCBs voluntarily participate in the operation of the CSDB. The CSDB stores item-by-item data, in particular, data on securities, their issuers and prices.

(2) Data are collected from various sources, including from ESCB members, certain commercial data providers, the public domain and administrative sources, and transmitted to the CSDB. There is a risk, however, that such input data may be inaccurate or incomplete. The CSDB system is able to reconcile partially inconsistent input data from different sources, and can detect incomplete or missing data. It automatically compounds input data from various overlapping sources to the extent possible into a complete and high quality single record.

(3) The overall quality of data in the CSDB can only be assessed at the level of output data rather than at the level of individual sets of input data. To ensure the completeness, accuracy and consistency of output data, to the extent possible, it is necessary to define a framework for data quality management (DQM) to be

(4) Some output feed data also include attributes such as prices or income-related information which are expected to fluctuate over time. These attributes are automatically verified by the CSDB system through the application of statistical algorithms. Only attributes specified in Annex I for each DQM target are subject to verification by competent authorities in accordance with this Guideline. The full list of attributes constituting the supported feeds is set out in Annex II.

(5) 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 euro area NCBs for the quality of output data in the CSDB and, where relevant, those of the European Central Bank (ECB).

(6) The CSDB DQM framework should be based, first, on DQM targets that represent indicators for assessing the quality of output feed data and, second, on DQM metrics that identify and prioritise, for each respective DQM target, the output feed data that need to be verified. It should also be based on DQM thresholds that define the minimum level of verification that needs to be conducted in relation to a DQM target.

(7) Given the absence of benchmark data, DQM targets do not always identify errors in output feed data but can only identify cases where manual verification of output feed data is needed.

(8) Since the CSDB is operated jointly by all ESCB members, they should all aim to follow the same DQM standards. 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

<sup>(1)</sup> OJ L 318, 27.11.1998, p. 8.

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 euro area and non-euro area NCBs. Non-euro area NCBs should therefore design and implement all the measures that they consider appropriate in order to carry out DQM in accordance with this Guideline.

- (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 structural mistakes in input data directly with the data provider,

HAS ADOPTED THIS GUIDELINE:

#### *Article 1*

##### **Definitions**

For the purpose of this Guideline:

- (1) 'CSDB' means the Centralised Securities Database set up by the ESCB and located at the ECB's premises;
- (2) 'input data' means any data provided to the CSDB from one or more data sources;
- (3) 'output data' means data that is automatically derived in the CSDB by compounding input data into a complete, high quality single record;
- (4) 'output feed data' means the subset of output data and characteristics listed in Annex II that serve as a data input to support the production of statistics or other uses;
- (5) 'Data Quality Management' or 'DQM' means ensuring, verifying and maintaining the quality of output feed data through the use and application of DQM targets, DQM metrics, DQM thresholds and the DQM workflow;
- (6) 'Data Source Management' or 'DSM' means identifying and correcting directly with a data provider repetitive and/or structural mistakes in input data;
- (7) 'initial DQM' means DQM of output feed data, including data covering the most recent time period, carried out by DQM competent authorities on a monthly basis taking into account the output feed data provided by the end-month preview;
- (8) 'regular DQM' means DQM of output feed data carried out by DQM competent authorities 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;

- (9) 'DQM target' means a benchmark for assessing the quality of output feed data, as specified in Annex I;
- (10) 'DQM metric' means a statistical indicator measuring the level to which a certain DQM target has been reached, as specified in Annex I;
- (11) '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;
- (12) 'DQM workflow' means a technical process applied for the correction of input data in order to comply with a DQM threshold;
- (13) 'end-month preview' means a regular monthly update of output data and of DQM metrics which produces an approximation of output data for the forthcoming end-month status;
- (14) 'working day' is a complete day on which TARGET2 is open, as published on the ECB's website;
- (15) 'verification' means the process whereby DQM competent authorities check CSDB output feed data and, if necessary, correct CSDB input data, hereby applying the DQM workflow;
- (16) 'resident' has the meaning defined in Article 1 of Regulation (EC) No 2533/98.

