



EUROPEAN CENTRAL BANK

EUROSYSTEM

Debt Issuance Market Contact Group

Advisory report on debt issuance and distribution in the European Union

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Executive summary

Disclaimer: This advisory report has been prepared by the Debt Issuance Market Contact Group (DIMCG) and it does not prejudge the final policy choices and decisions that the ECB decision-making bodies or other EU institutions may take. The views reflected in this report are the views of the DIMCG members. They do not constitute the views of their respective organisations, nor do they provide an indication of the decisions that such organisations may take in the future

In the field of financial market infrastructures, the Eurosystem has always supported the European Union (EU) financial market by providing a European framework conducive to financial integration and the smooth functioning of payment systems. This is in line with the Eurosystem's mandate, in particular on promoting the smooth operation of payment systems and supporting the general economic policy objectives of the EU. In order to provide this support, the Eurosystem has established the [TARGET Services](#) (for payments, securities settlement and – from November 2023 – collateral management) and has underpinned these services with [harmonisation initiatives](#), namely the [TARGET2-Securities \(T2S\) harmonisation agenda](#) and the [Single Collateral Management Rulebook for Europe \(SCoRE\)](#).

In this context, the European Central Bank (ECB) launched a market consultation in 2019 seeking the views of the market on a potential initiative in the area of debt issuance at EU level. The mixed results yielded by the consultation prompted the ECB Governing Council to seek the opinions of debt issuance market stakeholders. To this end, it created the Debt Issuance Market Contact Group (DIMCG) in the second quarter of 2020. With this advisory report, the DIMCG is fulfilling its temporary mandate to identify issues that are preventing further improvements in efficiency and integration in the area of debt issuance and initial distribution.

The report is structured according to three pillars of work. Pillar 1 is aimed at identifying the potential risks, costs and inefficiencies of the current landscape. Pillar 2, which builds on the findings of the previous pillar, identifies potential ways of harmonising pre-issuance and initial distribution. Pillar 3 explores how ongoing initiatives may contribute to improving the overall efficiency of issuance in Europe. The key findings of the report can be summarised as follows.

Pillar 1 – Identifying the current risks, costs and inefficiencies of the debt issuance process in the EU

Using the issuance of a plain vanilla debt instrument by an international issuer with a European perspective as an initial case study, and drawing on the findings from an internal survey, the DIMCG identified several inefficiencies in the pan-European debt issuance process that might be addressed by exploring the benefits of further harmonisation work.

In the syndication model, risks usually relate to documentation errors, manual interventions, ambiguity in investor identification during the book building phase, potential misallocation and risks related to the duration of the allocation process, as well as to the multiplicity of tools and the absence of straight-through processing. Although the likelihood of these risks materialising was considered to be low, the DIMCG concluded that if the risks were to materialise, this could have a significant financial, operational and reputational impact. By comparison, the auction issuance model, which in practice is available only to frequent issuers with a sufficiently large market footprint, is simpler and more automated although structurally less flexible, and as such it tends to involve fewer sources of potential operational risk. While the bond market functions smoothly and effectively, and the overall cost of issuance via syndication is considered moderate, DIMCG participants identified ways to further improve the overall efficiency of the process. Such efficiency gains could be achieved by standardising and harmonising the processes along the transaction chain. In particular, there is a wide consensus within the DIMCG on possible improvements at the pre-trade and trade-related issuance stages, which tend to be less standardised than the post-trade stage.

Pillar 2 – Potential harmonisation agenda

Based on the outcome of the 2019 ECB market consultation and an internal survey among DIMCG participants, the DIMCG investigated potential harmonisation initiatives to promote efficiency and increase integration in the debt issuance process. The DIMCG analysed and discussed the areas that could be the subject of harmonisation and made recommendations accordingly. In some cases, the findings and related recommendations may be relevant beyond the initial case study and apply in general to the process of issuing debt securities.

Regarding know-your-customer (KYC) and customer due diligence (CDD) procedures, the DIMCG acknowledged that managing investor or issuer onboarding is currently an onerous task. It involves a high number of different documents across jurisdictions in Europe, with paper documents signed in wet ink being required in some cases. In addition, KYC/CDD procedures are often conducted in parallel on the same investor or issuer by two or more stakeholders.

The DIMCG invites the European Commission to further promote harmonised requirements across Member States in the area of customer due diligence (CDD) by allowing the least possible scope for national discretion in the implementation of the relevant European legal acts while ensuring that the requirements are proportionate to the relevant risks. The European Commission and European lawmakers are encouraged to work towards the vision of a single European CDD framework which allows stakeholders to rely on digital procedures and a harmonised set of requirements, including common data elements and documents.

Regarding data exchange and data models, the DIMCG noted that data travels through the issuance value chain with a high number of media breaks, requiring too much manual intervention. The DIMCG recognised that, in order to facilitate the wider adoption of digital procedures in primary market transactions, the use of common data dictionaries and messaging standards is warranted, particularly in the

processes related to term sheets, book building and post-trade execution. The increasing number of platforms/systems offering digital services is a further consideration in this respect.

The DIMCG invites the industry (with input from the relevant trade associations) to consider defining common data dictionaries and messaging standards that could be used in the issuance process. These data dictionaries and messaging standards could cover at least the structured data exchanged on term sheets, both in the book building process and in the processing of standard issuance documents. The data dictionaries and messaging standards should also build to the greatest extent possible on similar standards already used in other financial market segments, notably post-trade securities services (e.g. ISO 20022).

Regarding book building and allocation, the DIMCG acknowledged that this area has seen the most progress in terms of moving from analogue procedures towards full digitalisation in recent years, as it requires the fast exchange of structured data among investors, managers and issuers. The aim of harmonisation could be achieved by basing data exchange on common and open data standards and by harmonising investor identification.

Regarding term sheets and market conventions, the DIMCG found that the labelling of data elements and the presentation of term sheets differ significantly across stakeholders and transactions despite the very similar economic content. The DIMCG believes that establishing and promoting a common term sheet taxonomy and template, together with market-driven convergence in the use of market conventions, is highly likely to further minimise manual intervention and increase the efficiency of the issuance process.

The DIMCG recommends that issuers of debt instruments in euro converge further on the use of the options offered by each of the most widespread market conventions and that they move away from the use of legacy conventions (such as national calendars for business days in euro operations). Legacy conventions should not be used unless there are genuine economic or legal reasons for doing so.

Regarding investor identification and classification, the DIMCG recognised the absence of a common approach to identifying an investor in primary market transactions. The DIMCG broadly agreed that the Legal Entity Identifier (LEI) as a global standard would form the best basis for proper investor identification and that it should be used together with the standardised investor attributes that issuers and deal managers need for processing an issuance transaction.

The DIMCG invites issuers, agents, deal managers and investors (buy-side representatives) to elaborate and agree on a common and open scheme building on the LEI to identify investors in primary market transactions.

Regarding the settlement cycle of syndicated issuance transactions, the DIMCG noted that an artificial, enforced reduction of the current settlement cycle (typically T+5) for syndicated transactions in the current ecosystem may give rise to operational risks and may not yield benefits proportionate to those risks. However,

there is broad consensus among DIMCG participants that a shorter settlement cycle might be achieved in an organic way by making progress on harmonisation in the areas that are highlighted in this report.

Regarding documentation and global notes, the DIMCG found that achieving the highest level of digitalisation means adopting document templates and using fully machine-readable language together with digital authentication methods. Achieving this level of digitalisation could alleviate the burden and risks created by today's practice of manually managing/digesting/processing documents, including extracting and reusing data from documents. Regarding global notes specifically, the DIMCG noted that, because of the risk of conflicts of laws, full dematerialisation in international markets may be a long-term vision. Meanwhile, establishing a standard for a digitally signed electronic global note could represent a first step as it would remove the need for wet ink signatures and physical depositing.

The DIMCG invites the industry (with input from the relevant trade associations) to continue its work on common issuance document templates and promote the machine-readability of such templates with the vision of achieving the fully digital processing and authentication of issuance documents. The DIMCG invites Member States to allow and facilitate – where necessary – the issuance of debt instruments in fully dematerialised (electronic) form and to work towards removing conflicts of laws with regard to the recognition of the rights and obligations attached to such securities.

Regarding ISIN allocation, the DIMCG identified potential room for harmonisation in the currently varying set of documents and data elements that are required by different national numbering agencies (NNAs) in the process of ISIN allocation. In addition, work on a common set of principles and a clear timeline specifying when an ISIN can or should be requested and allocated during the issuance process may also benefit primary market stakeholders.

The DIMCG invites the Association of National Numbering Agencies (ANNA) to carry out a survey among NNAs (in Europe or around the globe) to identify potential areas of harmonisation in the technical process of ISIN allocation and, on this basis, to consider putting forward recommendations or best practices to its members with regard to the process of ISIN allocation.

Regarding a potential label for pan-European euro-denominated debt, the DIMCG discussed the idea of applying a common label to issuance transactions, which could indicate compliance with a “package” of standards in some or all of the above-mentioned areas of harmonisation. Such a label could be used by international financial institutions (IFIs) and potentially by other issuers on a voluntary basis. While there was broad agreement on the need to further explore this idea, the DIMCG members were not unanimous in their views on the potential value added of such an initiative. Some members highlighted that such a label could help increase the transparency of a pan-European debt market by providing investors with a better understanding of what they receive in terms of technical features. Other members emphasised that such a label would not eliminate the current

fragmentation that results from the existence of different tax regimes and national securities or corporate laws.

To facilitate further work in the above-mentioned areas of harmonisation identified by the DIMCG, all stakeholders should be committed to creating and adapting to harmonisation standards. For such efforts to become effective, the DIMCG considers that an open, transparent and efficient **governance framework** is key.

The DIMCG invites all stakeholders to:

- 1. further reflect and provide feedback to the Eurosystem on the areas of harmonisation highlighted in this report;*
- 2. further consider setting up a governance framework for the future harmonisation work involving – directly or indirectly – all stakeholders of the debt issuance process.*

Pillar 3 – Initiatives in debt issuance

The DIMCG identified the following four dimensions for its analysis of existing initiatives: process integration, interoperability, support for harmonisation and European governance.

There is currently a proliferation of private initiatives to support the debt issuance process. This is indicative of the dynamism of the market and the need for improved and automated services. The initiatives are usually based on a market demand-driven delivery approach whereby the parts of the issuance process for which there is the greatest need are covered first. The result is that an incremental delivery approach is often adopted, with the focus currently on pre-trade-related activities. Some service providers include “plug and play” capability in their offering, which would potentially enable interoperability. As time to market is essential, especially in the early stages of development, service providers naturally focus on securing speedy product delivery. However, this increases the risk of a weaker focus on standardisation and reduced appetite for open access. Several initiatives are being developed by Europe-based entities. However, it is unclear whether the governance arrangements in place meet expectations in terms of user involvement and overall European governance.

In the context of the four dimensions mentioned above, some DIMCG members believe that it could be beneficial to establish a European issuance framework covering common rules and procedures within an appropriate European governance environment. Irrespective of the implementation of a central infrastructure, the introduction of such a framework could potentially support the establishment of a clearly defined harmonisation agenda as highlighted in Pillar 2, incentivise existing and future initiatives to converge towards such a framework, and ultimately deliver the expected benefits in terms of risk mitigation, removal of inefficiencies and cost reduction.

The specific concept of the central infrastructure was discussed by the DIMCG members. Some DIMCG members believe that regardless of whether it is

established under public, private or public-private governance, such an infrastructure could create the risk of crowding out private initiatives, thereby impeding innovation and competition among solution providers. Concerns were also raised that a new infrastructure of this kind could lead to increased fragmentation and to the potential creation of two-tiered markets.

At the same time, other members consider that the prospect of achieving significant improvements in the foreseeable future is uncertain and that the likelihood of such an outcome would increase with the support of a central infrastructure. Such an infrastructure could be positioned as the backbone of an efficient workflow throughout the full transaction chain, based on harmonised, internationally accepted data standards, with open access for all market participants and other interoperable solutions, and within a governance framework that includes all participants in the transaction chain. Consequently, it could foster European financial market integration.

The DIMCG did not reach a consensus on this point.

1 Introduction

Debt issuance and distribution channels constitute the starting point in the relationship and interaction between capital seekers (issuers) and capital providers (investors). Typically, in a single jurisdictional context, a public entity provides the benchmark debt instrument in the financial market, and the issuance process is well established, allowing issuers to reach out to either national or international investors.

However, the euro area has a multijurisdictional dimension, so market practices and procedures are more complex and often delineated along national borders or specific issuance and distribution channels. This landscape is partly the consequence of firmly entrenched legal and fiscal barriers between EU Member States¹, which in turn increase aversion to cross-border risk-sharing. At the same time as supporting legislative convergence, other initiatives aimed at improving technical and functional harmonisation and promoting the interoperability of systems and financial integration should be considered. Typical examples of such initiatives are the [TARGET2-Securities \(T2S\) harmonisation agenda](#) and the Eurosystem's [Single Collateral Management Rulebook for Europe \(SCoRE\) framework](#).

In view of the above, on 22 May 2019 the Governing Council approved the launch of a [six-week market consultation on a potential Eurosystem initiative regarding a mechanism for the issuance and initial distribution of debt securities in the EU](#). The [public consultation](#) triggered responses from a wide set of stakeholders and financial market participants, including issuers and investors. The purpose of the consultation was to gather the views of the market in order to analyse why – unlike in other currency areas – there is currently no pan-European, neutral and harmonised channel for the issuance and initial distribution of debt securities that covers the EU as a single domestic market. The absence of such a channel may be considered a shortcoming for an issuer with an objective or mandate to serve the EU as a currency area in the context of the capital markets union (CMU).

In October 2019, the ECB published an overview of the responses received.² The results of the market survey revealed mixed views, with no clear majority either strongly supporting or disagreeing outright with the key messages of the market consultation note, especially concerning the need for a public infrastructure initiative on the pre-issuance and initial distribution of debt securities. However, there was broad consensus on the need for further harmonisation and technical improvements in the pre-issuance segment, as well as on the connection with the post-trade segment for initial distribution.

As a follow-up to the 2019 market consultation, in May 2020 the ECB Governing Council established the [Debt Issuance Market Contact Group \(DIMCG\)](#) as a

¹ See “[Report of the European Post Trade Forum](#)”, European Commission, 2017.

² The non-confidential responses received by the ECB team, representing 80% of the total responses, are available on the “Public consultations” page of the ECB’s website, under the heading “[Market consultation on a potential Eurosystem initiative regarding a European mechanism for the issuance and initial distribution of debt securities in the European Union](#)”, dated 28 May 2019.

temporary forum for interaction between the Eurosystem and industry professionals involved in euro area primary debt markets. The objective of the group is to identify issues that prevent further improvements in efficiency and integration in the area of debt issuance and initial distribution, covering the full transaction chain from pre-issuance to post-trade, and to investigate how these issues may be addressed. The DIMCG is also mandated to explore how any potential harmonisation activities could be supported by private or public infrastructure initiatives in the area of debt issuance and initial distribution services. This report is the outcome of the DIMCG's work as mandated in its terms of reference.³

Section 2 of the report outlines risks, costs and inefficiencies in the current pre-issuance and initial distribution chain. The case study explored in this first pillar of work (Pillar 1) focuses on the issuance of a “plain vanilla” bond⁴ in euro by a public institution with a European perspective⁵, using either the syndication or the auction issuance models. The findings of this case study are based on the outcome of a survey conducted within the DIMCG in December 2020. Other issuance methods, such as tap issuances in existing bonds and private placements, or issuances made by private entities, were not included within the scope of the work performed by the DIMCG.⁶

The DIMCG also assessed opportunities for further harmonisation in the pre-issuance and initial distribution process. For this second pillar of work (Pillar 2), the DIMCG drew on the outcome of the 2019 ECB market consultation and the information gathered under Pillar 1 to investigate the elements of the overall issuance process that could benefit from further harmonisation. Existing standards and market practices were analysed, with particular attention paid to ongoing harmonisation activities for post-trade securities services. While recognising that changes to regulatory requirements are needed in some cases, the DIMCG identified several areas where opportunities for harmonisation exist and common practices could be developed, with positive effects across the issuance process. Details of these harmonisation opportunities are given in Section 3 of this report. In addition, the concept of a common optional label for issuing plain vanilla debt securities in euro at a pan-European level is explored. A label of this kind could play a role in several of the harmonisation areas identified by the DIMCG.

