The Eurosystem Integrated Reporting Framework: an overview

1 Background

European Union (EU) banks face a whole range of data reporting obligations, including for statistical, resolution and prudential information.

At the EU level, these reporting obligations are specified in different legal frameworks, including ECB statistical regulations on balance sheet items (BSI) and interest rates of monetary financial institutions (MIR), the sectoral module of Securities Holdings Statistics (SHS-S), granular credit and credit risk data (AnaCredit), and the European Banking Authority’s (EBA’s) implementing technical standards on supervisory data and on the reporting of resolution information to the Single Resolution Board (SRB).

Existing ECB statistical regulations specify the information that must be reported but not how the actual reporting process is to be carried out. They do not specify how the data should be organised (the data model), the definitions to be used for collecting the data (the data dictionary) or the deadlines for reporting agents. In addition, national central banks (NCBs) are generally allowed to collect the statistical information needed to fulfil the ECB’s statistical requirements under their own statistical (and/or supervisory and resolution) reporting frameworks.¹ The national systems also cover reporting obligations of NCBs towards the ECB where the relevant statistics are not covered by an ECB regulation (e.g. under ECB statistical guidelines on monetary and financial statistics, external statistics and financial accounts). Moreover, NCBs also cover reporting requirements of other international organisations, such as the Bank for International Settlements (BIS) and the International Monetary Fund (IMF), as well as data needs arising at the national level. So far, only a few euro area countries have implemented widely integrated national collection frameworks. In most cases, the national frameworks consist of many separate reports to be submitted by the reporting agents to NCBs. Figure 1 below depicts the current approach to statistical data collection from banks.

This arrangement dates back to the establishment of the ECB in 1998 and was justified at the time, as it meant that statistical reporting could be founded on well-established national reporting frameworks. However, the single monetary policy allows more efficient, cost-conscious reporting from banks. For instance, banks could save costs if they did not have to maintain heterogeneous national systems that feature:

• different national data models based on heterogeneous dictionaries, which are particularly challenging for cross-border banks;
• different transmission frequencies, timelines and levels of aggregation;
• possible duplications and overlaps in the reporting, with complex reporting schedules and processes;
• differences in data validations, revision policies, approaches to derogations and data exchange formats.

Figure 1
Current Eurosystem approach to the collection of statistical information from banks

The main objective of the Integrated Reporting Framework (IReF) is to reduce the reporting burden on euro area banks in line with Article 338(2) of the Treaty\(^2\) and Article 3(a) of Council Regulation (EC) No 2533/98\(^3\), while meeting the information needs of the European System of Central Banks (ESCB). This burden reduction will be achieved by integrating different statistical obligations and by harmonising data collection across countries. The latter means that statistical reporting will no longer depend on the euro area country in which a bank is resident. The ECB envisages issuing an IReF Regulation on statistical data requirements which would be directly applicable to banks resident in the euro area. Non-euro area EU Member States may decide to adopt IReF reporting through national legislation in full or in part (e.g. for content related to AnaCredit). The IReF could strengthen the banking and monetary

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union: the cross-country standardisation of reporting may remove some of the obstacles that can prevent smaller banks from engaging in cross-border operations, which in turn would foster competition in the EU financial sector. The gains in cost efficiency would be achieved by economies of scale and by systematic application of the “define once, report once, regulate once, perform as one system” principle. For instance, the costs for the development of the common data dictionary would be invested once for all ESCB countries. Under the new paradigm, cross-border banks could unify the technical specifications of their reporting for all their European entities. Leaner data flow management processes (see Figure 1) could also be designed. Moreover, once the initial investment phase is over, the granular reporting of data will increase the agility and speed with which policymakers can react to new developments, since they will be able to more easily re-arrange available granular data to gain insights into the latest economic, monetary and financial developments.

This overview provides key facts and procedural information on the IReF and how it fits in with the broader EU data integration initiative, which also encompasses resolution data and prudential data.

2 The scope of the IReF

The IReF seeks to integrate, insofar as possible, existing ESCB statistical data requirements for banks into a single, standardised reporting framework applicable across the euro area.

