

Cost-benefit assessment questionnaire on the Integrated Reporting Framework for the banking industry



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Executive summary

The ESCB is seeking to reduce the burden arising from statistical reporting by integrating as far as possible the existing data requirements for deposit-taking corporations into a unique, standardised Integrated Reporting Framework (IReF). In order to assess the impact of the IReF the ESCB, in close cooperation with the banking industry, initiated a cost-benefit analysis in 2018. Based on the feedback received from the qualitative stock-taking (QST) survey conducted in 2018, the ESCB has developed a baseline scenario for the IReF. This will now be evaluated by the stakeholders affected, based on this attached cost-benefit assessment (CBA) questionnaire. All euro area countries, plus Sweden, will participate in the exercise.

The national central banks (NCBs) of the countries participating in the questionnaire have selected national respondents with the objective of ensuring a minimum coverage of 80% of their domestic banks in terms of total assets, including institutions of all sizes and types. However, any deposit-taking corporation resident in participating countries may express its interest in completing the questionnaire. Should you be interested in participating, please contact your domestic NCB.

As a follow-up to the CBA questionnaire, the ESCB will draft a regulation on the statistical reporting of deposit-taking corporations under the IReF. The draft regulation will be subject to a public consultation before a final version is submitted to the Governing Council for adoption. The IReF Regulation will replace the existing ECB statistical regulations covering the requirements for deposit-taking corporations. The existing ECB regulations which relate to the datasets falling within the scope of the IReF will be either repealed, or amended to exclude deposit-taking corporations from their scope (where the regulations also address other institutional sectors).

The ESCB aims to implement the IReF in the period 2024-27. However, this timeline will be subject to review in the light of the results of the cost-benefit analysis.

1 Introduction

1.1 Background

The Eurosystem is working to consolidate the ESCB statistical requirements by developing an Integrated Reporting Framework (IReF). This would, primarily, integrate the reporting obligations of deposit-taking corporations¹ established under Article 5(1) of Council Regulation 2533/98² for the ECB statistical regulations on balance sheet items (BSI)³ and interest rates (MIR)⁴ of monetary financial institutions, the sectoral module of Securities Holdings Statistics (SHS)⁵, and granular credit and credit risk (AnaCredit)⁶. The framework⁷ covers all the data needed to calculate minimum reserves, and integrates reporting obligations in respect of deposit-taking corporations' own positions and transactions arising from the ECB Guidelines on external statistics⁸ and financial accounts⁹, as well as reporting requirements in respect of securities issues arising from the ECB Guideline on monetary and financial statistics¹⁰. Residency-based requirements arising from other international organisations (i.e. BIS locational banking statistics and standard IMF report forms) are also being considered.

The initiative was developed as a response to an increasing number of requests from the banking industry to reduce the reporting burden¹¹. On the statistical side, this arises mainly from the fact that the ECB regulations typically specify what should be reported in a given framework, but not how the actual reporting process and the content should be managed. For instance, the existing regulations specify neither the

- ⁴ Regulation (EU) No 1072/2013 of the ECB of 24 September 2013 concerning statistics on interest rates applied by monetary financial institutions (recast) (ECB/2013/34), OJ L 297, 7.11.2013, p. 51.
- ⁵ Regulation (EU) No 1011/2012 of the ECB of 17 October 2012 concerning statistics on holdings of securities (ECB/2012/24), OJ L 305, 1.11.2012, p. 6. The group module of SHS is not included in the current IReF scope, although it is likely to be considered for inclusion in a second step.
- ⁶ Regulation (EU) No 867/2016 of the ECB of 18 May 2016 on the collection of granular credit and credit risk data (ECB/2016/13), OJ L 144, 1.6.2016, p. 44.
- ⁷ The IReF will incorporate the requirements of these datasets that exist at time of the IReF implementation i.e. if amendments are made to the existing requirements before the IReF is implemented, the changes will also be reflected in the IReF.
- ⁸ Guideline (EU) No 120/2012 of the ECB of 9 December 2011 on the statistical reporting requirements of the ECB in the field of external statistics (recast) (ECB/2011/23), OJ L 65, 3.3.2012, p. 1.
- ⁹ Guideline (EU) No 3/2014 of the ECB of 25 July 2013 on the statistical reporting requirements of the ECB in the field of quarterly financial accounts (recast) (ECB/2013/24), OJ L 2, 7.1.2014, p. 34.
- ¹⁰ Guideline (EU) No 810/2014 of the ECB of 4 April 2014 on monetary and financial statistics recast) (ECB/2014/15), OJ L 340, 26.11.2014, p. 1.
- ¹¹ See, for example, the EBF press release of October 2018.

Deposit-taking corporations consist of credit institutions and other deposit-taking corporations, which comprise i) other financial institutions whose business is to receive deposits and/or close substitutes for deposits and to grant loans and/or make investments in securities; and ii) electronic money institutions principally engaged in issuing electronic money; see also the glossary. This distinction is relevant because different requirements apply to these two categories under the existing ECB statistical regulations.

² Council Regulation (EC) No 2533/98 of 23 November 1998 concerning the collection of statistical information by the European Central Bank, OJ L 318, 27.11.1998, p. 8.

³ Regulation (EU) No 1071/2013 of the ECB of 24 September 2013 concerning the balance sheet of the monetary financial institutions sector (recast) (ECB/2013/33), OJ L 297, 7.11.2013, p. 1.

model nor the dictionary to be used for collecting the data. Similarly, the timelines for the reporting by reporting agents are not specified in ECB regulations. In addition, NCBs are allowed to collect the statistical information necessary to fulfil the ECB's statistical requirements as part of the statistical reporting framework they have established under their own responsibility.¹² This solution dates back to the establishment of the European Monetary Union and was well-justified at the time as it meant that statistical reporting could be founded on well-established national reporting approaches. However, over time it has become inefficient and hence costly for the banking industry. For instance, a cross-border bank has to deal with heterogeneous systems that feature:

- different data models based on heterogeneous dictionaries;
- different transmission frequencies, timelines and levels of aggregation;
- duplications and overlaps in reporting, with complex reporting schedules and processes;
- different characteristics in terms of revision policies, approaches to derogations and formats of data exchanges.

The IReF initiative stems from the main objective of reducing the reporting burden, in line with Article 338(2) of the Treaty¹³ and Article 3a of Council Regulation 2533/98. The initiative is part of the broader ESCB data integration strategy which was published in September 2020¹⁴ as the ESCB input to the European Banking Authority (EBA) feasibility report mandated by the European Parliament and Council¹⁵. The ECB will lay down the statistical data requirements for deposit-taking corporations in a dedicated ECB regulation rather than in separate legal acts, and the requirements will be directly applicable to euro area deposit-taking corporations, without any translation into national collection frameworks. In order to effectively integrate the existing requirements, the IReF Regulation will encompass a set of requirements with different levels of granularity that will consolidate the existing reporting lines in a unique framework and avoid any duplication of the requirements. The reporting scheme will be covered in the legal act on the basis of a standardised data model¹⁶ and dictionary, thus ensuring standardisation of the definitions and methodological alignment with statistical standards. Such an approach will further enhance consistency across the statistical datasets which will stem from the IReF. Standardised reporting schedules will also apply. The legal act will cover the common revision policy that will apply to reporting agents and the scheme to be applied to derogate small credit institutions

¹² See, for instance, Recital 7 of the ECB Regulation on BSI statistics. See also the attached list of the national collection frameworks implementing the ECB datasets within the scope of the IReF.

¹³ Treaty on the Functioning of the European Union, OJ C 326, 26.10.2012, p. 47.

¹⁴ See ECB (2020), "The ESCB input into the EBA feasibility report under article 430c of the Capital Requirements Regulation (CRR 2)", September.

¹⁵ See Article 430c of Regulation (EU) 2019/876 of the European Parliament and of the Council of 20 May 2019 amending Regulation (EU) No 575/2013 as regards the leverage ratio, the net stable funding ratio, requirements for own funds and eligible liabilities, counterparty credit risk, market risk, exposures to central counterparties, exposures to collective investment undertakings, large exposures, reporting and disclosure requirements (OJ L 150, 7.06.2019, p. 1).

¹⁶ The model used for representing the requirements in the legal act will be a simplified version of the model that will actually be used for the technical implementation of the data transmission.

from full IReF reporting requirements. Non-euro area countries that are part of the EU could adopt IReF reporting in full or, perhaps, only in part (such as AnaCredit-related content) by means of national legislation.

1.2 The cost-benefit analysis

To establish an IReF Regulation, the Eurosystem decided to adapt the ESCB's merits and costs procedure (MCP) in order to properly reflect the benefits for reporting agents and statistical compilers in terms of cost reduction¹⁷. In fact, while the MCP normally evaluates the significance of the costs of new statistical requirements, the IReF primarily aims at reducing costs by streamlining and standardising the existing data reporting, in line with basic data management principles promoted by the banking industry.

The Eurosystem therefore decided, in close cooperation with the banking industry and other relevant stakeholders (i.e. Eurosystem NCBs as reporting agents and compilers, as well as ESCB user committees), to launch a modified MCP referred to as the "IReF cost-benefit analysis". The first step of this exercise was conducted in 2018 and consisted of a qualitative stock-taking (QST) questionnaire on the state of play across domains and countries, with the aim of helping to design scenarios for the collection aspects (e.g. reporting dates, data frequency, derogations, etc.) of a possible integrated framework. In 2019 the Eurosystem focused on the assessment of the QST results and worked on defining a more limited set of scenarios to be considered going forward.¹⁸ The second step of the exercise is the present cost-benefit assessment (CBA) questionnaire.

The Eurosystem will assess the results of the CBA questionnaire and identify the optimal features that would best suit the industry and the affected ESCB reporting areas, users and compilers. An IReF Regulation will therefore be drafted and, subject to the approval of the Governing Council, a public consultation will be held to collect additional feedback. It is currently expected that this public consultation will take place in 2023, while the IReF will be implemented during the period 2024-27.

1.3 Content and scope of the CBA questionnaire

Based on the QST results, **the Eurosystem has developed a more concrete set of scenarios for data reporting under the IReF**. The CBA questionnaire seeks to assess the costs and benefits of such scenarios, with the final objective of designing an overall solution for the IReF that would be feasible and cost-effective for reporting agents while also supporting the analytical needs of the Eurosystem. **Baseline scenarios have been identified** for many of the aspects under consideration. It

¹⁷ The potential cost reduction is expected to vary across countries and depends to a large extent on the level of integration of the current national reporting frameworks.

¹⁸ See "Qualitative stock-taking questionnaire on the integrated reporting framework – analysis of high-level considerations and high-priority technical aspects", ECB, Frankfurt am Main, February 2019. Annex 2 also provides an overview of the technical results for the QST.

should be noted, however, that these do not represent a preference, but are instead **points of reference that enable the main features of the IReF to be represented consistently**. In some cases the CBA questionnaire will reassess scenarios that had already been analysed in the QST exercise (for instance when the feedback received was not conclusive), taking the view that specific choices made when defining the baseline scenarios may affect the assessment.

The questions have been generally formulated to assess the costs and benefits of the individual scenarios presented. However, some questions assess scenarios in relative terms, comparing them with a baseline or reference scenario. With regard to costs, the CBA distinguishes between one-off costs that may materialise at the time of implementation (such as setting up the technical and operational infrastructure) and recurring regular costs relating to running the system. When completing the questionnaire, respondents are invited to bear in mind the status quo of statistical data requirements, thereby reflecting on the IReF's potential to reduce regular costs in the long run. In addition, while the implementation of the IReF may require an initial investment, respondents are also invited to bear in mind that there could be implementation costs in the absence of the IReF, for example due to the implementation of new or updated data collections. In other words, only the expected additional implementation cost arising from the IReF should be considered. Some questions may also not be relevant to the respondent (or to the institutions they represent in the questionnaire) - for example a respondent may not issue debt securities. In such cases respondents should assess the costs and benefits that they would expect to materialise should the underlying activity become relevant. Respondents should also note that the IReF will embed proportionality features (see the section entitled "Derogation scheme"), meaning that not all proposed scenarios may be directly applicable to small institutions. Moreover, at the point of the IReF implementation, no backward-looking requirements will apply - i.e. no historical data will be reported under the IReF – data will only be reported from the first reporting period to which the reporting applies. Respondents should also note that the data quality standards applicable under the IReF will be the same as those for the current data transmissions.

The questionnaire addresses different types of respondents from the banking industry – i.e. credit institutions, other deposit-taking corporations, banking associations and service providers.

Filters are used in the sequel to indicate which part of the text applies to a specific type of respondents, such as:

<filter: credit institutions / other deposit-taking corporations / banking associations / service providers>

As an example, the subsection entitled "Reporting of positions relating to 'intra-group' and foreign direct investment relationships" in the section "IReF features arising from the integration of the existing requirements" contains text addressing different types of respondents. These filters will be implemented in the online survey so that each

respondent will only see the text that is applicable to the respondent type to which it belongs.

1.4 The draft IReF reporting scheme in brief

A draft reporting scheme, consistent with the baseline scenarios presented in this document, is attached with a view to helping respondents answer the questions. Readers seeking more information are referred to Annex 1, which provides a detailed explanation of the concrete requirements that are being proposed.

The scheme is defined on the basis of a standardised data model and dictionary. It introduces additional granularity or detail compared with the existing datasets, to the extent necessary to integrate the existing reporting lines into a unique framework and avoid duplication of the requirements. The accounting standards which apply at the level of the legal entity¹⁹ will underpin IReF reporting.

As an introduction, it should be noted that the draft IReF scheme covers requirements at different levels of granularity. For the sake of simplicity and ease of reference, requirements are categorised in the CBA questionnaire as "granular" or "aggregated".

Definition of granular data

The term "granular" is used to describe data requirements that are collected (i) instrument-by-instrument (e.g. loan level or security-by-security), (ii) counterparty-by-counterparty (e.g. every individual debtor), or (iii) protection-by-protection, as well as instrument flow information (e.g. dividends, coupons/interest).

These levels of granularity are not applicable to all reporting agents and, as Annex 1 explains, are normally linked to one other. This should be borne in mind when completing the CBA. For example, the questions for credit institutions relating to loans to legal entities (i.e. loans to entities other than natural persons) address not only instrument-level data (e.g. outstanding nominal amount, currency of denomination) but also the corresponding information on counterparties (e.g. ESA sector) and, possibly, data on each individual protection (e.g. type of protection). Such linkages are easily detectable on the basis of the entity-relationship model (ERM) used to depict the draft scheme (see the attached Excel tool). However, these questions are not applicable to other deposit-taking corporations, which only report aggregated data on loans to legal entities.

For credit institutions, granular data requirements under the IReF baseline scenario refer to the following instruments:

¹⁹ Please notice that the term "entity" is used in the documentation with reference to counterparties (e.g. legal entities). Components of an Entity Relationship Model are called "tables" to avoid misunderstandings.

- loans²⁰ to legal entities;
- holdings of ISIN and non-ISIN securities;
- ISIN and non-ISIN securities issued, where the reporting/observed agent is either the debtor or the issuer;
- ISIN securities for which the reporting/observed agent acts as custodian, where applicable²¹.

Under the IReF baseline scenario, granular data requirements for other deposit-taking corporations refer to the following instruments:

- holdings of ISIN and non-ISIN securities;
- ISIN and non-ISIN securities issued, where the reporting/observed agent is either the debtor or the issuer;
- ISIN securities for which the reporting/observed agent acts as custodian, where applicable.

Definition of aggregated data²²

Aggregated data refer to those cases where no granular information (e.g. data on individual instruments, counterparties, protections or instrument flow information) can be identified. No information is requested at the counterparty level (e.g. data are typically broken down by sector and area of residency of the counterparty only).

For credit institutions, aggregated data requirements under the IReF baseline scenario refer to the following instruments:

- holdings of cash;
- loans to households;
- deposits²³;
- holdings and issuance of other equity (i.e. equity instruments other than securities);
- financial derivatives;
- non-financial assets;

In line with the terminology used in ECB legal acts, "loans" should be interpreted in this framework as the "loans and deposits" presented on the assets side of the balance sheet.

²¹ It should be clarified that the collection of data from custodians that are not deposit-taking corporations will be addressed outside the IReF framework, in line with the existing SHS requirements.

²² It should be noted that under the IReF baseline scenario a mixed granularity may apply for aggregated data requirements. For additional details, see the subsection entitled "Reporting of positions relating to 'intra-group' and foreign direct investment relationships" in the section "IReF features arising from the integration of the existing requirements".

²³ In line with the terminology used in ECB legal acts, "deposits" should be interpreted in this framework as "*loans and deposits*" presented on the liabilities side of the balance sheet.

remaining assets and liabilities.

Under the IReF baseline scenario, aggregated data requirements for other deposit-taking corporations refer to the following instruments:

- holdings of cash;
- loans;
- deposits;
- holdings and issuance of other equity (i.e. equity instruments other than securities);
- financial derivatives;
- non-financial assets;
- remaining assets and liabilities.

The following expressions are also used throughout the CBA questionnaire, and understanding them is key to correctly addressing the questions:

- "Change in the level of granularity" refers to a shift in the granularity of data requirements compared with the current approach, such as holdings of non-ISIN securities being collected from credit institutions instrument-by-instrument instead of aggregated;
- "Change in the level of detail" refers to the level of breakdown of aggregated data, such as additional variables or more detailed subdomains compared with the current approach, without a change in the level of granularity;
- "Aggregation" refers to the transformation of granular data into an aggregate, or of aggregated data into an aggregate with a lower level of breakdown.

Based on the CBA results, a new version of the IReF reporting scheme, adapted in structure and content, will be presented during the public consultation on the draft IReF Regulation.

1.5 Organisation of the questionnaire

The CBA covers several topics of relevance to the IReF, with a focus on the reporting aspects that the IReF aims to standardise. Some general information on the respondent is collected (as shown in the next section), followed by a high-level assessment of the general views of respondents with regard to the possibility of integrating data requirements. The CBA then moves on to the substance of the IReF, covering:

• features arising from the integration of existing requirements;

- technical aspects related to the design and implementation of the reporting scheme;
- the integration of requirements which are covered in the current national collection frameworks but do not arise from ECB regulations;
- additional features that may lead to a potential further streamlining of the IReF reporting;
- the timeline for the data transmissions foreseen under the IReF;
- the IReF's revision policy and derogation approach;
- the requirements arising in relation to the derivation of data on statistical transactions;
- aspects relating to the implementation of the IReF.

The questionnaire concludes by asking respondents to provide information on their preferred IReF scenario, in comparison with the current general baseline (i.e. the combination of the baseline scenarios).

It should also be noted that the questions need not be answered in the order given, as cross-linkages between the different sections have been limited as much as possible.

<filter: credit institutions / other deposit-taking corporations / banking associations / service providers>

2 Information on the respondent

2.1 Identification

Question 2.1. Please confirm your identity.

Type of responding institution:	[credit institution / other deposit-taking corporation / banking association / service provider]
Name:	[Name of responding institution]
Country:	[Country ISO code]

Question 2.2. Please provide contact details for the person responsible for completing the questionnaire.

Name:	
Role:	
Department:	
Email address:	
Phone number:	

<filter: credit institutions / other deposit-taking corporations>

The survey may be answered also on behalf of (other) deposit-taking corporations resident in the same country – such as an entity of a banking group providing feedback on behalf of other national subsidiaries of the banking group as well as on its own. In order to ensure that the results are assessed correctly, respondents are invited to indicate whether they are answering on behalf of other institutions, and if so which ones.

Question 2.3. Please indicate whether you are answering the survey on the behalf of other institutions.

No, I am answering the survey only on behalf of my institution	
Yes, I am answering the survey also on behalf of other institutions Please select those institutions you are representing in the survey besides your own: <multiple choice=""></multiple>	
[Drop-down menu: Domain = Preselected list of MFI names with the corresponding RIAD codes]	

<filter: banking associations / service providers>

National banking associations and service providers may be invited by their relevant NCB to participate in the survey, either on their own behalf or on behalf of the deposit-taking corporations they represent. If you have been invited to participate on

behalf of the latter, your NCB has already completed the corresponding list of deposit-taking corporations below. Please confirm it is correct and amend as necessary.

Question 2.4. Please indicate whether you are answering the survey on behalf of other institutions.