Section 4 investigates how existing or future initiatives in the area of debt issuance could help to meet potential harmonisation, integration or improvement goals. For this third pillar of work, the DIMCG established a framework based on (i) process coverage, (ii) openness to harmonisation, (iii) a level playing field and (iv) European governance. This framework was then applied to the various ongoing market

³ The DIMCG should, in principle, fulfil its mandate approximately 12 months after its launch, i.e. after its first meeting, by submitting an advisory report to the Eurosystem. See the [terms of reference of the DIMCG](#).

⁴ A plain vanilla bond is the most basic type of bond. The investor buying the bond receives a fixed coupon payment at predetermined intervals, and the maturity of the bond is predetermined. The face value of the bond is also predetermined, and the issuer redeems the bond at face value on the date of maturity. This is different from other types of bond such as floating rate, callable or convertible bonds.

⁵ This type of institution is usually referred to by the umbrella term “international financial institution” (IFI). Such institutions can also include supranational, intergovernmental and national development entities.

⁶ The report does not aim to compare different issuance or financing methods.

initiatives with the aim of providing a high-level prospective view of the extent to which these initiatives can contribute to (i) improving the overall efficiency of the issuance process in Europe, (ii) reducing costs and (iii) mitigating risks.

2 Pillar 1: What are the issues with European debt issuance?

2.1 Introduction

The issuance and initial distribution of debt securities in the euro area remain fragmented either by national markets or by specific issuance channels. The location of issuance of debt securities has a considerable impact on holding structures after issuance and on the settlement of secondary market transactions, thereby fostering the home bias structure of debt instrument holdings. However, this does not prejudice issuers' freedom of choice regarding the place of issuance or their ability to reach pan-European and/or international investors, especially in the case of central securities depository (CSD) links in T2S⁷.

Despite the launch of T2S in 2015⁸ and the consolidation of settlements onto a single technical platform, debt securities continue to be held and settled on a largely domestic basis. T2S settlement statistics (as at 2020) show that only 1% of the total volume of securities transactions (bonds and equities), and 2.6% in terms of value, are settled across borders via different CSDs.⁹ It is also interesting to note that only about 5% of debt securities eligible as Eurosystem collateral are issued by a non-domestic CSDs, while 20% of such assets are issued by international central securities depositories (ICSDs).¹⁰ The remaining debt instruments eligible for Eurosystem monetary policy operations are issued domestically by a national CSD of an EU Member State. The 2021 European Commission report on CSD regulation¹¹ also acknowledges that there is limited provision of cross-border CSD services in Europe. This is exemplified by the fact that the settlement of securities issued from other Member States represents less than 5% of the settlement activity of most CSDs, compared with more than 80% for ICSDs. This is according to the ECB's 2018 report on financial integration in Europe, which additionally states that bonds issued by an issuer located in the euro area are on average one and a half times more likely to be held by domestic than by other euro area investors.¹² None of the above statistics in itself conclusively proves any market failure as such, but the consistency among the statistics supports the argument that the EU debt instrument market remains largely fragmented across national borders.

The consequence of this fragmented landscape in the EU is that the distribution of debt instruments to investors requires a network of interactions between actors, as

⁷ T2S is a single securities settlement engine which covers 21 CSDs from 20 European countries.

⁸ While T2S commenced operations in 2015, the migration phase of the different markets was only completed in 2017.

⁹ 1% in terms of volume and 2.6% in terms of value according to the 2020 T2S Annual Report.

¹⁰ Information based on the 2019 Eurosystem eligible collateral database.

¹¹ See "Report from the Commission to the European Parliament and the Council under Article 75 of Regulation (EU) No 909/2014 of the European Parliament and of the Council of 23 July 2014 on improving securities settlement in the European Union and on central securities depositories and amending Directives 98/26/EC and 2014/65/EU and Regulation (EU) No 236/2012".

¹² See Section 3 of "Financial integration in Europe", ECB, May 2018.

well as a multiplicity of tools and procedures operated by various intermediaries along the issuance process. While acknowledging the multijurisdictional character of the EU financial market, and in the context of working towards a single capital market in the EU, it should be noted that none of the other global currency areas faces such complexity in issuing and distributing debt instruments.

In order to examine further the qualitative and potentially more quantitative aspects of the current situation in the EU, this section highlights risks, costs and inefficiencies identified by the DIMCG. The discussion presented below covers both the syndication and auction models. It is based on the information collected from the DIMCG participants. Where relevant, references to the results of the 2019 ECB market consultation are provided.

Box 1

High-level description of the existing debt issuance and distribution process

Debt issuance is the process of creating new debt instruments for issuers and selling them to investors so that the latter can obtain liquidity and address their funding needs. The sale of these newly created debt instruments can take place via (i) a syndicated transaction, whereby a consortium of dealer banks selected by the issuer takes on the responsibility of selling the debt instrument to investors on behalf of the issuer or (ii) an auction, whereby primary dealers participate in a bidding process for a share of the new debt security. Other issuance techniques or channels such as a direct placement or a “mini tap” with a limited number of dealers and investors can also be applied. The DIMCG focused on syndication and auction models, as these are the most commonly used issuance techniques for plain vanilla euro debt instruments. For both syndication and auction, the issuance process can be broken down into three distinct phases, namely pre-trade, trade (or execution) and post-trade, as shown in Figure A.

Figure A

Phases of the debt issuance process



In the syndication model, the issuer appoints a group of banks to collect subscription orders from investors and to manage the issuance process. The formation of a syndicate is the method typically used for the launch of new debt instruments, particularly longer-maturity bonds, since this method fulfils the dual objective of simultaneously placing a larger amount of securities at market prices and achieving a greater diversification of the investor base, both geographically and by type. Syndicated placements include a pot system for book building, which enables the issuer to intervene in the allocation to investors and to select those of greater quality, thereby ensuring a good performance

in the secondary market. Syndication allows the issuer to benefit from the expertise of investment banks in debt capital markets and to draw on their competence in the areas of investor relations and sales to investors. To compensate for their activities, issuers pay a fee to the different banks involved in the syndicate.

Auctions can be either open or closed. While open auctions cater for the direct involvement of investors, closed auctions allow the direct participation of primary dealers only. Other investors have to participate through these primary dealers. In some cases, primary dealers are not compensated by the issuer for their bids, which may or may not be allocated. Primary dealers bid for the right to buy securities for their own portfolios or with the aim of reselling them to other investors.

Issuance by means of syndication and auction co-exist, as each technique answers different issuer needs.

2.2 DIMCG fact-finding exercise

In order to support its analysis of risks, costs and potential inefficiencies in the current debt issuance process, the DIMCG conducted a fact-finding exercise by means of a survey.

The initial case study used as a baseline by the DIMCG focused on the initial distribution of a plain vanilla debt instrument issued in euro by an IFI. Such an instrument is the most natural candidate for linking the DIMCG's work with the wider EU policies on financial integration that are strongly supported by the ECB, namely the CMU and the international role of the euro.¹³ However, the conclusions may also be relevant for issuers and asset classes other than those in the initial case study.

The DIMCG survey consisted of a list of standardised questions grouped into three clusters: (i) risks, (ii) costs and (iii) inefficiencies.

Figures 1 and 2 provide high-level descriptions of the full transaction chain of the syndicate and auction models as used during the DIMCG survey process.

¹³ See “[The international role of the euro](#)”, ECB, June 2021. This states that “[t]he international role of the euro is primarily supported by a deeper and more complete Economic and Monetary Union, including advancing the capital markets union, in the context of the pursuit of sound economic policies in the euro area. The Eurosystem supports these policies and emphasises the need for further efforts to complete Economic and Monetary Union”.

Figure 1
Syndication issuance model

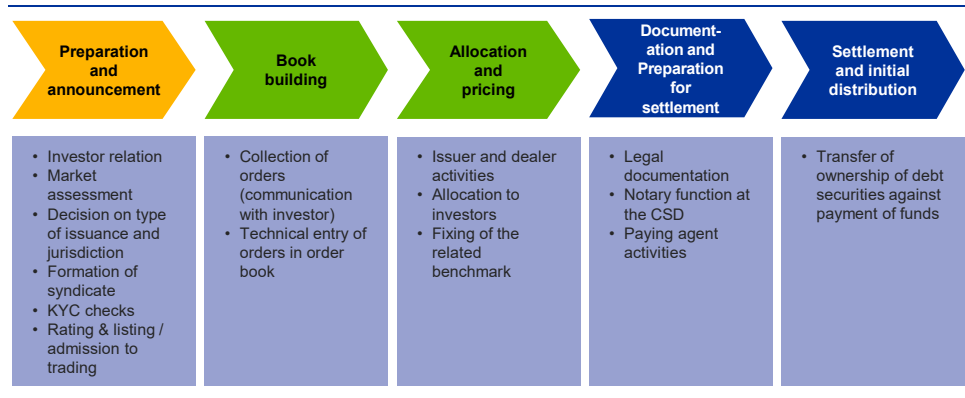
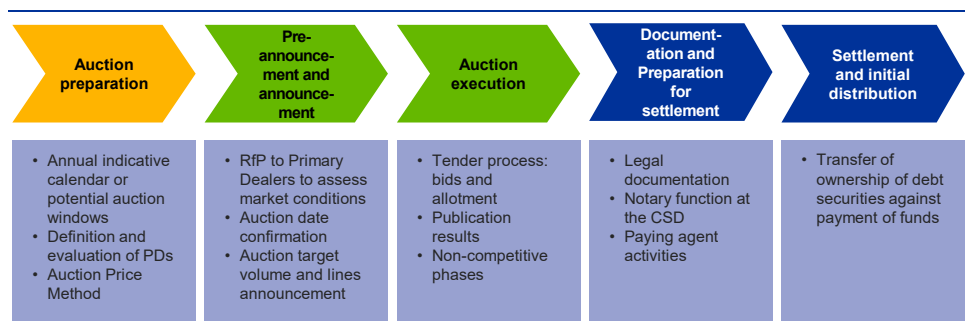


Figure 2
Auction issuance model



The outcome of the analysis is presented below. Further details can be found in Annex C.

2.2.1 Risks

The main potential syndication risks reported in the survey relate to documentation errors, manual interventions, ambiguity in investor identification during the book building phase, potential misallocation and risks related to the duration of the allocation process, as well as the multiplicity of tools and the absence of straight-through processing (STP).

While the likelihood of these risks materialising is considered low by DIMCG members, the financial, operational and reputational impact in the event that the risks do materialise is rated high. Given the potential consequences, actors must therefore take the necessary measures to mitigate the potential occurrence of these risks. Pillar 2 of this DIMCG advisory report is aimed at identifying a list of harmonisation and standardisation actions that could contribute to mitigating these risks.

The risks related to auctions are different from those related to syndication. This is because syndication is less standardised and involves a higher degree of communication and manual data entry throughout the process. The most relevant risks for auctions relate to the assessment of the market situation and potential mistakes in the estimation of investor demand by the issuer. An adequate choice of lines, size and timing is essential to avoid price misallocations and to ensure sufficient investor demand. Another risk highlighted in the survey relates to the time between the closure of the auction and the publication of the results, during which bidders are exposed to market risks. Finally, risks related to documentation apply equally to auctions, as the documentation cycle is identical to that for syndications.

2.2.2 Costs

As in all business operations, the various services provided during the syndication process entail certain costs, including legal, IT, human resources and other internal and external costs that are incurred by all relevant actors involved in the transaction chain. Other overhead costs are also associated with an issuer maintaining a presence in debt capital markets. These include staffing, travelling and reporting costs incurred as part of investor relations work.

Typically, in the syndication process, some of these costs are covered by the syndication fee paid by issuers to the syndicate banks. As an indication of how much is typically paid, the DIMCG survey identified upfront issuance fees of between 0.07% and 0.25% of the total issuance amount. Looking at the typical fee schedules, the longer the maturity of the bond, the higher the fee. The syndication fee is an all-in fee covering a large range of syndication services, such as market intelligence, sales activities, underwriting risk, support in the creation of legal documentation, settlement and execution. For smaller issuers (that are not sovereigns, supranationals or agencies), the amount of the fee may be different, and fees can be paid individually for the different services.

The debt issuance market functions effectively, and, compared with the size of the transactions, execution costs are moderate. However, the DIMCG identified areas of potential further improvement in the overall efficiency of the process, which could be achieved for example by more standardisation and harmonisation along the transaction chain. Technological progress, if managed appropriately, may allow for savings on both system development and operational costs.

2.2.3 Inefficiencies

Care should be taken when directly comparing bond issuance via syndication with bond issuance via auction, as these two channels represent different levels of flexibility and thus entail different degrees of operational complexity. In addition, auctions are realistically available only to frequent issuers with a substantial market footprint. During the survey, DIMCG members reported a number of inefficiencies and potential risks with regard to the syndication model. The root causes of these

inefficiencies are to be found in the lower level of process standardisation, the higher degree of communication required and the significant number of manual actions and data entries needed throughout the different steps of the process. Inefficiencies were mainly found in the activities performed at the pre-trade and trade-related stages, whereas in the area of post-trade/settlement the DIMCG did not identify major differences between securities issued via the two models. DIMCG members also acknowledged the considerable work in post-trade harmonisation done by the Advisory Group on Market Infrastructures for Securities and Collateral (AMI-SeCo) in the context of T2S.

The auction model is exposed to different sources of inefficiencies. Some of the examples highlighted in the results of the survey are the heterogeneity of the tools in place, the lack of standardisation in the legal documentation, and the different requirements and processes for the creation of securities in the various CSDs, resulting in an insufficient level of STP across the chain.

The DIMCG work undertaken in Pillar 2 is aimed at addressing most of the inefficiencies presented below. The idea that harmonisation could further improve the issuance process and address these inefficiencies was also supported by the 2019 ECB market consultation.¹⁴

1. **A significant amount of resources are required to execute know-your-customer (KYC) and customer due diligence (CDD) procedures in the context of debt issuance.** KYC/CDD checks are conducted several times by different syndicate members for the same investor and without a clear, standardised and harmonised process. The absence of harmonised regulatory requirements across jurisdictions also creates complexity. For additional details, please refer to Section 3.3.1.
2. **The absence of data standards and the use of multiple channels for data provision along the value chain often require the manual extraction and re-entry of data.** There is broad consensus that significant benefits could be reaped from the wider adoption of digital procedures. The survey respondents highlighted the absence of a central database for static securities data populated from the original source, as well as the benefits that a common transaction database containing information on all past syndications and auctions and their results would bring. Such a database could help overcome compliance barriers to sharing investor-specific data with parties not directly involved in a transaction as issuer, dealer or settlement agent. It should be noted, however, that access to such data is an element of competition among dealers. For additional details, please refer to Section 3.3.2.
3. **Different order book standards and excessive manual processing are required in the book building process.** The book building and allocation processes encompass all activities related to the collection of investor

¹⁴ The majority of those who responded to the [May 2019 ECB consultation](#) agreed that further work in the area of harmonisation and standardisation along the full transaction chain (from pre-issuance to post-trade) was necessary. The topics that received the most support as part of the consultation were, in the following order, term sheets, legal or fiscal areas, investor identification, technical standards, timelines, documentation, rounding conventions and book building processes.

information and the subsequent decision by the issuer and the syndicate on how to allocate the issued amount among investors. These activities are highly dependent on manual processing, which leads to time and cost inefficiencies and increases risk. For additional details, please refer to Section 3.3 and Section 3.3.3.