In the initial phase, the IReF is focusing primarily on ECB statistical datasets relating to banks and will hence cover the requirements of the ECB regulations on BSI and MIR statistics, SHS-S and AnaCredit. In respect of SHS-S, it will also cover requirements for banks in their role as custodians. The integration of the group module of Securities Holdings Statistics (SHS-G) is also being considered, while other ECB statistics that do not directly relate to banks’ balance sheet assets and liabilities, such as ECB payments or money market statistics, are not currently covered by the IReF.

The integration of reporting obligations on banks’ own positions and transactions arising in the context of statistics on balance of payments (b.o.p.), international investment positions (i.i.p.), financial accounts and securities issued is also envisaged. The integration of other requirements arising from the collection frameworks of international organisations (e.g. BIS Locational Banking Statistics and IMF Standardised Report Forms) is also being considered.

The granularity of the IReF scheme is expected to cover a large share of the statistics currently collected by NCBs that are outside the scope of ECB regulations. Nevertheless, NCBs may decide to preserve country-specific requirements, e.g. to comply with national legal obligations (such as activities related to anti-money laundering or government support). Such requirements will not be covered under the IReF Regulation and will continue to be legislated for at the national level. At the same time, an IReF extended technical layer will be developed, consisting of a logical representation and an implementation model to describe requirements arising
from the IReF Regulation and country-specific requirements that will continue to apply once the IReF enters into force. In this way, overlapping requirements across two or more countries will be described in a uniform way that is consistent with IReF requirements.

3 The IReF target population

The IReF is primarily intended to cover deposit-taking corporations. Given the different reporting populations of the datasets within its scope, the IReF distinguishes between requirements that are applicable to credit institutions and those that relate to deposit-taking corporations other than credit institutions. For example, under the IReF, instrument-level requirements on loans to legal entities would apply to credit institutions, whereas deposit-taking corporations other than credit institutions would continue to report loan data on an aggregated basis.

Requirements addressed to money market funds (MMFs) are not part of the IReF and will continue to be set out in separate ECB legal acts, leaving discretion at the national level on how to collect this information in practice. Some NCBs have developed an integrated reporting framework for investment funds (covering both MMFs and non-MMFs). Such an integrated approach to the statistical reporting of data relating to investment funds may be adopted at Eurosystem level in the medium term.

4 Advantages of the IReF

The advantages of the IReF for different stakeholders mentioned in Section 1 are explained in more detail below.

Reporting agents are expected to benefit substantially from the IReF. Reporting requirements will be presented on the basis of a logical data model and the data collection will rely on a standardised implementation model. A common data dictionary will underlie the reporting, thereby ensuring that the definitions are standardised. The reporting frequency and timelines and the level of granularity of the requirements will also be standardised. The framework will specify a common set of validation rules and a revision policy directly applicable to all reporting agents. The cross-country standardisation may be of particular benefit to large banking groups that operate across borders in the euro area. However, all banks, including smaller institutions, are expected to gain from the integration of the different statistical reporting requirements, especially as they become more stable over time. Moreover, the reporting burden on small institutions could be mitigated by suitable Eurosystem-wide derogations (see next section). Ad hoc requests to fill information gaps are likely to become less frequent, and the higher level of standardisation will facilitate the development of standard IT solutions. The initial gains will differ from country to country depending on the reporting model and the degree of integration of the current national frameworks. The need for banks to procure external data services is also expected to decrease as requirements are harmonised across the euro area.
While there are one-off investments to be made at the implementation stage, regular costs may be reduced, not least because the standardisation of the requirements and the additional granularity (e.g. on loans to legal entities) and level of detail (e.g. on deposits) of the IReF scheme may meet new user needs without having to change the data collection, thereby minimising maintenance costs. Over the medium/long run, banks will reap additional benefits from the integration of statistical, prudential and resolution requirements.

These aspects have been assessed in more depth through the cost-benefit analysis, which was conducted in a transparent and cooperative way with all IReF stakeholders, including banks (see also Section 6).