No, I am answering the survey only on behalf of my institution	
Yes, I am answering the survey on behalf of other institutions	
Please select those institutions you are representing in the survey:	
<multiple choice=""></multiple>	
[Drop-down menu: Domain = Preselected list of MFI names with the corresponding RIAD codes]	

<filter: credit institutions / other deposit-taking corporations / banking associations / service providers>

This section closes by inviting respondents to indicate whether they are engaged in activities relating to certain instrument types. Whenever an entity is responding on behalf of other institutions, the instrument should be selected if it is relevant for at least one of the institutions represented.

Question 2.5. Please indicate whether your institution, or an institution on whose behalf you are answering the survey, is engaged in activities relating to the following instrument types.

Assets Listed ISIN securities Unlisted ISIN securities and non-ISIN securities Other equity Liabilities Listed ISIN securities Unlisted ISIN securities and non-ISIN securities Other equity Derivatives	<multiple choice=""></multiple>						
Unlisted ISIN securities and non-ISIN securities Other equity Liabilities Listed ISIN securities Unlisted ISIN securities and non-ISIN securities Other equity	Assets						
Conter equity Clabilities Listed ISIN securities Unlisted ISIN securities and non-ISIN securities Other equity	Listed ISIN securities						
Liabilities Listed ISIN securities Unlisted ISIN securities and non-ISIN securities Other equity	□ Unlisted ISIN securities and non-ISIN securities						
Listed ISIN securities Unlisted ISIN securities and non-ISIN securities Other equity	Other equity						
Unlisted ISIN securities and non-ISIN securities Other equity	Liabilities						
Other equity	Listed ISIN securities						
	□ Unlisted ISIN securities and non-ISIN securities						
	□ Other equity						

Question 2.6. Please indicate whether your institution, or an institution on whose behalf you are answering the survey, is engaged in the following activities.

<multiple choice>

- Custodian for securities holdings
- □ Issuer of securities for other institutions

<filter: credit institutions / other deposit-taking corporations / banking associations / service providers>

2.2 Information notice to respondents

This survey has been developed by the Statistics Committee of the ESCB under its mandate to advise on the design and the compilation of statistical information collected by the ECB with the assistance of the NCBs.²⁴ In particular, the Statistics Committee has established an expert group for the IReF initiative consisting of staff members of the ESCB. This expert group is responsible for carrying out the survey.

Participation in the survey is voluntary. Respondents' individual answers to this questionnaire will only be visible in non-anonymous form to selected staff members of the NCB Statistics Department of the country in which the respondent is resident, for the purpose of assessing the results of the survey. In addition, the above-mentioned IReF expert group will have access to individual answers to facilitate the technical processing of the information. The professional secrecy obligation applies to all persons accessing respondents' individual answers to this questionnaire.

When analysing the results of the questionnaire, the ECB may use some individual data reported by the respondents to their competent NCB under the requirements of the BSI Regulation – for example to calculate weighted averages for the results or to stratify the respondents by size. The transmission of such individual BSI data to the ECB and their use for the performance of the IReF cost-benefit analysis is based on Article 8.4(b) of Council Regulation 2533/98 as such transmission is necessary for "the efficient development, production or dissemination of statistics under Article 5 of the Statute."

The personal data collected through the survey is to be used only for the purpose of conducting the exercise – for example for contacting the person responsible for completing the questionnaire in the event that clarifications are needed.

The ESCB will take all the necessary regulatory, administrative, technical and organisational measures needed to ensure the physical and logical (including electronic and IT) protection of the information, including with regard to the transmission, storage, access and use of the information contained in respondents' individual answers to this questionnaire.

<filter: credit institutions / other deposit-taking corporations / banking associations / service providers>

²⁴ See also the ECB website.

3 High-level considerations

The IReF is seeking to integrate the ESCB's statistical data requirements related to deposit-taking corporations into a unique and standardised reporting framework that would be applicable across European countries and could be seen as the first step towards the implementation of a broader data integration strategy for an integrated reporting system for statistical, resolution and prudential data in the European Union. The IReF scheme is being designed in a way that facilitates data extraction from the institutions' internal systems – data would be collected only once, in accordance with a standardised data model, and then used for multiple purposes. As clarified above, different scenarios are being assessed for several aspects of the collection framework, although in most cases baselines are being specified as points of reference based on the results of the QST questionnaire and to ensure that the draft scheme is represented consistently across instruments.

This section seeks to evaluate the costs and benefits of the IReF as a whole, comparing the overall IReF baseline scenario with the status quo. Later in the questionnaire reporting agents are invited to indicate the differences between their preferred overall IReF scenario and the baseline.

3.1 Expected benefits of the IReF

Several benefits are expected to materialise under the IReF. The IReF will use a unique data model and a unique data dictionary, which will make it possible to standardise the concepts and methodologies underlying the data submissions. The new approach will limit the need for reporting agents to interpret the reporting requirements and will therefore be more open to automation.

The IReF will also enable reporting agents to fully benefit from the Banks' Integrated Reporting Dictionary (BIRD), which is one of the pillars of the ESCB's strategy for standardising the reporting requirements for statistical, resolution and prudential purposes. In particular, the BIRD consists of an "input layer", which helps banks to organise the information stored in their internal systems so as to effectively fulfil reporting requirements and also defines the transformation rules to be applied to banks' input data in order to transmit data to the authorities. At the current stage, banks cannot use the BIRD directly for statistical reporting as they would have to adapt it to the national collection frameworks. However, the more the reporting is incorporated into a single reporting framework, the more effectively the BIRD will support banks.

There will be more precise and efficient communication between reporting agents and the authorities, as potential enquiries about granular data could be linked directly to the relevant instrument. These will, to a large extent, replace enquiries about aggregated data that currently often require lengthy efforts to drill down to the respective level of detail. Redundancies in the statistical reporting should also be significantly reduced. Cross-border banking groups could benefit in particular from the cross-country harmonisation of the reports wherever they operate in the euro area. In addition, all deposit-taking corporations, including smaller institutions, are expected to benefit from the integration of the different reporting requirements into an integrated framework.²⁵ Over time, the new scheme is expected to bring more stability to the statistical reporting requirements and ad hoc requests may become less frequent. The gains will differ from country to country depending on the model of reporting and the degree of integration of the current national frameworks. In assessing the IReF's overall baseline scenario respondents are requested to use the continuation of the status quo as a benchmark.

Question 3.1. Please provide an assessment of the **expected benefits** of the IReF **in the medium to long term** (i.e. for a time horizon longer than five years) under the baseline scenario, taking the continuation of the status quo as a benchmark.

	None 0	Very low 1	Low 2	Moderate 3	High 4	Very high 5
Use of standardised definitions and modelling						
Automation of reporting						
Single reporting across statistical datasets with no redundancies						
Single reporting across countries						
Using the BIRD for statistical reporting						
Stability in the reporting requirements						
Organisational enhancements and improvements in internal processes						

3.2 Expected costs of the IReF

The introduction of the IReF may create various challenges for reporting agents. While it is expected that existing reporting systems could be reused, given that the level of reporting will be broadly unchanged under the IReF (e.g. data on loans to legal entities will be collected from credit institutions at the instrument level as in AnaCredit), implementing a new integrated framework may require changes to the existing infrastructure or possibly the development of new infrastructure. In assessing the IReF's overall baseline scenario respondents are requested to take into account the fact that implementation costs would probably also materialise for the status quo (for instance if the existing data reporting system has reached the end of its lifecycle, or the national reporting framework has been amended to reflect updates to the existing requirements or additional data requirements which may not materialise if the IReF is implemented) and that current approaches often have high regular costs.

²⁵ See also the section entitled "Derogation scheme".

Question 3.2. Please provide an assessment of the **implementation costs** of the IReF under the baseline scenario. When answering, please bear in mind that the costs of implementing new features, new functionalities and so on may also materialise under the current reporting frameworks. These costs should be "deducted" from the assessment.

	Very low 1	Low 2	Moderate 3	High 4	Very high 5
Workload for establishing data extractions from the internal systems from a conceptual perspective					
Workload for developing or adapting the IT infrastructure for data extractions, compilation, checking and submissions					
Organisational changes					
Development of new competences for staff members (e.g. training)					

Question 3.3. Please provide an assessment of the **regular costs** of the IReF under the baseline scenario. When answering, please take the current reporting frameworks as a benchmark.

	Very low 1	Low 2	Moderate 3	High 4	Very high 5
Workload for data management (e.g. extractions, quality checks)					
Workload for data submissions					
Maintenance of the system					

3.3 Overall assessment

Based on the analyses provided above, respondents are now invited to balance costs and benefits. At the end of the questionnaire, respondents will be given the opportunity to submit additional observations on the approach envisaged for the IReF.

Question 3.4. Please provide an assessment on whether, under the IReF baseline scenario, the **expected benefits in the medium to long term** (i.e. for a time horizon longer than five years) will be **higher than the costs**.

Benefits will be significantly lower than costs 1	Benefits will be moderately lower than costs 2	No difference 3	Benefits will be moderately higher than costs 4	Benefits will be significantly higher than costs 5

<filter: credit institutions / other deposit-taking corporations / banking associations / service providers>

IReF features arising from the integration of the existing requirements

This section assesses features that are proposed for the IReF reporting with the objective of effectively integrating existing requirements. When assessing the proposals, respondents should bear in mind that, under the IReF, derogations will be applied to "small" reporting agents, in line with normal practice in many euro area countries. Under some of the scenarios that are being considered, derogated institutions would be exempted from reporting granular data, so some of the proposed requirements may not apply to such institutions.

4.1 Proposals directly related to the outcome of the QST

This section reviews the reporting features for which the results of the QST questionnaire indicated clear options with regard to scenarios to be considered in the IReF.

<filter: credit institutions / banking associations / service providers>

4.1.1 Loans to legal entities below €25,000

4

As Annex 2 shows, the QST found strong support for using loan-level information to compile statistical aggregates on loans, thus eliminating the parallel reporting of aggregated data on loans to corporations. While the draft IReF scheme was designed to reflect this approach, it remains to be seen what manner of data collection for loans below the threshold of €25,000 applied in AnaCredit would ensure that the aggregates are compiled effectively. In this respect, the QST assessed three broad options: (1) retaining the threshold and collecting data on loans below the threshold on an aggregated basis, (2) extending the AnaCredit coverage by dropping the threshold, in line with the current practice in some euro area countries, or (3) retaining the threshold and estimate aggregates by grossing up aggregated granular data based on a number of aggregated high-level requirements. Option 3 was, overall, not supported in the QST and has therefore been dropped in the CBA assessment. Although Option 2 was strongly supported, it can be operationalised in different ways - i.e. by collecting data for loans below the €25,000 threshold following the same requirements as for other loans to legal entities, or by requesting only those variables and measures needed to compile aggregated statistics. Option 1 is also assessed in the CBA as it may offer the benefit of keeping data volume at current levels. The following scenarios are therefore assessed in the CBA.

- Scenario 1 (baseline): All loans to legal entities would be collected at a granular level, with the same requirements in terms of variables and measures to be reported.²⁶
- Scenario 2: All loans to legal entities would be collected at a granular level. For loans below €25,000, only a limited set of variables and measures would be requested (i.e. those needed for compiling derived reports).²⁷
- Scenario 3: Loans below €25,000 would be collected on an aggregated basis. Only the variables and measures which apply to aggregated loan requirements would be collected for such loans.²⁸

The questions below are intended to assess the implementation costs and the other regular costs of the proposed scenarios as well as the associated benefits in terms of processes and governance (e.g. processing all loans to legal entities at once without needing to regularly monitor loans below the threshold) and data quality enhancements (e.g. limiting the risks of errors when aggregating information for loans below \notin 25,000).

Question 4.1. Please provide an assessment of the **implementation costs** of the proposed scenarios.

_	None 0	Very low 1	Low 2	Moderate 3	High 4	Very high 5
Scenario 1						
Scenario 2						
Scenario 3						

Question 4.2. Please provide an assessment of the regular costs of the proposed
scenarios.

	None 0	Very low 1	Low 2	Moderate 3	High 4	Very high 5
Scenario 1						
Scenario 2						
Scenario 3						

²⁶ The data requirements can be identified in the draft IReF reporting scheme by the following choice of parameters – type of reporting agent: "Credit institution"; type of reporting: "Full"; structure item: "Loans granular".

²⁷ The data requirements for loans below €25,000 under this scenario are those specified by Scenario 2 in the section entitled "Derogation scheme". They can be identified in the draft IReF reporting scheme by the following choice of parameter – type of reporting agent: "Credit institution"; type of reporting: "Derogation - Scenario 2"; structure item: "Loans - granular".

²⁸ The data requirements for loans below €25,000 under this scenario are those specified by Scenario 3 in the section entitled "Derogation scheme". They can be identified in the draft IReF reporting scheme by the following choice of parameters – type of reporting agent: "Credit institution"; type of reporting: "Derogation - Scenario 3"; structure item: "Loans - aggregated".

	None 0	Very low 1	Low 2	Moderate 3	High 4	Very high 5
Scenario 1						
Scenario 2						
Scenario 3						

Question 4.3. Please provide an assessment of the **benefits** of the proposed scenarios.

<filter: credit institutions / other deposit-taking corporations / banking associations / service providers>

4.1.2 Collection of data on holdings of non-ISIN securities

As Annex 2 shows, the QST found strong support for collecting data on holdings of non-ISIN securities at the instrument level, in line with current practice in several euro area countries. The baseline scenario for the draft IReF scheme was therefore based on this approach.

This section focuses on the data relevant for the compilation of aggregated statistics²⁹, which would be reported within 10-12 working days of the reference date. The assessment should not cover the reporting of accounting information³⁰, which is covered separately in the subsection entitled "Collection of accounting information not necessary for the compilation of aggregated statistics" in the section "Additional features for potentially streamlining the IReF reporting".

Proposed scenario: Granular collection of data regarding holdings of non-ISIN securities.

The questions below are intended to assess the implementation costs and the regular costs of the proposed scenario as well as the associated benefits in terms of processes and governance (e.g. following a unique approach for all types of securities) as well as data quality enhancements (e.g. limiting the risk of errors when aggregating instrument-level data).

²⁹ The data requirements can be identified in the draft IReF reporting scheme by the following choice of parameters – type of reporting agent: "Credit institution" or "Other deposit-taking corporation"; type of reporting: "Full"; structure item: "Securities held - granular". No parameter is included to distinguish the reporting requirements relating to holdings of ISIN and non-ISIN securities, although the footnotes provided in the draft reporting scheme describe how the requirements differ between these categories.

³⁰ These data requirements are covered in the "Accounting" table and can be identified in the draft IReF reporting scheme by selecting the deadline "Quarterly - 20-24 working days" for each combination of the applicable parameters.

Question 4.4. Please provide an assessment of the **implementation costs** of the proposed scenario.

	None	Very low	Low	Moderate	High	Very high
	0	1	2	3	4	5
Proposed scenario						

Question 4.5. Please provide an assessment of the **regular costs** of the proposed scenario.

_	None	Very low	Low	Moderate	High	Very high
	0	1	2	3	4	5
Proposed scenario						

Question 4.6. Please provide an assessment of the **benefits** of the proposed scenario.

	None	Very low	Low	Moderate	High	Very high
	0	1	2	3	4	5
Proposed scenario						

<filter: credit institutions / other deposit-taking corporations / banking associations / service providers>

4.1.3 Collection of custodian data on ISIN securities

The current SHS Regulation provides for the collection of security-by-security data on ISIN securities for which the reporting/observed agent acts as custodian at the level of the institutional sector and area of residency of the holder (i.e. without breaking down the holdings by individual holder). Under the IReF, it is proposed to collect instrument-level data relating to the holdings of legal entities for each individual holder. Limited reference information would be collected on the holder (i.e. name, address and institutional sector). This approach would align the data collection of holders' data to the counterparty information collected in the IReF for granular data requirements. Reporting agents will no longer need to perform aggregations at the level of the institutional sector. Data on holdings of ISIN securities by households will continue being collected on a security-by-security basis at the level of the institutional sector and area of residency of the holder. Individual households will therefore not be identifiable.

 Proposed scenario: Collect instrument-level data on ISIN securities for which the reporting/observed agent acts as custodian for legal entities for each individual holder.³¹

The questions below are intended to assess the implementation costs and the regular costs of the proposed scenario as well as the associated benefits in terms of processes and governance (e.g. holder information to match the structure of counterparty data) and data quality enhancements (e.g. limiting the risk of errors when performing data transformations).

Question 4.7. Please provide an assessment of the **implementation costs** of the proposed scenario.

	None	Very low	Low	Moderate	High	Very high
	0	1	2	3	4	5
Proposed scenario						

Question 4.8. Please provide an assessment of the **regular costs** of the proposed scenario.

	None	Very low	Low	Moderate	High	Very high
	0	1	2	3	4	5
Proposed scenario						

Question 4.9. Please provide an assessment of the **benefits** of the proposed scenario.

	None	Very low	Low	Moderate	High	Very high
	0	1	2	3	4	5
Proposed scenario						

<filter: credit institutions / other deposit-taking corporations / banking associations / service providers>

4.1.4 Assessment of additional level of detail

As Annex 2 shows, the QST found significant support for structuring the IReF scheme so that variables share the same subdomains, as far as possible, and so that subdomains are defined at a detailed (and redundancy-free) level. The draft IReF scheme was developed according to these findings. For example, it is envisaged that the individual currency of denomination will be collected for all instruments where a currency breakdown exists instead of asking reporting agents to perform intermediate

³¹ The data requirements can be identified in the draft IReF reporting scheme by the following choice of parameters – type of reporting agent: "Credit institution" or "Other deposit-taking corporation"; type of reporting: "Full"; structure item: "ISIN securities custodian - granular".

aggregations (e.g. aggregate for currencies other than euro). This also provides the ESCB with more flexibility during the analyses, and limits the scope for future extensions as the level of detail foreseen is already at a maximum. However, this level of detail goes beyond that provided for in current ECB legal acts.

 Proposed scenario: Variables share the same subdomains and are defined at a detailed level, with no overlaps and redundancies.

The questions below are intended to assess the implementation costs and the regular costs of the proposed scenario as well as the associated benefits in terms of processes and governance (e.g. facilitating the data extractions) and data quality enhancements (e.g. limiting the risk of errors when performing data transformations).

Question 4.10. Please provide an assessment of the **implementation costs** of the proposed scenario.

	None	Very low	Low	Moderate	High	Very high
	0	1	2	3	4	5
Proposed scenario						

Question 4.11. Please provide an assessment of the **regular costs** of the proposed scenario.

	None	Very low	Low	Moderate	High	Very high
	0	1	2	3	4	5
Proposed scenario						

Question 4.12. Please provide an assessment of the **benefits** of the proposed scenario.

	None	Very low	Low	Moderate	High	Very high
	0	1	2	3	4	5
Proposed scenario						

<filter: credit institutions / banking associations / service providers>

4.1.5 Approach to data collection from branches of euro area credit institutions

Question 4.13. Is your institution or an institution you are representing in the questionnaire either a branch³² with a euro area head office or a head office with euro area branches?

No	
Yes	

<filter: if answer to Question 4.13 is No skip the section, otherwise continue>

Under the current approach to statistical data collection, branches are directly responsible for reporting to the NCB of the country in which they are resident.³³ The QST questionnaire tested the level of stakeholder interest in applying a new approach to data reporting under the IReF for branches of euro area credit institutions. Under this approach, the head office could become responsible for transmitting all IReF data for its branches to the home NCB.³⁴ Such a change would only affect data reporting obligations – in reality reporting agents would remain free to organise technical reporting in the way they find most suitable³⁵. Each NCB would also remain responsible for compiling its national statistics.

The proposed approach received significant support across the euro area from reporting agents that would be directly affected by the change. Respondents in favour of the new approach indicated that the proposal would lead to cost savings (e.g. in terms of licenses, IT developments, resources, etc.) and would support the further centralisation of data reporting processes within their groups. A number of credit institutions that currently have decentralised operational systems in place for their branches expressed a preference for continuing to follow current statistical practice, their main argument being that branches are better suited to reporting data referring to national phenomena. Others, however, indicated that going forward they could see the benefits of such a centralisation of IT systems (also for internal purposes).

Based on the QST results, it is therefore proposed that, as a baseline scenario, data from euro area credit institutions would be collected at the level of the legal entity (i.e. with separate returns for the head office and each of its euro area branches) and that

³² For a definition of "branch" and "subsidiary", see the glossary.