4. **The non-standardisation of legal document templates and inefficiencies in legal documentation workflows create obstacles.** Legal documents are exchanged among actors (issuers, banks, agents, CSDs, stock exchanges and trading venues) in email or hardcopy format in both issuance models. The creation, processing and comparison of legal documents require a lot of time and manual effort in different areas of the transaction chain. This results in higher costs and increases the overall duration of the issuance process. The harmonisation of document templates along with the automated creation and machine-readability of the documents could speed up the process, reduce costs and prevent manual errors from occurring. For additional details, please refer to Section 3.3.4.
5. **There are ambiguities in investor identification and classification.** Most of the steps in the syndication process could benefit from a common investor identification scheme and a harmonised classification taxonomy. While the Legal Entity Identifier (LEI) is a natural candidate for investor identification, the DIMCG concluded that this alone would not provide sufficient granularity and depth to reflect the actual identity of the investor, and that it should ideally be used together with other criteria. Also, in order to support investor classification, individual databases combining LEIs with expected investor behaviour would still be required, which would be specific to issuers/banks depending on past experiences and relationships with investors. Therefore, the DIMCG takes the view that establishing a common identifier alone is not enough to remove or significantly reduce the current inefficiencies. However, a common framework for classifying investors would bring additional benefits, even though the actual classification of each investor would differ depending on the issuer and its history/relationship with the investors. For additional details, please refer to Section 3.3.5.
6. **The standard settlement cycle for syndicated transactions could be shortened.** From the trade date to the settlement date, there is a period of five business days, known as “T+5”, which is used to finalise the legal documentation, list the security with a trading venue and carry out the necessary preparations for the settlement. While acknowledging the benefits of shortening the settlement cycle, some DIMCG members highlighted that such a reduction should not result in increased operational risk. For additional details, please refer to Section 3.3.6.
7. **The requirement for physical global notes and signatures in wet ink delays the process and results in additional costs and risks in both the syndication and auction models.** The challenges and operational inefficiencies of handling and authenticating physical global notes increased in the context of the restrictions imposed to counteract the coronavirus (COVID-

19) pandemic. While dematerialisation¹⁵ is possible and is used frequently in many European countries together with the electronic signature, a few countries still require a physical document with signatures in wet ink. For additional details, please refer to Section 3.3.7.

8. **There is a low level of IT integration as well as a lack of interoperability and STP along the full transaction chain for both issuance models.** The issuance of a debt instrument is a complex process involving multiple activities. The lack of integration and interoperability results in most of these activities being executed in isolation by different actors and teams. It also prevents STP from being carried out along the chain. One shortcoming in the implementation of STP is the connection between the pre-issuance and post-trade stages, where the result of the allocation process is not processed automatically for clearing and settlement but rather passed on manually. This creates inefficiencies, a greater manual workload and increased risks for paying agents. For additional details, please refer to Section 3.2.

¹⁵ In this context, a distinction must be made between dematerialised and immobilised securities. Dematerialisation refers to the absence of a physical global note that documents the total amount outstanding, whereas immobilisation refers to the recording and transfer of securities in a book entry system, i.e. without the need to move paper from one place to another. Immobilisation is the standard for the large majority of securities in Europe, although the disadvantages of physical global notes also apply to immobilised physical global notes.

3 Pillar 2: Harmonisation

3.1 The context of the DIMCG's work on harmonisation

In accordance with its terms of reference, the DIMCG found potential areas of improvement in debt issuance and initial distribution, and possible solutions to address the issues identified. Potential harmonisation initiatives to promote efficiency and increase integration were investigated. The aim of this section is (i) to present the outcome of these investigations by conducting an initial analysis of the areas that could be harmonised, including the intrinsic barriers they present and the methods needed to overcome these barriers; and (ii) to show where harmonisation would bring substantive benefits to the industry.¹⁶ It is not the aim of this section to formulate and put forward closed-form standards.

Fragmentation is accompanied by a lack of harmonised procedures and processes in European debt issuance markets. Different market practices are applied in different EU jurisdictions, which in turn requires issuers and investors to have different procedures in place to cope accordingly.

The DIMCG primarily relied on three sources of input in these discussions:

1. the feedback collected from a wide set of stakeholders in the 2019 public consultation by the ECB on debt issuance;
2. the findings of the DIMCG Pillar 1 survey (see Section 2);
3. the insights provided by the DIMCG participants.

In addition, the DIMCG paid particular attention to existing standards and widely accepted market practices as a foundation for potential further harmonisation in Europe. In this regard, it is worth highlighting (i) the work by the International Capital Market Association (ICMA) in a number of areas including term sheets, market conventions, documentation and a set of principles guiding ICMA members participating in primary markets, which are collected and presented in the ICMA's Primary Market Handbook; (ii) the work by the International Capital Market Services Association (ICMSA) on the best practices regarding the international segment of European securities markets; and (iii) the work by the International Securities Market Advisory Group (ISMAG) on best practices regarding the international segment of European securities markets, which are described in its Market Practice Book. Important stocktaking work on European sovereign debt markets has been carried out by the Association for Financial Markets in Europe and the Sub-Committee on EU Sovereign Debt Markets of the Economic and Financial Committee of the EU

¹⁶ The focus of the report is on the DIMCG case study. Nevertheless, as the debt issuance market is global, any potential solution would ideally require the broad involvement of stakeholders (going beyond those using the euro).

Council. These activities contribute greatly to efficiency, transparency and the better integration of European debt markets.

Finally, the DIMCG also considered the ongoing harmonisation activities that are outside the scope of, but related to, debt issuance, in particular the standards applicable to post-trade securities services such as corporate actions and settlement within the Eurosystem's SCoRE framework as well as the harmonisation associated with T2S.

In the next section, the DIMCG report sets out the reasons why harmonisation is so important considering the issuance of plain vanilla bonds through a syndication model as per the DIMCG case study. Section 3.3 lists the areas where harmonisation could bring benefits to the issuance process. Section 3.4 explains the importance of harmonisation in a technological innovation environment. Section 3.5 elaborates on governance arrangements and the benefits of creating an inclusive governance framework encompassing all stakeholders.

3.2 Why harmonise?

Harmonisation and standardisation are key to enhancing competitiveness and efficiency while reducing the risks associated with financial market services. In network markets such as financial infrastructures and the related ecosystems, there is both cooperation and competition. Individual providers offer services that add value for end-users, i.e. issuers and investors. As has occurred in other situations in the past, stakeholders that compete by establishing or maintaining idiosyncratic or proprietary procedures create an environment in which competition is not as fluid as it ought to be (competition for the market instead of in the market). Such situations tend to lead to a loss of efficiency and decreasing cooperation.

Therefore, one efficient way of cooperating is for all stakeholders to follow the same standards. To achieve harmonised business processes and requirements for the benefit of all stakeholders, it is necessary to list the current gaps and analyse whether and how the different practices can be aligned by way of harmonisation. At the same time, it is important that cooperation on establishing harmonised procedures and standardisation does not go beyond what is necessary to maximise public welfare and does not decrease the level of competition between individual service providers.

Some initiatives already in place, such as the T2S harmonisation agenda and SCoRE initiative, have proved or are proving that harmonisation enables integration, standardisation and automation, as well as promoting a level playing field and competition, all of which ultimately leads to lower future running costs. These market experiences have shown that defining market-wide standards with industry players in order to establish a single set of rules or procedures is key to fostering financial market integration.

In this context, it is important to reflect on the role of regulation versus market harmonisation (self-regulation). Although some EU-level regulations (such as the

Prospectus Directive¹⁷, the Market Abuse Directive¹⁸ and relevant provisions of the Markets in Financial Instruments Directive¹⁹ and Markets in Financial Instruments Regulation²⁰) cover certain aspects of debt issuance, primary markets are not a strongly regulated area in the EU today. In general, market harmonisation has an advantage over regulation in that it is more flexible and allows for a wider array of tools to ensure common procedures and an integrated marketplace. However, regulation can in some instances provide a stronger form of coordination, in particular when potential vested interests block further progress towards a single market. In such cases, if market harmonisation efforts fail, regulation can be considered as a last resort to remove the relevant barriers.

As the findings from the 2019 ECB market consultation and the DIMCG Pillar 1 survey showed inefficiencies, complexity and lengthiness in the existing variety of processes, systems and platforms, in its work on harmonisation the DIMCG started by identifying issues preventing further improvements in efficiency and integration in the area of debt issuance and initial distribution.

The goal of the DIMCG's work on harmonisation is to present the problematic areas, the intrinsic barriers they present and the methods needed to overcome these barriers, and to show where harmonisation would bring substantive benefits to the industry. In working towards this goal, the DIMCG's objective is not in principle to define binding standards, although in a few exceptional cases (such as in the area of KYC) regulation may be the only effective option to achieve the necessary harmonisation. Nonetheless, this does not preclude the DIMCG from recommending possible measures to pave the way for a more efficient, digital, secure and inclusive debt issuance process.

3.3 Areas of harmonisation in debt issuance

Based on the above sources of information and feedback from the wider market, the DIMCG identified a number of areas in the debt issuance process which could or should be harmonised. In each area, the DIMCG focused on the existing issues/barriers and the prospects of harmonised procedures improving the situation.²¹ As these areas are not uniform, the following topics are not ranked or presented in any order of priority.

¹⁷ Directive 2003/71/EC of the European Parliament and of the Council of 4 November 2003 on the prospectus to be published when securities are offered to the public or admitted to trading and amending Directive 2001/34/EC (OJ L 345, 31.12.2003, p. 64).

¹⁸ Directive 2014/57/EU of the European Parliament and of the Council of 16 April 2014 on criminal sanctions for market abuse (market abuse directive) (OJ L 173, 12.6.2014, p. 179).

¹⁹ Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Directive 2002/92/EC and Directive 2011/61/EU (OJ L 173, 12.6.2014, p. 349).

²⁰ Regulation (EU) No 600/2014 of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Regulation (EU) No 648/2012 (OJ L 173, 12.6.2014, p. 84).

²¹ In a few cases, the DIMCG could not reach a broad consensus on the issues and the potential approach to resolving them. The major arguments or viewpoints put forward in those cases are presented in this report.

3.3.1 KYC and CDD procedures (auction and syndication)

It is widely accepted that KYC and CDD procedures are key to ensuring sound financial markets and combating financial terrorism and money laundering. Nevertheless, they require a significant amount of resources on the part of banks in the debt issuance context. In addition, there are overlaps in the KYC-related activities that are performed in parallel, for example by different banks for the same transaction party, i.e. issuer, guarantor or investor. Although onboarding at financial service providers is not specific to debt issuance (as entities also use other financial services besides buying debt instruments), the inefficiencies in the process also have a direct negative impact on the efficiency of the debt distribution value chain in Europe.

Currently, the regulatory KYC/CDD requirements established at European level take the form of an EU directive on anti-money laundering (the AML Directive²²) that grants significant discretion regarding national implementation. This translates into differing requirements for each Member State²³ and leaves banks and other financial service providers serving investors in different jurisdictions with a multitude of conditions to comply with. It also creates a level playing field issue whereby service providers in jurisdictions with less strict requirements may have a competitive advantage over those jurisdictions with stricter implementation.²⁴ Finally, the existing fragmentation also prevents efficient cross-border digital (remote) procedures for customer identification in the context of onboarding.

When KYC/CDD checks are carried out on investors as companies/institutions/financial corporations, publicly available data are retrieved from company websites, stock exchange websites, public business registers and other data repositories, or are often simply requested from the customer.²⁵ For unlisted and unrated companies, retrieving data to perform KYC procedures is even more difficult, as most of the data are not publicly available. The list of documents required also differs significantly across EU jurisdictions. In short, the process of collecting such data is time-consuming and costly. Onboarding delays can cause

²² [Directive \(EU\) 2015/849 of the European Parliament and of the Council of 20 May 2015 on the prevention of the use of the financial system for the purposes of money laundering or terrorist financing, amending Regulation \(EU\) No 648/2012 of the European Parliament and of the Council, and repealing Directive 2005/60/EC of the European Parliament and of the Council and Commission Directive 2006/70/EC \(OJ L 141, 5.6.2015, p. 73\).](#)

²³ See “[Assessing portable KYC/CDD solutions in the banking sector: The case for an attribute-based & LoA-rated KYC framework for the digital age](#)”, report by the EU Commission Expert Group on Electronic Identification and Remote Know-Your-Customer Processes, December 2019. On page 10, this report states: “In short, divergent national legal frameworks which are a direct consequence of the minimum harmonisation approach adopted by the EU AML directives are now recognised by the ESAs as a factor weakening the overall effectiveness of EU AML/CFT processes.”

²⁴ *ibid.* On page 10, this states: “[W]e believe that reconciling single market financial services with loosely coordinated or uncoordinated national KYC rules is highly problematic, and likely to be unstable in the long term, especially knowing that KYC rules are designed to ensure the integrity of financial transactions and prevent fraudulent activities. As KYC rules apply to services providers (obliged entities) and not directly to customers, it implies that customers are then able to select which KYC rules should apply to them, with an incentive given to providers based in jurisdictions with less demanding KYC requirements.”

²⁵ It is worth noting that the European Commission is setting up a repository known as the European single access point (ESAP) for financial and non-financial information publicly disclosed by companies, pursuant to EU legislation.

losses of revenue, and delays in closing financing transactions can potentially affect the entire issuance value chain.

As a reaction to KYC/CDD procedures becoming key “pain points” for financial service providers in recent years, third-party service providers have started offering KYC solutions to banks and customers that build on emerging digital technologies to simplify the identification, verification and collection process. Nevertheless, these solutions are designed to comply with the local legislation that they are subject to and are themselves limited by the existing fragmentation in regulatory requirements. Differing national requirements can therefore hamper these providers in their efforts to offer a wide range of KYC services across EU jurisdictions.

The DIMCG takes the view that there is significant room to further harmonise the rules and regulations around KYC/CDD with the objective of improving efficiency while also protecting the integrity of financial services and preventing money laundering or terrorist financing. The DIMCG believes there are three main areas in which the efficiency of KYC/CDD procedures could be improved.

1. **Harmonisation of the methods/documents used for identification and/or the data elements recorded across EU jurisdictions** in order to facilitate authentication by means of e-signatures (as defined by the Regulation on electronic identification and trust services, known as the eIDAS Regulation²⁶) and methods for digital identification across borders in the EU.²⁷
2. **Sharing of investors’ KYC data/identification across financial service providers using common certified databases or central data hubs** in order to prevent multiple submissions. Even though responsibility for keeping customer data up to date lies with the service provider (the obliged entity) and cannot be delegated to a third party, DIMCG participants stated that a common certified database could address the issue of maintaining updated data on their investors in an efficient way.
3. **KYC passporting/portability** in order to allow financial service providers to rely on the KYC procedures already performed and prevent customer identification and other CDD procedures from being performed more than once.²⁸ On the one hand, a KYC passport would allow the KYC procedures to be carried out once for an investor and then reused by other issuer agents or deal managers.²⁹ On the other hand, KYC portability of this kind would require a common scheme and a contractual framework to govern the various

²⁶ [Regulation \(EU\) No 910/2014 of the European Parliament and of the Council of 23 July 2014 on electronic identification and trust services for electronic transactions in the internal market and repealing Directive 1999/93/EC \(OJ L 257, 28.8.2014, p. 73\).](#)

²⁷ On 3 June 2021, the European Commission proposed a [framework for a European digital identity](#) that will be available to all EU citizens, residents and businesses in the EU. This framework will allow citizens to prove their identity, share electronic documents from their European digital identity wallets and access online services with their national digital identification.

²⁸ For some KYC-related activities, such as those performed by managers/persons in charge of a given supervised institution, the KYC passport could be obtained from the supervisory authority in the country where the issuer/investor (as a supervised institution) is resident.

²⁹ It is worth noting that the reuse of CDD data is already allowed under AML rules, and upcoming harmonisation is expected to make this easier.

responsibilities of the stakeholders involved, and such a scheme would need to comply with data protection legislation. For this to be feasible, active regulatory support would be required in order to remove regulatory barriers and ensure clarity regarding the liabilities of parties.

The DIMCG invites the European Commission to further promote harmonised requirements across Member States in the area of customer due diligence (CDD) by allowing the least possible scope for national discretion in the implementation of the relevant European legal acts while ensuring that the requirements are proportionate to the relevant risks. The European Commission and European lawmakers are encouraged to work towards the vision of a single European CDD framework which allows stakeholders to rely on digital procedures and a harmonised set of requirements, including common data elements and documents.