#### *Article 2*

##### **Subject matter and scope**

1. This Guideline establishes a framework for DQM in the CSDB, the aim of which is to ensure the completeness, accuracy and consistency of output data in the CSDB by consistently applying rules on quality standards for such data.
2. The CSDB DQM framework shall be based on the DQM and DSM.

#### *Article 3*

##### **DQM Competent authorities**

1. The NCB of the euro area Member State in which a security issuer is resident shall be competent for the DQM of the data related to that issuer.

2. The ECB shall be competent for 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.

#### Article 4

##### **DQM, DQM metrics and DQM thresholds**

1. DQM competent authorities shall carry out initial DQM and regular DQM. In doing so they shall verify output feed data, regardless of its source.

2. DQM competent authorities shall apply DQM metrics in accordance with Annex I.

3. For the attributes covered by Annex I, DQM competent authorities shall apply DQM thresholds at a level that ensures the quality of output feed data in accordance with the requirements to support the uses for these respective attributes as set out in Annex II.

#### Article 5

##### **Initial DQM**

1. Initial DQM shall be applied to DQM targets 1, 2, 3a, 3b and 6, as specified in Annex I.

2. The ECB shall make available the end-month preview seven working days before the end of each calendar month.

3. In carrying out initial DQM, DQM competent authorities shall verify substantial statistical outliers to ensure that, after initial DQM has taken place, output feed data reflects the most recent developments to the extent possible.

4. DQM competent authorities shall verify the end-month preview data by the end of the second working day of the following calendar month to the extent that, pursuant to DQM metrics, the DQM thresholds have not been met.

5. Where there is no benchmark data available outside the CSDB initial DQM shall rely solely on information that is readily available to the DQM competent authority or which can be easily obtained without setting up any new reporting structure.

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

#### Article 6

##### **Regular DQM**

1. Regular DQM shall be applied to DQM targets 3a, 3b, 4, 5 and 6, as specified in Annex I.

2. DQM competent authorities shall carry out regular DQM within one month following the end of each calendar month.

They shall verify output feed data, taking into account all currently available information, by no later than the second working day of the calendar month following the month in which regular DQM is carried out.

3. DQM competent authorities 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.

#### Article 7

##### **Tasks related to DSM**

1. DQM competent authorities shall identify any DSM issues and report them to the ECB.

2. The ECB shall address repetitive high-priority errors pertaining to DSM in cooperation with the relevant DQM competent authorities within one month of the date on which a DSM issue is reported to the ECB.

#### Article 8

##### **Corrections of input data**

A DQM competent authority shall, provided that it has improved input data, use the CSDB system to correct any errors and omissions in its input data that were not corrected in the course of verification as specified in Article 5(4).

#### Article 9

##### **Annual quality report**

Taking account of the views of the ESCB Statistics Committee, the Executive Board of the ECB shall report annually to the Governing Council on the quality of output feed data.

#### Article 10

##### **Simplified amendment procedure**

Taking account of the views of the ESCB Statistics Committee, the Executive Board of the ECB shall be entitled to make technical amendments to the Annexes to this Guideline, provided that such amendments do not change the underlying conceptual framework of the Guideline, including the division of responsibilities between the ECB and the NCBs, or materially affect the reporting burden on DQM competent authorities. The Executive Board shall inform the Governing Council of any such amendment without undue delay.

#### Article 11

##### **Entry into force**

1. This Guideline shall enter into force on 1 November 2012.

2. This Guideline shall apply from 1 July 2013.

*Article 12***Addressees**

This Guideline is addressed to all Eurosystem central banks.

Done at Frankfurt am Main, 26 September 2012.

