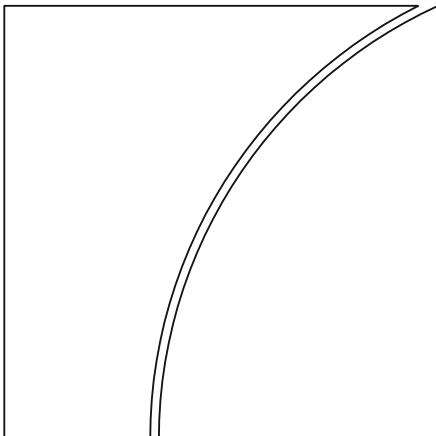


Committee on
Payments and Market
Infrastructures

Board of the International
Organization of Securities
Commissions



Implementation
monitoring of PFMI: Level 2
assessment report for the
European Union – PSs and
CSDs/SSSs

April 2025



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1. Executive summary

In April 2012, the BIS Committee on Payments and Settlement Systems (CPSS)¹ and the International Organization of Securities Commissions (IOSCO) issued the *Principles for financial market infrastructures* (PFMI).² The Principles within the PFMI (“the Principles”) set standards for the design and operation of key financial market infrastructures (FMIs) to enhance their safety and efficiency and, more broadly, to limit systemic risk and foster transparency and financial stability. The PFMI apply to all systemically important payment systems (PSs), central securities depositories (CSDs), securities settlement systems (SSSs), central counterparties (CCPs) and trade repositories (TRs), collectively referred to as FMIs. These FMIs collectively clear, settle and record transactions in financial markets. In line with the G20’s expectations, BIS Committee on Payments and Market Infrastructures (CPMI) and IOSCO members have committed to implementing and applying the PFMI in their jurisdictions.

Following the publication of the PFMI, CPMI-IOSCO agreed to monitor the implementation of the PFMI in 28 jurisdictions that are members of the Financial Stability Board (FSB), CPMI or IOSCO.³ To that end, the CPMI-IOSCO Steering Group⁴ established the Implementation Monitoring Standing Group⁵ to design, organise and conduct the implementation monitoring assessments. The implementation monitoring programme has proceeded at three levels: (i) a Level 1 self-assessment of jurisdictions’ progress in completing the process of adopting the legislation, regulations and other policies (“implementation measures”) that will enable them to implement the PFMI; (ii) a Level 2 peer assessment of the completeness of the implemented framework and its consistency with the PFMI; and (iii) a Level 3 peer assessment of the consistency in outcomes of such frameworks.⁶

This report presents CPMI-IOSCO’s conclusions of a Level 2 assessment of whether, and to what degree, the contents of the legal, regulatory and oversight framework – including rules and regulations, any relevant policy statements or other forms of implementation – applied to systemically important PSs and CSDs/SSSs in the European Union (EU) are complete and consistent with the PFMI.

Given that there are separate regulatory frameworks for PSs in the euro area and in Sweden, and that these are also separate from the EU-wide regime for CSDs/SSSs, the assessment team (AT) has assessed each of these separately.

The assessment reflects the status of the EU legal, regulatory and oversight framework as of 30 October 2019. Accordingly, assessment ratings, recommendations and key conclusions reflect the implementation measures in place as of 30 October 2019 for PSs and CSDs/SSSs for current EU members.⁷ Annex C includes a detailed jurisdictional response from EU authorities on developments in the legal and

¹ The Committee on Payment and Settlement Systems (CPSS) changed its name to the BIS Committee on Payments and Market Infrastructures (CPMI) on 1 September 2014. References to reports published before that date use the Committee’s old name.

² See CPSS-IOSCO, *Principles for financial market infrastructures*, April 2012, available at www.bis.org/cpmi/publ/d101.htm and www.iosco.org/library/pubdocs/pdf/IOSCOPD377-PFMI.pdf.

³ The 28 jurisdictions participating in the PFMI implementation monitoring programme are Argentina, Australia, Belgium, Brazil, Canada, Chile, China, the European Union, France, Germany, Hong Kong SAR, India, Indonesia, Italy, Japan, Korea, Mexico, the Netherlands, Russia (until February 2022), Saudi Arabia, Singapore, South Africa, Spain, Sweden, Switzerland, Türkiye, the United Kingdom and the United States.

⁴ The Steering Group comprises a subset of the members of the CPMI and the IOSCO Board, and is responsible for providing operational guidance on behalf of the “parent committees” (ie CPMI and the BIS Global Economy Meeting (GEM), and the IOSCO Board) on joint CPMI-IOSCO work.