The DIMCG is aware that the European Commission is in the process of significantly overhauling EU-level KYC/CDD requirements to ensure greater harmonisation, having recently presented a package of legislative proposals to strengthen the EU's anti-money laundering and countering of terrorist financing rules.³⁰ It notes that KYC requirements were also included in the focus of the European Commission's digital finance package published in September 2020. The European Commission's plans seem to be broadly in line with the DIMCG's considerations and would be likely to receive the full support of the DIMCG, given the vision of a single European KYC/CDD framework relying on digital procedures and a common set of requirements, including common data elements and documents.

3.3.2 Data exchange and data models in debt issuance (auction and syndication)

There is broad consensus in the industry that further progress is needed on the adoption of digital procedures in the debt issuance process. The key benefit of replacing analogue (paper and telephone-based) processes by building on modern technology is that this can free up a considerable amount of resources for stakeholders (issuers, deal managers, agents and investors) and enable greater efficiency, accuracy and transparency. Large amounts of data are transmitted throughout the issuance process. For the transition to a fully digital value chain to succeed, the way these data are exchanged and processed needs to be improved to avoid unnecessary manual intervention and processing and increase the speed of the overall process.

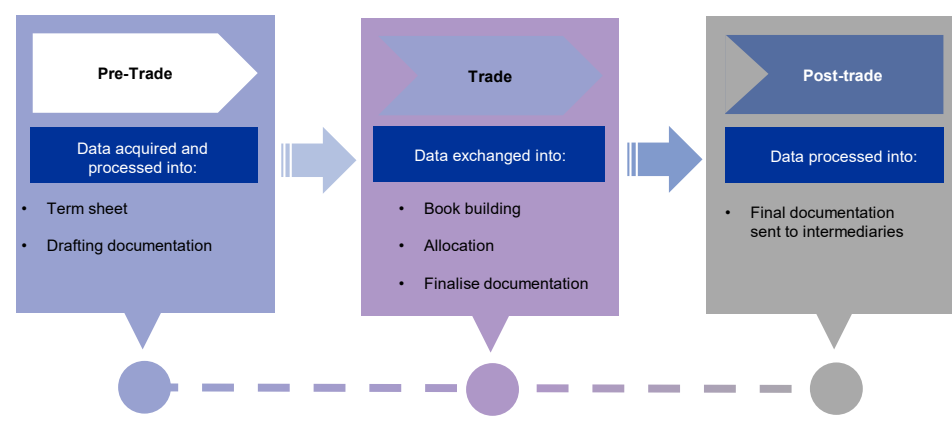
It is important to highlight that the economic content and scope of the data exchanged between stakeholders in a typical debt issuance transaction is fairly uniform and common, yet the way these data are represented, labelled and transmitted seems to diverge strongly, which is primarily due to a lack of common data languages. Recognising that there is room for improvement in the way data are exchanged and processed, third-party service providers have launched a large

³⁰ "Anti-money laundering and countering the financing of terrorism legislative package", European Commission, 2021.

number of initiatives that target various aspects of the primary market value chain (ranging from deal announcement to book building and documentation management; see the section on Pillar 3 of the DIMCG’s work). These initiatives can help overcome the problems, but it is unlikely that full interoperability between stakeholders’ systems can be achieved without the implementation of common, widely adopted and open data dictionaries and messaging protocols³¹. Debt issuance seems to be one of the few remaining segments of financial services in which such globally accepted data standards have not been developed or adopted.

According to the preliminary analysis by the DIMCG, there are three areas in which the efficient management of data is particularly important in the issuance process:

1. the processing and exchange of data on term sheets/final terms;
2. the generation and exchange of data in the book building and allocation process;
3. the processing and finalisation of standard issuance documents.



All the processes or procedures under each of the three areas are covered in dedicated subsections of Section 3.3 in this report. However, a common consideration regarding data exchange in all three areas is that there is a lack of standard representation of data and a high number of media breaks. This, together with the proliferation of platforms/systems that offer digital services, warrants the call for a joint effort on the part of the industry to harmonise data representation and exchange. Given that debt issuance does not exist in isolation from other financial services, such harmonisation work should build on the existing and widely used data dictionaries and messaging protocols in financial markets (such as ISO 20022 and FIX).

³¹ An open data dictionary can be defined as a collection of names, definitions and attributes for data elements and models that can be freely used and republished without restrictions from copyright, patents or other mechanisms of control. Messaging protocols are the rules, formats and functions defined for exchanging messages between systems.

The DIMCG invites the industry (with input from the relevant trade associations) to consider defining common data dictionaries and messaging standards that could be used in the issuance process. These data dictionaries and messaging standards could cover at least the structured data exchanged on term sheets, both in the book building process and in the processing of standard issuance documents. The data dictionaries and messaging standards should also build to the greatest extent possible on similar standards already used in other financial market segments, notably post-trade securities services (e.g. ISO 20022).

3.3.3 Book building and allocation (syndication)

In syndicated debt issuance transactions, the book building and allocation processes involve the structured collection of investor orders (following price guidance communicated to investors) within a limited time window and the subsequent decision by the issuer and the managers on how to allocate the issued amount among the investor orders in the final order book if a transaction is oversubscribed, on the understanding that there is no set or “correct” way to allocate a book.

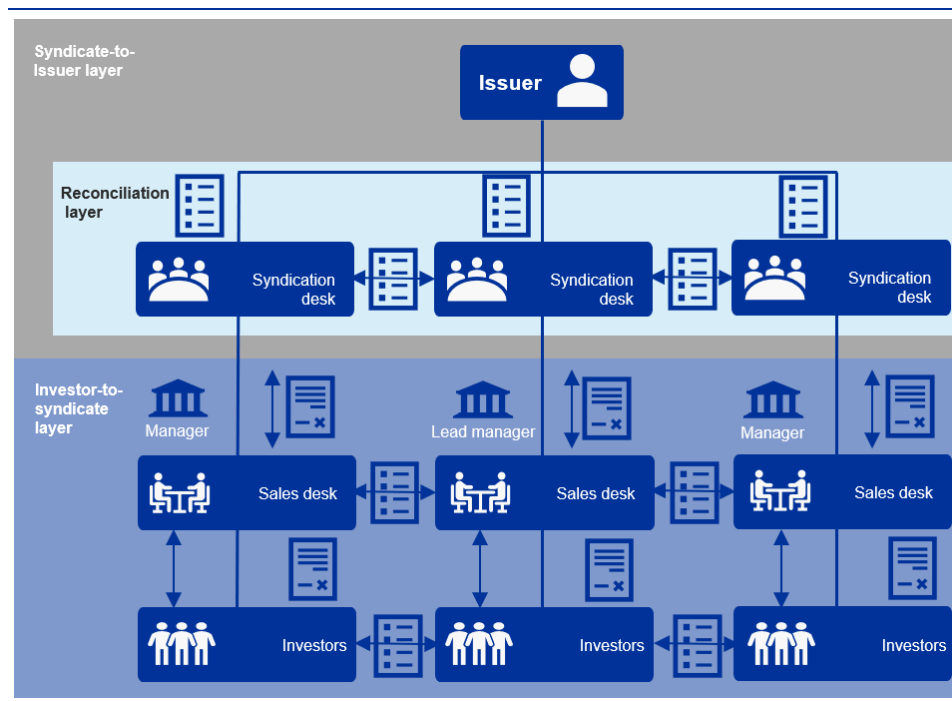
Communication between investors and issuers passes via the syndicate in three “layers”:

1. **the investor-to-syndicate layer**, where investors submit their orders via the sales desks of the syndicate members;
2. **the syndicate-to-book-reconciliation layer**, where the syndicate desks receive the orders from the sales desks and maintain the order book to manage, update and reconcile the orders;³²
3. **the syndicate-to-issuer layer**, where the lead manager (or co-lead managers) shares (or share) the consolidated order book with the issuer.

³² Reconciliation is necessary, as the same investor order may be submitted via several syndicate members in parallel.

Figure 4

Layers of communication between investors and issuers in the book building and allocation steps of a syndicated transaction



Book building and allocation imply and require the fast exchange of structured data between investors, managers and issuers and are most commonly a target for digitalisation by third-party platforms³³. Consequently, this area has seen the most progress in terms of moving from analogue procedures towards full digitalisation in recent years. The consolidation has been most pronounced in the syndicate-to-book-reconciliation layer, where just a few platforms cover nearly all major banks. Achieving full digitalisation in the investor-to-syndicate layer is more challenging, not least because of the significantly higher number of stakeholders (with several hundred investors typically submitting orders in a high-quality, liquid transaction denominated in euro). Recently, however, third-party platforms have also been launched in this layer and seem to be quickly gaining traction. The gradual move to digital forms of communication over the last 20 years in general and the third-party services providing common or consolidated platforms in particular have significantly increased the efficiency and reduced the costs of the book building and allocation process. However, the current landscape is still characterised by barriers and challenges preventing full integration and an even higher level of efficiency. Two areas were detected by the DIMCG in which harmonisation could help in overcoming these barriers.

³³ A third-party platform can be defined as a platform, add-on, service, application or product not provided by the incumbent stakeholders of the debt market.

1. **Harmonisation of data exchange³⁴ building on common and open standards:** If the industry were uniformly using a single transaction platform for book building and allocation,³⁵ then by definition data exchange and the related barriers would not be an issue, as all communication would take place via that platform. However, this is not the case. First, although there are clearly dominant platforms in the marketplace, multiple platforms still exist, and stakeholders continue to rely on their own proprietary systems. Second, while the users of third-party platforms can rely on these platforms to communicate with other stakeholders of the issuance process, most users continue to operate their own in-house, proprietary systems, which need to be linked to the common platforms (with the platforms essentially used as “pipes” between stakeholders’ own systems).

These considerations point to the need for open data exchange standards (a common data dictionary and messaging protocols), which the industry could create by building on the existing open global data standards for financial services (for further details, see the subsection 3.3.2 on data harmonisation). Calls and initiatives for a common data dictionary have also recently been proposed by some of the leading platform providers.

Regarding allocation, it is worth noting that there are a wide range of factors (such as the quality of an order, its underlying mandate, the individual issuer’s particular relationship with a specific investor and the recent behaviour of a specific investor in the primary and secondary market) that influence a dealer’s allocation recommendation and an issuer’s allocation decision. These factors place a natural limit on the potential for automating the allocation process.

2. **Harmonisation of investor identification:** The biggest obstacle in the processes of order book reconciliation and allocation at present is the identification of investors. The lack of a common scheme to identify investors and a common taxonomy to classify them poses a key challenge for deal managers and issuers and slows down the allocation process considerably (for further details, see subsection 3.3.5 on investor identification).

3.3.4 Term sheets and market conventions (auction and syndication)

There are currently no fundamental differences with regard to the financial terms – i.e. the terms defining the contractual cash flow of the bond in question – used in the term sheets or final terms of a typical plain vanilla debt issuance transaction

³⁴ In the syndicate-to-issuer layer, many efforts have been carried out in recent years to achieve a higher level of efficiency in data exchange. These efforts are likely to continue in the coming years.

³⁵ Any common transaction platform would need to ensure that investors’ data in a (primary) market transaction were not shared with external parties in relation to that specific trade (including other investors participating in the same trade).

denominated in euro.³⁶ Despite this, many issuers and deal managers use their own proprietary templates and data labels to create term sheets. This use of proprietary templates explains why term sheets vary significantly within the same debt issuance markets and among different ones, especially when it comes to the naming and order of each data element.³⁷ Despite the significant economic convergence of the substantive elements of term sheets, the industry has yet to adopt a common dictionary or taxonomy regarding the data elements that are normally presented.

In the opinion of the DIMCG, harmonising term sheets would help minimise the degree of manual intervention and consequently lower the risk of operational errors, as well as reducing the time spent on validations and cross-checks. In addition, automation would facilitate the smooth integration of the technical data of a commercial term sheet with the final terms and allow the data to travel seamlessly through the value chain.

The DIMCG differentiated between two threads of work in this area.

1. **Establishment of a common taxonomy and term sheet template, i.e. data elements, allowed values and their presentation:** This workstream involved identifying the most commonly used and necessary data elements in a term sheet of a plain vanilla debt issuance transaction in euro and examined the prospects of using a common taxonomy (i.e. data labels) and a common set of permitted attributes for some of the data elements. Based on this discussion, most DIMCG participants agreed that there appears to be no economic or legal justification for the existing differences in term sheet templates and that a common template (with permissible flexibility to allow for more complex or unique transactions) would benefit all stakeholders in the long run.
2. **Use of market conventions:** The other workstream focused on the use of market conventions in term sheets of plain vanilla debt issuance transactions in euro. These include the day-count convention, the business day convention, the calendar convention and the rounding convention. Although these market conventions are themselves already an agreed set of rules or processes (i.e. standards), the issue with their current use is that – despite a gradual convergence over the last two decades – there seem to be too many options that are still used within each convention without any apparent economic or legal justification. The fewer the options implemented, the lower the degree of complexity and the easier it would be for stakeholders to process and automate transactions, not only in the trading phase but also in the post-trading phase. In addition to the number of different conventions that still exist in parallel, another

³⁶ Bond contracts diverge substantially among issuers, and to some extent even for the same issuer's different bond series, in terms of credit enhancement (e.g. state guarantees provided for certain bond series), "green bond" terms, collective action clauses and fallback language, etc. The legal standardisation of these features would be a precondition for the harmonisation of this information. Such a harmonisation of bond contracts is beyond the scope of the DIMCG, and hence also of this report.

³⁷ It is important to note that in some cases, even the same issuer uses more than one standard term sheet. It was argued by the DIMCG participants that when an issuer issues a bond in a foreign currency, it needs to comply with the rulebook and requirements of that foreign currency, leading to adjustments to the standard term sheet used when issuing in euro. In this regard, harmonisation would need to go beyond the European context to achieve full efficiency.

issue identified was the differing definitions of the same conventions across stakeholders (especially regarding the day-count conventions for calculating interest). In most cases, the DIMCG was able to identify the most prevalent or the most popular conventions used by stakeholders (i.e. calendar: T2S calendar; day-count: six most used day-count conventions; rounding: CAJWG³⁸ rounding rules; business day: set of conventions allowed under the SCoRE standards), for which further convergence should be encouraged in order to limit diverging practices.

In addition, the DIMCG noted that in the area of term sheet standardisation, the use of open data standards could also be a possible way forward (see subsection 3.3.2 on data exchange and data models).

The DIMCG recommends that issuers of debt instruments in euro converge further on the use of the options offered by each of the most widespread market conventions and that they move away from the use of legacy conventions (such as national calendars for business days in euro operations). Legacy conventions should not be used unless there are genuine economic or legal reasons for doing so.

3.3.5 Investor identification and classification (auction and syndication)

Currently, there is no common approach to identifying an investor in debt issuance transactions, with many issuers and deal managers inserting orders in their books by using the investor name in free text format or using their own proprietary investor identifiers. This creates an issue in the book building and allocation processes, as well as in post-trade processing.

If an investor expresses their orders through various syndicate members, it is difficult to obtain a consolidated view of all the orders from that same investor. In addition, different classifications attributed to a given investor among issuers or deal managers can further limit the efficiency of the allocation process. Settlement reconciliation can also be affected if proprietary identifiers (which are different for each syndicate member) are used.

The DIMCG noted that the harmonisation of investor identification could make allocation more efficient by increasing the speed and accuracy of the process without adding more complexity to it. In addition, an unambiguous method of identifying an investor would have positive knock-on effects for KYC procedures and lead to a smoother integration of pre-trade and trade processes with post-trade processing.

The DIMCG also acknowledged that harmonisation in this area could provide a better tool for managing investor records in issuer databases, allowing statistical production and/or enhanced, non-complex analysis over time and across trades.

³⁸ The Corporate Actions Joint Working Group (CAJWG) was established in 2007 with the objective of developing a comprehensive set of market standards for the operational processing of all categories of corporate actions.