³³ When a legal entity has a number of branches operating in a country, these are treated as one observed agent (i.e. a single institutional unit in the terminology of international statistical standards).

³⁴ Requirements under some reporting frameworks such as FINREP solo are already collected at the level of the legal entities through the head office.

³⁵ Even now, while branches are formally responsible for data reporting, in some cases the actual data gathering and transmission is performed by the head office.

the head office would be responsible for the data transmission.³⁶ In defining alternative scenarios, it has been borne in mind that the existing ECB regulations within the scope of the IReF also cover requirements that are not implemented based on purely statistical principles. For instance, AnaCredit data referring to accounting and risk variables³⁷ need to be reported based on the accounting standards of the legal entity – this type of reporting will be preserved under the IReF.

The following scenarios are therefore being considered for reporting under the IReF:

- Scenario 1 (baseline): The head office would be responsible for the data reporting of its euro area branches under the IReF.
- Scenario 2: The head office would be responsible for the reporting of IReF accounting and risk requirements³⁸, while branches would be responsible for the reporting of the remaining IReF requirements.
- Scenario 3: Branches would be responsible for the reporting of all IReF data.

Under all scenarios the accounting standards of the legal entity would underpin the data reporting of branches of euro area credit institutions. This type of approach would preserve the internal consistency of the data collected under the IReF. However, for branches with a head office outside the euro area, the accounting standards of the country in which they are resident would underpin the IReF data reporting.

The following questions are intended to assess the implementation costs and the regular costs of alternative scenarios compared with the baseline, as well as the associated benefits in terms of processes and governance (e.g. internal processes may be different under the proposed scenarios).

	Significantly lower 1	Moderately lower 2	No difference 3	Moderately higher 4	Significantly higher 5
Scenario 2					
Scenario 3					

Question 4.14. Please provide an assessment of the **implementation costs** of the alternative scenarios compared with Scenario 1.

³⁶ The IReF reporting scheme is being developed based on the AnaCredit data model and its distinction between the reporting agent (i.e. the entity responsible for data reporting) and the observed agent (i.e. the entity to which the data refer). This type of data model would provide effective support to the reporting of all IReF data under the proposed new approach.

³⁷ Template 2 of the AnaCredit Regulation, relating to "accounting, protection received, instrument-protection received, counterparty risk and counterparty default data".

³⁸ The variables in this category are broadly the same as those in Template 2 of the AnaCredit Regulation and can be identified in the draft IReF reporting scheme as the content of the following tables: "Accounting", "Counterparty Risk/Default" and "Protection".

Question 4.15. Please provide an assessment of the **regular costs** of the alternative scenarios compared with Scenario 1.

	Significantly lower 1	Moderately lower 2	No difference 3	Moderately higher 4	Significantly higher 5
Scenario 2					
Scenario 3					

Question 4.16. Please provide an assessment of the **benefits** of the alternative scenarios compared with Scenario 1.

	Significantly Iower 1	Moderately lower 2	No difference 3	Moderately higher 4	Significantly higher 5
Scenario 2					
Scenario 3					

<filter: credit institutions / other deposit-taking corporations / banking associations / service providers>

4.2 Other proposals

<filter: credit institutions / other deposit-taking corporations / banking associations / service providers>

4.2.1 Requirements for securities issued, where the reporting/observed agent is either the debtor or the issuer

As discussed in Annex 1, the current draft IReF scheme allows for the granular collection of data on securities issued. Although the ECB statistical regulations do not require this information to be collected, several euro area countries are currently doing so. The data would be reported within 10-12 working days of the reference date, except for attributes of an accounting nature which would be reported within 20-24 working days. The requirements cover all securities for which the reporting/observed agent acts as a debtor or as an issuer. As specified in the reporting scheme, a reporting agent acting as an issuer would have to report information on both the instrument and the debtor of the security.

In particular, this section assesses the collection of granular information on the instrument (e.g. primary asset classification, inception date, outstanding amounts).³⁹ The possible granular collection of information on flows relating to securities issued is analysed in the subsection entitled "Standardisation of the collection of flow information on securities issued" in the section "Integration of requirements covered in national collection frameworks but not arising from ECB regulations".

 Proposed scenario: The granular collection of instrument data on securities issued for which the reporting/observed agent acts as debtor or issuer.

The questions below are intended to assess the implementation costs and the regular costs of the proposed scenario as well as the associated benefits in terms of processes and governance (e.g. a unique approach across euro area countries) and data quality enhancements (e.g. limiting the risk of errors when aggregating instrument-level data). A distinction is made between cases where the reporting/observed agent acts as a debtor and as an issuer for another institution.

	None 0	Very low 1	Low 2	Moderate 3	High 4	Very high 5
Securities issued for which the reporting/observed agent is the debtor						
Securities for which the reporting/ observed agent is the issuer for another institution						

Question 4.17. Please provide an assessment of the **implementation costs** of the proposed scenario.

Question 4.18. Please provide an assessment of the **regular costs** of the proposed scenario.

	None 0	Very low 1	Low 2	Moderate 3	High 4	Very high 5
Securities issued for which the reporting/observed agent is the debtor						
Securities for which the reporting/ observed agent is the issuer for another institution						

³⁹ The data requirements can be identified in the draft IReF reporting scheme by the following choice of parameters – type of reporting agent: "Credit institution" or "Other deposit-taking corporation"; type of reporting: "Full"; structure item: "Securities issued - granular". The "Event" table of the scheme should not be taken into account for this assessment as it is included in a separate section of the questionnaire.

	None 0	Very low 1	Low 2	Moderate 3	High 4	Very high 5
Securities issued for which the reporting/observed agent is the debtor						
Securities for which the reporting/ observed agent is the issuer for another institution						

Question 4.19. Please provide an assessment of the **benefits** of the proposed scenario.

<filter: credit institutions / other deposit-taking corporations / banking associations / service providers>

4.2.2 Reporting of positions relating to "intra-group" and foreign direct investment relationships

The BSI Regulation currently covers the requirements on intra-group positions for inter-MFI deposits and loans, where intra-group relationships are defined in accordance with the supervisory principles of direct and indirect control (i.e. more than 50% of the voting power) within the perimeter of the banking group. The IReF also seeks to integrate existing requirements on intra-group positions arising from the BIS locational banking statistics as well as some data requirements that would make it possible to derive asset and liability positions with regard to foreign direct investment (FDI) relationships. The intra-group perimeter of the BIS locational banking statistics is the same as the perimeter of the BSI Regulation but extends the instrument coverage to all types. In turn, the FDI relationships relate to those cases in which an entity has more than 10% of the voting power in another entity and could therefore cover relationships outside of the banking group⁴⁰.

Figure 1 provides a simplified comparison of the BSI and FDI concepts. The FDI requirements cover deposits, loans, securities and equity.

⁴⁰ Currently, FDI requirements are collected on the basis of non-standardised national solutions (e.g. surveys) rather than under an ECB regulation. If a standardised common set of requirements is not integrated in the IReF, FDI requirements will continue to be collected on the basis of national solutions. It should also be noted that "debt between selected affiliated financial corporations is not classified as direct investment" (see paragraph 6.28 of the Balance of Payments and International Investment Position Manual – Sixth Edition).

Figure 1



Comparison of the BSI concept of "group" and FDI relationships

Notes: DTC stands for deposit-taking corporations. The percentages refer to the voting power of the parent in the subsidiary. The violet rectangle provides an example of intra-group relationships according to the BSI concept (i.e. more than 50% of the voting power restricted to the banking activities). The blue rectangle reflects the FDI concept, referring to relationships with voting rights above 10%, including all types of entities. Both approaches also reflect indirect relationships. This is illustrated in the figure via DTCs C and D and their relationships to corporation F. DTC A indirectly has more than 10% of voting rights regarding corporation F (i.e. 8% + 7% = 15%), and thus F falls within A's FDI relationships.

Question 4.20. Is your institution or an institution you are representing in the questionnaire in an FDI relationship – i.e. it either has or is subject to control/a significant degree of influence?

No	
Yes	

<filter: credit institutions / banking associations / service providers>

Under the current IReF baseline scenario, whenever data are collected at the granular level (e.g. loans to legal entities (for credit institutions) and securities holdings, with related counterparty information), the ESCB would perform the aggregation of intra-group and FDI positions based on reference information on relationships which may be available internally.⁴¹ However, in the case of aggregated requirements (e.g. deposits and derivatives), the identification of intra-group and FDI relationships can only take place based on information collected from reporting/observed agents.

A first set of questions relates to whether to apply the same modelling approach for all affected instrument types, as FDI relationships are broader than the BSI intra-group

⁴¹ The feasibility of such an approach is currently being assessed. NCBs that do not have such reference data in their registers may need to collect the information from reporting agents.

concept but they only apply to deposits. This would have the advantage of applying the same integration approach for all affected instrument types. However, this would also require collecting more data than is actually necessary for fulfilling the existing data needs. In particular:

- Scenario 1 (baseline): For all instrument types that are collected at the aggregated level and are affected by either BSI intra-group positions or FDI relationships, apply the same modelling approach based on the FDI criteria.
- Scenario 2: Collect data on FDI relationships only for deposits, while for other instruments that are collected at the aggregated level only data on relationships based on the BSI criteria will be collected.

<filter: other deposit-taking corporations>

Under the current IReF baseline scenario, whenever data are collected at the granular level (e.g. securities holdings, with related counterparty information), the ESCB would perform the aggregation of intra-group and FDI positions based on reference information on relationships which may be available internally.⁴² However, in the case of aggregated requirements (e.g. deposits, loans and derivatives), the identification of intra-group and FDI relationships can only take place based on information collected from reporting/observed agents.

A first set of questions relates to whether to apply the same modelling approach for all affected instrument types, as FDI relationships are broader than the BSI intra-group concept but they only apply to deposits and loans. This would have the advantage of applying the same integration approach for all affected instrument types. However, this would also require collecting more data than is actually necessary for fulfilling the existing data needs. In particular:

- Scenario 1 (baseline): For all instrument types that are collected at the aggregated level and are affected by either BSI intra-group positions or FDI relationships, apply the same modelling approach based on the FDI criteria.
- Scenario 2: Collect data on FDI relationships only for deposits and loans, while for other instruments that are collected at the aggregated level only data on relationships based on the BSI criteria will be collected.

<filter: credit institutions / other deposit-taking corporations / banking associations / service providers>

The questions below are intended to assess the implementation costs and the regular costs of the proposed scenarios as well as the associated benefits in terms of processes and governance (e.g. applying a unique approach to the modelling of BSI-like intra-group and FDI relationships).

¹² The feasibility of such an approach is currently being assessed. NCBs that do not have such reference data in their registers may need to collect the information from reporting agents.

Question 4.21. Please provide an assessment of the **implementation costs** of the proposed scenarios.

	None 0	Very low 1	Low 2	Moderate 3	High 4	Very high 5
Scenario 1						
Scenario 2						

Question 4.22. Please provide an assessment of the **regular costs** of the proposed scenarios.

	None 0	Very low 1	Low 2	Moderate 3	High 4	Very high 5
Scenario 1						
Scenario 2						

Question 4.23. Please provide an assessment of the **benefits** of the proposed scenarios.

	None 0	Very low 1	Low 2	Moderate 3	High 4	Very high 5
Scenario 1						
Scenario 2						

Assuming that the same technical modelling approach will be applied for all affected instrument types, various approaches can be considered for the concrete collection of data through the IReF scheme. Four possible scenarios are under consideration⁴³.

Scenario 1 (baseline): Data on positions relating to FDI relationships (thus also covering BSI intra-group positions) would be reported at the counterparty level or at the instrument level, while residual positions would be reported on an aggregated basis (see Figure 2 below for an example of the approach for deposits; the same approach would apply to all affected instrument types). The ESCB would then perform the necessary aggregations.

Figure 2

Mixed approach for collecting data on deposits under Scenario 1



• Scenario 2: Data on positions relating to FDI relationships (thus also covering BSI intra-group positions) would be reported at the counterparty level or at the

⁴³ The implicit assumption underpinning the scenarios is that the concept of ownership would act as a proxy for voting power for the purposes of FDI calculations. The ESCB is also aware that the information on relationships may be not fully available to a reporting/observed agent, although the current experience of some NCBs proves that it is, overall, possible to report it on a best-effort basis.

instrument level in a complementary table. The ESCB would then perform the necessary aggregations. In turn, the main IReF reporting scheme would only cover the affected instrument types on an aggregated basis.

- Scenario 3: Data would be reported at an aggregated level, with the inclusion of an additional variable that would break records down by relationships with counterparties in terms of ownership (e.g. less than 10%, between 10% and 50%, more than 50%). No data would be reported at the counterparty (or instrument) level.
- Scenario 4: Data on positions relating to FDI relationships (thus also covering BSI intra-group positions) would be reported at an aggregated level in a complementary table. The data would be broken down by relationships with counterparties in terms of ownership (e.g. between 10% and 50%, more than 50%). No data would be reported at the counterparty (or instrument) level.

All scenarios imply the collection of new content compared with the existing ECB legal acts. However, many NCBs already have some of these scenarios in place and standardising the existing approaches in the IReF would appear to be very beneficial overall.

The questions below are intended to assess the implementation costs and the regular costs of the proposed scenarios as well as the associated benefits in terms of processes and governance (e.g. discontinuing the existing national requirements for FDI).

	None 0	Very low 1	Low 2	Moderate 3	High 4	Very high 5
Scenario 1						
Scenario 2						
Scenario 3						
Scenario 4						

Question 4.24. Please provide an assessment of the **implementation costs** of the proposed scenarios.



	None 0	Very low 1	Low 2	Moderate 3	High 4	Very high 5
Scenario 1						
Scenario 2						
Scenario 3						
Scenario 4						

	None 0	Very low 1	Low 2	Moderate 3	High 4	Very high 5
Scenario 1						
Scenario 2						
Scenario 3						
Scenario 4						

Question 4.26. Please provide an assessment of the **benefits** of the proposed scenarios.

For Scenarios 1 and 2, data on positions for the affected instrument types relating to FDI relationships would be reported at the counterparty level or at the instrument level. Respondents are now invited to express their preference for one of the two granularity levels. Although collecting data at the counterparty level may imply a lower increase in data volume, collecting data at the instrument level would implement the same level of granularity for positions relating to FDI relationships as for other IReF granular requirements. For this reason, collecting positions relating to FDI relationships at the instrument level is currently seen as the baseline scenario in the IReF, although this is not explicitly shown in the draft IReF reporting scheme.

Question 4.27. Please provide an assessment of the **implementation costs** of the following options for collecting data on positions relating to FDI relationships (thus also covering BSI intra-group positions) under Scenarios 1 or 2.

	None 0	Very low 1	Low 2	Moderate 3	High 4	Very high 5
Instrument level						
Counterparty level						

Question 4.28. Please provide an assessment of the **regular costs** of the following options for collecting data on positions relating to FDI relationships (thus also covering BSI intra-group positions) under Scenarios 1 or 2.

	None 0	Very low 1	Low 2	Moderate 3	High 4	Very high 5
Instrument level						
Counterparty level						

Question 4.29. Please provide an assessment of the **benefits** of the following options for collecting data on positions relating to FDI relationships (thus also covering BSI intra-group positions) under Scenarios 1 or 2.

	None 0	Very low 1	Low 2	Moderate 3	High 4	Very high 5
Instrument level						
Counterparty level						

<filter: credit institutions / banking associations / service providers>

4.2.3 Reporting of information on write-offs for loans to legal entities

Several variables relating to accounting information are essential in order to compile statistical aggregates on loans from granular data. For instance, the variable on balance sheet recognition makes it possible to filter the loans to be considered for aggregation purposes, while the variable on status of forbearance and renegotiation is used to identify renegotiated loans in the context of the derivation of interest rate aggregates on new business. Similarly, information on write-offs is key to identifying decreases in the amounts outstanding of loans that are not related to loan redemptions. To ensure the timely compilation of aggregated statistics, all such variables should be collected on a monthly basis, within 10-12 working days of the reference date, although this information is of an accounting nature and is therefore normally reported on a quarterly basis and with a longer timeline. However, in compliance with the BSI Regulation, this information is currently implicitly required on a monthly basis and with a short timeline for the submission of aggregated loan data.

Under the IReF baseline scenario, a distinction is made between those accounting variables that are needed for classification purposes (e.g. balance sheet recognition, status of forbearance and renegotiation) and measures for loan write-offs. Under the IReF baseline scenario, the former will be collected within 10-12 working days on a monthly basis and the feasibility of such an approach will be tested in the section entitled "Data transmission timelines". For the latter, the following scenarios are under consideration.⁴⁴

- Scenario 1 (baseline): Provisional monthly data on write-offs would be reported at granular level within 10-12 working days of the reference date for the compilation of derived reports. The corresponding actual data would be collected on a quarterly basis within 20-24 working days of the reference date, as a part of the accounting information.
- Scenario 2: Provisional monthly data on write-offs would be reported on an aggregated basis within 10-12 working days of the reference date for the compilation of derived reports. The corresponding actual granular data would be collected on a quarterly basis within 20-24 working days of the reference date, as a part of the accounting information.
- Scenario 3: Monthly data on write-offs would be reported at granular level within 10-12 working days of the reference date for the compilation of derived reports. These data would replace the quarterly information on write-offs included in the "Accounting table" of the draft scheme.

Provisional data under Scenarios 1 and 2 refer to information that is transmitted based on lower standards in terms of accuracy. The actual accurate information would be received with the quarterly transmission under Scenarios 1 and 2, and is expected to

⁴ The write-off requirements relate to loans that are recognised on the balance sheet and serviced loans that are not recognised on the balance sheet.

be aligned to supervisory reporting. The only difference between Scenarios 1 and 2 relates to the level of granularity at which the provisional information is collected. Under Scenario 3, reporting agents would be expected to be able to report write-off data every month (within 10-12 working days of the reference date) that are in line with the supervisory quarterly reporting.⁴⁵

The questions below are intended to assess the implementation costs and the regular costs of the proposed scenarios as well as the associated benefits in terms of processes and governance (e.g. data are collected on an aggregated basis under Scenario 2).

Question 4.30. Please provide an assessment of the **implementation costs** of the proposed scenarios.

	None 0	Very low 1	Low 2	Moderate 3	High 4	Very high 5
Scenario 1						
Scenario 2						
Scenario 3						

Question 4.31. Please provide an assessment of the regular costs of the proposed	
scenarios.	

	None 0	Very low 1	Low 2	Moderate 3	High 4	Very high 5
Scenario 1						
Scenario 2						
Scenario 3						

Question 4.32. Please provide an assessment of the **benefits** of the proposed scenarios.

	None 0	Very low 1	Low 2	Moderate 3	High 4	Very high 5
Scenario 1						
Scenario 2						
Scenario 3						

⁴⁵ For loans to legal entities for which the reporting/observed agent acts as a servicer, but which are not recognised on the balance sheet, none of the actual information requested in the accounting table is available. Data should therefore be reported on a best-effort basis.
<filter: credit institutions / other deposit-taking corporations / banking associations / service providers>

4.2.4 Approach to instrument and issuer information on holdings of listed ISIN securities

The IReF baseline scenario does not envisage the collection of market values (i.e. closing prices for the day in the market) and reference information on the instrument (e.g. the name of the instrument, its primary asset classification and the inception and legal final maturity date) and on the issuer (e.g. the name of the issuer, its institutional sector and address) for ISIN securities held by the reporting/observed agents that are listed on exchanges. The data would instead be obtained from the ESCB's centralised securities database (CSDB) for the purpose of enriching the granular data. This approach could potentially reduce the reporting burden.⁴⁶

At the same time, the CBA questionnaire seeks to assess the implementation costs and the regular costs of collecting some of this information from reporting/observed agents within 10-12 working days of the reference date, together with the associated overall benefits. For instance, using information on market values from the CSDB could lead to communication challenges between reporting/observed agents and compilers in relation to data validation, as ESCB data may differ from that of reporting/observed agents (for example, validation rules may provide different outcomes when implemented by NCBs and reporting/observed agents). The assessment should be provided for each of the variables and measures listed⁴⁷.