⁵ The IMSG comprises representatives from CPMI and IOSCO members that reflect both a balance between the two standard-setting bodies and geographical dispersion.

⁶ See the BIS and IOSCO websites for a list of completed Level 1, Level 2 and Level 3 assessments.

⁷ The United Kingdom (UK) was part of the EU before the cut-off date for this review; however, the IMSG decided to conduct a separate UK L2 assessment and therefore the UK was not evaluated in this report.

regulatory framework following the L2 assessment date. These developments are not in the scope of this report.

1.1 Legal and regulatory framework

There are separate regulatory frameworks for PSs in the euro area and in Sweden, and these are also separate from the EU-wide regime for CSDs/SSSs. The relevant authorities are:

- *Euro area PSs*: European Central Bank (ECB);
- *Sweden PSs*: Sveriges Riksbank and Finansinspektionen (FI); and
- *EU CSDs/SSSs*: EU institutions (ie the Council of the European Union, the European Parliament, and the European Commission) for legislation, and the European Securities and Markets Authority (ESMA) and the European Banking Authority (EBA) for implementing texts and supervisory convergence measures. The relevant EU authorities for the purposes of this assessment are indicated below.

Different types of implementation measures are used for PSs and CSDs/SSSs in the EU; in a number of cases there are also differences between the implementation measures for private sector FMIs and central-bank FMIs. The main implementation measures are:

- *Euro area PSs*: the Eurosystem Oversight Policy Framework and the ECB Regulation on oversight requirements for systemically important payment systems (SIPS Regulation);
- *Sweden PSs*: Sveriges Riksbank's oversight of the financial infrastructure (Riksbank policy statement), the Securities Markets Act of 2007 and the FI regulatory code (FFFS); the latter two do not apply to central-bank PSs; and
- *EU CSDs/SSSs*: Regulation (EU) No. 909/2014 (Central Securities Depositories Regulation or CSDR). The Eurosystem Oversight Policy Framework also applies to EU CSDs/SSSs. Under the Eurosystem framework, the Eurosystem oversees TARGET2-Securities (T2S) as a common settlement infrastructure which provides settlement services in central bank money to CSDs in an integrated technical environment with cross-border capabilities. The Eurosystem implements the PFMI for T2S through the T2S Oversight Framework.

1.2 Key findings of the assessment

PSs were evaluated individually for different jurisdictions as different authorities cover them in the euro area and in Sweden. For all jurisdictions, the implementation of the PFMI was determined to be complete and consistent for all Principles.

The AT has found that the legal, regulatory and oversight frameworks in the EU for CSDs/SSSs are complete and consistent with the Principles in most aspects, with some areas for improvement where implementation was broadly or partly consistent or not consistent. For EU CSDs/SSSs that provide banking-type ancillary services, the AT concluded that the regulatory and oversight framework is consistent with 16 Principles, broadly consistent with four (Principles 9, 11, 15 and 16) and not consistent with Principle 10. For EU CSDs/SSSs that do not provide banking-type ancillary services, the AT found additional gaps in terms of the implementation of Principles 4 and 7, where implementation was assessed to be partly consistent.

1.3 Summary response from the assessed jurisdiction's authorities

The EU authorities appreciate the detailed and comprehensive assessment that CPMI-IOSCO performed and welcome this opportunity to respond to their conclusions.

The EU authorities agree with the outcome of the assessment which confirmed full consistency between the EU legal, regulatory and oversight frameworks for PSs and the related Principles.

At the same time, the EU authorities take note of a very high degree of convergence between the EU legal, regulatory and oversight frameworks for CSDs/SSSs and the Principles, as the implementation of the vast majority of Principles was rated as consistent. In addition, the EU authorities emphasise that the legal and regulatory framework applicable to CSDs, i.e. the CSDR, was recently reviewed, with the so-called CSDR REFIT⁸ published in 2024 and one CSDR provision on dematerialisation⁹ which became fully applicable in January 2025. The EU authorities view is that the new provisions led to an even greater consistency of the EU regulatory framework with the PFMI than the one of 30 October 2019 presented in this report by addressing most of the gaps identified in this assessment, in particular in relation to Principles 3, 4, 7, 10, 11 and 15 (more information can be found in Annex C).

The Swedish authorities, Sveriges Riksbank and Finansinspektionen, note that since the assessment, Sweden has passed a new act on clearing systems that have come into force on 1 July 2024.¹⁰ Furthermore, Finansinspektionen published a new FI regulatory code, FFFS, regarding clearing and settlement of payments, which came into force on 1 July 2024. The new act and the regulatory code further implement the PFMI for clearing systems in Sweden.