The DIMCG broadly agreed that the LEI would be the best starting point for investor identification, as it is based on a standard and offers a harmonised and structured way to identify an entity. The LEI is also gaining ground quickly and covers an increasing number of entities, with EU regulation requiring the mandatory use of the identifier to the greatest extent possible. Based on the DIMCG's fact-finding exercise, the vast majority (over 90%) of investors in a typical plain vanilla liquid transaction in Europe have LEIs.³⁹

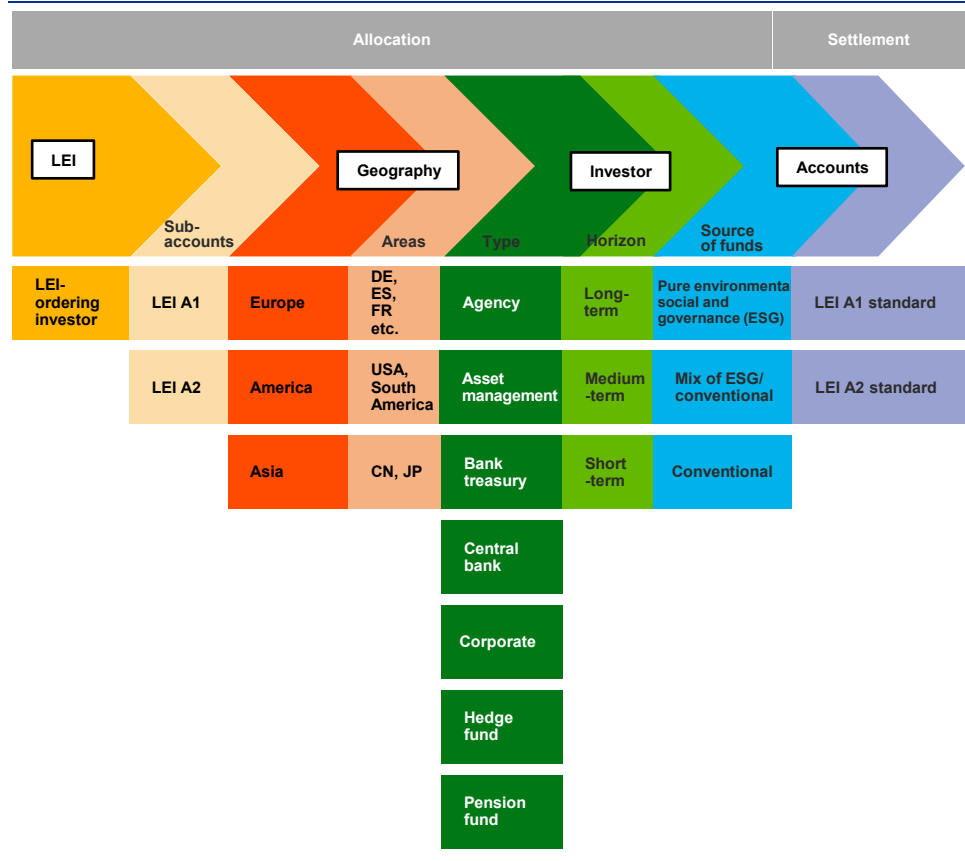
Based on the above, there is broad consensus among DIMCG participants that a harmonised investor identification scheme should build on the LEI. However, most DIMCG participants agreed that the LEI alone is not enough to provide all investor attributes that issuers and deal managers need in an issuance transaction.

The DIMCG recognised that the optional adoption of an identification scheme could be considered where, below the LEI level, other required investor attributes such as the source of buying interest, the classification of the investor or the country where the investor belongs could be recorded (based on a set of predefined values). This information could be retrieved from the LEI reference data where available or provided by investors themselves, verified by bank deal managers and confirmed by issuers. Apart from the objective investor identifier elements (LEI, geographical location, investor type, etc.), the remaining data elements could be filled with content based on issuers' or managers' own assessment (such as the investment horizon or source of funds). An investor identification scheme of this kind would therefore not require all issuers to judge a particular investor in the same way. However, a standard set of attributes for these data elements would make it easier to process investor orders and would help achieve a more efficient allocation process.

³⁹ The LEI needs to be annually renewed (otherwise it expires even if the assigned ID is retained), and it is not available for natural persons, which might be a drawback for CSDs that have segregated investor accounts. Nevertheless, natural persons have little or no significance in order books for plain vanilla bonds. It is also worth noting that, in the context of ISO/TC 68 (financial services), a standard for the identification of natural persons is currently being investigated, namely the natural person identifier (NPI).

Figure 5

Illustration of potential data elements that could form part of a common investor identification scheme



The DIMCG invites issuers, agents, deal managers and investors (buy-side representatives) to elaborate and agree on a common and open scheme building on the LEI to identify investors in primary market transactions.

3.3.6 Settlement cycle of syndicated issuance transactions (syndication)

From the launch date (i.e. the day when the order book closes and the allocation is completed) to the closing date (i.e. the day of settlement), the settlement of syndicated issuances normally takes five business days (T+5 settlement). During this period, all relevant documentation is generally agreed upon and signed by the parties involved, the listing with a trading venue and the application for ECB eligibility (where relevant) are arranged, and preparations for settlement are carried out (collection and verification of settlement details).

The DIMCG discussed the potential advantages and drawbacks of a shorter settlement cycle for syndicated transactions.⁴⁰ As regards benefits, some DIMCG

⁴⁰ It should be noted that for auctions in Europe, T+2 settlement is used in the overwhelming majority of cases.

participants mentioned that finalising a deal within a shorter period (i) limits grey market activity⁴¹; (ii) may help achieve better hedging coverage; (iii) lowers settlement risk between dealers and investors⁴²; and (iv) can facilitate issuers' cash or liquidity management, as the time between going to market and receiving the funds is shorter.

At the same time, other DIMCG participants pointed out that very few complaints are raised by investors and issuers regarding the current settlement cycle, and having a shorter settlement cycle (i) could increase the operational risk of not finalising all relevant documentation on time and (ii) would deviate from the T+5 market practice followed in other regions such as the United States.

Despite the differing views regarding the benefits and drawbacks of a potentially shorter settlement cycle, there was broad consensus among DIMCG participants that rather than being an objective in itself, a potential shortening of the settlement cycle for syndicated transactions could organically follow from streamlining or harmonising some of the steps in the issuance process, such as (i) the implementation of a scheme to accurately identify an investor more quickly, (ii) open data standards allowing data to flow smoothly from term sheets to machine-readable and digital documents and (iii) interoperability among data models.

3.3.7 Documentation and global notes (auction and syndication)

Most DIMCG participants agree that preparing, managing and finalising debt issuance documentation, including extracting and reusing data from existing documents, is a key bottleneck and a barrier to speeding up and digitising the issuance process. In addition, the scale of document management varies significantly between frequent and non-frequent issuers.

The table below depicts the documents required in the debt issuance process and the respective stakeholders involved in each step.

⁴¹ The grey market enables issuers and underwriters to assess the demand for a new offering, as it allows the trading of securities that will be offered in the very near future (i.e. on a "when issued" basis).

⁴² Settlement risk is the risk that some investors will not accept bonds in return for cash due to an unexpected and material adverse change in the issuer's situation or the occurrence of a risk event such as an embargo decision. Settlement risks may also occur between issuers and dealers.

Table 1**Documents and stakeholders involved in the debt issuance process**

Document / activity name	Description	Debt issuance stakeholders involved
Initial syndicate communication	Communication of the basic terms of an issue to the prospective managers	<ul style="list-style-type: none"> • Issuer • (Prospective) lead manager and remaining managers
(Base) prospectus / offering circular / information memorandum	Finalised base document of disclosure to the public on the offering of securities (by the issuer)	<ul style="list-style-type: none"> • Issuer • Lead manager and managers • (I)CSD • (Prospective) investors
ISIN / common code allocation request	Official request from the issuer agent or lead manager to the numbering agency (often the issuer CSD, depending on the market) to allocate an ISIN (arranged by the issuer agent)	<ul style="list-style-type: none"> • Issuer • Issuer agent • Lead manager • National numbering agency (NNA)
Listing request	Official request to trading venue/stock exchange to list the issue (arranged by the issuer agent, lead manager or listing agent)	<ul style="list-style-type: none"> • Issuer • Issuer agent • Lead manager and managers • Listing agent • Stock exchange
Dealer / subscription agreement	Signing of the final agreement between the issuer and managers that sets out the terms and conditions upon which the managers agree to subscribe the securities	<ul style="list-style-type: none"> • Issuer • Lead manager and managers
Final terms / pricing supplement	Document that, together with the offer document, sets out the terms and conditions of the issue. Used to set the commercial terms, which include the actual pricing of the transaction	<ul style="list-style-type: none"> • Issuer • Issuer agent • Lead manager and managers • (I)CSD • Stock exchange • Investors
Confirmation to managers	Communication sent by the lead manager to the co-managers confirming their participation	<ul style="list-style-type: none"> • Lead manager and managers
ECB eligibility (if applicable)	Request for ECB eligibility / provision of documents to national central bank of place of listing to assess eligibility for Eurosystem collateral and/or asset purchase programme purposes	<ul style="list-style-type: none"> • Issuer • Lead manager
Agreement among managers	Signing of the final agreement among managers which defines the amount each manager agrees to subscribe and the distribution of commissions	<ul style="list-style-type: none"> • Lead manager and managers
Agency agreement / trust deed	Signing of the final agreement between the issuer and its agent (can be a trustee via trust deed or fiscal agent via fiscal agency agreement; not needed for issuances under an existing programme)	<ul style="list-style-type: none"> • Issuer • Issuer agent • Trustee
Conditions precedent	Package that includes the comfort letter, legal opinion and certificate. Documentation prepared by the issuer's auditors and legal counsels to be provided to the dealers	<ul style="list-style-type: none"> • Issuer • Issuer agent
Issuer-issuer CSD agreement	Signing of the agreement between the issuer and the issuer (I)CSD (generally arranged by issuer agent; not needed for issuances under existing programmes)	<ul style="list-style-type: none"> • Issuer • Issuer agent • (I)CSD
Global note / certificate	Finalisation, authentication and delivery of the global note (where relevant) to the issuer CSD or common depository/safekeeper (usually arranged by issuer agent)	<ul style="list-style-type: none"> • Issuer • Issuer agent • (I)CSD • Common depository/common safekeeper

As the above table shows, debt issuance consists of a sequence of steps involving multiple intermediaries and contributors between the issuer and the investor, each of which is required to repeatedly convey information back and forth in order to draft and execute the documents necessary to ensure full legal validity of the transaction. Much of this exchange and processing relies on manual procedures. The processes that occur after the drafting of relevant documentation, such as clearing and record-keeping, are also manual and time-consuming, with parties having to manually review documents to extract the information they need to input into their systems. In addition, the existing exchange mechanism relies on sending emails with PDF attachments.

The DIMCG looked into three areas in which harmonisation could reduce the current hurdles, namely (i) common templates, (ii) machine-readability and (iii) fully digital processing and authentication.

Regarding document templates, the DIMCG noted that these could make the creation, storage and exchange of legal documents more efficient and easier to digitise. For a number of document types that are necessary for a typical syndicated transaction, common templates have already been created by various industry associations (ICMA, ICMSA, ISMAG) as well as law firms. However, standard industry templates of this kind are not widely used outside the international market⁴³, as most issuers and managers still use their own proprietary formats. This is despite the fact that in terms of economic and legal content – at least across plain vanilla transactions – there is often no difference between high-quality euro-denominated debt instruments of major issuers. The use and – where still necessary – creation of standard document templates should be promoted across stakeholders to enhance the efficiency of the issuance process.

The DIMCG also acknowledged that the objective of machine-readability is to seamlessly integrate the preparation and processing of documents in the issuance dataflow. Common templates with a single taxonomy, naming conventions and standard versioning, combined with a codable (mark-up) language that can be read by both human and machines, would be necessary to facilitate the widespread machine-readability of issuance documentation.⁴⁴

Achieving the highest level of digitalisation would mean establishing a fully digital processing and authentication procedure for issuance documents. This would involve rendering documents in a fully codable (mark-up) language, as well as using digital authentication methods (e-signatures, e-stamps). Only common and mutually accepted electronic authentication has the potential to fully eliminate paper processing. In this respect, sustained efforts have been made to establish cross-border interoperability between national e-signature and authentication schemes. Recently, the European Commission put forward a proposal for a common European framework of electronic identity (including e-stamping), which – if agreed and

⁴³ The international bond market, commonly known as the Eurobond market, is the market in which securities denominated in any currency are issued. It is typically separate from the market in which the issuer resides, and issues are executed by ICSDs (Clearstream and Euroclear).

⁴⁴ Some initiatives have already been launched, with a focus on General-purpose Legal Mark-up Language (GLML).

implemented by EU Member States – could serve as a potential solution within the EU.⁴⁵

The DIMCG is aware of the emergence of new technologies and fintech providers addressing this need to process documents in a more efficient and digital manner. Nevertheless, these new technologies could in fact increase fragmentation, as not all stakeholders are using them. Having open standards commonly accepted by the industry is crucial to avoid further fragmentation (see Section 4 of this report on Pillar 3). The DIMCG is also aware that the European Commission has adopted a proposal to review the eIDAS Regulation with the aim of facilitating the creation of such schemes.

A particular aspect of the handling of global notes in the international market that was highlighted as an issue by several DIMCG participants was the need for wet ink signatures and physical depositing during the lockdowns and restrictions resulting from the COVID-19 pandemic.

The DIMCG discussed the underlying reasons for the use of physical global notes and concluded that it is primarily related to legal requirements, as in certain jurisdictions full dematerialisation is not permitted.⁴⁶ From an international perspective, using this form of security is often considered the most robust way of avoiding a potential conflict of laws.⁴⁷

The DIMCG recognised that physical global notes are likely to continue being used for the above reasons until a more widespread recognition of electronic authentication methods and/or of fully dematerialised issuances is achieved in the governing laws and jurisdictions relevant for the issuance of debt securities in Europe. Nevertheless, the DIMCG noted that a standard for a digitally signed electronic global note could be a first step in this process.⁴⁸ However, even for this first step to succeed, cross-border interoperability between national e-signature and authentication schemes is necessary, as is the recognition of such e-signatures in each jurisdiction so as to eliminate potential legal risks.⁴⁹

The DIMCG invites the industry (with input from the relevant trade associations) to continue its work on common issuance document templates and promote the machine-readability of such templates with the vision of achieving the fully digital processing and authentication of issuance documents.

⁴⁵ See the European Commission's [proposed regulation](#).

⁴⁶ A [recent survey](#) performed by the Harmonisation Steering Group of the AMI-SeCo among its national stakeholder groups indicates that in at least seven EU Member States, physical global or definitive notes are still actively used when issuing securities. However, only four jurisdictions reported that issuing a security in fully dematerialised form is prevented or made cumbersome by local regulation.

⁴⁷ Importantly, one of the findings of the survey conducted by the Harmonisation Steering Group of the AMI-SeCo was that “global note form is used even in jurisdictions which allow full dematerialisation in case there is a risk of conflict of laws stemming from the laws of the country (of residence) of the foreign issuer or the foreign laws under which the securities are issued”.

⁴⁸ ICMSA and ICSDs are currently analysing potential initiatives to make the handling of global notes more efficient. These include a potential phased approach that requires market support and focuses on (i) electronic/digital signatures, (ii) electronic storage and (iii) dematerialisation.

⁴⁹ It is worth noting that the eIDAS Regulation (Articles 25-34) provides a legal framework at European level for electronic signatures and certification services. As such, qualified e-signatures that are notified under eIDAS are recognised across the EU27 and are interoperable.

The DIMCG invites Member States to allow and facilitate – where necessary – the issuance of debt instruments in fully dematerialised (electronic) form and to work towards removing conflicts of laws with regard to the recognition of the rights and obligations attached to such securities.

3.3.8 ISIN allocation (auction and syndication)

Some respondents to the DIMCG Pillar 1 survey and the 2019 ECB public consultation highlighted that the process of allocating an International Securities Identification Number (ISIN) can be one of the hurdles preventing the faster and more efficient closing of issuance transactions.

The aim of assigning an ISIN to a security is to ensure the unique identification of the financial and referential instrument. ISIN codes are issued by national numbering agencies (NNAs) in accordance with the ISO 6166 standard, for which the Association of National Numbering Agencies (ANNA) acts as the registration authority. For debt instruments, the first two characters of an ISIN normally only represent the country code of the CSD where the securities are issued, albeit with some exceptions.