**Statisticians at central banks** will also benefit, as they will receive only one set of statistical information for the production of the datasets covered by the IReF. The use of a standardised logical data model to represent the requirements will ensure methodological soundness and alignment with statistical standards. Data quality assessment procedures and revision policies can also be standardised. Integrated data collection may also create new opportunities for further automation of statistics production and dissemination systems.

**Users of statistical information**, including potentially banks themselves, will also benefit from the IReF, as its model aims to ensure a precise and unambiguous definition of the statistical information relevant for their needs throughout the Eurosystem. This will improve the accuracy and comparability of data across datasets and across countries. The quality and analytical value of the data received will increase, as users will have a fully consistent and standardised dataset, rather than data provided under different frameworks that need to be reconciled ex post (e.g. between BSI and SHS-S). In addition, users will be able to drill down from aggregated data to the underlying granular information (subject to the relevant data access). As the IReF is expected to directly use granular data on loans and securities for statistical compilation, more breakdowns will become available for policymakers, banks, academia and the public at large, while always respecting confidentiality constraints. These breakdowns will also allow policymakers to analyse changes in economic and financial trends more quickly, thanks to the wealth of statistical information available to them.

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**Ensuring proportionality under the IReF**

Each ECB statistical collection framework includes derogations or sampling schemes that are aimed at ensuring representativeness and proportionality. The approaches are not usually harmonised across datasets and range from cases where reporting agents can be exempted, at least partially, from the data collection (e.g. BSI, SHS-S, AnaCredit) as they are small with respect to certain criteria, to cases where derogations also relate to a subset of the requirements specified in a dataset (e.g. BSI). In other cases, the collection framework can be based on a sampling approach (e.g. MIR). In addition, countries currently have discretion as to how they
apply these general derogation schemes at the national level, resulting in a wide range of schemes, including cases where no derogations at all are applied.

The Eurosystem recognises the need to ensure proportionality under the IReF and favours the implementation of simple solutions across the euro area, such as derogations for small institutions in the tail of the banking population defined in terms of relevant balance sheet indicators. Derogated institutions would be subject to simplified reporting. Various options for structuring such simplified reporting are being assessed in the course of the ongoing cost-benefit analysis.

**6 Ongoing work and steps ahead**

The IReF is an ambitious endeavour to redefine the collection of statistical data from banks, both in terms of data content and in terms of processes. These and other aspects are being assessed in close cooperation with banks and other stakeholders by means of the ongoing cost-benefit analysis. When defining the methodology to be followed in the cost-benefit analysis, the Eurosystem decided to adapt the merits and costs procedure in order to properly reflect the cost-reducing benefits for reporting agents and authorities. In fact, while the merits and costs procedure normally evaluates the significance of the costs of new statistical requirements, the IReF primarily aims to reduce costs by streamlining and standardising the existing statistical data reporting in line with basic data management principles promoted by banks. The procedure is fully in line with the principles of increased transparency in ECB regulations on European statistics adopted by the Governing Council in October 2016.

The first step in the exercise was taken in 2018 and consisted of a qualitative stock-taking questionnaire on the state of play across datasets and countries to help to design scenarios on the collection aspects (reporting dates, data frequency, derogations, etc.) of a possible integrated framework. In 2019 the Eurosystem focused on assessing the results of the qualitative stock-taking questionnaire and worked on defining a more limited set of scenarios to be considered in the future. The second step consisted of a cost-benefit assessment questionnaire, which explored the costs and benefits of the identified scenarios for various aspects of the collection framework. This covered, among other things, the concrete data requirements and corresponding modelling options, the reporting timelines, the revision policy and approach to derogations, aspects related to the technical and operational implementation, and the integration of country-specific requirements.

The Eurosystem assessed the results of the cost-benefit assessment questionnaire with the aim of identifying the optimal features that would best suit banks, the Eurosystem and its users. The assessment focused first on the feedback received from stakeholders on the drivers of costs and benefits, the overall question of whether the benefits of implementing IReF would outweigh the costs and some high-

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4 See "Qualitative stock-taking questionnaire on the integrated reporting framework – Analysis of high-level considerations and high-priority technical aspects", ECB, February 2019.
priority technical aspects in order to facilitate a discussion on the utility of establishing the IReF.