	None 0	Very low 1	Low 2	Moderate 3	High 4	Very high 5			
Information on the instrument									
Name of the instrument									
Asset securitisation type									
Primary asset classification									
Inception date									
Legal final maturity date									
Market value									
		Information	on the issuer						
Name of the issuer									
Institutional sector									
Address									

Question 4.33. Please provide an assessment of the **implementation costs** of transmitting the following variables.

⁴⁶ As Annex 1 explains, this information would be collected in relation to holdings of non-ISIN securities and unlisted securities. Similarly, reference data would be collected on ISIN securities issued by deposit-taking corporations with a view to populating the CSDB.

⁴⁷ Please refer to the draft IReF reporting scheme for the definitions of the variables. Some of the variables may not refer to standard classifications, and would thus not be available from external sources.

	None	Very low	Low	Moderate	High	Very high			
	0	1	2	3	4	5			
Information on the instrument									
Name of the instrument									
Asset securitisation type									
Primary asset classification									
Inception date									
Legal final maturity date									
Market value									
		Information	n on the issuer						
Name of the issuer									
Institutional sector									
Address									

Question 4.34. Please provide an assessment of the **regular costs** of transmitting the following variables.

Question 4.35. Please provide an assessment of the **benefits** of transmitting the following variables.

	None 0	Very low	Low 2	Moderate 3	High 4	Very high 5			
Information on the instrument									
Name of the instrument									
Asset securitisation type									
Primary asset classification									
Inception date									
Legal final maturity date									
Market value									
		Information	n on the issuer						
Name of the issuer									
Institutional sector									
Address									

<filter: credit institutions / other deposit-taking corporations / banking associations / service providers>

4.2.5 Approach to collecting data on other equity

The IReF baseline scenario allows for the collection of data on the holdings and issuance of other equity on an aggregated basis, following the rationale that no existing ECB regulation provides for the collection of these data at the instrument level. At the same time, it may be beneficial to collect these data at the same level of

granularity as for securities. The CBA questionnaire seeks to assess the implementation costs and the regular costs of collecting granular data on the holdings and issuance of other equity, together with the associated overall benefits.⁴⁸ For instance, under the proposed scenario reporting agents would process all data on securities and other equity in the same way, and without aggregations.

Question 4.36. Please provide an assessment of the **implementation costs** of transmitting data on other equity at the granular level.

	None 0	Very low 1	Low 2	Moderate 3	High 4	Very high 5
Holdings of other equity						
Issuance of other equity						

Question 4.37. Please provide an assessment of the **regular costs** of transmitting data on other equity at the granular level.

	None 0	Very low 1	Low 2	Moderate 3	High 4	Very high 5
Holdings of other equity						
Issuance of other equity						

Question 4.38. Please provide an assessment of the **benefits** of transmitting data on other equity at the granular level.

	None 0	Very low 1	Low 2	Moderate 3	High 4	Very high 5
Holdings of other equity						
Issuance of other equity						

<filter: credit institutions / other deposit-taking corporations / banking associations / service providers>

⁴⁸ The granular requirements would be similar to those applicable to non-ISIN securities under Scenario 2 of the section entitled "Derogation scheme". The data requirements can be identified in the draft IReF reporting scheme by the following choice of parameters – type of reporting agent: "Credit institution" or "Other deposit-taking corporation"; type of reporting: "Derogation-Scenario 2"; structure item: "Other - aggregated".

5 Technical aspects

5.1 Structure of the reporting scheme

As Annex 1 explains, the draft IReF reporting scheme has been developed based on the AnaCredit logical ERM (for example by allowing for more instruments and covering both granular and aggregated data reporting). This approach allows for a coherent unified structure for the requirements and is in line with state-of-the-art solutions for data modelling, storing and management. However, the current representation only constitutes a preliminary proposal, which will then have to be assessed against current practices based on the feedback received, in order to identify the optimal approach for the technical implementation of the data transmission under the IReF. In particular, the CBA compares the ERM solution against two other modelling possibilities: a template-based approach, according to which requirements are represented in reports identifying the data points to be reported, and "flat tables", which may be thought of as non-normalised tables defined by all the variables and measures that are applicable to the reporting. By contrast, the ERM structures the data into a set of (fairly) normalised tables linked by identifiers⁴⁹.

Figure 3 compares the three options on the basis of a simplified dataset (i.e. not directly linked to the draft IReF scheme). More detailed examples can be found after the questions. It should also be noted **that the template-based approach is not really applicable for granular data** and will not, therefore, be tested for requirements of this type.

Respondents are invited to assess the following scenarios with regard to the technical implementation of the data transmission under the IReF.

- Scenario 1 (baseline): ERM.
- Scenario 2: Template-based approach.
- Scenario 3: Flat-table approach.

⁴⁹ Normalisation means organising the data in a database so that they meet two basic requirements: (1) there is no redundancy of data (i.e. all data are stored in only one place), and (2) data dependencies are logical (i.e. all related data items are stored together); see also Appendix 1 of Annex 1. The current version of the draft scheme is not fully normalised; see also the subsection entitled "Level of normalisation" in the section "Technical aspects".

Figure 3

Data structures

	Template			Flat table		ERM	
	Outstand	ing nominal amount	•	FLAT TABLE	⇒	TABLE: Instrument	
	Euro area	Other than euro ar Total		Observed agent] [Observed agent]
	010	020 030	1	Reference period		Reference period	
10 Deposits]	Instrument ID		Instrument ID	
20 up to 1 year				Instrument type			
30 more than 1 year]			Instrument type	
40 Central banks			1	Counterparty ID		Counterparty ID	++
50 General governments]	ESA sector		Outstanding amount	
60 Credit institutions]			Outstanding amount	
70 Other financial corpora	tions]	Country	X T		Logical
80 Non-financial corporation	ons			Outstanding amount		TABLE:	connection
90 Loans and advances			J		L L	Counterparty	
100 of which: Nonfinancial	corporations		J				a!
110 up to 5 years			J			Counterparty ID	
120 more than 5 years]			Country	
130 of which: Households			J			,	
140 up to 5 years]			ESA sector	
150 more than 5 years					L		_
			-				

<filter: credit institutions / banking associations / service providers>

In particular, the scenarios will be tested for the different types of reporting, as follows:

- loan level granular data (i.e. instrument-by-instrument) for loans to legal entities and related information (e.g. protection-by-protection, counterparty-by-counterparty)⁵⁰;
- security level granular data (e.g. instrument-by-instrument) for securities issued and held, securities for which the observed agent acts as a custodian, and related data (e.g. counterparty-by-counterparty)⁵¹;
- aggregated data⁵² all requirements other than those for loan level or security level (e.g. data on deposits, loans to households, other equity and derivatives).

<filter: other deposit-taking corporations>

In particular, the scenarios will be tested for the different types of reporting, as follows:

 security level – granular data (e.g. instrument-by-instrument) for both securities issued and held, securities for which the observed agent acts as a custodian, and related data (e.g. counterparty-by-counterparty)⁵³;

⁵⁰ The data requirements can be identified in the draft IReF reporting scheme by the following choice of parameters – type of reporting agent: "Credit institution"; type of reporting: "Full"; structure item: "Loans granular".

⁵¹ The data requirements can be identified in the draft IReF reporting scheme by the following choice of parameters – type of reporting agent: "Credit institution"; type of reporting: "Full"; structure item: "Securities held - granular", "Securities issued - granular" and "ISIN securities custodian - granular". No parameter is included to distinguish between the reporting requirements relating to holdings of ISIN and holdings of non-ISIN securities, although the footnotes provided in the draft reporting scheme describe how the requirements differ between these categories.

⁵² The data requirements can be identified in the draft IReF reporting scheme by the following choice of parameters – type of reporting agent: "Credit institution"; type of reporting: "Full"; structure item: "Loans aggregated", "Deposits - aggregated", "Derivatives - aggregated" and "Other - aggregated".

 aggregated data⁵⁴ – all requirements other than security level (e.g. data on deposits, loans, other equity and derivatives).

<filter: credit institutions / banking associations / service providers>

The questions below are intended to assess the implementation costs and the regular costs of the proposed scenarios as well as the associated benefits (e.g. an ERM may better represent the relationships between the data attributes in comparison with the other scenarios).

Question 5.1. Please provide an assessment of the **implementation costs** of the alternative scenario(s) compared with Scenario 1 with regard to the technical implementation of the data transmission under the IReF.

		Significantly lower 1	Moderately lower 2	No difference 3	Moderately higher 4	Significantly higher 5
Loan level	Scenario 3					
Security level	Scenario 3					
Aggregated	Scenario 2					
data	Scenario 3					

Question 5.2. Please provide an assessment of the **regular costs** of the alternative scenario(s) compared with Scenario 1 with regard to the technical implementation of the data transmission under the IReF.

		Significantly lower 1	Moderately lower 2	No difference 3	Moderately higher 4	Significantly higher 5
Loan level	Scenario 3					
Security level	Scenario 3					
Aggregated	Scenario 2					
data	Scenario 3					

⁵³ The data requirements can be identified in the draft IReF reporting scheme by the following choice of parameters – type of reporting agent: "Other deposit-taking corporation"; type of reporting: "Full"; structure item: "Securities held - granular", "Securities issued - granular" and "ISIN securities custodian granular". No parameter is included to distinguish between the reporting requirements relating to holdings of ISIN and holdings of non-ISIN securities, but the footnotes provided in the draft reporting scheme describe how the requirements differ between these categories.

⁵⁴ The data requirements can be identified in the draft IReF reporting scheme by the following choice of parameters – type of reporting agent: "Other deposit-taking corporation"; type of reporting: "Full"; structure item: "Loans - aggregated", "Deposits - aggregated", "Derivatives - aggregated" and "Other aggregated".

the data transmission under the IReF.									
		Significantly lower 1	Moderately lower 2	No difference 3	Moderately higher 4	Significantly higher 5			
Loan level	Scenario 3								
Security level	Scenario 3								

Question 5.3. Please provide an assessment of the **benefits** of the alternative scenario(s) compared with Scenario 1 with regard to the technical implementation of the data transmission under the IReF.

<filter: other deposit-taking corporations>

Scenario 2

Scenario 3

Aggregated data

The questions below are intended to assess the implementation costs and the regular costs of the proposed scenarios as well as the associated benefits (e.g. an ERM may represent the relationships between the data attributes more effectively than the other scenarios).

Question 5.4. Please provide an assessment of the **implementation costs** of the alternative scenario(s) compared with Scenario 1 with regard to the technical implementation of the data transmission under the IReF.

_		Significantly lower 1	Moderately lower 2	No difference 3	Moderately higher 4	Significantly higher 5
Security level	Scenario 3					
Aggregated	Scenario 2					
data	Scenario 3					

Question 5.5. Please provide an assessment of the **regular costs** of the alternative scenario(s) compared with Scenario 1 with regard to the technical implementation of the data transmission under the IReF.

		Significantly lower 1	Moderately lower 2	No difference 3	Moderately higher 4	Significantly higher 5
Security level	Scenario 3					
Aggregated	Scenario 2					
data	Scenario 3					

Question 5.6. Please provide an assessment of the **benefits** of the alternative scenario(s) compared with Scenario 1 with regard to the technical implementation of the data transmission under the IReF.

		Significantly lower 1	Moderately lower 2	No difference 3	Moderately higher 4	Significantly higher 5
Security level	Scenario 3					
Aggregated data	Scenario 2					
	Scenario 3					

<filter: credit institutions / other deposit-taking corporations / banking associations / service providers>

Question 5.7. Would you prefer a unified model (i.e. ERM or flat table) to be applied for the technical implementation of the data transmission under the IReF for all levels of granularity⁵⁵?

Yes	
No	

Examples of approaches to data modelling - non-mandatory reading

The following examples seek to explain the approaches further, although they are not directly linked to the draft IReF scheme.

Figure 4 shows what a template for deposit and loan data could look like. Data points are uniquely identified by the corresponding row and column. Modelling with templates is often prone to duplication of data requirements (e.g. within the template and across templates). In addition, this type of representation would not be suitable for granular information as the template would normally not allow for an unspecified number of rows.

⁵⁵ Please bear in mind that templates are not applicable for granular data.

Figure 4

Template-based approach

		Outsta	nding nominal a	imount
		Euro area	Other than euro area	Total
		010	020	030
10	Deposits	1116	586	
20	up to 1 year			1021
30	more than 1 year			681
40	Central banks	372	215	
50	General governments	233	151	
60	Credit institutions	365	139	
70	Other financial corporations	66	81	
80	Non-financial corporations	80	0	
90	Loans and advances			6848
100	Central banks	697	427	
110	up to 5 years	392	133	
120	more than 5 years	305	294	
130	General governments	667	379	
140	up to 5 years	438	324	
150	more than 5 years	229	55	
160	Credit institutions	759	452	
170	up to 5 years	271	91	
180	more than 5 years	488	361	
190	Insurance corporations	793	432	
200	up to 5 years	710	390	
210	more than 5 years	83	42	
220	Pension funds	293	428	
230	up to 5 years	171	336	
240	more than 5 years	122	92	
250	Remaining financial corporations	875	335	
260	up to 5 years	483	96	
270	more than 5 years	392	239	
280	Nonfinancial corporations			290
290	Households			21

Figure 5 provides an example of a flat table depicting three instruments for the same counterparty (Counterparty ID = EXMPL01). In contrast to the template approach, the illustrated flat table makes it easier to standardise the members of the subdomains. For example:

- maturities have a single code list (i.e. <1 year, >1 and <5 years, >5 years) instead of different code lists for deposits and loans as in the template;
- codes relating to countries and ESA sector are included at full granularity for both loans and deposits.

Figure 5

Flat-table approach

FLAT TABLE						
Observed agent	X123	X123	X123			
Reference period	2019-05-31	2019-05-31	2019-05-31			
Instrument ID	AA	ВВ	сс			
Instrument type	Loan	Loan	Deposit			
Maturity	>1 and <5 y ears	<1 year	>5 years			
Counterparty ID	EXMPL01	EXMPL01	EXMPLO1			
ESA sector	S.128 (IC)	S.128 (IC)	S.128 (IC)			
Country	AT	AT	AT			
Outstanding amount	200	450	50			
$\downarrow \qquad \downarrow \qquad \downarrow$						
The data would be allocated to the sev eral data points in the template example*:	190:010 200:010 090:030	190:010 200:010 090:030	010:010 030:030 070:010			

Note: The identifiers of the data points refer to the line number and the column number of the template example. For instance, 190:010 refers to the data point relating to line number 190 and column number 010.

Figure 6

ERM approach

TABLE: Instrument			
Observed agent	X123	X123	X123
Reference period	2019-05-31	2019-05-31	2019-05-31
Instrument ID	AA	вв	сс
Instrument type	Loan	Loan	Deposit
Maturity	>1 and <5 years	<1 year	>5 y ears
Counterparty ID	EXMPL01	EXMPL01	EXMPLO1
Outstanding amount	200	450	50
Outstanding amount TABLE: Counterparty	200	450	50
	200 EXMPL01		50
TABLE: Counterparty			

Please also note that a flat table is simply a way of depicting datasets. In transmission formats the content of these tables can often be compressed, instead of including every single line in full. The ERM reorganises the information in the flat table by splitting the data into more normalised tables – the concept of normalisation is explained in Annex 1. Redundancies can be avoided using such a structure. The three instruments depicted in Figure 5 relate to a single counterparty. Criteria related to the instrument (e.g. maturity) can change independently for each instrument while the counterparty – being a single counterparty – cannot. Redundancies can therefore be avoided by applying a normalised structure such as that shown in Figure 6.

5.2 Level of normalisation

The current draft of the IReF scheme has been defined to resemble the level of normalisation⁵⁶ of the AnaCredit ERM. However, for the IReF the question arises as to whether more normalisation may be applied for the technical implementation of the data transmission under the IReF, as shown by the examples below.

- The instrument table could be broken down to distinguish between drawn and undrawn instruments, with only the first table including the settlement date as a variable.
- The instrument table could also be broken down to distinguish between instruments with fixed interest rates and those with non-fixed interest rates. The second table would include an interest rate cap, floor and spread/margin, as well as possibly data for the reference rate, while the first table would not include those variables as they do not apply to instruments with fixed interest rates.

Normalisation could go beyond the examples above and could result in a large number of tables for which all the variables are completely independent from each other for all the entities of the ERM. A normalised structure would support data quality and would offer the advantage of making (many) validation rules redundant. For example, a check prohibiting transmission for cap and floor in the case of a fixed interest rate would not be necessary because the only table which allows for fixed interest rate instruments does not contain those variables. In addition, there is no need for null explanatory variables, as the reports/tables of the ERM only include applicable and required values; see also the subsection entitled "Null explanatory values" in the section "Technical aspects". However, the model would become more complex and would, perhaps, be harder to understand. The stability of the model may also not be certain as the detection of possible new dependencies could trigger further normalisation and the creation of new tables over time. On the other hand, a less normalised structure offers more flexibility, while the integrity of the model could be guaranteed by validation rules.

It should also be stressed that the level of normalisation chosen to represent the IReF scheme does not need to be the same as that used for the technical implementation of the data transmission. For instance, a (very) normalised version could be used to represent the IReF scheme and could automatically generate validation rules for the data transmission, which would be based on a less normalised model. These options are therefore tested separately with regard to the **representation** of the IReF requirements that will be modelled based on an ERM and the corresponding **technical implementation of the data transmission**.

The following scenarios are considered in the CBA:

⁵⁶ Normalisation means reorganising the data in a database so that it meets two basic requirements: (1) there is no redundancy of data (i.e. all data are stored in only one place), and (2) data dependencies are logical (i.e. all related data items are stored together). See also Appendix 1 of Annex 1.

- Scenario 1 (baseline): The overall level of normalisation of the IReF ERM should be kept at the level currently used in the draft scheme (see the attached Excel tool).
- Scenario 2: The IReF ERM will be "fully" normalised according to the interdependencies that will become known when implementation takes place.

The questions below are intended to assess the benefits of the proposed scenarios (e.g. a fully normalised ERM reduces the scope for interpreting the data requirements and embeds a number of implicit structural validation rules) as well as the implementation costs and the regular costs with regard to the technical implementation of the data transmission.

Question 5.8. Please provide an assessment of the **benefits** of Scenario 2 compared with Scenario 1 with regard to the representation of IReF requirements.

	Significantly lower 1	Moderately lower 2	No difference 3	Moderately higher 4	Significantly higher 5
Representation of the IReF reporting requirements					

Question 5.9. Please provide an assessment of the **implementation costs** of Scenario 2 compared with Scenario 1 with regard to the technical implementation of the data transmission under the IReF.

	Significantly lower 1	Moderately lower 2	No difference 3	Moderately higher 4	Significantly higher 5
Technical implementation of the data transmission					

Question 5.10. Please provide an assessment of the **regular costs** of Scenario 2 compared with Scenario 1 with regard to the technical implementation of the data transmission under the IReF.

	Significantly lower 1	Moderately lower 2	No difference 3	Moderately higher 4	Significantly higher 5
Technical implementation of the data transmission					

Question 5.11. Please provide an assessment of the **benefits** of Scenario 2 compared with Scenario 1 with regard to the technical implementation of the data transmission under the IReF.

	Significantly Iower 1	Moderately lower 2	No difference 3	Moderately higher 4	Significantly higher 5
Technical implementation of the data transmission					

5.3 Approach to the modelling of measures in the IReF scheme

Different approaches may be used for modelling measures in the IReF scheme. The current version of the draft IReF scheme is based on the baseline scenario below:

• Scenario 1 (baseline): Measures are treated in the same way as variables.

An understanding of this approach may be achieved by considering a simple dataset consisting of two records identified by an identifier ID, three applicable variables (V1, V2 and V3) and three different measures (M1, M2 and M3). Under the approach followed in the current draft of the IReF scheme, the dataset can be represented by showing a column for each measure, as in Figure 7.

Figure 7

Representation of measures in the current draft IReF scheme

ID	V1	V2	V3	M1	M2	M3
X1	Х	Y	Z	1	2	3
X2	А	В	С	4	5	6

However, other possible approaches may be preferred by reporting agents depending, for example, on their IT environment. Two alternatives are under consideration.

Scenario 2: A new variable is introduced to describe the measure type, while the values of the measures are captured in a new column. The approach is shown in Figure 8. A new variable is introduced to represent the measure type, with the list of applicable measures as subdomains. All measure values are stored in a dedicated column. This approach results in a multiplication of the records although, depending on the data exchange format, variables need not actually be repetitive in transmission files and can be compressed.