In issuance transactions under a programme, ISINs are normally requested by the issuer (or its agent), whereas for standalone bonds the lead manager will arrange for the ISIN to be obtained. The request is usually made immediately after or very close to the launch decision.

During their discussions, the DIMCG participants highlighted the following challenges associated with the technical process of ISIN allocation.

1. **Manual process:** The process requires manual interactions and is mostly not automated. This is primarily due to the manual propagation of key issuance documents (term sheets, prospectuses, etc.) that need to be submitted to the NNA assigning the ISIN. It is important to highlight that certain fintech providers have recently targeted this area by developing solutions that offer automated and more efficient management of issuance documents and data. By cooperating with certain NNAs, these innovative providers can facilitate very fast and automated ISIN allocation for those NNAs.
2. **Different practices applied by NNAs:** The documents required by NNAs, due diligence and validation checks, deadlines and processing times are not harmonised across Europe and are heavily influenced by local regulatory requirements and market practices.
3. **Point in time at which ISINs are assigned in the issuance process:** There appears to be a trade-off here between the need on the part of NNAs to conduct due diligence-related activities and the need on the part of issuers to identify transactions by ISINs as early as possible in the issuance process.

4. **Pre-reservation versus allocation versus dissemination:** Most NNAs offer the option of pre-reserving ISINs, which speeds up allocation for frequent issuers and issuers using programmes. However, pre-reservation is not equivalent to (the final) ISIN allocation. Dissemination by issuers and issuer agents to other stakeholders in the issuance process can also be slow, with the current dissemination process relying heavily on exchanging emails.

To help address the challenges mentioned above, harmonisation in ISIN allocation could be achieved by recommending best practices to European NNAs involved in the ISIN allocation process, such as:

1. a common set of documents and data elements that are required for ISIN allocation, possibly including the recommendation to allocate ISINs based on draft/preliminary documentation;
2. a common set of principles governing when an ISIN can or should be requested and allocated during the issuance process;
3. a recommended timeline for processing ISIN requests;
4. concrete safeguards in case an ISIN is allocated to a transaction which does not result in the issuance or creation of a valid security or in case an ISIN is requested on the basis of draft documents;
5. a recommendation to make pre-reserved ISINs or ranges of ISINs available to frequent issuers.

As the current NNA structure in Europe reflects the notion of separate national markets and jurisdictions, and in the light of a recent example involving the creation of a global numbering agency for over-the-counter derivatives (the Derivatives Service Bureau, ANNA-DSB), in which a numbering split by jurisdiction was not necessarily needed, some DIMCG participants expressed positive views regarding a long-term move towards a common (optional) numbering scheme in Europe, potentially with a single European numbering agency, agreeing that this could be another way to achieve harmonisation in the ISIN allocation process. However, other DIMCG participants highlighted certain risks and drawbacks inherent in the initiative, namely that (i) it is not clear what value it would bring in the technical process of ISIN allocation if it only covered Europe, (ii) it might potentially increase fragmentation over the short term by introducing yet another numbering regime and (iii) it would not necessarily resolve all outstanding issues (harmonisation across NNAs may still be needed).

The DIMCG invites ANNA to carry out a survey among NNAs (in Europe or around the globe) to identify potential areas of harmonisation in the technical process of ISIN allocation and, on this basis, to consider putting forward recommendations or best practices to its members with regard to the process of ISIN allocation.

3.3.9 A potential common label for pan-European euro-denominated debt (auction and syndication)

The current debt issuance and distribution landscape in Europe is fragmented. This fragmentation exists on the one hand in each EU jurisdiction (as procedures and market practices are applied differently by issuer agents, stock exchanges and CSDs) and on the other hand at the level of issuance ecosystems, which are segmented between national markets and the international market, particularly for issuers wishing to reach out to an international investor base. These ecosystems work well and serve their primary purpose, which is to match investors' savings with issuers' capital raising requirements. Issuers, investors and intermediaries know how to navigate these ecosystems and can choose which one to use depending on which investors or issuers they want access to. Nevertheless, from the perspective of a European single market (and a fully integrated CMU), this represents a lack of integration.⁵⁰ Although such fragmentation cannot be overcome by harmonisation alone, creating standards can make it easier and more efficient for stakeholders to navigate these ecosystems.

Against this background, the DIMCG discussed the concept of a potential common label for pan-European euro-denominated debt⁵¹ issuance that could help stakeholders to navigate the different debt issuance ecosystems in Europe. Such a label could consist of a standard "package" of different harmonisation elements that could be used by issuers on an optional basis when issuing plain vanilla euro-denominated debt within a pan-European context. The creation of such a label would not require the market practices of existing ecosystems to be overridden or changed, but it could provide a common core around which the market practices of such ecosystems could organically converge on a voluntary basis over time. The label could build on the existing market standards and on additional ones to be created in the areas of harmonisation highlighted in this report and elsewhere. To provide an example, it could consist of the following elements (these are provided only as an illustration and are not intended as binding proposals by the DIMCG).

In the economic/legal terms domain:

- a common term sheet template (representation, field names, permitted values);
- a single calendar, business day, day-count and rounding convention;
- a single reference rate/rate calculation (for floating rate instruments);
- common document templates (to the extent allowed by legal/regulatory differences between jurisdictions).

⁵⁰ Several initiatives have been launched to address this fragmentation, such as the Prospectus Regulation, which aims to harmonise the information contained in the prospectus to be published when securities are offered to the public or admitted to trading on a regulated market.

⁵¹ Pan-European euro-denominated debt means plain vanilla bonds issued in euro by a public institution with a European perspective, as envisaged by the DIMCG case study.

In the issuance process domain applied to both syndications and auctions (where applicable):

- a single investor identification scheme and single KYC procedure (principles);
- a single data model/library for term sheet and/or book building data and messaging;
- common principles/rules for book building and allocation (e.g. transparency of ex post deal data).

In the post-trade domain:

- a common settlement cycle (already standard);
- the adoption/adaptation of investor identification standards created by the industry pursuant to the Shareholder Rights Directive II (SRD II)⁵²;
- the use of a European corporate actions rulebook (issuers' and intermediaries' adherence to SCoRE, CAJWG and T2S corporate actions standards);
- common rules/arrangements to prevent and resolve conflict of law issues.

Such a label should be agnostic to infrastructures (such as issuer CSD, place of listing and book building platforms). The label could only be created by the industry with the close cooperation of stakeholders, potentially including public entities, and would require appropriate and inclusive governance of its own.

The views of DIMCG participants differ with regard to the potential value of such a label in fostering the further integration of European euro-denominated debt markets. Among the potential benefits, it was highlighted that such a label could help increase the transparency of a pan-European debt market by providing investors with a better understanding of what they receive in terms of technical features and thereby requiring them to spend fewer resources on discovering the idiosyncratic features of transactions. As was observed by some DIMCG participants, investors might currently rely on the first two characters of ISIN codes⁵³ to determine the relevant and important features of a debt instrument (for instance, the issuance governing law, the place of listing or the asset type), which is not the intended purpose of the ISIN prefix. A common European label could be used for any ISIN prefix, and some DIMCG participants believe that common rules could be applied to the allocation of the two-character ISIN prefix (which could potentially be assigned in the long term via a common optional European numbering scheme as mentioned in the previous section). This two-character ISIN prefix could be allocated in any European

⁵² [Directive \(EU\) 2017/828 of the European Parliament and of the Council of 17 May 2017 amending Directive 2007/36/EC as regards the encouragement of long-term shareholder engagement \(OJ L 132, 20.5.2017, p. 1\).](#)

⁵³ Regarding debt instruments, as mentioned in the previous section, the first two characters of an ISIN assigned by the responsible national numbering agency typically only represent the country code of the issuer CSD that issued the ISIN and nothing else. In other words, the ISIN "country code" does not imply or guarantee any information regarding place or law of issuance, listing or asset type. There are certain relevant exceptions to this rule, such as ISINs with an XS prefix (which are issued via an ICSD) or with an EU prefix (which are issued either as a financial or referential instrument or by the European Stability Mechanism).

jurisdiction irrespective of the place of deposit, which would help avoid any misconceptions about the ISIN prefix and could thereby further support the benefits of competition and a level playing field (which are intrinsically linked to the benefits of having harmonised business processes and requirements) from a European perspective. As a result, such a label could indirectly contribute to the European Commission's initiatives regarding the CMU and the international role of the euro. Other DIMCG participants do not share this view, highlighting the risks of fragmentation that having another numbering regime might entail.

Among the drawbacks and challenges identified by some DIMCG participants, it was noted that such a label may contribute to the existing fragmentation in Europe by creating yet another market segment, i.e. that of the EU debt benchmark. It was added that such a label alone would not eliminate the existing fragmentation at the level of infrastructures and that it would be relevant primarily to pan-European euro-denominated debt. In itself, it would not eliminate some of the existing sources of fragmentation such as different tax regimes and national securities or corporate laws. Some DIMCG members also highlighted the development and implementation costs that such a label could imply and the potential externalities on those issuers that could not secure or use the label.

Overall, a large number of DIMCG participants expressed interest in further exploring the concept of a common label for pan-European euro-denominated debt as a follow-up to the DIMCG's current work.

3.4 Technological innovation and harmonisation of debt issuance

The rapid technological innovation of recent years has given rise to new technologies that have the potential not only to make processes more efficient and overcome existing barriers to electronic and digital procedures but also to change the architecture of the ecosystems in which debt instruments are issued. The best-known among these is distributed ledger technology (DLT), in which modern cryptographic algorithms are used to enable the fully decentralised and synchronised keeping of transaction records (ledgers).

The adoption of DLT in debt issuance is still in an experimental phase, with a high number of market participants (such as issuers and deal managers) around the globe launching pilot transactions using DLT and blockchain to complement or replace traditional infrastructures (auction/book building platforms, CSDs, etc.). In their purest form, such experiments create debt instruments which only exist on a DLT ledger and require all stakeholders, in particular investors, to use such DLT solutions if they want to access and invest in such debt instruments. These experiments are live transactions but tend to be limited in terms of size and scope, hence serving more as pilots for participants to understand the implications. Another important factor is that these experiments differ vastly from one another in terms of their parameters. In addition, there are ongoing developments regarding the changing regulatory landscape, which is being made more accommodating to the

adoption of such new technologies and DLT in particular.⁵⁴ However, DLT applications have not yet found their way into the mainstream and have not yet replaced the traditional ecosystems that are used for debt issuance.

This is relevant from a harmonisation perspective in that one of the factors potentially blocking the mainstream adoption of such technologies is the lack of common market practices and standards, as pointed out by most publications covering research in this area.⁵⁵ This underlines the importance of harmonisation and market standards in promoting innovation. However, there is a delicate balance to be struck between creating standards and facilitating innovation, as market standards (similarly to regulatory requirements) can also hamper innovation and entry if the adoption of innovative technologies is in a nascent stage. Innovation may also give rise to the need to change existing market standards and practices and may even make some of these obsolete.

Therefore, monitoring of the adoption of technological innovation should be a key part of harmonising market practices, so that the standards created remain robust and future-proof with regard to new technologies.

3.5 Governance of harmonisation work on debt issuance

3.5.1 General considerations on the governance of future harmonisation work

Work on harmonisation can only be successful if all stakeholders are committed to creating and adapting to the harmonised procedures in question. To establish and maintain such a commitment directly or indirectly, all relevant stakeholders need to be involved in agreements on common standards via an open, transparent and efficient governance framework.

The primary purpose of such governance arrangements is for stakeholders to agree on a clear and predefined conceptual framework or methodology for determining the scope, modalities, deadlines and other key parameters of the harmonisation work. Once standards are agreed, there is also a need to monitor compliance by stakeholders and to obtain regular feedback so as to maintain and update standards over time (where necessary).

The following factors need to be considered to ensure that any new governance arrangements created are fit for purpose.

⁵⁴ [Proposal for a Regulation of the European Parliament and of the Council on a pilot regime for market infrastructures based on distributed ledger technology \(COM/2020/594 final\)](#).

⁵⁵ See AMI-SeCo reports on (i) [“The use of DLT in post-trade”](#), April 2021 ; (ii) [“Potential use cases for innovative technologies in securities post-trading”](#), January 2019 and (iii) [“The potential impact of DLTs on securities post-trading harmonisation and on the wider EU financial market integration”](#), September 2017.

1. **Identifying all stakeholders:** Although trade associations have made a significant contribution to the creation of standards and market practices relevant for debt issuance, their work has naturally focused on the services provided by their members, i.e. a particular stakeholder group in the debt issuance value chain. An ambitious harmonisation agenda would necessarily entail bringing together all debt issuance stakeholder groups, including issuers, banks (as deal managers, agents and custodians), investors, third-party service/platform providers, CSDs, trading venues and law firms, whether they are established companies or new entrants. Such an approach would help ensure that ownership over and commitment to standards are not restricted to a particular stakeholder group.
2. **Confirming a common vision and strong “political” commitment:** Setting up governance arrangements requires resources. This is a good test of whether there is a strong commitment at the level of stakeholders’ highest decision-making bodies to embark on harmonisation work. Without such a commitment, harmonisation is likely to result in empty standards that are either too broad to achieve true harmonisation or are not followed or complied with by stakeholders.
3. **Determining the scope of harmonisation:** When setting up governance arrangements, a high-level agreement needs to be in place regarding the scope of the harmonisation activities. This scope can be defined by agreeing on harmonisation needs as a first step (as the DIMCG did when it discussed the potential areas of harmonisation presented in Section 3.3) and defining standards as a second step. Another key consideration with regard to scope is the question of whether the work targets mandatory standards across the industry, i.e. standards requiring all stakeholders to change their practices, or whether it is aimed at creating a new optional standard (to fill an existing gap), with the expectation that stakeholders will organically elect to adopt such a standard.⁵⁶ An example of the latter is the concept of a common label for pan-European issuance (outlined in Section 3.3.9).
4. **Taking into account existing arrangements and standards:** Not all new harmonisation work needs to be performed under new arrangements – existing arrangements (market fora) can also be leveraged. In some cases, existing fora can even obviate the need to create any new arrangements at all. As already mentioned, various industry associations have achieved a lot when it comes to directly or indirectly harmonising market practices relevant to primary markets. Any future governance arrangements should build on the work already done and find ways to leverage existing fora. However, as highlighted above, the involvement of all stakeholders – both established companies and new entrants

⁵⁶ It is often argued that harmonisation standards only make sense if they are mandatory. However, there are numerous practical examples of non-mandatory standards contributing to better integration and more harmonised practices. A prime example is the existence of market conventions for business days and day-count conventions for interest rates, etc. These conventions are not mandatory, yet they have allowed stakeholders to gravitate towards common practices, speak a common language and use common definitions in financial services.

– is key and must be ensured even when relying on existing fora, which may need to be adapted where necessary.

5. **Channelling market expertise and all relevant knowledge:** Elaborating standards at the technical level requires market professionals and practitioner experts to be involved to the greatest extent possible. This is crucial when the resources required for harmonisation consist primarily of the time such experts devote to this work.
6. **Involving public authorities:** Harmonisation in financial services needs to rely primarily on industry input and efforts. The involvement of public authorities (central banks, ministries of finance, regulators and supervisors) adds value only if there is a clear link between the scope of the work and the mandate and activities of the given public authority (such as a link to regulatory initiatives or central bank activities).

3.5.2 Current Eurosystem harmonisation workstreams (in the post-trade field)

The Eurosystem – via its market advisory body, the AMI-SeCo – is actively promoting harmonisation activities in the field of post-trade securities services in two key areas:

1. harmonisation related to T2S, focusing primarily on securities settlement and the post-trade services directly relevant to settlement (T2S harmonisation agenda);
2. harmonisation related to collateral management (SCoRE).

Both activities are linked to Eurosystem (TARGET) services but are broader in scope, as the ambition is to create and maintain standards that are also used in transactions where the Eurosystem is not involved in any capacity. Both of these harmonisation agendas are industry-driven, with the involvement of all stakeholders and with decisions made via the appropriate governance arrangements under the AMI-SeCo's mandate. A further key success factor in these initiatives is that they are associated with infrastructural development projects that affect a broad set of stakeholders. Such projects act as vehicles for ensuring and motivating engagement and compliance by stakeholders.