A first report on the feedback received on these aspects was published in December 2021. The report showed strong support for the IReF on the part of the banking industry and other relevant stakeholders. The benefits outweigh the costs for all stakeholder groups. As regards the banking industry, support is highest among members of cross-border groups. For standalone institutions too, the proportion of respondents indicating that benefits would outweigh costs was much higher than those indicating the opposite. When the results are broken down according to the size of the respondents, support is, as expected, lower among small institutions than among large and medium-sized institutions, although over 60% of small institutions still indicated that benefits would outweigh costs.

Since then, and in close cooperation with the banking industry, the Eurosystem has continued to analyse the answers received on the other aspects. The results have now been published in three additional focused reports: a report on content-related topics and technical aspects covering a range of issues from loan write-offs to the preferred structure to represent and collect the IReF requirements; a report on the technical integration of country-specific requirements; and a report on reporting schedules, revision policy, the approach to derogations and implementation aspects.

As a follow-up, the Eurosystem will perform a complementary cost-benefit assessment with IReF stakeholders to address additional topics of relevance for setting up the IReF. For instance, some gaps that have been identified in the integration of existing requirements can be solved by introducing additional attributes in the IReF. Similarly, country-specific requirements that are common across euro area countries could be included in the IReF Regulation to the extent that they arise from Eurosystem tasks. The integration of SHS-G in the IReF may also require the inclusion of additional attributes. Any extension of the IReF content in relation to these aspects will require a detailed assessment of its costs and benefits before being included in the IReF Regulation.

As a final step, the Eurosystem will perform a comprehensive matching of costs and benefits based on the feedback received from all stakeholders, which will form the basis for the drafting of an ECB Regulation on IReF. In line with the ECB merits and costs procedure, the results of the matching exercise will be published to inform the public consultation on the draft IReF Regulation, currently scheduled for 2024. The legal act will then be adopted by the Governing Council.

The IReF Regulation will replace the existing regulations on BSI, MIR, SHS and AnaCredit with respect to the requirements of deposit-taking corporations. The MIR and AnaCredit regulations would thus be repealed, while the BSI and SHS regulations would be recast or amended in order to exclude deposit-taking corporations from the respective reporting populations.\(^5\)

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\(^5\) For instance, the BSI Regulation will continue to apply to MMFs.
The implementation of the IReF

Subject to the adoption of the IReF Regulation by the Governing Council in 2025, the IReF is expected to go live in 2027. In parallel, the Eurosystem is designing the organisation of the Eurosystem statistical business processes as a preliminary step in the investigation and implementation of the IT solutions that will support data collection under the IReF.

This time frame will give reporting agents and the Eurosystem enough lead time to prepare the legal and technical framework without unduly delaying the expected reduction in the reporting burden. Going forward, the Eurosystem will regularly update this medium-term plan to reflect how broader collaborative efforts with other European authorities to integrate statistical, resolution and prudential requirements are developing (see also Section 8).

The IReF as part of the broader data integration initiative

The IReF is part of a broader data initiative for an integrated reporting system for statistical, prudential and resolution data in the EU requested by the European banking industry. Such an initiative was envisaged by the European Parliament and the Council in Article 430c of Regulation (EU) 2019/876. In line with the mandate received, the EBA carried out a feasibility study on an integrated reporting system and published the final report on the study in December 2021.

The ESCB published its views on this broader initiative in a report which served as input for the EBA’s feasibility study. The ESCB sees the IReF as a first step towards a fully integrated reporting system for banks in the EU. Such a fully integrated system should be based on a common data dictionary that has an underlying common meta (data) model.

A joint reporting committee – an advisory body comprising representatives from relevant European and national authorities and involving the banking industry in certain tasks – will be set up to advise on integrating statistical, resolution and prudential data reporting. It could also advise on laying the foundations for sharing data and ensuring interoperability among the relevant national and European authorities.