Figure 8

Introduction of a variable relating to the measure type	Introduction	of a variable	relating to the	measure type
---	--------------	---------------	-----------------	--------------

ID	V1	V2	V3	Measure type	м
X1	Х	Y	Z	M1	1
X1	Х	Y	Z	M2	2
X1	Х	Y	Z	M3	3
X2	А	В	С	M1	4
X2	А	В	С	M2	5
X2	A	В	С	M3	6

• Scenario 3: Separate measures in independent tables.

This option consists of separating measures from variables and representing them in independent tables linked by identifiers, as shown in Figure 9. Any potential repetition is excluded upfront in this scenario.

Figure 9

Shifting the measures to a new table

				;		
ID	V1	V2	V3	ID	Measure type	м
X1	Х	Y	Z	X1	M1	1
X2	А	В	С	X1	M2	2
				X1	M3	3
				X2	M1	4
				X2	M2	5
				X2	M3	6

The questions below are intended to assess the implementation costs and the regular costs of the proposed scenarios for reporting agents, as well as their benefits.

Question 5.12. Please provide an assessment of the **implementation costs** of the alternative scenarios compared with Scenario 1.

	Significantly lower 1	Moderately lower 2	No difference 3	Moderately higher 4	Significantly higher 5
Scenario 2					
Scenario 3					

Question 5.13. Please provide an assessment of the **regular costs** of the alternative scenarios compared with Scenario 1.

	Significantly lower 1	Moderately lower 2	No difference 3	Moderately higher 4	Significantly higher 5
Scenario 2					
Scenario 3					

Question 5.14. Please provide an assessment of the **benefits** of the alternative scenarios compared with Scenario 1.

	Significantly lower 1	Moderately lower 2	No difference 3	Moderately higher 4	Significantly higher 5
Scenario 2					
Scenario 3					

5.4 Null explanatory values

Some variables and measures included in the reporting scheme may be "not applicable" in some cases. For instance, no accounting information is, in principle, available for those instruments that are not assets of the reporting/observed agent (e.g. securities held in custody, loans securitised and not recognised on the balance sheet but still serviced by deposit-taking corporations). In the AnaCredit framework, reporting agents are asked to identify such cases through the transmission of complementary variables referred to as null explanatory values (NEVs). The AnaCredit framework also provides for the use of NEVs for "not-required" variables – for example in those cases in which a variable is not collected at national level.⁵⁷ While the IReF seeks to define a reporting scheme that would be equally applicable in all euro area countries, a need for "not-required" variables may materialise in the context of the integration of country-specific requirements in the IReF. Should NEVs be applied, there would be two possible scenarios.

- Scenario 1 (baseline): The AnaCredit approach would be applied, introducing a NEV variable for each existing variable that can be "not applicable" (or "not required").
- Scenario 2: NEV members are included in the domains for all variables that have actual domains (i.e. code lists). All other variables (e.g. dates) and measures would have separate NEV variables, as is the case in Scenario 1.

It should be noted that, for the sake of simplicity, neither of the scenarios are reflected in the current draft of the IReF reporting scheme. As an example, Figure 10 shows the implications of the two scenarios for the variable "Accounting classification". Under

⁷ When a fully normalised ERM is used to model data requirements there is no need for NEVs as the entities/tables of the model only include applicable and required variables.

Scenario 1, the separate variable "Accounting classification NEV" would be added, while the alternative scenario would include a member to identify NEV information. The questions below seek to assess the costs and benefits of the proposed scenarios.

Figure 10

NEV approaches

Scen	ario 1	Scenario 2
Accounting classification	Accounting classification NEV	Accounting classification
nGAAP: Loans and receivables	-	nGAAP: Loans and receivables
nGAAP: Held-to-maturity investments	-	nGAAP: Held-to-maturity investments
-	N/A	N/A

Question 5.15. Please provide an assessment of the **implementation costs** of Scenario 2 compared with Scenario 1.

	Significantly Iower 1	Moderately lower 2	No difference 3	Moderately higher 4	Significantly higher 5
Scenario 2					

Question 5.16. Please provide an assessment of the **regular costs** of Scenario 2 compared with Scenario 1.

	Significantly Iower 1	Moderately lower 2	No difference 3	Moderately higher 4	Significantly higher 5
Scenario 2					

Question 5.17. Please provide an assessment of the **benefits** of Scenario 2 compared with Scenario 1.

	Significantly Iower 1	Moderately lower 2	No difference 3	Moderately higher 4	Significantly higher 5
Scenario 2					

Question 5.18. Based on your experience of data reporting, please indicate the overall **benefits** of applying NEVs.

	None	Very low	Low	Moderate	High	Very high
	0	1	2	3	4	5
Applying NEVs						

<filter: credit institutions / other deposit-taking corporations / banking associations / service providers>

6

Integration of requirements covered in current national collection frameworks but not arising from ECB regulations

Euro area NCBs are currently given the option of collecting data with regard to requirements laid down in ECB regulations as part of wider national collection frameworks, meaning that in practice the actual requirements that deposit-taking corporations have to report in each euro area country can differ in terms of structure and content. This fact has been identified by the banking industry as one of the biggest challenges faced by the current approach to statistical data collection. The IReF aims to resolve this challenge by defining a unique reporting scheme that would be directly applicable to reporting agents.

Figure 11

Representation of requirements not arising from ECB regulations



As Figure 11 shows, those requirements of the national collection frameworks that do not arise from ECB regulations can be conceptualised as arising within the scope of the NCBs' contribution to the Eurosystem tasks laid down in the Statute of the ESCB and the ECB⁵⁸ (and may therefore be viewed as extended ESCB statistical requirements), and outside this scope.

⁵⁸ The tasks are the following: (i) the definition and implementation of monetary policy; (ii) the conduct of foreign exchange operations; (iii) the holding and management of the euro area's foreign currency reserves; and (iv) macroprudential policy and financial stability.

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- Extended ESCB statistical requirements comprise requirements for deposit-taking corporations arising in relation to ECB statistical guidelines, other ECB legal acts or Governing Council decisions (e.g. the assessment of the quality of data reported by credit institutions in the context of Targeted Longer-Term Refinancing Operations), as well as specific national activities contributing to the performance of Eurosystem tasks⁵⁹.
- Requirements arising from national activities outside the perimeter of Eurosystem tasks reflect the specific regulatory and legal obligations of NCBs and include, for instance, requirements arising in relation to anti-money laundering activities. These requirements refer to purely national tasks and would continue to be required legally under national law.

The ESCB is currently in the process of assessing the extent to which the requirements in the first category will remain applicable under the IReF. This section first assesses two cases of extended ESCB statistical requirements that have already been identified as common to the national collection frameworks of NCBs. Subject to the outcome of the CBA questionnaire, these requirements may be included in the IReF reporting scheme applicable to all euro area countries.

In general, it is the ESCB's objective that under the IReF country-specific requirements should be kept to a minimum to guarantee the meaningfulness of the initiative. Although the assessment of individual existing requirements is currently under way, this section also assesses how such requirements could be introduced into the IReF from a methodological and technical perspective.

6.1 Proposals for the integration in the IReF of extended ESCB statistical requirements common to several NCBs

6.1.1 Standardisation of the collection of flow information on securities issued

As discussed in the subsection entitled "Requirements for securities issued, where the reporting/observed agent is either the debtor or the issuer" in the section "IReF features arising from the integration of the existing requirements", the current draft IReF scheme allows for the granular collection of instrument data on securities for which the reporting/observed agent acts as debtor or as an issuer. The IReF baseline scenario illustrates how the possible collection of detailed information on flows (as identified in the event table for the proposed ERM – see also Annex 1) could work. In particular, for debt securities the scheme would cover granular information on issuances and individual flows (e.g. with regard to coupons and redemptions to allow for the derivation of payment schedules). Data on individual tap issuances are also

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⁹⁹ For instance, this category covers cases where an NCB has implemented a specific national data collection framework from deposit-taking corporations to support the analysis of the monetary policy transmission mechanism. While the task is common to all euro area countries, special data needs may arise in individual countries due to national specificities.

included. With regard to equity securities, in addition to granular data on issuances the scheme covers information on dividends and potential stock splits. Following the logic of Figure 11, these extended ESCB statistical requirements arise in connection with the requirements for securities issues statistics specified in the ECB Guideline on monetary and financial statistics, and are also connected with other ongoing work in the context of the G20 data gaps initiative⁶⁰. The data would be reported within 10-12 working days of the reference date.⁶¹ As an alternative scenario, data on gross issuance and redemptions could be collected at the security level on an aggregated basis.

- Scenario 1 (baseline): Granular collection of data for issuance of securities and corresponding individual flow information.⁶²
- Scenario 2: Collection of data for gross issuance and redemptions at the security level, without information on individual flows.⁶³

The questions below are intended to assess the implementation costs and the regular costs of the proposed scenarios, as well as the associated benefits in terms of processes and governance (e.g. a unique approach across euro area countries, fewer data transformations for reporting agents).

	None 0	Very low 1	Low 2	Moderate 3	High 4	Very high 5
Scenario 1						
Scenario 2						

Question 6.1. Please provide an assessment of the **implementation costs** of the proposed scenarios.

Question 6.2. Please provide an assessment of the **regular costs** of the proposed scenarios.

	None 0	Very low 1	Low 2	Moderate 3	High 4	Very high 5
Scenario 1						
Scenario 2						

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⁶⁰ See also the IMF website.

⁶¹ As Annex 1 clarifies, the Eurosystem may use data from business registers rather than collecting counterparty data from reporting agents. A similar approach seems possible for flow data on securities (for example when NCBs can use other available official sources).

⁶² The data requirements can be identified in the "Event" table of the draft IReF reporting scheme by the following choice of parameters – type of reporting agent: "Credit institution" or "Other deposit-taking corporation"; type of reporting: "Full"; structure item: "Securities issued - granular".

⁶³ The data requirements would match those specified under Scenario 2 in the section entitled "Derogation scheme". They may be identified in the draft IReF reporting scheme by the following choice of parameters – type of reporting agent: "Credit institution" or "Other deposit-taking corporation"; type of reporting: "Derogation-Scenario 2"; structure item: "Securities issued - granular".

	None 0	Very low 1	Low 2	Moderate 3	High 4	Very high 5
Scenario 1						
Scenario 2						

Question 6.3. Please provide an assessment of the **benefits** of the proposed scenarios.

Scenario 1 above foresees the reporting of the payment schedule relating to interest coupons and redemptions of debt securities issued. Take, for instance, a debt security with a two-year maturity which is paying interest on a quarterly basis and for which the applicable interest rate is fixed upfront for each year of the contract, although a different rate applies in each year. Under the IReF baseline scenario, the payments would result in a line of data for each year, showing the interest rate applicable and the number of payments. In the case of a variable interest rate applied that is set at the beginning of each year, the payments would also be captured in two lines, and the interest rate applicable for the first year would initially also be reported for the second year. The data for the second year if a different interest rate were applied.

However, it might be worth considering a technical alternative, whereby each individual expected payment would be modelled. In the two examples provided above this would mean recording eight lines of data, each referring to a quarterly payment. Revisions would also be needed in this case if there were changes to the rates. It should also be noted that for cases in which payments do not follow a clear pattern the two scenarios would be equivalent, as for both a line would be reported for each payment.

In order to identify the best technical method for modelling information on interest payments and redemptions, the following scenarios are assessed in the CBA:

- Scenario 1 (baseline): The reporting scheme would include information on payment schedules.
- Scenario 2: The reporting scheme would include information on individual payments.

The questions below are intended to assess the implementation costs and the regular costs of the proposed scenarios as well as the associated benefits in terms of processes and governance (e.g. the requirements may be more easily matched to the internal systems under Scenario 2) and data quality enhancements (e.g. there may be more complete information under Scenario 2).

Question 6.4. Please provide an assessment of the **implementation costs** of the proposed scenarios.

	None 0	Very low 1	Low 2	Moderate 3	High 4	Very high 5
Scenario 1						
Scenario 2						

Question 6.5. Please provide an assessment of the **regular costs** of the proposed scenarios.

	None 0	Very low 1	Low 2	Moderate 3	High 4	Very high 5
Scenario 1						
Scenario 2						

Question 6.6. Please provide an assessment of the **benefits** of the proposed scenarios.

	None 0	Very low 1	Low 2	Moderate 3	High 4	Very high 5
Scenario 1						
Scenario 2						

6.1.2 Data requirements for financial derivatives

The existing BSI Regulation includes aggregated requirements for financial derivatives, breaking down assets and liabilities according to the sector and area of residency of the counterparty. Under the IReF, information will be collected on the market value of asset and liability positions related to financial derivatives on an aggregated basis within 10-12 working days of the reference date. This will be at a higher level of detail than under the BSI Regulation in terms of sector and area of residency of the counterparty to align with the proposed overall IReF approach⁶⁴. An option also under consideration is extending the reporting to reflect other extended ESCB statistical requirements arising mainly in relation to IMF requirements⁶⁵ or BIS collections of data on derivatives⁶⁶. The following additional variables are under consideration:

- type of instrument (e.g. options, forward);
- currency of denomination of the financial derivative;

⁶⁴ See also the subsection entitled "Assessment of additional level of detail" in the section "IReF features arising from the integration of the existing requirements".

⁶⁵ See the Balance of Payments and International Investment Position Manual – Sixth Edition.

⁶⁶ See the dedicated page on the BIS website.

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- type of underlying (e.g. commodity, credit, currency, equity, interest rate);
- role in the derivative contract (i.e. whether the reporting/observed agent is the buyer or the seller of the instrument).

The questions below are intended to assess the implementation costs and the regular costs of transmitting the proposed variables as well as the associated benefits (e.g. discontinuing existing national requirements on financial derivatives).

• • •						
	None 0	Very low 1	Low 2	Moderate 3	High 4	Very high 5
Type of instrument						
Currency of denomination of the financial derivative						
Type of underlying						
Role in the derivative contract						

Question 6.7. Please provide an assessment of the **implementation costs** of transmitting the proposed variables.

Question 6.8. Please provide an assessment of the **regular costs** of transmitting the proposed variables.

	None 0	Very low 1	Low 2	Moderate 3	High 4	Very high 5
Type of instrument						
Currency of denomination of the financial derivative						
Type of underlying						
Role in the derivative contract						

Question 6.9. Please provide an assessment of the **benefits** of transmitting the proposed variables.

	None 0	Very low 1	Low 2	Moderate 3	High 4	Very high 5
Type of instrument						
Currency of denomination of the financial derivative						
Type of underlying						
Role in the derivative contract						

6.2 The technical integration of country-specific requirements in the IReF

As clarified above, the ESCB's objective is to limit the number of country-specific requirements under the IReF. However, it is likely that some of these requirements will continue to exist.

In order to support reporting agents in the reporting of country-specific requirements, the ESCB is planning to develop an extended IReF technical layer in order to model and describe these requirements from a technical perspective. This will ensure that overlapping requirements across countries are described in the same way. To achieve this, the common reporting scheme will be extended to include additional variables or by expanding the subdomains of existing variables in line with the national requirements.⁶⁷ While the national requirements will be part of the IReF technical layer, from a legislative perspective only the common requirements will be covered in the ECB Regulation on the IReF, whereas the country-specific requirements will be legislated for at national level. The CBA assesses the costs and benefits of two scenarios for how this type of extended IReF technical layer could be translated into reporting schemes that would be applicable at national level.

- Scenario 1: Based on the extended IReF technical layer (i) a common reporting scheme would be defined that would apply in each country, and (ii) complementary reports/tables would be created on national requirements that would only be applicable in the relevant countries.
- Scenario 2: Based on the extended IReF technical layer, national reporting schemes would be defined, integrating common and national requirements.

As reporting requirements are defined ex ante in the same technical layer, both scenarios imply the methodological and semantic integration of country-specific requirements in the IReF. The scenarios are also nearly equivalent in technical terms for requirements not collected at an aggregated level, as in both cases national requirements would result in additional variables or measures which would not be collected in countries in which they do not apply. However, for requirements referring to aggregated data the two scenarios have different implications. Under Scenario 1, the uniformity of the IReF common reporting scheme across countries would be preserved. National requirements would have to be covered by additional complementary tables that are likely to include some degree of double reporting, given that some national requirements might have to be collected together with information that is already included in the common reporting scheme. Scenario 1 would also require consistency checks to be established between the core scheme and the complementary reports/tables. However, under Scenario 2 each country would extract its national version of the IReF reporting scheme from the IReF technical layer. The differences might not be significant, but this approach would mean that each NCB might apply a different set of requirements. Double reporting would be avoided, and reporting agents would not need to implement additional data transformations or

⁷⁷ This is consistent with the results of the QST questionnaire that showed very marginal support for collecting national requirements through dedicated national reporting lines.

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validation checks for complementary reports/tables. See also Appendix 2 of Annex 1 for a detailed description of the technical implications of the two scenarios together with examples.

The questions below are intended to assess the implementation costs and the regular costs of the proposed scenarios as well as the associated benefits in terms of processes and governance (e.g. under Scenario 2, there would be no double reporting of requirements) and the international standardisation of the requirements (e.g. under Scenario 1, the common reporting scheme would be applicable in all countries).

Question 6.10. Please provide an assessment of the **implementation costs** of the proposed scenarios.

	None 0	Very low 1	Low 2	Moderate 3	High 4	Very high 5
Scenario 1						
Scenario 2						

Question 6.11. Please provide an assessment of the **regular costs** of the proposed scenarios.

	None 0	Very low 1	Low 2	Moderate 3	High 4	Very high 5
Scenario 1						
Scenario 2						

Question 6.12. Please provide an assessment of the **benefits** of the proposed scenarios.

	None 0	Very low 1	Low 2	Moderate 3	High 4	Very high 5
Scenario 1						
Scenario 2						

Under Scenario 2, an additional feature could be introduced in order to make it possible for cross-border banks to report the same dataset in all countries in which they operate. Reporting agents could be granted the discretion to decide which variables to report and which subdomains to use, provided that all the national requirements of the NCBs of the countries in which the group is subject to reporting are met. The national requirements of each country could then be combined in a single scheme, allowing the reporting agents to report the same data for all branches and subsidiaries in all countries.⁶⁸ In order to link the input received with the applicable

⁶⁸ For example, a bank operating in three countries is requested to report an additional distinct variable by each corresponding NCB. Harmonised reporting can be achieved by transmitting the three variables for each country. It is also recalled that for the purposes of statistical reporting, when a legal entity has more than one branch operating in a country, these branches are treated as one observed agent (i.e. a single institutional unit in the terminology of international statistical standards).

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national requirements, NCBs could then ignore the information that is not applicable at the national level.

 Proposed approach: Reporting agents should be granted the discretion to report more information than the requested minimum so as to ensure that cross-border banks transmit the same dataset across countries.

The questions below seek to evaluate the benefits of the proposed approach in terms of processes and governance (e.g. the possibility of creating a standardised report for all observed agents in the group) and analyse the extent to which the proposal may impact the assessment of the costs and benefits of Scenario 2 above. The approach is tested separately with regard to reporting at the level of the legal entity and across legal entities (e.g. at the level of the banking group or for legal entities using the same service provider to support reporting to the Eurosystem). See also Appendix 2 of Annex 1 for a detailed description of the technical implications of the approach proposed for reporting.

Question 6.13. Please provide an assessment of the **benefits** of the proposed approach **when implemented at the level of the legal entity** to allow for standardised reporting for all branches.

	None	Very low	Low	Moderate	High	Very high
	0	1	2	3	4	5
Proposed scenario						

Question 6.14. Please provide an assessment of the **benefits** of the proposed approach **when implemented across legal entities** to allow for standardised reporting - e.g. for all subsidiaries of a banking group or for legal entities using the same service provider.

	None	Very low	Low	Moderate	High	Very high
	0	1	2	3	4	5
Proposed scenario						

It is possible that the costs and benefits identified above for Scenario 2 would be assessed differently if the proposed approach were implemented. Respondents are therefore invited to indicate if this is the case and, if so, to re-assess the costs and benefits of Scenario 2 for a situation in which they are granted the discretion to report the same dataset across countries.

Question 6.15. Would you assess the **costs and benefits** of Scenario 2 differently from the above if you were given the discretion to report the same dataset across countries at the level of the legal entity?