3.5.3 Potential approaches to establishing the governance framework for future harmonisation work on debt issuance

In the light of the above considerations, there are at least two potential ways to organise the governance of future harmonisation work on debt issuance. In both cases, harmonisation is driven by the industry and market stakeholders.

1. If the involvement of public authorities as sponsors of this work is considered necessary, one option could be to use the Eurosystem's AMI-SeCo, which

currently focuses on post-trade harmonisation and involves the relevant stakeholders in the post-trade domain. An advantage of involving the AMI-SeCo would be the ability to rely on existing governance procedures and a well-established group for future work that would also naturally establish a link to post-trade harmonisation. However, the AMI-SeCo's mandate and composition would need significant changes to onboard stakeholders who are not currently represented in post-trade harmonisation discussions and are therefore not part of the AMI-SeCo's governance. In addition, as noted above, Eurosystem-sponsored harmonisation efforts have in the past been normally associated with related public or private infrastructure initiatives, which had an effect on the way the AMI-SeCo was designed and functions.

2. If more emphasis is to be placed on the continuation and consolidation of the successful work already performed by the relevant industry associations, harmonisation work should continue in the existing fora or potentially in new fora set up by these associations. This would have the advantages of a more organic link to previous industry harmonisation work (i.e. retaining the necessary expertise and potentially involving new stakeholders such as emerging primary market platform providers) and more flexible governance structures.

To facilitate further work in the areas of harmonisation presented in this report, all the stakeholders should be committed to creating and adapting to harmonisation standards. For such efforts to become effective, the DIMCG considers that an open, transparent and efficient governance framework is key. The DIMCG invites all stakeholders to:

- 1. further reflect and provide feedback to the Eurosystem on the areas of highlighted in this report;*
- 2. further consider setting up a governance framework for the future harmonisation work involving – directly or indirectly – all stakeholders of the debt issuance process.*

4 Pillar 3: Existing initiatives

4.1 Introduction

In line with the DIMCG's [terms of reference](#), the aim of this section is to explore how any potential harmonisation, integration or improvement activities could be supported by private, public or joint private and public infrastructure initiatives in the area of debt issuance and initial distribution, relying primarily on industry input and efforts.

Market participants who play a role in the process of debt issuance already benefit from the services and capabilities offered by multiple providers. These services and capabilities are quite diverse in scope, covering various steps of the debt issuance process and targeting different market actors (e.g. issuers and/or investors). One of the DIMCG's areas of focus is to understand how these solutions are connected to the issuance process and how relevant they are in terms of supporting harmonisation, interoperability, efficiency gains, a level playing field and eventually financial integration in the EU.

The [primary markets technology directory](#) published by ICMA is a good starting point for such an analysis, as it offers a comprehensive description of the key features and capabilities of the initiatives currently available on the market.

Rather than conducting a detailed evaluation of these initiatives individually, the DIMCG opted to build an overall picture of existing initiatives and to assess the prospects of an evolution towards the mitigation of existing risks, the reduction of costs for debt issuance and the improvement of identified inefficiencies.

To structure the DIMCG's overall assessment of existing initiatives, the following four dimensions were identified:

1. process integration and interoperability;
2. support for harmonisation;
3. level playing field and open access;
4. European governance.

4.2 High-level analysis of the existing landscape

Driven primarily by technological innovation and the need to further reduce costs and risks in financial market transactions, there is currently a proliferation of competing initiatives to provide issuance-related services to issuers, intermediaries and investors. Most of these initiatives are currently at an early stage of their development. In order to safeguard the financial system and mitigate the risk of disruption, an evolutionary approach is being adopted in the initiatives at present, resulting in small-scale pilot implementations.

This increased number of initiatives illustrates the dynamism in the market, which can be conducive to innovation. However, the situation also increases the risks of fragmentation and of users being locked into proprietary frameworks. This in turn could have a negative impact on harmonisation.

Leveraging on the ICMA technology repository, the DIMCG identified several initiatives being carried out in the issuance segment. The following subsections provide an overview of the assessment conducted by the DIMCG along the four dimensions listed above.

4.2.1 Process integration and interoperability

The issuance of a debt instrument is a complex activity, both in terms of the multiplicity of processes at stake and the number of actors involved. There are two strategies in particular that may be used to improve process efficiency: integration and interoperability.

Integration consists of developing solutions that cover a wider spectrum of tasks and activities relevant within the process of securities issuance. This type of strategy has been proven to deliver tangible benefits in terms of efficiency gains, risk mitigation and cost reduction. At the same time, however, it increases industrial risk, as it requires solution providers to expand their area of expertise and increase their level of investment. It may also result in a longer and more complex delivery path. For these reasons, solution providers often opt for an interoperability strategy, i.e. one that focuses on specific parts of the process, thereby favouring the depth of their products over coverage. For the overall efficiency of the issuance process, it is essential that these solutions targeting specific parts of the process ensure interoperability with other solutions in order to support STP along the value chain.

These two strategies are not mutually exclusive, however. Solutions offering broad process coverage should also ensure a good level of interoperability with other solutions.

The DIMCG also highlighted the presence of a “network effect”, whereby a solution is adopted on the basis of its level of adoption by other users and not necessarily on the basis of its intrinsic value. Fostering interoperability could reduce the need for a network effect and help ensure that solutions are adopted on the basis of the actual value they provide to the user. Interoperability would also act indirectly as a catalyst for increased competition and innovation (i.e. competition in the market instead of competition for the market).

The feedback collected within the DIMCG points towards a landscape in which solution providers adopt niche strategies with a focus on covering specific parts of the overall issuance process (such as legal documentation). No solution has yet been identified that would cover the full issuance process – or large parts of the process – in a way that meets the objectives of harmonisation and efficiency. Some DIMCG members highlighted that a number of initiatives are still at the early stage of

their development and are based on an evolutionary approach, so that there may be an increase in process coverage over time.

4.2.2 Support for harmonisation

Debt issuance is a highly standardised activity in terms of the processes involved. However, many activities are subject to national specificities, primarily driven by different national legal and fiscal requirements or by the operational characteristics of a debt instrument and the established business practices traditionally built around them. In this context, it is essential that every existing or new initiative supports the further harmonisation and standardisation of the issuance process across national markets in the EU, so as to foster financial integration and reduce home bias and fragmentation across national borders. Harmonisation is necessary for enabling interoperability and increasing the level of STP across the overall issuance process. It is acknowledged that national legal and fiscal rules could impede cross-market harmonisation, but experience has shown that even these obstacles can be overcome thanks to appropriate catalyst initiatives leading to important changes being introduced (e.g. the T2S harmonisation agenda in the post-trade area).

In general, while promoting standardisation to the prospective users, current initiatives often refer to the use of specific proprietary rulebooks. Competition between these initiatives also reduces the incentives for efficient collaboration towards standardisation.

However, it is also acknowledged that the issuance segment has not received the same level of attention in terms of harmonisation efforts as, for example, the post-trade segment. The findings and recommendations under Pillars 1 and 2 show that there is significant room for improvement. To achieve a higher level of standardisation across the EU, increased collaboration within a clear governance framework is necessary. When asked about standardisation, members of the DIMCG reported a positive trend towards the promotion of standard dictionaries and document templates thanks to various initiatives.

4.2.3 Level playing field and equal access

The work carried out in Pillar 1 shows that bond issuance entails a certain degree of competition among issuers and that equal access for investors is key to the effective functioning of financial services in Europe.

The notion of a level playing field in financial services can be supported by legal and regulatory intervention. This means defining a set of rules and standards that allow businesses to compete on the basis of fair and equal conditions. However, even without regulation, market-wide collaboration can still take place and standards can still be set to support a level playing field. According to the principle of open access, solutions for promoting the integration of the EU financial market should be designed to support the needs of a wider set of users, and access to these solutions should be

available on a non-discriminatory basis to all relevant actors within the EU (beyond the initial case study of the DIMCG), particularly potential new entrants.

Over the past few decades, numerous regulatory frameworks have been designed by the authorities in order to ensure a level playing field within European financial services, but most have targeted post-trade services rather than the pre-issuance stage of the overall issuance process.

The DIMCG observes that market initiatives in securities issuance tend to develop within a specific geographical area and to support the specific needs and business models of a cluster of market actors. While recognising the possibility of developing niche solutions targeting limited groups of users, the assessment by the DIMCG is that ongoing initiatives mostly target a specific activity within the issuance process. They are typically developed by existing market actors whose aim is to modernise and streamline their own interactions with clients (such as dealer-to-investor interactions). This is why these solutions are often tailored to the specific needs of a cluster of actors in the market rather than to the needs of the market as a whole. Open access would require that solutions be designed to address the needs of a wider community of users and be made available to them on a non-discriminatory basis.

However, some DIMCG members pointed out that tailored/bespoke implementation may be necessary in certain specific cases, such as for underwriting liabilities in a syndication process or meeting KYC and other confidentiality requirements. In these instances, it may be appropriate to limit access to certain market actor groups, for example issuers, intermediaries and CSDs but not investors.

4.2.4 European governance

As debt issuance is a global activity, international market participants play a role in the issuance of debt in Europe. This process lies at the heart of the relationship between issuers and investors and is therefore essential to the sound functioning of financial markets. Solutions provided in this context may legitimately be expected to support the EU's wider aims concerning the openness, strength and resilience of the European economic and financial system.⁵⁷ This is in line with the strong support expressed by the ECB for the international role of the euro, as mentioned previously in this report.

Some DIMCG members pointed out the additional complexity resulting from the fact that their activities are not limited to Europe and that support for the EU's wider aims must be balanced with other international objectives.

Taking into account further geopolitical considerations in this context and bearing in mind that, currently, a significant number of fintech providers are based in the United Kingdom, the notion of "European governance" reflects how important it is for legal entities offering products and services to be located in the EU and to be regulated

⁵⁷ See the [European Commission press release](#) of 19 January 2021.

under EU or EU Member State law. This is particularly relevant as regards the mitigation of political and commercial dependency risks outside the scope of EU governance, access to sensitive data, and the resilience and availability of services in times of economic and/or geopolitical crisis.⁵⁸

Besides the considerations concerning location and regulatory regime, adequate governance arrangements require that the interests of users (typically issuers and investors) be properly taken into account. For instance, users should be consulted on the development of debt issuance solutions as well as on other operational and risk-related aspects.

The DIMCG concluded that there is relatively little clarity on the strength of European governance (EU location of legal entity and EU/Member State regulatory framework) underpinning most of these initiatives. Based on publicly available information (from the ICMA's primary markets technology directory), it seems that around half of the initiatives are being carried out in accordance with European governance arrangements.

4.3 Single versus multiple platforms

The ICMA directory used as a reference point for the current analysis includes distinct and competing commercial initiatives based on a multiplicity of technical platforms. The significant increase⁵⁹ in initiatives in recent years is a positive development reflecting the dynamism in the debt issuance segment, which may potentially lead to innovation and increased competition. Some members of the DIMCG representing global institutions expressed the view that strong competition between initiatives, especially across currencies and jurisdictions (i.e. including outside the euro area), helps to mitigate existing inefficiencies in the broader sovereigns, supranationals and agencies market.

On the question of whether an intervention by the public sector is desirable in order to establish a pan-European infrastructure service as a catalyst for improving investor reach and fostering further standardisation and harmonisation in the area of debt issuance, it is worth remembering that during the [2019 ECB market consultation](#), no majority emerged in favour of or against the establishment of such an infrastructure.

Focusing on the potential benefits of a centralised infrastructure, some respondents considered that such an initiative would in effect support technical standardisation, accuracy and consistency in dataflows and generally promote EU-wide harmonisation; other respondents took the view that similar results could be achieved by means of a robust governance framework on harmonisation and standardisation, without introducing a central piece of infrastructure. It is widely acknowledged that

⁵⁸ This consideration is less relevant for assets of less systemic relevance for the EU, which are outside the scope of the initial DIMCG case study.

⁵⁹ The latest version of the ICMA primary markets technology directory, dated July 2021, includes over 42 technology solutions, up from 35 in its 2020 review, 28 in 2019 and 22 in its first edition from 2018.

the combination of a central infrastructure with a harmonisation agenda could lead to better results, as experienced in the context of the introduction of T2S.

In response to the concerns raised about the potential negative effect that a centralised initiative focusing on the issuance of plain vanilla IFI bonds (as proposed by the DIMCG initial case study) could have on other euro area debt securities, it could be argued that supporting EU supranational/intergovernmental issuance has merits in itself for the EU and the euro, while the harmonisation and standard jurisdiction elements of any EU-wide initiative could possibly have positive externalities for other asset classes. Some DIMCG members agreed that any implementation of a central infrastructure would require modularity and interoperability, close user involvement under strong European governance, a level playing field and open access. They also agreed that the use of such an infrastructure should remain voluntary, irrespective of whether the infrastructure is implemented under private or public governance.

Beyond reconfirming the conditions necessary for a central infrastructure to deliver benefits, the conclusions reached by the DIMCG on this topic did not differ materially from those already drawn in 2019.

DLT initiatives were also discussed within the DIMCG. Several initiatives and experiments are taking place in the market concerning the use of DLT and native DLT assets or tokens, highlighting the increased focus of fintech companies on the topic. In this context, the AMI-SeCo has already produced a number of reports covering certain aspects of asset issuance and servicing using DLT.⁶⁰ It is not clear how these considerations may affect the key findings of the current report, in particular with regard to the potential areas of harmonisation identified in Section 3 of this report in connection with Pillar 2.

Although the future adoption of DLT by European financial market infrastructures (in the pre-issuance and/or the post-trade layer) has not been ruled out, benchmark debt instruments such as those covered under the DIMCG's initial case study are currently managed by clearly authorised and still centralised service providers. This is due in part to the current European regulatory framework, including the monetary policy requirements of the Eurosystem. It is also due to the fact that DLT experiments on issuing benchmark debt instruments are either "closed-loop" pilots or de facto private placements with no secondary market and a limited set of investors (and therefore do not fall into the benchmark category) or are eventually managed, after the experimentation stage, by centralised and authorised service providers.

The adoption of DLT in mainstream financial services remains very limited, and there are divergent views regarding the prospects of using it in the issuance process, other than for purely for the purpose of exchanging information between specific market actors. Some DIMCG members argue that this has the potential to greatly alleviate the pain points identified in Pillars 1 and 2, while others take the view that a wider

⁶⁰ See "[The use of DLT in post-trade processes](#)", report by the AMI-SeCO, April 2021.

coordination of harmonisation and standardisation is required, irrespective of the technology used by the market (centralised or decentralised databases).

Annexes

A DIMCG terms of reference

A1 Purpose

The Debt Issuance Market Contact group (DIMCG) is a temporary forum for interaction between the Eurosystem and industry-wide market professionals involved in euro area primary debt markets. The objective of the group is to identify issues that preclude further improvements in efficiency and integration in the area of debt issuance and initial distribution (i.e. covering the full transaction chain from pre-issuance to post-trade) and to investigate how these issues may be addressed.

The DIMCG shall base its investigation on the feedback provided by the market to the public consultation launched by the ECB on 22 May 2019.⁶¹ The DIMCG shall also explore how any potential harmonisation activities could be supported by private or public infrastructure initiatives in the area of debt issuance and initial distribution services. The DIMCG should, in principle, fulfil its mandate approximately 12 months after its launch, i.e. after its first meeting, by submitting an advisory report to the Eurosystem. The mandate can be renewed if deemed necessary.

A2 Governance and membership

The DIMCG is composed of the ECB, National Central Banks of the Eurosystem⁶², private-sector participants with a broad and deep knowledge of issuance and initial distribution of debt securities. The selection aims at ensuring participation by a wide range of institutions that should cover the full transaction chain of debt issuance, e.g. issuers, investors, intermediaries in different roles (e.g. issuer agents, dealer banks, custody), CSDs and other service providers that are relevant in the full transaction chain of debt instruments. EU public authorities (e.g. European Commission and the European Securities Market Authority (ESMA)) as well as representatives from relevant financial market associations can also attend as observers.