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9 See "The ESCB input into the EBA feasibility report under article 430c of the Capital Requirements Regulation (CRR 2)!", ECB, September 2020.
10 A common meta model (information model) refers to the standard and formalised layer that depicts the semantic information. This is described in "On a Feasibility Study of an Integrated Reporting System under Article 430c CRR", Discussion Paper, No EBA/DP/2021/01, EBA, March 2021, in the process chain and the three levels of abstraction in the syntactic layer of the data definition part.
authorities. Since the formal establishment of such a committee within a proper legislative setting takes some time, the ECB, the European Commission, the EBA and the SRB have set up an informal coordination group to ensure that the cooperation on an integrated reported system moves ahead.

The Eurosystem is already cooperating closely with the banking industry in optimising reporting and reducing the overall reporting burden via the Banks’ Integrated Reporting Dictionary (BIRD). The BIRD offers a redundancy-free source (i.e. logical data model/input layer) from which transformations describe how to create data to meet the actual reporting requirements of authorities. This feature makes it less burdensome for banks to determine which source data to use and how to correctly process them, thereby providing full data lineage. The BIRD also features “mappings” to translate the different metadata and codification used in various dictionaries into a single metadata language. If the authorities agree on a common data dictionary featuring semantic integration, this part of the BIRD will no longer be necessary.

It is expected that the BIRD could be adapted to the new common data dictionary or provided additionally, as it is today. For maximum benefit it would, of course, be preferable if the common data dictionary were developed and maintained in collaboration with the BIRD. The possibility of a common input approach will be investigated, as also indicated by the EBA in its feasibility study.

Both the IReF and the BIRD will provide crucial support for banks’ reporting tasks by logically and methodologically bridging the gap between the authorities’ reporting requirements and the banks’ operational systems. The BIRD is expected to benefit significantly from the IReF in view of its standardisation of statistical reporting across countries. This will allow the direct application of the BIRD in the euro area for statistical requirements. As more reporting frameworks are incorporated into the IReF, the BIRD will provide more effective support to banks and to the overall integration of statistical, prudential and resolution requirements.

In 2021 the BIRD was reshaped to allow the alignment of both the metadata and the data model (i.e. the design/structure) with the IReF in order to generate further benefits and synergies. This will, for example, enable the IReF to adapt more easily to possible extensions (e.g. SHS-G) that are already included and modelled in the BIRD, thereby making the IReF much more scalable.

It is important to point out that banks remain fully responsible for organising their internal reporting systems and ensuring the accuracy of their reports to the authorities, including the application of the transformation rules. The BIRD provides more detailed but not legally binding interpretations. Most crucially, the BIRD does not change reporting requirements.

The envisaged approach to data collection from banks aims to be cost-effective and transparent. The IReF describes statistical requirements in a redundancy-free layer

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11 Thus far, the BIRD has covered, as separate outputs, the reporting requirements for AnaCredit, SHS-G, financial reporting (FINREP), asset encumbrance and resolution planning. Other datasets, including those within the scope of the IReF, are currently being considered.
and will represent future statistical reporting obligations issued by the ECB and applicable to Eurosystem banks. The BIRD describes how the information present at bank level should be transformed to comply with such obligations, referring not only to ECB statistical regulations but also to EU prudential and resolution requirements. The difference between the BIRD and the IReF is that the IReF will constitute mandatory reporting, while the BIRD is voluntary and will only exist at the level of the reporting agents. From a logical perspective, the BIRD and the IReF are very similar, as both initiatives integrate requirements in a redundancy-free way, from which multiple outputs/products can be created. However, they vary in scope, as IReF only integrates statistical requirements. Transformation rules to generate IReF and other (i.e. prudential and resolution) reporting requirements from the BIRD input layer are applied by banks, not by authorities. Based on the IReF, the ESCB will, however, apply transformations internally to a large degree to generate statistical products that have so far been directly reported by banks. The BIRD input layer may also be used by banks for their own internal purposes. Thus the BIRD could align banks’ reporting more closely to their operations and so pave the way for the banks and the Eurosystem to base their work on the same (or very similar) sets of data. Data quality should increase and costs decrease as the BIRD input layer would provide a comprehensive and flexible tool to support data reporting.