Yes	
No	

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<filter: if answer to Question 6.15 is 'Yes'>

Question 6.15.1. Please reassess the **implementation costs** of Scenario 2 for a situation in which you are given the discretion to report the same dataset across countries at the level of the legal entity.

	None	Very low	Low	Moderate	High	Very high
	0	1	2	3	4	5
Scenario 2						

Question 6.15.2. Please reassess the **regular costs** of Scenario 2 for a situation in which you are given the discretion to report the same dataset across countries at the level of the legal entity.

	None	Very low	Low	Moderate	High	Very high
	0	1	2	3	4	5
Scenario 2						

Question 6.15.3. Please reassess the **benefits** of Scenario 2 for a situation in which you are given the discretion to report the same dataset across countries at the level of the legal entity.

	None	Very low	Low	Moderate	High	Very high
	0	1	2	3	4	5
Scenario 2						

Question 6.16. Would you assess the **costs and benefits** of Scenario 2 differently from the above if you were given the discretion to report the same dataset across countries and across legal entities?

Yes	
No	

<filter: if answer to Question 6.16 is 'Yes'>

Question 6.16.1. Please reassess the **implementation costs** of Scenario 2 for a situation in which you are given the discretion to report the same dataset across countries and across legal entities.

	None	Very low	Low	Moderate	High	Very high
	0	1	2	3	4	5
Scenario 2						

Question 6.16.2. Please reassess the **regular costs** of Scenario 2 for a situation in which you are given the discretion to report the same dataset across countries and across legal entities.

	None	Very low	Low	Moderate	High	Very high
	0	1	2	3	4	5
Scenario 2						

Question 6.16.3. Please reassess the **benefits** of Scenario 2 for a situation in which you are given the discretion to report the same dataset across countries and across legal entities.

	None	Very low	Low	Moderate	High	Very high
	0	1	2	3	4	5
Scenario 2						

<filter: credit institutions / other deposit-taking corporations / banking associations / service providers>

7 Additional features for potentially streamlining the IReF reporting

This section looks at a number of features that could, potentially, streamline IReF reporting but do not relate to the integration of existing requirements. Some of these features could be directly introduced into the model stemming from the integration of the requirements introduced in the previous sections. These have therefore been introduced into the draft IReF scheme in order to clarify how the reporting would be affected. Some other features were not reflected in the draft IReF scheme because they would have required a change to the overall structure of the model (e.g. new tables/entities). These features will only be analysed further to the extent that reporting agents see them as beneficial to the reporting.

7.1 Features reflected in the draft IReF reporting scheme

7.1.1 Collection of accounting information not necessary for the compilation of aggregated statistics

As Annex 2 shows, the QST showed strong support for linking the IReF data requirements to the applicable accounting standards. The rationale for this is that this type of approach would support data quality procedures, thus reducing the need for revisions and contact between reporting agents and compilers. Following this logic, it is proposed that the IReF scheme should extend the existing requirements of AnaCredit to all instrument types. In particular, this section looks at the collection of accounting variables that are not necessary for the compilation of aggregated statistics (e.g. the accounting classification of the instrument and the corresponding carrying amount). The data would be transmitted on a quarterly basis within 20-24 working days of the reference date.

• **Proposed scenario:** Accounting information would be transmitted for all instrument types on a quarterly basis within 20-24 working days of the reference date.

The questions below are intended to assess the implementation costs and the regular costs of the proposed scenario as well as the associated benefits in terms of processes and governance (e.g. a harmonised approach for all types of instruments) and data quality enhancements (e.g. easier cross-checking between frameworks could reduce the number of enquiries on data developments by the NCBs).

<filter: credit institutions / banking associations / service providers>

In particular, a distinction is made between the following categories of requirements:

- security level granular data (e.g. instrument-by-instrument) for both securities issued and held, and related data (e.g. counterparty-by-counterparty)⁶⁹;
- aggregated data⁷⁰ all requirements other than loan level or security level (e.g. data on deposits, loans to households, other equity and derivatives).

No assessment is performed for loan-level data as for these requirements, which are already part of AnaCredit, only the timelines needs to be assessed (see the section entitled "Data transmission timelines"). Similarly, accounting variables necessary for the compilation of aggregated statistics (see the dedicated subsection entitled "Reporting of information on write-offs for loans to legal entities" in the section "IReF features arising from the integration of the existing requirements") should not be considered for the assessment.

<filter: other deposit-taking corporations>

In particular, a distinction is made between the following categories of requirements:

- security level granular data (e.g. instrument-by-instrument) for both securities issued and securities held, and related data (e.g. counterparty-by-counterparty)⁷¹;
- aggregated data⁷² all requirements other than security level (e.g. data on deposits, loans, other equity and derivatives).

Accounting variables necessary for the compilation of aggregated statistics, such as information on loan write-offs, should not be considered for the assessment. They will continue to be collected on an aggregated basis, in line with the current approach, within 10-12 working days of the reference date.

<filter: credit institutions / other deposit-taking corporations / banking associations / service providers>

It should also be noted that accounting information may, generally, be available monthly, and within a shorter timeline than 20-24 working days. If it is preferable to transmit the affected variables on a monthly basis within 10-12 working days, please

⁶⁹ The data requirements can be identified in the draft IReF reporting scheme by the following choice of parameters – type of reporting agent: "Credit institution"; type of reporting: "Full"; structure item: "Securities held - granular" and "Securities issued - granular"; deadline: "Quarterly – 20-24 working days".

⁷⁰ The data requirements can be identified in the draft IReF reporting scheme by the following choice of parameters – type of reporting agent: "Credit institution"; type of reporting: "Full"; structure item: "Loans aggregated", "Deposits - aggregated", "Derivatives - aggregated" and "Other - aggregated"; deadline: "Quarterly – 20-24 working days".

⁷¹ The data requirements can be identified in the draft IReF reporting scheme by the following choice of parameters – type of reporting agent: "Other deposit-taking corporation"; type of reporting: "Full"; structure item: "Securities held - granular" and "Securities issued - granular" "; deadline: "Quarterly – 20-24 working days".

⁷² The data requirements can be identified in the draft IReF reporting scheme by the following choice of parameters – type of reporting agent: "Other deposit-taking corporation"; type of reporting: "Full"; structure item: "Loans - aggregated", "Deposits - aggregated", "Derivatives - aggregated" and "Other - aggregated"; deadline: "Quarterly – 20-24 working days".

indicate your preference in the relevant question in the subsection entitled "Quarterly transmission at T + 20-24 working days" in the section "Data transmission timelines".

Question 7.1. Please provide an assessment of the **implementation costs** of the proposed scenario.

	None 0	Very low 1	Low 2	Moderate 3	High 4	Very high 5
Security level						
Aggregated data						

Question 7.2. Please provide an assessment of the **regular costs** of the proposed scenario.

_	None 0	Very low 1	Low 2	Moderate 3	High 4	Very high 5
Security level						
Aggregated data						

Question 7.3. Please provide an assessment of the **benefits** of the proposed scenario.

	None 0	Very low 1	Low 2	Moderate 3	High 4	Very high 5
Security level						
Aggregated data						

<filter: credit institutions / other deposit-taking corporations / banking associations / service providers>

7.1.2 Data relating to branches not resident in the euro area or in other EU Member States that will adopt the IReF

The AnaCredit Regulation covers loan level requirements relating to branches of euro area credit institutions not resident in the euro area or in other EU Member States that have adopted AnaCredit, giving NCBs the option of exempting reporting agents from the requirements. Eight euro area NCBs currently collect these data.

It is proposed that data should also be collected for these branches under the IReF – i.e. in relation to all granular and aggregated IReF data requirements. In line with the general spirit of the IReF, it is being considered whether to drop the national discretion granted to each individual NCB as to whether they apply the requirements or not. This approach would guarantee the coverage of data relating to the whole legal entity and, looking ahead, could facilitate the future integration into the IReF of new datasets such

as the group module of SHS. The same requirements would apply to both non-euro area and euro area branches.⁷³

 Proposed scenario: Reporting agents would transmit IReF data relating to their branches not resident in the euro area or in other EU Member States that will adopt the IReF.

The questions below are intended to assess the implementation costs and the regular costs of the proposed scenario as well as the associated benefits in terms of processes and governance (e.g. creating a framework for further integration of datasets).

Question 7.4. Please provide an assessment of the **implementation costs** of the proposed scenario.

_	None	Very low	Low	Moderate	High	Very high
	0	1	2	3	4	5
Proposed scenario						

Question 7.5. Please provide an assessment of the **regular costs** of the proposed scenario.

	None	Very low	Low	Moderate	High	Very high
	0	1	2	3	4	5
Proposed scenario						

Question 7.6. Please provide an assessment of the **benefits** of the proposed scenario.

	None	Very low	Low	Moderate	High	Very high
	0	1	2	3	4	5
Proposed scenario						

<filter: credit institutions / banking associations / service providers>

7.1.3 Reporting of flow information on loans to legal entities

Given that loans are similar to debt securities with regard to interest payments and redemptions, deposit-taking corporations may see the benefit of extending the proposed reporting of flows for securities issued to loans whenever the corresponding information is collected at a granular level (i.e. loans provided by credit institutions to legal entities). This approach would modify the way these data are collected in

⁷³ At a later stage of the IReF process it might be considered whether or not to introduce a common derogation scheme that would exclude from the reporting small branches not resident in the euro area or other EU member states that adopt the IReF.

AnaCredit, but would ensure that the same methodology is followed for loans to legal entities and securities issued under the IReF. In addition, some of the existing AnaCredit requirements could be discontinued.⁷⁴ The data would be reported within 10-12 working days of the reference date.

The approach is reflected in the draft IReF reporting scheme, the main objective being to illustrate potentially homogeneous modelling for loans and debt securities. However, while the approach forms part of the current IReF baseline scenario, the ESCB does not view it as a point of reference for standardisation given the implications it may have in terms of complexity. The extension will only be considered if reporting agents indicate in the CBA that this option offers clear benefits.

The following scenarios are therefore assessed in the CBA:

- Scenario 1 (baseline): Information regarding loan interest payments and redemptions would be collected in accordance with the same requirements as for securities issued.
- Scenario 2: Status quo; no information regarding loan interest payments and redemptions would be collected. Related data requirements would remain in line with the AnaCredit Regulation.

The questions below are intended to assess the implementation and regular costs of the proposed scenarios as well as the associated benefits in terms of processes and governance (e.g. the same approach for loans and debt securities issued under Scenario 1) and data quality enhancements (e.g. more complete information under Scenario 1).

Question 7.7. Please provide an assessment of the **implementation costs** of Scenario 1 compared with Scenario 2.

	Significantly lower 1	Moderately lower 2	No difference 3	Moderately higher 4	Significantly higher 5
Scenario 1					

Question 7.8. Please provide an assessment of the **regular costs** of Scenario 1 compared with Scenario 2.

	Significantly Iower 1	Moderately lower 2	No difference 3	Moderately higher 4	Significantly higher 5
Scenario 1					

⁷⁴ In detail, the changes are as follows: (i) the variables "interest rate cap/floor/spread/margin", "reference rate", "type of interest rate" and "settlement date" were moved from the AnaCredit "Instrument" table to the IReF "Event" table; and (ii) the collection of the AnaCredit variables "type of amortisation", "end date of the interest-only period", "interest rate reset frequency" and "payment frequency" would be discontinued as they can be derived.

Question 7.9. Please provide an assessment of the **benefits** of Scenario 1 compared with Scenario 2.

	Significantly Iower 1	Moderately lower 2	No difference 3	Moderately higher 4	Significantly higher 5
Scenario 1					

<filter: credit institutions / other deposit-taking corporations / banking associations / service providers>

7.2 Features not reflected in the draft IReF reporting scheme

<filter: credit institutions / banking associations / service providers>

7.2.1 Introduction of an additional level of granularity for multi-instrument contracts

A contract between a creditor and its debtor may consist of several instruments. Although each instrument under the contract has its own characteristics, the corresponding contract can be administered as a whole. For instance, a contract can permit the use of different credit instruments but fix the overall credit amount that can be drawn.

Currently AnaCredit does not include a separate table for data at the contract level. As a consequence, for certain variables reporting agents are required to make assumptions in order to fit the information at the instrument level. For instance, in the example above of a contract permitting different credit instruments, the commitment amount at inception would, for each instrument, show an allocated amount that would be in line with the overall credit limit.

The current IReF baseline scenario follows the AnaCredit modelling, although it could be worth considering the potential costs and benefits of introducing an additional level of granularity at the contract level.

The following scenarios are therefore assessed in the CBA:

- Scenario 1 (baseline): Status quo; the ERM would not be extended to include a contract-level table and the information relating to the contract level would be allocated to existing tables as in AnaCredit.
- Scenario 2: The ERM would be extended to include a contract level table and the information relating to the contract level would be adapted to this new table.

The questions below are intended to assess the implementation costs and the regular costs of the proposed scenarios as well as the associated benefits in terms of processes and governance (e.g. Scenario 2 would not require reporting agents to make allocations) and data quality enhancements (e.g. more complete information under Scenario 2).

Question 7.10. Please provide an assessment of the **implementation costs** of Scenario 2 compared with Scenario 1.

	Significantly Iower 1	Moderately lower 2	No difference 3	Moderately higher 4	Significantly higher 5
Scenario 2					

Question 7.11. Please provide an assessment of the **regular costs** of Scenario 2 compared with Scenario 1.

	Significantly Iower 1	Moderately lower 2	No difference 3	Moderately higher 4	Significantly higher 5
Scenario 2					

Question 7.12. Please provide an assessment of the **benefits** of Scenario 2 compared with Scenario 1.

	Significantly Iower 1	Moderately lower 2	No difference 3	Moderately higher 4	Significantly higher 5
Scenario 2					

<filter: credit institutions / other deposit-taking corporations / banking associations / service providers>

7.2.2 Allowing for a plurality of protection providers for an instrument

The IReF baseline scenario currently follows the AnaCredit modelling with regard to protection providers, and includes information in the protection table.⁷⁵ However, while the current approach allows for only one protection provider, protection can in fact be provided by several guarantors (e.g. by joint guarantors in the case of commercial real estate loans with multiple owners).

In such situations reporting agents are currently advised to identify all protection providers and record them in their respective systems. Given that only one can currently be included in the AnaCredit reporting, credit institutions are advised to

⁷⁵ The IReF reporting scheme includes information on the protection provider for loans to legal entities and securities issued.

select the protection provider to be reported based on reasonable risk prudent factors (e.g. the subordination of liabilities, the size of the contribution to the joint protection). The following scenarios are therefore assessed in the CBA:

- Scenario 1 (baseline): Status quo; do not allow for a plurality of protection providers in the IReF model.
- Scenario 2: allow for a plurality of protection providers.

The questions below are intended to assess the implementation costs and the regular costs of the proposed scenarios as well as the associated benefits in terms of processes and governance (e.g. Scenario 2 would not require reporting agents to make choices) and data quality enhancements (e.g. more complete information under Scenario 2).

Question 7.13. Please provide an assessment of the **implementation costs** of Scenario 2 compared with Scenario 1.

	Significantly Iower 1	Moderately lower 2	No difference 3	Moderately higher 4	Significantly higher 5
Scenario 2					

Question 7.14. Please provide an assessment of the **regular costs** of Scenario 2 compared with Scenario 1.

	Significantly Iower 1	Moderately lower 2	No difference 3	Moderately higher 4	Significantly higher 5
Scenario 2					

Question 7.15. Please provide an assessment of the **benefits** of Scenario 2 compared with Scenario 1.

	Significantly Iower 1	Moderately lower 2	No difference 3	Moderately higher 4	Significantly higher 5
Scenario 2					

<filter: credit institutions / other deposit-taking corporations / banking associations / service providers>
Data transmission timelines

8

IReF requirements can be divided into two broad categories, depending on whether they would be used directly to derive the aggregated monetary reports needed shortly after the reference date (e.g. monetary aggregates, loan and other credit aggregates, interest rates) and all other requirements. According to the QST results, data relating to all requirements in the first category would be collected on a monthly basis. The QST questionnaire also provides an initial analysis of the feasibility of possible transmission timelines, and its results have enabled baseline scenarios to be developed. These allow for two transmission deadlines: at T + 10-12 working days for monthly data that would be needed early for statistical compilation; and at T + 20-24 working days for the residual monthly (where applicable) and quarterly information. The CBA questionnaire now seeks to assess the costs of these scenarios based on the concrete requirements specified in the current draft IReF scheme. It should be noted that this topic is independent of the actual structure of the scheme (e.g. flat tables versus ERM) because, for every technical implementation of the data transmission, the same timelines would have to be applied. The reporting deadline for each variable and measure is depicted in the draft scheme and this should provide the basis for answering the questions below.

It should be noted that some variables and measures are currently collected with a longer timeline in the national reporting frameworks than that envisaged by the IReF baseline scenario. However, in such cases what often changes is the level of granularity and detail at which the information is collected, while the underlying data availability remains unchanged. For instance, in countries in which granular data on securities are currently reused to compile monetary reports, this information is likely to be collected within 10-12 working days. On the other hand, if only the aggregates of securities holdings are collected following such a short timeline, the granular securities information should still be available at the level of reporting agents for the derivation and transmission of the resulting aggregates.

In addition, it is likely that in many cases the national reporting frameworks are already in line with the timeline proposed for the IReF. For example, loan granular data are often reported sufficiently early, so the proposed IReF timeline would not introduce an additional burden on reporting agents. Hence, when answering the questions, please keep in mind that the costs should be compared with the status quo (as well as future extensions to data requirements that are expected to take place in any case) and if the proposed timeline is in line with the current national practices, it is expected that regular costs would be assessed as "very low".

<filter: credit institutions / banking associations / service providers>

In particular, a distinction is made between the following categories of requirements.

- Loan level granular data (i.e. instrument-by-instrument) for loans to legal entities and related information (e.g. protection-by-protection, counterparty-by-counterparty).⁷⁶ No assessment is made for the reporting of flow information on loans, as these data requirements (including the timelines of reporting) are assessed in the subsections entitled "Reporting of flow information on loans to legal entities" in the section "Additional features for potentially streamlining the IReF reporting".
- Security level granular data (e.g. instrument-by-instrument) for ISIN securities held and related data (e.g. counterparty-by-counterparty), and ISIN securities for which the observed agent acts as custodian, where applicable.⁷⁷ No assessment is made for holdings of non-ISIN securities and securities issued or the reporting of accounting information that is not required for the compilation of aggregated statistics, as such data requirements (including the timelines of reporting) are assessed in the subsections entitled "Collection of data on non-ISIN securities" and "Requirements for securities issued, where the reporting/observed agent is either the debtor or the issuer" in the section "IReF features arising from the integration of the existing requirements", and the subsection entitled "Collection of aggregated statistics" in the section "Additional features for potentially streamlining the IReF reporting" respectively.
- Aggregated data⁷⁸ all requirements other than loan level or security level (e.g. data on deposits, loans to households, other equity and derivatives).⁷⁹ No assessment is made for the reporting of accounting information not necessary for the compilation of aggregated statistics, as such data requirements (including the timelines of reporting) are assessed in the subsection entitled "Collection of accounting information not necessary for the compilation of aggregated statistics" in the section "Additional features for potentially streamlining the IReF reporting".

For each of the timelines envisaged, only the applicable categories are assessed – for instance, aggregated data are to be reported at T + 10-12 working days. This section also assesses the views of reporting agents with regard to the possibility of transmitting certain attributes relating to granular data on loans and securities before the official data transmission cycles (e.g. open transmission of attributes not referring

⁷⁶ The data requirements can be identified in the draft IReF reporting scheme by the following choice of parameters – type of reporting agent: "Credit institution"; type of reporting: "Full"; structure item: "Loans granular", with the deadline to be chosen according to the question.

⁷⁷ The data requirements can be identified in the draft IReF reporting scheme by the following choice of parameters – type of reporting agent: "Credit institution"; type of reporting: "Full"; structure item: "Securities held - granular" and "ISIN securities custodian - granular"; deadline: "Monthly – 10-12 working days". No parameter is included to distinguish between the reporting requirements relating to holdings of ISIN and holdings of non-ISIN securities, although the footnotes provided in the draft reporting scheme describe how the requirements differ between these categories.