*For the Governing Council of the ECB*

*The President of the ECB*

Mario DRAGHI

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## DQM TARGETS, IMPLEMENTATION, ATTRIBUTES AND DQM THRESHOLD BASIS

DQM target	DQM metrics	Implementation	Output feed data attributes	DQM threshold basis
<b>Target 1:</b>  <b>Data stability – stock data</b>	<p>Concept:</p> <p>The metric shall 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 shall indicate that the respective attribute has not changed for any of the underlying securities, while an index value of 0 shall indicate that the respective attribute has changed for all securities.</p> <p>If an index drops below 1, individual securities shall be identified with the changed attribute that has caused the index drop with a view to verifying the change until the threshold is met.</p> <p>Events triggering an index change:</p> <p>For discrete attributes, any month-on-month difference in the attribute is considered to trigger an index change.</p> <p>For continuous attributes, any month-on-month difference larger than 25 % is considered to trigger an index change.</p> <p>Coverage:</p> <p>This DQM metric shall cover all investment fund shares, equity and debt securities including certificates which do not have a maturity date older than three months.</p>	<p>Target 1 assesses the stability of stock data.</p> <p>Unverified changes to CSDB attributes shall not decrease the share of stable data beyond the DQM threshold for each of the following European System of Accounts (ESA) <sup>(1)</sup> issuer sectors:</p> <ul style="list-style-type: none"> <li>— S.11 'non-financial corporations' (S.11 pursuant to ESA 95)</li> <li>— S.121 'the central bank' (S.121 pursuant to ESA 95)</li> <li>— S.122 'deposit-taking corporations except the central bank' (S.122 pursuant to ESA 95)</li> <li>— S.123 'money market funds (MMF)' (S.122 pursuant to ESA 95)</li> <li>— S.124 'non-MMF investment funds' (S.123 pursuant to ESA 95)</li> <li>— S.125 'other financial intermediaries, except insurance corporations and pension funds' (S.123 pursuant to ESA 95)</li> <li>— S.126 'financial auxiliaries' (S.124 pursuant to ESA 95)</li> <li>— S.127 'captive financial institutions and money lenders' (S.123 pursuant to ESA 95)</li> <li>— S.128 'insurance corporations (IC)' (S.125 pursuant to ESA 95)</li> <li>— S.129 'pension funds (PF)' (S.125 pursuant to ESA95)</li> <li>— S.13 'general government' (S.13 pursuant to ESA 95).</li> </ul>	<p>Explicit attributes: Issue date for debt, maturity date for debt, nominal currency, quotation basis, instrument ESA class, issuer country of residence, issuer ESA sector, issuer European Classification of Economic Activities (NACE) classification, amount outstanding, number of shares outstanding for quoted shares.</p>	<p>Amounts outstanding or market capitalisation in euro, expressed as share of stock data.</p>

DQM target	DQM metrics	Implementation	Output feed data attributes	DQM threshold basis
<b>Target 2:</b>  <b>Data accuracy – new issues and redemptions; net issuances</b>	<p>Concept:</p> <p>The metric shall be defined for each country of residence/sector combination and shall cover new issues, redemptions and outstanding amounts of debt securities quoted in percentage.</p> <p>The metric shall relate the net issuance activity during the month to the outstanding amount at the end of the previous month (percentage change) and shall monitor the relative development of outstanding debt.</p> <p>It shall be possible to access disaggregated data down to the individual new issues and redemptions which have caused the change in outstanding amounts. These developments shall be verified until the threshold is met.</p>	<p>Target 2 assesses new issues and redemptions against the respective stock data.</p> <p>Unverified outstanding amount data of new issues and redemptions of debt securities quoted in percentage shall in net terms not exceed the DQM threshold for each of the following ESA issuer sectors:</p> <ul style="list-style-type: none"> <li>— S.11 ‘non-financial corporations’ (S.11 pursuant to ESA 95)</li> <li>— S.121 ‘the central bank’ (S.121 pursuant to ESA 95)</li> <li>— S.122 ‘deposit-taking corporations except the central bank’ (S.122 pursuant to ESA 95)</li> <li>— S.123 ‘money market funds (MMF)’ (S.122 pursuant to ESA 95)</li> <li>— S.124 ‘non-MMF investment funds’ (S.123 pursuant to ESA 95)</li> <li>— S.125 ‘other financial intermediaries, except insurance corporations and pension funds’ (S.123 pursuant to ESA 95)</li> <li>— S.126 ‘financial auxiliaries’ (S.124 pursuant to ESA 95)</li> <li>— S.127 ‘captive financial institutions and money lenders’ (S.123 pursuant to ESA 95)</li> <li>— S.128 ‘insurance corporations (IC)’ (S.125 pursuant to ESA 95)</li> <li>— S.129 ‘pension funds (PF)’ (S.125 pursuant to ESA95)</li> <li>— S.13 ‘general government’ (S.13 pursuant to ESA 95).</li> </ul>	<p>Explicit attributes: amount outstanding.</p> <p>Implicit attributes: Issue date, maturity date, nominal currency, quotation basis, instrument ESA classification, issuer country of residence, issuer ESA sector.</p>	<p>Amounts outstanding in euro, expressed as relative development compared to respective stock data.</p>