The DIMCG Members shall actively contribute to the work of the group and have key expertise and interest in the group's undertakings. These individuals are chosen by the Eurosystem on the basis of their personal experience, level of seniority and function within their institution. Occasionally, non-member experts may be invited to discuss or present specific issues.

Members are expected to provide contributions from a EU wide market perspective rather than represent a narrow commercial or national interest. Membership is

⁶¹ [ECB market consultation on a potential Eurosystem initiative regarding a European mechanism for the issuance and initial distribution of debt securities in the European Union.](#)

⁶² Based on expressions of interest.

granted on an individual basis and any change in a member's position within his or her institution will result in a review of his or her membership; the seat cannot be automatically passed on to a replacement within the institution. Membership and the term of appointment are considered by the Eurosystem and should ensure equal treatment and broad representativeness. Members are expected to attend all regularly scheduled meetings in person. Members should contact the Secretary, if they are unable to attend a meeting. Each institution nominates an alternate who can participate in the exceptional absence of the member, subject to Eurosystem's approval.

The DIMCG is chaired by the ECB. The ECB also provides the Secretariat, proposes the agenda and participates in the discussions.

A3 Procedures

The group shall be established in the course of 2020 as a temporary group and in principle complete its work with fulfilling its mandate approximately 12 months after its launch. The final outcome of the DIMCG work would be an advisory report to the Eurosystem regarding the best way forward to establish a more efficient, integrated market for debt instruments in Europe.

The meetings may be called by the Chairperson, the dates of which are communicated sufficiently in advance to the meetings. In principle, meetings take place at the ECB's premises in Frankfurt am Main. Meeting dates shall be set and communicated to members and observers sufficiently in advance. The working language shall be English. The meetings follow an agenda which is circulated by the Secretariat to the members prior to the meetings. The agenda is established by the Chairperson in consultation with the members and the Secretary. Members are encouraged to propose topics for inclusion in the agenda and in the work programme. In addition to the pre-arranged meetings, ad hoc teleconferences and written procedures may be requested at any time by the ECB, either at its own initiative or at the request of some members. The DIMCG may decide to establish specific task forces or drafting groups in order to elaborate further on a specific technical issue.

Agendas, a list of participants' attendance, summaries of the DIMCG discussions and material presented are published on the ECB's website. The outcomes of the meetings are circulated to participants and any comments received are addressed prior to publication. Unless otherwise agreed, meeting outcomes will not attribute expressed views to any specific member.

B List of DIMCG participants

Participant's organisation	Name of participant
European Central Bank	Mr Dimitri Pattyn - Chairperson
European Central Bank	Mr Miguel Tahoces - Secretary
Members	
Banque Centrale du Luxembourg	Mr Andreas Duhr
Banca d'Italia	Mr Alessio Abbate
Banco de España	Ms Sofia Galmés
Banque de France	Mr Maximilien Demarquette
Deutsche Bundesbank	Mr Benjamin Stamer
European Central Bank	Mr George Kalogeropoulos
European Central Bank	Mr Markus Mayers
European Central Bank	Mr Gergely Koczan
Clearstream	Mr Philippe Mueller
Euroclear	Mr Jan Lemeire
Iberclear	Mr Jesús Benito
Monte Titoli	Mr Mauro Dognini
Interbolsa	Mr Rui Matos
NBB-SSS	Mr Koen Geenen
VP Securities	Mr Bjørn Crepaz
European Stability Mechanism (ESM)	Mr Herbert Barth
European Investment Bank (EIB)	Mr Sandor Valkovszky
Council of Europe Development Bank (CEB)	Mr Arturo Seco
BNG bank	Mr Peter Nijse
KfW	Ms Petra Wehlert
Nykredit	Mr Jørn Strunge
Debt Management Office - Italy	Mr Davide Iacovoni
Debt Management Office - France	Ms Diana Lathier
Debt Management Office - Germany	Mr Thomas Weinberg
Debt Management Office - Portugal	Ms Cristina Casalinho
Blackrock	Mr Edward Cook
Norges bank	Mr Gisle Råsberg
Amundi	Mr Herve Boiral
Carmignac	Mr Michael Michaelides
JP Morgan	Mr Deivid Calles
HSBC	Mr Jean-Marc Mercier
DZ Bank	Mr Friedrich Luithlen
Commerzbank	Mr Klaus-Peter Eitel
Deutsche Bank	Mr Achim Linsenmaier
BNY Mellon	Mr Tom Ahern
BNP Paribas	Ms Dominique Le Masson
Intesa San Paolo	Mr Fabio Francesco Ferrari
Citibank	Mr Alex Barnes
Credit Agricole	Mr Christian Haller
UniCredit Bank	Mr Matthias Glückert

Participant's organisation	Name of participant
Observers	
ESMA	Ms Alina Dragomir
European Commission	Ms Anna Tissot-Favre
European Commission	Mr Cornelius Schmidt
European Commission	Mr Fabio Fiorello
ICMA	Mr Leland Goss
ICMSA	Mr Bob King
ECSDA	Ms Anna Kulik
AFME	Ms Victoria Webster
ESDM	Mr Pablo de Ramón-Laca Clausen
AFTI	Mr Marc Tibi
ABI	Mr Davide Ferrazzi
Finance Denmark	Mr Lars Ravn Knudsen

C Detailed process-related findings for the syndication and auction models

Table C1
Risks in the syndication model

Process	Findings
Preparation and announcement	<p>Most relevant risks:</p> <ul style="list-style-type: none"> • violation of selling restrictions applicable to the debt instrument described in the prospectus; • errors in documentation; • market risk or incorrect market assessment; • incorrect announcement. <p>Likelihood of occurrence: low. Impact: high.</p>
Book building	<p>Most relevant risks:</p> <ul style="list-style-type: none"> • manual entry of orders; • manual communication and reconciliation of orders collected; • ambiguity in investor identification. <p>Likelihood of occurrence: low. Impact: high.</p>
Allocation and pricing	<p>The risk of misallocation is considered substantial and more likely to occur than the risks in the previous steps. In this step of the process, respondents also identified considerable financial risks, for example if the allocation were to take too long and market conditions worsened in the meantime.</p>
Documentation and preparation for settlement	<p>Most relevant risks:</p> <ul style="list-style-type: none"> • lack of STP and multiplicity of tools possibly leading to manual re-entry errors; • unclear or incomplete documentation; • compliance with complex KYC requirements and cumbersome manual checks. <p>Likelihood of occurrence: low. Impact: high.</p>
Settlement and initial distribution	<p>Most relevant risks:</p> <ul style="list-style-type: none"> • settlement risk, e.g. late settlement or failed payment; • manual authentication or effectuation of the global note in the context of the settlement of the primary market transaction among ICSDs. The requirement to issue a physical global note that needs to be signed manually may delay the issuance process. While costs would be incurred, they would be borne solely by the intermediaries directly involved in the process; • potential settlement risks associated with commercial bank money (CoBM)⁶³. <p>Likelihood of occurrence: low. Impact: high.</p>

⁶³ CoBM is defined as commercial bank liabilities that take the form of deposits held at a commercial bank and that can be used for settlement purposes. Central bank money (CeBM) represents the liabilities of a central bank that can be used for settlement purposes.

Table C2

Costs in the syndication model

Process	Findings
Preparation and announcement	Whereas the flat fee for the syndication service seems to be substantial, all other costs in this process are considered moderate to low. The figures provided differed substantially among the respondents (e.g. costs of €10,000, full-time equivalents (FTEs) between 0.1 and 6, duration between 0.5 hours and three business days).
Book building	Costs in this process are considered moderate to low. For some DIMCG participants, some of the cost types are of medium to high relevance (operational fees, process duration and FTEs, etc.).
Allocation and pricing	The lengthy duration of the allocation process creates significant costs, including in terms of FTEs.
Documentation and preparation for settlement	Costs in this process are considered moderate to low.
Settlement and initial distribution	Costs in this process are considered moderate to low.

Table C3

Inefficiencies in the syndication model

Process	Findings
Preparation and announcement	<p>Inefficiencies:</p> <ul style="list-style-type: none"> • medium or high level of inefficiency in data handling, mainly due to the use of emails and information entered manually or communicated via phone; • low level of standardisation and availability of data from previous issuances; • low level of process automation and use of IT platforms. <p>Some respondents took the view that a common single platform could improve the existing process by providing a common infrastructure open to all relevant stakeholders (issuers, intermediaries and investors). Other respondents, while recognising the room for improvement, mentioned that a common/single platform may not address the needs of all stakeholders.</p> <p>Potential for improvement:</p> <ul style="list-style-type: none"> • medium or high potential for improvement by fostering harmonisation in at least one of the following areas: terminology, conventions and/or document templates, automation of mandate announcement; • automation of ISIN allocation to a newly issued debt instrument; • availability at source of enhanced and timely digital data from previous issuances to improve processing at CSDs.
Book building	<p>Inefficiencies</p> <p>Inefficiencies in this process relate especially to the areas of existing tools, quality of service and process complexity. These include:</p> <ul style="list-style-type: none"> • inefficiencies in communications and updates to investors; • ambiguity in investor identification; • fragmentation stemming from non-interoperability between multiple systems and platforms; • tendency for the book building process to take too long. <p>If the issuer were to provide access to more timely and accurate data, this would improve efficiency, enable faster decision-making and accelerate the allocation process.</p> <p>Potential for improvement:</p> <ul style="list-style-type: none"> • medium or high potential for improvement by fostering harmonisation in the areas of terminology and document templates; • high level of inefficiency in data handling (email, phone, manual entry); • standardisation of order books; • standardisation of investor identification and classification; • more granular and faster access to data, as well as improved artificial intelligence (AI), which would speed up the process and improve decision-making.

<p>Allocation and pricing</p>	<p>Regarding the pricing of debt instruments, most respondents considered this step of the process to be fairly efficient.</p> <p>Inefficiencies:</p> <ul style="list-style-type: none"> many respondents identified inefficiencies in the allocation process, especially due to the allocation process taking too long, but also because of the quality of the service offered by existing tools and platforms in this area. <p>Potential for improvement:</p> <ul style="list-style-type: none"> the lower level of standardisation of investor identification and classification (compared with the auction model) was mentioned most often, both as a root cause of the long duration of the allocation process and as a potential area of improvement; more granular and faster access to data, as well as improved AI, would speed up the process and improve decision-making.
<p>Documentation and preparation for settlement</p>	<p>Inefficiencies and potential for improvement:</p> <ul style="list-style-type: none"> this is the process where the most inefficiencies were reported and where the inefficiencies were deemed to have the greatest impact (medium to high); workflow should be standardised and automated; documents should be harmonised and machine-readable, and STP should be ensured; emails should be replaced by more standardised and automated means of communication; a standard for digital data formats, in particular applicable to relevant European debt securities, should be established in order to improve the processing of new debt instruments by CSDs; compliance checks are often missing and should be implemented.
<p>Settlement and initial distribution</p>	<p>The broad consensus within the DIMCG is that the level of inefficiency in the settlement part of the issuance process is low.</p> <p>Inefficiencies:</p> <ul style="list-style-type: none"> the requirement of global notes in physical form and signatures in wet ink remains a key pain point in the context of the COVID-19 pandemic; data processing, e.g. the use of emails, in the settlement and distribution process does not support efficiency and STP. <p>Potential for improvement:</p> <ul style="list-style-type: none"> there was found to be considerable potential for improvement in the harmonisation of terminology, conventions and document templates. At the same time, it was mentioned that harmonisation is always a balancing act between cost saving and flexibility; it should therefore be approached carefully and in the context of the right governance of stakeholders; the introduction of dematerialised securities and a higher level of STP and automation could improve the process. At the same time, it was mentioned that extensive automation might reduce the robustness of the settlement process in unexpected situations; DIMCG participants expressed differing views on the potential benefits of shortening the settlement cycle to < T+5. Some were wary of a potential shortening, as they believed this might increase the risks in the areas of liquidity provision and legal document generation.

Table C4
Risks in the auction model

Process	Findings
Auction preparation	<p>Most relevant risks:</p> <ul style="list-style-type: none"> • an incorrect assessment of the market situation or investor demand was identified as the main risk in this phase; • the risk of having several auctions by different issuers taking place on the same day was not considered a problem in general. At the same time, some DIMCG participants took the view that there are potential risks due to competition for investor demand. <p>Likelihood of occurrence: low. Impact: high.</p>
Pre-announcement and announcement	No major risks were identified.
Auction execution	<p>Most relevant risks:</p> <ul style="list-style-type: none"> • inability to achieve price formation, particularly for long-term bonds. Placing an initial tranche through an auction can jeopardise price discovery. Placing an initial tranche through a syndication offers participants a clearer reference point for pricing in subsequent auctions; • IT failure and unavailability of the auction system for bids; • many respondents also reported that the timing between the close of the auction and the publication of the results could be a risk factor, as bidders are exposed to market risks. <p>Likelihood of occurrence: medium. Impact: high.</p>
Documentation and preparation for settlement	No major risks were identified.
Settlement and initial distribution	<ul style="list-style-type: none"> • Delay or failure of the settlement/payment; • errors due to the manual entry of settlement instructions are considered a possible source for risks. <p>Likelihood of occurrence: low. Impact: high.</p>

Table C5
Costs in the auction model

Process	Findings
Auction preparation	DIMCG participants were of the view that the relevance of costs is very low in this process.
Pre-announcement and announcement	DIMCG participants were of the view that the relevance of costs is very low in this process.
Auction execution	<p>Generally, the costs in the process are considered low. However, some DIMCG participants see the overbidding costs in specific sovereign markets as significant barriers to entry. Demand can also be minimised or maximised depending on the auction price method followed by the issuer. The price method depends on whether the auction is:</p> <ul style="list-style-type: none"> • a multiple price auction (MPA), which means selling government securities at bidding prices; • a uniform price auction (UPA), which means selling government securities at cut-off prices; • a hybrid price auction (HPA), also known as a Spanish auction.
Documentation and preparation for settlement	The relevance of costs is very low at this stage of the process.
Settlement and initial distribution	The relevance of costs is very low at this stage of the process.

Table C6**Inefficiencies in the auction model**

Phase	Findings
Auction preparation	No inefficiencies were identified; this is because industry-standard auction models are used.
Pre-announcement and announcement	<p>Inefficiencies</p> <p>Some respondents identified inefficiencies in the following areas:</p> <ul style="list-style-type: none"> • time delay in results publication; • possibility of information passed via email being leaked; • differences in the announcement process among European debt management offices. <p>Potential for improvement:</p> <p>no specific proposals for improvement were identified.</p>
Auction execution	<p>Inefficiencies:</p> <ul style="list-style-type: none"> • delays in the publication of auction results; • differences in the functionality and usability of the auction tools in place; • absence of a common database containing information on all auctions of an issuer and their results; • some DIMCG participants also took the view that the price discovery process could be improved. They are in favour of (i) MPAs and (ii) the introduction of penalties for overbidding. However, other participants did not see the need for a change in auction models, as in their view single and multiple price models both have their pros and cons. <p>Potential for improvement:</p> <p>no specific recommendations.</p>
Documentation and preparation for settlement	<p>Inefficiencies</p> <p>The main inefficiencies were identified in the areas of:</p> <ul style="list-style-type: none"> • legal documentation, where templates are not standardised and there is a lack of STP for submissions; • data standards and provision of data; • the absence of a central database for securities populated from source, as well as the manual extraction and re-entry of static securities data; • differences in the requirements and processes for creating a new security among different CSDs. <p>Potential for improvement:</p> <p>no clear proposals were identified.</p>
Settlement and initial distribution	<p>Inefficiencies</p> <p>Some inefficiencies were identified in the area of legal documents and global notes, where standardised templates are missing and signatures in wet ink are required.</p> <p>Potential for improvement</p> <p>no clear proposals were identified.</p>

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Postal address 60640 Frankfurt am Main, Germany
Telephone +49 69 1344 0
Website www.ecb.europa.eu

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For specific terminology please refer to the [ECB glossary](#) (available in English only).

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