⁷⁸ The data requirements can be identified in the draft IReF reporting scheme by the following choice of parameters – type of reporting agent: "Credit institution"; type of reporting: "Full"; structure item: "Loans aggregated", "Deposits - aggregated", "Derivatives - aggregated" and "Other - aggregated"; deadline: "Monthly – 10-12 working days".

⁷⁹ It should also be remembered that derogated institutions will only report aggregates under Scenarios 3 and 4 that are covered by the section entitled "Derogation scheme".

to specific reporting periods, such the instrument's inception date, maturity date, currency of denomination, and type of protection and legal form).

<filter: other deposit-taking corporations>

In particular, a distinction is made between the following categories of requirements.

- Security level granular data (e.g. instrument-by-instrument) for ISIN securities held and related data (e.g. counterparty-by-counterparty), and ISIN securities for which the observed agent acts as custodian, where applicable.⁸⁰ No assessment is made for holdings of non-ISIN securities and securities issued or the reporting of accounting information that is not required for the compilation of aggregated statistics, as such data requirements (including the timelines of reporting) are assessed in the subsections entitled "Collection of data on non-ISIN securities" and "Requirements for securities issued, where the reporting/observed agent is either the debtor or the issuer" in the section "IReF features arising from the integration of the existing requirements", and the subsection entitled "Collection of aggregated statistics" in the section "Additional features for potentially streamlining the IReF reporting" respectively.
- Aggregated data⁸¹ all requirements other than security level (e.g. data on deposits, loans, other equity and derivatives).⁸² No assessment is made for the reporting of accounting information not necessary for the compilation of aggregated statistics, as such data requirements (including the timelines of reporting) are assessed in the subsection entitled "Collection of accounting information not necessary for the compilation of aggregated statistics" in the section "Additional features for potentially streamlining the IReF reporting".

For each of the timelines envisaged, only the applicable categories are assessed – for instance aggregated data are to be reported at T + 10-12 working days. The section also assesses the views of reporting agents with regard to the possibility of transmitting certain attributes relating to granular data on securities before the official data transmission cycles (e.g. the open transmission of attributes not referring to specific reporting periods, such as the instrument's inception date, maturity date, currency of denomination and type of protection and legal form).

⁸⁰ The data requirements can be identified in the draft IReF reporting scheme by the following choice of parameters – type of reporting agent: "Other deposit-taking corporation"; type of reporting: "Full"; structure item: "Securities held - granular" and "ISIN securities custodian - granular"; deadline: "Monthly – 10-12 working days". No parameter is included to distinguish between the reporting requirements relating to holdings of ISIN and holdings of non-ISIN securities, although the footnotes provided in the draft reporting scheme describe how the requirements differ between these categories.

⁸¹ The data requirements can be identified in the draft IReF reporting scheme by the following choice of parameters – type of reporting agent: "Other deposit-taking corporation"; type of reporting: "Full"; structure item: "Loans - aggregated", "Deposits - aggregated", "Derivatives - aggregated" and "Other aggregated"; deadline: "Monthly – 10-12 working days".

⁸² It should also be remembered that derogated institutions will only report aggregates under Scenarios 3 and 4 that are covered by the section entitled "Derogation scheme".

<filter: credit institutions / other deposit-taking corporations / banking associations / service providers>

8.1 Monthly transmission at T + 10-12 working days

<filter: credit institutions / banking associations / service providers>

Question 8.1. For each of the following categories, please provide an assessment of the **implementation costs** of transmitting the corresponding variables and measures within 10-12 working days on a monthly basis.

	None 0	Very low 1	Low 2	Moderate 3	High 4	Very high 5
Loan level ⁸³						
Security level: ISIN securities held						
Security level: custodian data ⁸⁴						
Aggregated data						

Question 8.2. For each of the following categories, please provide an assessment of the **regular costs** of transmitting the corresponding variables and measures within 10-12 working days on a monthly basis.

	None 0	Very low 1	Low 2	Moderate 3	High 4	Very high 5
Loan level						
Security level: ISIN securities held						
Security level: custodian data						
Aggregated data						

⁸³ Please note that the instrument-protection table may not be required within 10-12 working days for reporting/observed agents not subject to interest rate reporting if a sample approach is applied under the IReF.

⁸⁴ If your institution is not acting as a custodian, or if none of the institutions on whose behalf you are answering the survey act as a custodian, please provide an assessment of the costs you foresee should the activity become relevant.

<filter: other deposit-taking corporations>

Question 8.3. For each of the following categories, please provide an assessment of the **implementation costs** of transmitting the corresponding variables and measures within 10-12 working days on a monthly basis.

	None 0	Very low 1	Low 2	Moderate 3	High 4	Very high 5
Security level: ISIN securities held						
Security level: custodian data ⁸⁵						
Aggregated data						

Question 8.4. For each of the following categories, please provide an assessment of the **regular costs** of transmitting the corresponding variables and measures within 10-12 working days on a monthly basis.

	None 0	Very low 1	Low 2	Moderate 3	High 4	Very high 5
Security level: ISIN securities held						
Security level: custodian data						
Aggregated data						

<filter: credit institutions / other deposit-taking corporations / banking associations / service providers>

The following question is intended to assess which of the variables to be transmitted within 10-12 working days on a monthly basis are the costliest for reporting agents to report. In contrast to the questions above, this should be answered in the light of the overall IReF reporting scheme (e.g. including the requirements for holdings of non-ISIN securities and securities issued).

Question 8.5. Please indicate up to ten variables or measures that are the costliest to report from those to be transmitted within 10-12 working days on a monthly basis.

Variables	Very high cost	High cost
<list according="" of="" of<br="" the="" to="" type="" variables="">reporting agent></list>		

⁸⁵ If your institution is not acting as a custodian, or if none of the institutions on whose behalf you are answering the survey act as a custodian, please provide an assessment of the costs you foresee should the activity become relevant.

8.2 Monthly transmission at T + 20-24 working days

<filter: credit institutions / banking associations / service providers>

Question 8.6. For each of the following categories, please provide an assessment of the **implementation costs** of transmitting the corresponding variables and measures within 20-24 working days on a monthly basis.

	None	Very low	Low	Moderate	High	Very high
	0	1	2	3	4	5
Loan level						

Question 8.7. For each of the following categories, please provide an assessment of the **regular costs** of transmitting the corresponding variables and measures within 20-24 working days on a monthly basis.

	None	Very low	Low	Moderate	High	Very high
	0	1	2	3	4	5
Loan level						

<filter: credit institutions / other deposit-taking corporations / banking associations / service providers>

The following questions are intended to assess which of the variables to be transmitted within 20-24 working days on a monthly basis are costliest for reporting agents to report and which variables could be transmitted within 10-12 working days instead. These questions should be answered with reference to the overall IReF reporting scheme (e.g. including instrument-level requirements for securities issued).

Question 8.8. Please indicate up to ten variables or measures that are costliest to report from those to be transmitted within 20-24 working days on a monthly basis.

Variables	Very high cost	High cost
<list according="" of="" of<br="" the="" to="" type="" variables="">reporting agent></list>		

Question 8.9. To facilitate the possible streamlining of the draft scheme, please indicate which variables or measures currently expected to be reported within 20-24 working days on a monthly basis could be transmitted within 10-12 working days on a monthly basis without significantly increasing costs.

Variables	Can be reported monthly within 10-12 working days
<list according="" of="" of<br="" the="" to="" type="" variables="">reporting agent></list>	

8.3 Quarterly transmission at T + 20-24 working days

<filter: credit institutions / banking associations / service providers>

Question 8.10. For each of the following categories, please provide an assessment of the **implementation costs** of transmitting the corresponding variables and measures within 20-24 working days on a quarterly basis.

	None	Very low	Low	Moderate	High	Very high
	0	1	2	3	4	5
Loan level						

Question 8.11. For each of the following categories, please provide an assessment of the **regular costs** of transmitting the corresponding variables and measures within 20-24 working days on a quarterly basis.

	None	Very low	Low	Moderate	High	Very high
	0	1	2	3	4	5
Loan level						

The following questions are intended to assess which of the variables to be transmitted within 20-24 working days on a quarterly basis are costliest for reporting agents to report and which could be transmitted within 10-12 working days on a monthly basis instead. These questions should be answered with reference to the overall IReF reporting scheme (i.e. including both instrument-level requirements on holdings of non-ISIN securities and securities issued and aggregated requirements).

<filter: other deposit-taking corporations>

The following questions are intended to assess which of the variables to be transmitted within 20-24 working days on a quarterly basis are costliest for reporting agents to report and which variables could be transmitted within 10-12 working days on a monthly basis instead.

<filter: credit institutions / other deposit-taking corporations / banking associations / service providers>

Question 8.12. Please indicate up to five variables or measures that are costliest to report from those to be transmitted within 20-24 working days on a quarterly basis.

Variables	Very high cost	High cost
<list according="" of="" of<br="" the="" to="" type="" variables="">reporting agent></list>		

Question 8.13. To enable the possible streamlining of the draft scheme please indicate which variables or measures currently foreseen to be reported within 20-24 working days on a quarterly basis could be transmitted within 10-12 working days on a monthly basis without increasing costs significantly.

Variables	Can be reported monthly within 10-12 working days
<list according="" of="" of<br="" the="" to="" type="" variables="">reporting agent></list>	

8.4 Possibility of transmitting certain attributes before the start of the official transmission cycles

<filter: credit institutions / banking associations / service providers>

Reporting agents are normally given the option of reporting data at any point in time, provided that the official deadlines are met – after the deadline compilers start data production tasks. As most of the statistical data collected refer to a reporting period, transmission cycles normally start after the end of the reporting period to which the data refer. In the context of granular data transmissions, however, certain attributes do not refer to a reporting period. For instance, in the IReF this is the case for the "event table", which captures events referring to loans and securities, as well as for other attributes of loans and securities such as an instrument's inception date and currency of denomination.

<filter: other deposit-taking corporations>

Reporting agents are normally given the option of reporting data at any point in time, provided that the official deadlines are met – after the deadline, compilers start data production tasks. As most of the statistical data collected refer to a reporting period, transmission cycles normally start after the end of the reporting period to which the data refer. In the context of granular data transmissions, however, certain attributes do not refer to a reporting period. For instance, in the IReF this is the case for the "event table", which captures events referring to securities, as well as for other attributes of securities such as an instrument's inception date and currency of denomination.

<filter: credit institutions / other deposit-taking corporations / banking associations / service providers>

This section also assesses the views of reporting agents with regard to the possibility of transmitting these data before the start of the official transmission cycles (e.g. transmission on a continuous basis, potentially close to real-time transmission).

• **Proposed scenario:** If data attributes do not refer to a reporting period, reporting agents may report them before the start of the official transmission cycles.

Question 8.14. Please provide an assessment of the **implementation costs** of the proposed scenario.

	None	Very low	Low	Moderate	High	Very high
	0	1	2	3	4	5
Proposed scenario						

Question 8.15. Please provide an assessment of the **regular costs** of the proposed scenario.

	None	Very low	Low	Moderate	High	Very high
	0	1	2	3	4	5
Proposed scenario						

Question 8.16. Please provide an assessment of the **benefits** of the proposed scenario.

	None	Very low	Low	Moderate	High	Very high
	0	1	2	3	4	5
Proposed scenario						

<filter: credit institutions / other deposit-taking corporations / banking associations / service providers>

Revision policy

9

Revision policies applied in the euro area in the context of statistical data collections vary greatly across countries and collection frameworks in terms of both the scope and the length of the revision period. This heterogeneity has cost implications for reporting agents and creates inconsistencies across countries and datasets. To overcome these shortcomings, a unique revision policy is proposed for the IReF data collection – this would be applied across countries and to all types of reporting (i.e. both granular and aggregated data).

Figure 12



Visualisation of the IReF's revision policy under the baseline scenario

A distinction should be made in the IReF between attributes collected at the granular level which do not normally change over time (and which may be seen as "static", such as the instrument's inception date, legal final maturity date and currency of denomination, as well as counterparty information, where relevant), and attributes which change over time (i.e. which may be seen as "dynamic", such as the amount outstanding of an instrument when data are collected at the instrument level and all measures referring to aggregated data). Where an error affects static attributes, only a correction to the reported value is needed. For dynamic variables, however, reporting agents would normally be required to resubmit past values for multiple reporting periods. As a baseline scenario it is proposed that for each reporting round any revisions to dynamic variables should be submitted for the previous twelve months⁸⁶ (not including the reporting period) or from the point in time at which the error occurred - whichever is the shortest. For the sake of clarity, Figure 12 shows the impact on a dynamic variable distinguishing between: (1) a correction affecting a figure reported for the current reporting period during the production round, (2) a revision correcting an error that occurred within the twelve-month timeframe, and (3) a revision correcting an error that occurred before the twelve-month timeframe. Revisions submitted by reporting agents on their own initiative will be accepted for all past reporting periods.

⁸⁶ In other words, twelve reporting periods for monthly data and four reporting periods for quarterly data.

Two alternative scenarios are proposed: a revision period of three years, which may better support statistical compilation needs, and a revision period of three months, which may help reduce the reporting burden. In summary, the following scenarios are under consideration.

- Scenario 1 (baseline): A revision period of twelve months (or four quarters).
- Scenario 2: A revision period of three years (or twelve quarters).
- Scenario 3: A revision period of three months (or one quarter).

Question 9.1. Please provide an assessment of the **implementation costs** of the proposed scenarios.

	Very low 1	Low 2	Moderate 3	High 4	Very high 5
Scenario 1					
Scenario 2					
Scenario 3					

Question 9.2. Please provide an assessment of the **regular costs** of the proposed scenarios.

	Very low 1	Low 2	Moderate 3	High 4	Very high 5
Scenario 1					
Scenario 2					
Scenario 3					

<filter: credit institutions / other deposit-taking corporations / banking associations / service providers>

10 Derogation scheme

The IReF will include a common derogation scheme aimed at reducing the reporting burden on small reporting institutions. The following scenarios are under consideration with regard to the reporting obligations of derogated institutions.

- Scenario 1: Collection of the full IReF scheme on a quarterly basis, with the same timeline as for full reporters.⁸⁷
- Scenario 2: Collection of a simplified scheme on a monthly basis, with the same level of granularity as the IReF scheme for full reporters.⁸⁸
- Scenario 3: Collection of a simplified aggregated scheme (i.e. no granular requirements) on a monthly basis. The subdomains applicable to the variables and measures would be defined at a detailed level i.e. the same level of detail as the IReF scheme for full reporters.⁸⁹
- Scenario 4: Collection of a simplified aggregated scheme (i.e. no granular requirements) on a monthly basis. The subdomains applicable to the variables and measures would be defined with a reduced set of members (e.g. "euro area" and "rest of the world" instead of individual countries).⁹⁰

Under Scenarios 2, 3 and 4 data would be collected at T + 10-12 working days and the simplified schemes would only cover variables and measures relevant for the derivation of the main statistical aggregates. Although the exact perimeter of these main statistical aggregates has not yet been completely defined, the current version of the draft scheme links the perimeter to the statistics presented in the ECB press releases on monetary developments in the euro area and MFI interest rates. It should, however, be noted that Scenario 4 would not cover certain existing requirements (such as those arising from the BIS locational banking statistics) and would require intermediate aggregations from reporting agents. The scenarios are shown in Table 1 below.

⁸⁷ The data requirements can be identified in the draft IReF reporting scheme by the following choice of parameters – type of reporting agent: "Credit institution" or "Other deposit-taking corporation"; type of reporting: "Scenario 1".

⁸⁸ The data requirements can be identified in the draft IReF reporting scheme by the following choice of parameters – type of reporting agent: "Credit institution" or "Other deposit-taking corporation"; type of reporting: "Scenario 2".

⁸⁹ The data requirements can be identified in the draft IReF reporting scheme by the following choice of parameters – type of reporting agent: "Credit institution" or "Other deposit-taking corporation"; type of reporting: "Scenario 3".

⁹⁰ The data requirements can be identified in the draft IReF reporting scheme by the following choice of parameters – type of reporting agent: "Credit institution" or "Other deposit-taking corporation"; type of reporting: "Scenario 4".

Table 1

Scenarios under consideration for the reporting obligations of derogated institutions

	Frequency	Level of granularity	Variables and measures	Subdomains
Scenario 1	Quarterly	Granular & aggregated	Full	Full
Scenario 2	Monthly	Granular & aggregated	Selected	Full
Scenario 3	Monthly	Aggregated	Selected	Full
Scenario 4	Monthly	Aggregated	Selected	Limited

The questions below are intended to assess the implementation costs and the regular costs of the proposed scenarios.

Question 10.1. Please provide an assessment of the **implementation costs** of the proposed scenarios.

	None	Very low	Low	Moderate	High	Very high
	0	1	2	3	4	5
Scenario 1						
Scenario 2						
Scenario 3						
Scenario 4						

Question 10.2. Please provide an assessment of the **regular costs** of the proposed scenarios.

	None 0	Very low 1	Low 2	Moderate 3	High 4	Very high 5
Scenario 1						
Scenario 2						
Scenario 3						
Scenario 4						

<filter: credit institutions / other deposit-taking corporations / banking associations / service providers>

11 Derivation and reporting of transactions

Data on statistical transactions (e.g. new loans net of repayments, purchases of securities net of sales and redemptions, or issuance of securities net of redemptions) are an essential ingredient of assessments of macroeconomic developments for the purposes of monetary, economic and financial stability analysis. The derivation of transactions is, therefore, a key area of statistical compilation, and the IReF framework will continue to fulfil such data needs. Currently, practices with regard to the reporting and compilation of transactions vary significantly across euro area countries as well as across statistical domains and instrument type. In some cases data on transactions are collected directly from reporting agents (e.g. data on sales, purchases and redemptions of securities during the reporting period) while in other cases NCBs derive transactions indirectly. This indirect approach refers to deriving transactions from the changes in outstanding amounts adjusting for effects which are not related to the transactions, namely:

- revaluation effects arising from changes in prices;
- revaluation effects arising from changes in exchange rates, which reflect changes in the value of foreign currency-denominated assets and liabilities when expressed in euro;
- effects relating to write-offs in the case of loans;
- reclassification effects covering those cases for which an aggregated time series shows a break due to, for example, corporate restructuring, reclassification of counterparties and of assets and liabilities, the correction of reporting errors and the introduction of new statistical concepts or definitions.⁹¹

Data on these effects are either collected from reporting agents or estimated by the NCBs based on information available internally (e.g. exchange rates or the market prices of securities), or they are transmitted by reporting agents as part of the official national collection frameworks or on an ad hoc basis.

The IReF is seeking to standardise current national practices. This section focuses first on the approach envisaged for transactions by instrument and it then assesses how to collect data on reclassification effects.

¹ Corporate restructuring may refer, for example, to mergers or acquisitions in which either one of two corporations ceases to exist or the two corporations form an entirely new corporation. Reclassifications of counterparties comprise changes in the country of residency or sector classification of an entity. Similarly, reclassifications of assets and liabilities cover those modifications regarding the instrument type, maturity or currency of denomination. For additional information on the concept of reclassifications, please see the Manual on MFI balance sheet statistics.

11.1 Approach to transactions by instrument category

The QST questionnaire has already provided a first broad assessment of the preferences of stakeholders with regard to the derivation and collection of data on transactions. Based on the results of the QST questionnaire (see also Annex 2), more concrete proposals are now formulated by instrument category.

11.1.1 Cash and deposits, loans, holdings of other equity, non-financial assets, and remaining assets and liabilities

For these instruments it is proposed to continue following the indirect approach defined in the current BSI Regulation.

Cash and **deposits**: indirect approach. Reporting agents do not report data on revaluations for changes in exchange rates – these revaluations are estimated by the ESCB compilers currency-by-currency, based on outstanding amounts and exchange rate developments⁹². No revaluations for changes in prices apply to these instrument categories.

Loans: indirect approach. Reporting agents transmit data on loan write-offs⁹³, while no revaluations for changes in prices apply to this instrument category. The ESCB compilers estimate data on revaluations for changes in exchange rates currency-by-currency, based on outstanding amounts and exchange rate developments.

<filter: credit institutions / banking associations / service providers>

It should also be noted that under Scenario 1 of the subsection entitled "Reporting of flow information on loans" in the section "Additional features for potentially streamlining the IReF reporting", detailed data on loan issuance and redemptions would become available, and it could, in principle, become possible to derive statistics on loan transactions directly. However, additional analyses would be necessary to confirm the suitability of this approach.