DQM target	DQM metrics	Implementation	Output feed data attributes	DQM threshold basis
<b>Target 3a:</b>  <b>Data accuracy – support correct sector allocation and data extraction by issuer</b>	<p>Conceptual background:</p> <p>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 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.</p> <p>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.</p> <p>Instruments in clash groups prevent the consistent and reliable extraction of all instruments issued by a certain issuer.</p> <p>Instruments in clash groups increase the risk of misclassification by country of residence or sector.</p> <p>Concept:</p> <p>For each country of residence the metric shall identify the instruments in clash groups and shall relate them as a percentage share in terms of counts or in terms of monetary amounts to all instruments for that country.</p> <p>Coverage:</p> <p>The metric shall cover all instruments in the CSDB.</p>	<p>Target 3a assesses the correct identification of the issuer population.</p> <p>Where there is a disagreement on the issuer of an instrument, i.e. instruments in ‘clash groups’, such instruments shall not exceed the DQM threshold.</p>	<p>Explicit attributes: Issuer identifier used for grouping.</p>	<p>Amounts outstanding in euro referring to instruments in clash groups, expressed as a percentage share of all instruments.</p>

DQM target	DQM metrics	Implementation	Output feed data attributes	DQM threshold basis
<p><b>Target 3b:</b></p> <p><b>Data accuracy – support correct sector allocation and data extraction by issuer</b></p>	<p>Conceptual background:</p> <p>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.</p> <p>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.</p> <p>Instruments in stand-alone groups prevent the consistent and reliable extraction of all instruments issued by a certain issuer.</p> <p>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.</p> <p>Concept:</p> <p>For each country of residence the metric shall identify the instruments in stand-alone groups and shall relate them as a percentage share in terms of counts or in terms of monetary amounts to all instruments for that country.</p>	<p>Target 3b assesses the correct identification of the issuer population.</p> <p>Where there is no reliable information on the issuer of an instrument, i.e. instruments in ‘stand-alone groups’, such instruments shall not exceed the DQM threshold.</p>	<p>Explicit attributes: Issuer identifier used for grouping.</p>	<p>Amounts outstanding in euro referring to instruments in stand-alone groups, expressed as a percentage share of all instruments.</p>