<filter: credit institutions / other deposit-taking corporations / banking associations / service providers>

Holdings of other equity: indirect approach. Reporting agents transmit data on revaluations due to changes in prices, while revaluations due to changes in exchange rates are estimated by the ESCB compilers currency-by-currency, based on outstanding amounts and exchange rate developments.

⁹² Data on exchange rates published on the ECB website would be used in the estimations.

³³ Data on write-offs would also cover gains and losses realised upon the sale of a loan or other loan transfer.

Non-financial assets (e.g. real estate), and **remaining assets and liabilities**: indirect approach. Reporting agents transmit data on revaluations for changes in prices. For these items revaluations due to changes in exchange rates could be difficult for reporting agents to estimate and would not, in any case, be of major importance. Reporting agents would therefore be invited to include such effects as a part of revaluations due to changes in prices, on a best-effort basis.

Table 2 summarises the requirements by instrument category. No cost-benefit assessment is performed for any category as there is no change in approach compared with existing ECB statistical regulations while the QST results, in any case, strongly support the continuation of current practices.

Table 2

Information to be provided by reporting agents Revaluations due to **Revaluations due** Compilation Outstanding changes in to changes in Instrument type amounts Transactions exchange rates prices approach Cash and deposits Indirect No No Not applicable Yes Indirect Not applicable Loans Yes No No Holdings of other equity Indirect No No Yes Yes Non-financial assets Indirect Yes No No Yes Remaining assets and Indirect Yes No No Yes liabilities

Requirements for cash and deposits, loans, holdings of other equity, non-financial assets, and remaining assets and liabilities

Note: See the subsection entitled "Reclassification adjustments" in the section "Derivation and reporting of transactions" for the requirements in respect of reclassification effects.

11.1.2 Issuance of securities and other equity

With regard to issuance of (ISIN and non-ISIN) securities, the IReF baseline scenario considers the option of collecting flow information directly at the security level (i.e. with information on individual flows), as discussed in the subsection entitled "Standardisation of the collection of flow information on securities issued" in the section "Integration of requirements covered in the current national collection frameworks but not arising from ECB regulations". Therefore, as Table 3 shows, no separate collection of data on revaluations would be included in the IReF scheme. By contrast, no collection of flow information is required with regard to other equity issued by deposit-taking corporations. For balance sheet purposes these instruments are recorded at nominal amount and, therefore, no revaluations due to changes in prices. In addition, ESCB compilers estimate data on revaluations due to changes in exchange rates currency-by-currency, based on outstanding amounts and exchange rate developments. Data on transactions will be derived on the basis of an indirect approach – see also Table 3. No cost-benefit assessment is performed as there is no change in approach compared with the existing statistical requirements.

Table 3

Requirements for issuance of securities and other equity

		Information to be provided by reporting agents						
Instrument type	Compilation approach	Outstanding amounts	Transactions	Revaluations due to changes in exchange rates	Revaluations due to changes in prices			
Issuance of securities	Direct	Yes	Yes	No	No			
Issuance of other equity	Indirect	Yes	No	No	No			

Note: See the subsection entitled "Reclassification adjustments" in the section "Derivation and reporting of transactions" for the requirements in respect of reclassification effects.

11.1.3 Holdings of securities

As discussed in Annex 2, for holdings of (ISIN and non-ISIN) securities the QST questionnaire did not provide any clear guidance as to which approach would be preferred under the IReF. In this respect, the ESCB believes that a suitable approach – at least for ISIN securities listed on exchanges – might be for reporting agents not to report any information on either transactions or revaluation effects. These would be estimated by the ESCB using price information on securities from the CSDB. At the same time, the following scenarios are also under consideration and are assessed in the CBA questionnaire, as they would have an impact on reporting agents.⁹⁴

- Scenario 1: Reporting agents would report the value of all sales (including securities being redeemed) and purchases during each reporting period for each instrument held at their transaction values (in line with the ESA 2010 approach), instrument-by-instrument on an aggregated basis. Compilers would derive transactions by aggregating the corresponding instrument-level data for transactions.
- Scenario 2: Reporting agents would report the value of all sales (including securities being redeemed) and purchases during each reporting period for each instrument held at their transaction values (in line with the ESA 2010 approach) on a transaction-by-transaction basis. Compilers would derive transactions by aggregating the corresponding transaction level data.

Table 4 provides an overview of the requirements for reporting agents under each scenario.

⁹⁴ In the assessment of the results, scenarios for which reporting agents report no information on transactions and revaluation effects on holdings of securities will be assigned "no costs" and will be treated as the preferred option by reporting agents.

Table 4

Scenarios for holdings of securities⁹⁵

		Information to be provided by reporting agents						
Instrument type	Compilation approach	Outstanding amounts	Transactions	Revaluations due to changes in exchange rates	Revaluations due to changes in prices			
Scenario 1	Direct (instrument-by-instrument)	Yes	Yes	No	No			
Scenario 2	Direct (transaction-by-transaction)	Yes	Yes	No	No			

Note: See the subsection entitled "Reclassification adjustments" in the section "Derivation and reporting of transactions" for the requirements in respect of reclassification effects.

Reporting agents are invited to assess the implementation costs and the regular costs of the above scenarios, distinguishing between listed ISIN securities and other securities.

Question 11.1. Please provide an assessment of the **implementation costs** of the proposed scenarios for listed ISIN securities.

	Very low 1	Low 2	Moderate 3	High 4	Very high 5
Scenario 1					
Scenario 2					

Question 11.2. Please provide an assessment of the **regular costs** of the proposed scenarios for listed ISIN securities.

	Very low 1	Low 2	Moderate 3	High 4	Very high 5
Scenario 1					
Scenario 2					

Question 11.3. Please provide an assessment of the **implementation costs** of the proposed scenarios for unlisted ISIN securities and non-ISIN securities.

_	Very low 1	Low 2	Moderate 3	High 4	Very high 5
Scenario 1					
Scenario 2					

⁹⁵ The scenario chosen for securities held will also apply to securities for which the reporting/observed agent acts as custodian.

	Very low 1	Low 2	Moderate 3	High 4	Very high 5
Scenario 1					
Scenario 2					

Question 11.4. Please provide an assessment of the **regular costs** of the proposed scenarios for unlisted ISIN securities and non-ISIN securities.

11.1.4 Financial derivatives

With regard to financial derivatives, transactions mainly arise from trading in options and settlement payments. Changes in the value of derivatives' positions over their lifecycle are largely driven by revaluations due to changes in the prices of financial derivatives rather than transactions. Revaluations may also arise due to changes in exchange rates when a financial derivative is quoted in a foreign currency. The following scenarios are assessed in the CBA with regard to the derivation and reporting of transactions for financial derivatives.

- Scenario 1: Direct approach. Reporting agents report aggregated data for transactions.
- Scenario 2: Indirect approach. Reporting agents report aggregated data on revaluations due to changes in prices and exchange rates.⁹⁶
- Scenario 3: Indirect approach. Reporting agents report aggregated data on revaluations due to changes in prices, while revaluations due to changes in exchange rates are estimated centrally by the ESCB.⁹⁷

Table 5 provides an overview of the requirements for reporting agents under each scenario.

Table 5

Scenarios for financial derivatives

		Information to be provided by reporting agents					
Instrument type	Compilation approach	Outstanding amounts	Transactions	Revaluations due to changes in exchange rates	Revaluations due to changes in prices		
Scenario 1	Direct	Yes	Yes	No	No		
Scenario 2	Indirect	Yes	No	Yes	Yes		
Scenario 3	Indirect	Yes	No	No	Yes		

Note: See the subsection entitled "Reclassification adjustments" in the section "Derivation and reporting of transactions" for the requirements in respect of reclassification effects.

⁹⁶ For those types of derivatives for which it may not be practical to separate revaluations due to changes in exchange rates from those arising due to changes in prices (e.g. a foreign exchange swap), a convention may apply to collect all revaluations together.

⁹⁷ This approach is only applicable if data for derivatives are collected, broken down by currency of denomination of the instrument, so as to provide a basis for estimations by ESCB compilers. See the subsection entitled "Data requirements for financial derivatives" in the section "Integration of requirements covered in current national collection frameworks but not arising from ECB regulations".

Reporting agents are invited to assess the costs of the above identified scenarios.

Question 11.5. Please provide an assessment of the **implementation costs** of the proposed scenarios.

	Very low 1	Low 2	Moderate 3	High 4	Very high 5
Scenario 1					
Scenario 2					
Scenario 3					

Question 11.6. Please provide an assessment of the **regular costs** of the proposed scenarios.

_	Very low 1	Low 2	Moderate 3	High 4	Very high 5
Scenario 1					
Scenario 2					
Scenario 3					

11.2 Reclassification adjustments

As explained earlier, reclassification adjustments refer to cases in which an aggregated time series shows a break due to, for example, corporate restructuring, the reclassification of counterparties or of assets and liabilities, the correction of reporting errors, or the introduction of new statistical concepts or definitions. These effects should be identified to ensure that the developments in time series can be correctly analysed. The IReF scheme has been created at a level of granularity which makes it possible to estimate most reclassification effects by interlinking granular data with reference data on entities and instruments, without collecting information from reporting agents directly. The only exceptions are as follows:

- Case A: in the case of mergers, acquisitions and demergers, information would have to be collected on the cross-positions between the affected institutions for data not collected at the instrument level (or at the counterparty level, if applicable), or when one of the affected institutions falls outside the scope of IReF reporting;
- Case B: for the reclassification of counterparties or instruments, additional information is, in principle, needed for aggregated data only.

It is not expected that additional information will be required for other reclassification effects, although there will need to be a further assessment of these cases at a later stage of the process, depending on the specific design of the IReF reporting scheme and its related features (e.g. revision policy). For those effects that cannot be traced on the basis of either reference data or data collected through the IReF reporting scheme itself, the following scenarios are under consideration:

- Scenario 1: The information will be transmitted on a regular basis by means of dedicated measures that will be included in the IReF reporting scheme.
- Scenario 2: The information will be transmitted upon the occurrence of the relevant event outside regular reporting (e.g. by email, memo or other bilateral form of communication).

In the assessment a distinction is made between granular and aggregated data.

	Very low	Low	Moderate	High	Very high			
	1	2	3	4	5			
Granular data								
Scenario 1								
Scenario 2								
		Aggrega	ted data					
Scenario 1								
Scenario 2								

Question 11.7. Please provide an assessment of the **implementation costs** of the proposed scenarios, bearing in mind that the reclassification effects to be covered are limited to cases a) and b) mentioned at the beginning of this section.

Question 11.8. Please provide an assessment of the **regular costs** of the proposed scenarios, bearing in mind that the reclassification effects to be covered are limited to cases a) and b) mentioned at the beginning of this section.

	Very low 1	Low 2	Moderate 3	High 4	Very high 5			
Granular data								
Scenario 1								
Scenario 2								
		Aggrega	ted data					
Scenario 1								
Scenario 2								

<filter: credit institutions / other deposit-taking corporations / banking associations / service providers>

12 Aspects relating to the implementation of the IReF

It is currently envisaged that from the time the IReF is implemented, there will be a parallel phase, during which data will continue to be collected in accordance with the existing national reporting lines in parallel with the IReF reporting.⁹⁸ This approach will ensure that the transition to the new integrated approach is smooth in euro area countries. The duration of the parallel phase will be decided at a later stage of the process, but the CBA questionnaire is seeking to collect some early indications as to how long the parallel reporting should apply, on the basis of respondents' previous experiences.

Question 12.1. How long do you think parallel reporting should apply?

Number of months <accepted 0="" 24="" to="" values=""></accepted>

A second question relates to whether, apart from parallel reporting in the initial phase, it may be necessary for an interim period to collect additional high-level aggregates for compilation purposes. In fact, there may be cases in which the completeness of granular information on loans (where applicable) and securities held and issued may not be sufficient in the early rounds of IReF reporting, so it might be better for compilation to rely on aggregates collected directly from reporting/observed agents.

In line with the QST results⁹⁹, the IReF baseline scenario does not currently allow for the reporting of such high-level requirements for an interim period. However, the CBA questionnaire assesses the implementation costs and the regular costs of such an option, as well as the associated benefits in terms of processes and governance (e.g. stepwise IReF implementation, with less focus on granular data during the interim period) and data quality enhancements (e.g. monitoring the robustness of granular data reporting). The following scenarios are under consideration:

- Scenario 1 (baseline): No aggregated high-level requirements would be collected for an interim period.
- Scenario 2: Aggregated high-level requirements would be collected for an interim period.

The interim period would last beyond the phase of parallel reporting. The additional data requirements are not currently defined, although it is expected they would match those specified for derogated institutions under Scenario 4 in the section entitled "Derogation scheme". This issue is also highly dependent on ongoing assessments of the feasibility of compiling high-quality aggregated statistics from granular data (e.g. in relation to the quality of SHS and AnaCredit data). The final decision will therefore also

⁹⁸ In addition, it is likely that a preliminary testing phase will also take place.

⁹⁹ See Annex 2 with regard to the question on the stepwise integration of AnaCredit in the IReF.

take into account possible improvements in the quality of these datasets by the time of the IReF implementation.

Question 12.2. Please provide an assessment of the **implementation costs** of Scenario 2 compared with Scenario 1.

	Significantly Iower 1	Moderately lower 2	No difference 3	Moderately higher 4	Significantly higher 5
Scenario 2					

Question 12.3. Please provide an assessment of the **regular costs** of Scenario 2 compared with Scenario 1.

	Significantly Iower 1	Moderately lower 2	No difference 3	Moderately higher 4	Significantly higher 5
Scenario 2					

Question 12.4. Please provide an assessment of the **benefits** of Scenario 2 compared with Scenario 1.

	Significantly lower 1	Moderately lower 2	No difference 3	Moderately higher 4	Significantly higher 5
Scenario 2					

Question 12.5. If additional aggregated high-level requirements were collected for an interim period, how long do you think this should continue after the parallel phase?

Number of months <accepted 1="" 24="" to="" values=""></accepted>

A final question relates to whether it may make sense to collect the high-level aggregates on a permanent basis. This may be beneficial for reporting agents in terms of processes and governance (e.g. high-level requirements could be used to compile aggregated statistics) as well as for data quality management purposes (i.e. to monitor the robustness of the granular data reporting). Whereas the implementation costs would be expected to be similar to those for an interim phase, the regular costs could vary. The following scenarios are under consideration:

- Scenario 1 (baseline): No aggregated high-level requirements would be collected permanently.
- Scenario 2: Aggregated high-level requirements would be collected permanently.

Question 12.6. Please provide an assessment of the **implementation costs** of Scenario 2 compared with Scenario 1.

	Significantly lower 1	Moderately lower 2	No difference 3	Moderately higher 4	Significantly higher 5
Scenario 2					

Question 12.7. Please provide an assessment of the **regular costs** of Scenario 2 compared with Scenario 1.

	Significantly lower 1	Moderately lower 2	No difference 3	Moderately higher 4	Significantly higher 5
Scenario 2					

Question 12.8. Please provide an assessment of the **benefits** of Scenario 2 compared with Scenario 1.

	Significantly lower 1	Moderately lower 2	No difference 3	Moderately higher 4	Significantly higher 5
Scenario 2					

As discussed above, one of the IReF's most significant success factors is making it feasible to compile high-quality aggregated statistics from granular data. In line with the experience of several euro area NCBs, the ESCB is considering publishing IReF validation rules and plausibility checks¹⁰⁰, with the objective of supporting reporting agents in data submission and, possibly, enhancing data quality. Reporting agents are invited to assess the benefits of such an approach in terms of processes and governance (e.g. limiting exchanges with NCBs¹⁰¹) and data quality enhancements (e.g. the possibility of checking data quality upfront).

Question 12.9. Please provide an assessment of the **benefits** of sharing validation rules and plausibility checks.

	None 0	Very low 1	Low 2	Moderate 3	High 4	Very high 5
Publishing IReF validation rules						
Publishing IReF plausibility checks						

¹⁰⁰ Validation rules are aimed at verifying that granular and/or aggregated data submitted by reporting agents meet the standards specified by NCBs, while plausibility checks (e.g. consistency over time or comparisons with other external sources such as banks' financial reporting) rely on analysts' judgement.

¹⁰¹ It is expected that the ESCB will follow proportionality principles when applying validation rules and plausibility checks. It will not, therefore, contact reporting agents regarding data developments that are not significant.

<filter: credit institutions / other deposit-taking corporations / banking associations / service providers>

13 Assessment of the respondent's preferred scenario compared with the baseline

The questionnaire has so far assessed the costs and benefits of the current IReF overall baseline scenario as well as those of the individual scenarios for each of the topics that are relevant to respondents. As a final step, respondents are now invited to indicate how the current IReF overall baseline scenario differs from their own overall preferred scenario and what the main drivers of such differences are. When assessing the current IReF overall baseline scenario, respondents are invited to consider only those CBA aspects for which a baseline has been defined. The other aspects will be further analysed based on the CBA results. For examples of the cost and benefit drivers to be considered, please refer to the section entitled "High-level considerations".

Question 13.1. Does your preferred scenario offer greater **expected benefits in the medium to long term** (i.e. for a time horizon longer than five years) than the current IReF baseline scenario?

Yes	
No	

<filter: if answer to Question 13.1 is 'Yes'>

Question 13.1.1. Please provide an assessment of the **overall differences in expected benefits in the medium to long term** (i.e. for a time horizon longer than five years) between your preferred scenario and the current IReF baseline scenario.

Slightly higher benefits under your	Moderately higher benefits under your	Significantly higher benefits under your
preferred scenario	preferred scenario	preferred scenario
1	2	3

<filter: if answer to Question 13.1 is 'Yes'>

Question 13.1.2. Please indicate the **most relevant topics** (i.e. up to two) for which your preferred scenario differs from the baseline scenario in terms of benefits.

Topics	Drag and drop
<list according="" of="" of<br="" the="" to="" topics="" type="">reporting agent></list>	

Cost-benefit assessment questionnaire on the Integrated Reporting Framework for the banking industry – Assessment of the respondent's preferred scenario compared with the baseline

<filter: if answer to Question 13.1 is 'Yes'>

Question 13.1.3. For each of the topics identified above, please explain the differences between your preferred scenario and the baseline scenario.

<open text=""></open>

Question 13.2. Does your preferred scenario have lower **implementation costs** than the current IReF baseline scenario?

Yes	
No	

<filter: if answer to Question 13.2 is 'Yes'>

Question 13.2.1. Please provide an assessment of the **overall differences in implementation costs** between your preferred scenario and the current IReF baseline scenario.

Significantly lower costs under your	Moderately lower costs under your	Slightly lower costs under your
preferred scenario	preferred scenario	preferred scenario
1	2	3

<filter: if answer to Question 13.2 is 'Yes'>

Question 13.2.2. Please indicate the **most relevant topics** (i.e. up to two) for which your preferred scenario differs from the baseline scenario in terms of implementation costs.

Topics	Drag and drop
<list according="" of="" of<br="" the="" to="" topics="" type="">reporting agent></list>	

<filter: if answer to Question 13.2 is 'Yes'>

Question 13.2.3. For each of the topics identified above, please explain the differences between your preferred scenario and the baseline scenarios.

<open text>

Question 13.3. Does your preferred scenario have lower **regular costs** than the current IReF baseline scenario?

Yes	
No	

<filter: if answer to Question 13.3 is 'Yes'>

Question 13.3.1. Please provide an assessment of the **overall differences in regular costs** between the current IReF baseline scenario and your preferred scenario.

Significantly lower costs under your	Moderately lower costs under your	Slightly lower costs under your
preferred scenario	preferred scenario	preferred scenario
1	2	3

<filter: if answer to Question 13.3 is 'Yes'>

Question 13.3.2. Please indicate the **most relevant topics** (i.e. up to two) for which your preferred scenario differs from the baseline scenario in terms of regular costs.

Topics	Drag and drop
<list according="" of="" of<br="" the="" to="" topics="" type="">reporting agent></list>	

<filter: if answer to Question 13.3 is 'Yes'>

Question 13.3.3. For each of the topics identified above, please explain the differences between your preferred scenario and the baseline scenario.

<open text>

The questionnaire closes by offering respondents the opportunity to offer any additional observations they may have on the IReF (e.g. any potential additional frameworks to be included).

Question 13.4. Please indicate any additional observations you may have on the IReF.

<open text, voluntary>

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