DQM target	DQM metrics	Implementation	Output feed data attributes	DQM threshold basis
	<p>Coverage:</p> <p>The metric shall cover all instruments in the CSDB.</p>			
<p><b>Target 4:</b></p> <p><b>Data accuracy – amount outstanding of debt securities including certificates</b></p>	<p>Concept:</p> <p>The metric shall aggregate amounts outstanding for debt securities including certificates by the country of residence of each issuer and by issuer sector pursuant to the concept of securities issues statistics (SEC).</p> <p>This aggregate shall be compared to the respective SEC figure and the percentage deviation of the CSDB data shall be calculated.</p> <p>Unverified and unexplained differences shall not exceed the DQM threshold.</p>	<p>Target 4 compares CSDB output data to external benchmark data.</p> <p>Unverified and unexplained differences between aggregated CSDB data and the respective information from ECB SEC or other reliable benchmarks shall, subject to the availability of such benchmark data, not exceed the DQM threshold for the same reference date for each of the following ESA issuer sectors:</p> <ul style="list-style-type: none"> <li>— S.11 ‘non-financial corporations’ (S.11 pursuant to ESA 95)</li> <li>— S.121 ‘the central bank’ (S.121 pursuant to ESA 95)</li> <li>— S.122 ‘deposit-taking corporations except the central bank’ (S.122 pursuant to ESA 95)</li> <li>— S.123 ‘money market funds (MMF)’ (S.122 pursuant to ESA 95)</li> <li>— S.124 ‘non-MMF investment funds’ (S.123 pursuant to ESA 95)</li> <li>— S.125 ‘other financial intermediaries, except insurance corporations and pension funds’ (S.123 pursuant to ESA 95)</li> <li>— S.126 ‘financial auxiliaries’ (S.124 pursuant to ESA 95)</li> <li>— S.127 ‘captive financial institutions and money lenders’ (S.123 pursuant to ESA 95)</li> <li>— S.128 ‘insurance corporations (IC)’ (S.125 pursuant to ESA 95)</li> <li>— S.129 ‘pension funds (PF)’ (S.125 pursuant to ESA95)</li> <li>— S.13 ‘general government’ (S.13 pursuant to ESA 95).</li> </ul>	<p>Explicit attributes: Amount outstanding in euro, market capitalisation in euro.</p> <p>Implicit attributes: issue date, maturity date, currency, issuer ESA sector, country of residence.</p>	<p>Amounts outstanding or market capitalisation in euro, expressed as a percentage difference between CSDB and external benchmark.</p>

DQM target	DQM metrics	Implementation	Output feed data attributes	DQM threshold basis
<b>Target 5:</b>  <b>Data accuracy – market capitalisation equity</b>	<p>Concept:</p> <p>The metric shall aggregate market capitalisation for equity shares by country of residence of each issuer and issuer sector pursuant to the concept of securities issues statistics.</p> <p>This aggregate shall be compared to the respective SEC figure and the percentage deviation of the CSDB data shall be calculated.</p> <p>Unverified and unexplained differences shall not exceed the DQM threshold.</p>	<p>Target 5 compares CSDB output data to external benchmark data.</p> <p>Unverified and unexplained differences between aggregated CSDB information and the respective information from ECB SEC or other reliable benchmarks shall not, subject to the availability of benchmark data, exceed the DQM threshold for the same reference date for each of the following ESA issuer sectors:</p> <ul style="list-style-type: none"> <li>— S.11 ‘non-financial corporations’ (S.11 pursuant to ESA 95)</li> <li>— S.121 ‘the central bank’ (S.121 pursuant to ESA 95)</li> <li>— S.122 ‘deposit-taking corporations except the central bank’ (S.122 pursuant to ESA 95)</li> <li>— S.123 ‘money market funds (MMF)’ (S.122 pursuant to ESA 95)</li> <li>— S.124 ‘non-MMF investment funds’ (S.123 pursuant to ESA 95)</li> <li>— S.125 ‘other financial intermediaries, except insurance corporations and pension funds’ (S.123 pursuant to ESA 95)</li> <li>— S.126 ‘financial auxiliaries’ (S.124 pursuant to ESA 95)</li> <li>— S.127 ‘captive financial institutions and money lenders’ (S.123 pursuant to ESA 95)</li> <li>— S.128 ‘insurance corporations (IC)’ (S.125 pursuant to ESA 95)</li> <li>— S.129 ‘pension funds (PF)’ (S.125 pursuant to ESA95)</li> <li>— S.13 ‘general government’ (S.13 pursuant to ESA 95).</li> </ul>	<p>Explicit attributes: Amount outstanding in euro, number of shares outstanding for quoted shares.</p> <p>Implicit attributes: nominal currency, issuer ESA sector, country of residence, price value for quoted shares (outlier check only).</p>	<p>Amounts outstanding or market capitalisation in euro, expressed as a percentage difference between CSDB and external benchmark.</p>

DQM target	DQM metrics	Implementation	Output feed data attributes	DQM threshold basis
<b>Target 6:</b>  <b>Data accuracy – issuer classification</b>	<p>Concept:</p> <p>The metric shall rank issuers for each country of residence/issuer sector combination pursuant to their total security-based liabilities (equity and debt combined). The metric shall also indicate absolute rank changes between different issuers to facilitate identification of significant outliers in outstanding amounts or market capitalisation. The country of residence and sector classification of the issuer shall be verified up to the DQM threshold.</p> <p>Coverage:</p> <p>The metric shall cover all investment fund shares, equity and debt securities which do not have a maturity date older than three months.</p>	<p>Target 6 assesses the statistical classification of issuers.</p> <p>The statistical classification of the issuers up to the DQM threshold shall be verified for each of the following ESA issuer sectors:</p> <ul style="list-style-type: none"> <li>— S.11 ‘non-financial corporations’ (S.11 pursuant to ESA 95)</li> <li>— S.121 ‘the central bank’ (S.121 pursuant to ESA 95)</li> <li>— S.122 ‘deposit-taking corporations except the central bank’ (S.122 pursuant to ESA 95)</li> <li>— S.123 ‘money market funds (MMF)’ (S.122 pursuant to ESA 95)</li> <li>— S.124 ‘non-MMF investment funds’ (S.123 pursuant to ESA 95)</li> <li>— S.125 ‘other financial intermediaries, except insurance corporations and pension funds’ (S.123 pursuant to ESA 95)</li> <li>— S.126 ‘financial auxiliaries’ (S.124 pursuant to ESA 95)</li> <li>— S.127 ‘captive financial institutions and money lenders’ (S.123 pursuant to ESA 95)</li> <li>— S.128 ‘insurance corporations (IC)’ (S.125 pursuant to ESA 95)</li> <li>— S.129 ‘pension funds (PF)’ (S.125 pursuant to ESA95)</li> <li>— S.13 ‘general government’ (S.13 pursuant to ESA 95).</li> </ul>	<p>Issuer ESA sector, country of residence.</p>	<p>Amounts outstanding or market capitalisation in euro, expressed as ‘capitalisation’, i.e. amounts outstanding plus market capitalisation per issuer.</p>

(<sup>1</sup>) The numbering of categories reflects the numbering introduced in the proposal for a regulation of the European Parliament and of the Council on the European System of national and regional accounts in the European Union, COM(2010) 774 final.

## ANNEX II

**FEEDS AND OUTPUT FEED DATA ATTRIBUTES COVERED BY THE DQM FRAMEWORK**

The DQM framework shall cover the following feeds which support different uses:

- Feed supporting external statistics (EXT 1.0)
- Financial vehicle corporations feed supporting statistics on financial vehicle corporations (FVC 1.0)
- Investment fund feed supporting statistics on investment funds (IF 1.0)
- Securities-holding feed supporting securities holding statistics (SHS 1.0)
- Government securities funding feed supporting statistics on government securities funding (GSF 1.0)

Output feed data attributes constituting the supported feeds:

Output feed data attribute name	Description	Applicable feed				
		EXT 1.0	FVC 1.0	IF 1.0	SHS 1.0	GSF 1.0
International Security Identification Number (ISIN) code	ISIN security identifier.	√	√	√	√	√
Instrument European System of Accounts (ESA) class	Classification of the security pursuant to ESA.	√	√	√	√	√
Debt type	Type of debt instrument.				√	√
Is In securities issues statistics (SEC)	An attribute which can be used to identify securities that should be included in 'current outstanding amounts', in line with the definitions of ECB SEC.					√
Instrument supplementary class	Supplementary attribute allowing identification of whether an instrument should be included in SEC or not. This attribute can take values such as 1 = 'coupon strip', 2 = 'principal strip' etc.					√
Security status	Supplementary attribute allowing identification of whether an instrument should be included in SEC or not. This attribute can indicate whether an instrument is alive or not.					√
Asset securitisation type	Type of securing asset.		√		√	
Is In the Eligible Assets Database	Attribute indicating whether an instrument is eligible to be pledged as collateral for Eurosystem credit operations.				√	
Nominal currency	Nominal currency of the instrument (International Standards Organisation (ISO) 4217).	√	√	√	√	√

Output feed data attribute name	Description	Applicable feed				
		EXT 1.0	FVC 1.0	IF 1.0	SHS 1.0	GSF 1.0
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 are 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	Date on which the debt instrument is actually redeemed.	√	√	√	√	√
Residual maturity	The residual maturity of an instrument calculated at the date of population.					√
Issuer domicile country	Country of legal incorporation (domicile) of the issuer of the security (ISO 3166).	√	√	√	√	√
Issuer ESA sector	Institutional sector of the issuer pursuant to ESA.	√	√	√	√	√
Issuer European Classification of Economic Activities (NACE) classification	Main economic activity pursuant to NACE.	√				
Amount issued	Amount of the debt instrument that has been raised at issue (nominal value).  For a strip, this column indicates the amount the coupon/principal has been stripped at. For a security issued in tranches, under one ISIN, this column indicates the cumulative amount issued so far.  Amount issued is denominated in nominal currency.					√
Amount outstanding	Outstanding amount in nominal 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, 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 of population.				√	√
Market capitalisation	Latest available market capitalisation. Market capitalisation is denominated in nominal currency.  If nominal currency is missing, market capitalisation is denominated in euro.				√	

Output feed data attribute name	Description	Applicable feed				
		EXT 1.0	FVC 1.0	IF 1.0	SHS 1.0	GSF 1.0
Yield to maturity	Security specific yield to maturity in percentage terms.				√	√
Short name	Short name given by issuer, 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.	√	√	√	√	√
Quotation basis	Quotation basis of the instrument, e.g. percentage of nominal (percent) or currency per share/unit (units).	√	√	√	√	√
Price value	Last available representative price of the instrument at the reference date on quotation basis and 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 on quotation basis and nominal currency, if applicable, of the instrument.	√			√	
Redemption type	Redemption type, e.g. bullet, perpetual, structured, annuity, serial, irregular, null, stepped.					√
Redemption frequency	Number of redemptions per year for a debt instrument.					√
Redemption price	Final redemption price.					√
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 of accrued interest and income due to difference in issue and redemption price.	√	√	√	√	

Output feed data attribute name	Description	Applicable feed				
		EXT 1.0	FVC 1.0	IF 1.0	SHS 1.0	GSF 1.0
Coupon type	Type of coupon, e.g. 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 into the reporting period or not.	√	√	√	√	
Last coupon frequency	Frequency per year, in which the last coupon rate is being paid out: 'annual' transforms into AN, 'semi-annual' into SA etc.	√	√	√	√	
Dividend amount	Amount of the last dividend payment per share (in dividend amount type) before tax (gross dividend).	√		√	√	
Dividend amount type	Dividend amount per share may be denominated in dividend currency or in number of shares.	√		√	√	
Dividend currency	ISO 4217 code of the currency of the last dividend payment.	√		√	√	
Dividend Settlement date	Settlement date of the last dividend payment. The attribute permits to identify whether the dividend amount paid falls into the reporting period or not.	√		√	√	
Last split factor	Stock splits and reverse splits of shares.	√		√	√	
Last split date	Date as of which the stock split becomes effective.	√		√	√	