2. Introduction

This report presents CPMI-IOSCO's conclusions on the Level 2 assessment of implementation of the Principles for PSs and CSDs/SSSs in the EU. The assessment reflects the status of the EU legal, regulatory and oversight framework for PSs and CSDs/SSSs as of 30 October 2019. The assessment was conducted as a peer review from November 2019 to May 2023. The time needed for this assessment was longer than expected, in part due to the Covid-19 pandemic.

The relevant EU authorities for the assessment, who are responsible for the regulation, supervision and oversight of FMIs in the EU, are:

- For PSs:
 - the European Central Bank (ECB) for pan-European systemically important payment systems (SIPS) in the euro area, jointly with a national central bank in one case; and the local national central bank for national SIPS in the euro area; and
 - both Sveriges Riksbank (Riksbank) and Finansinspektionen (FI) in Sweden.
- For CSDs/SSSs:

⁸ See Regulation (EU) 2023/2845 of the European Parliament and of the Council of 13 December 2023 amending Regulation (EU) No 909/2014 as regards settlement discipline, cross-border provision of services, supervisory cooperation, provision of banking-type ancillary services and requirements for third-country central securities depositories and amending Regulation (EU) No 236/2012.

⁹ CSDR Article 3(1)

¹⁰ The new act, known as "Lag (2024:114) om clearing och avveckling av betalningar" can be found at www.riksdagen.se/sv/dokument-och-lagar/dokument/svensk-forfattningssamling/lag-2024114-om-clearing-och-avveckling-av_sfs-2024-114/.

- for EU CSDs/SSSs: the national competent authority/ies, relevant authorities (including central banks) designated under CSDR for supervision and the European Securities and Markets Authority (ESMA) and the European Banking Authority (EBA);¹¹
- for T2S: the Eurosystem.¹²

2.1 Broader context of the Level 2 assessment

In line with the G20's expectations, CPMI and IOSCO members have undertaken to incorporate the Principles and Responsibilities included in the PFMI in their legal and regulatory frameworks. CPMI-IOSCO regards full, timely and consistent implementation of the PFMI as fundamental to ensuring the safety and soundness of FMIs, avoiding regulatory arbitrage and supporting the resilience of the global financial system.

To that end, CPMI-IOSCO has been actively monitoring the implementation of the PFMI based on a framework comprising three levels:

- (i) Level 1 assesses whether jurisdictions have completed the process of adopting the implementation measures that will enable them to implement the Principles and Responsibilities;
- (ii) Level 2 assesses the completeness and consistency of the contents of implementation measures with the Principles and the Responsibilities; and
- (iii) Level 3 assesses consistency in the outcomes of implementation of the Principles and Responsibilities.

The Level 1 exercise reflects each jurisdiction's self-assessment on their progress in completing the process of adopting the legislation, regulations and other policies that will enable them to implement the PFMI.¹³ The Level 2 and Level 3 assessments, in contrast, are designed to reflect the assessment by CPMI-IOSCO via peer reviews.

The assessments related to the PFMI are ongoing and are being considered separately at Level 2 and Level 3.¹⁴ Overall, the 28 participating jurisdictions have made further progress in completing the adoption of legislation, regulations and/or policies to support implementation of the PFMI. The Level 1 assessments also showed that jurisdictions have implemented, or are in the process of implementing, the PFMI in different ways. Depending on the national legal and regulatory or oversight framework, some jurisdictions use a policy-based approach (ie rely on a policy statement as the primary tool for adopting the PFMI), some use a rules-based approach (ie rely on rules and/or regulations corresponding to the PFMI) and others combine these two approaches.

¹¹ ESMA is responsible for the development of technical standards and supervisory convergence measures related to CSDs, with the exception of the capital requirements and certain requirements related to the provision of banking-type ancillary services that are within the EBA's remit.

¹² The Eurosystem, which oversees T2S to ensure the efficiency and soundness of T2S services, established the T2S Cooperative Arrangement to fulfil the statutory duties of the authorities which share a common interest in the prudent design, operation and management of T2S, in particular regarding the expected coordination among such authorities. To this aim, a Memorandum of Understanding on the T2S Cooperative Arrangement (the MoU) was signed between the ECB as lead overseer of T2S, overseers of CSDs participating in T2S, central banks of issue for currencies settled in T2S, competent authorities for the supervision of those CSDs which have signed the T2S Framework Agreement, and ESMA in its role as coordinator of competent authorities for the supervision of CSDs.

¹³ The Level 1 assessments are available at www.bis.org/cpmi/info_mios.htm and www.iosco.org/about/?subsection=cpmi_iosco.

¹⁴ For the Responsibilities, the IMSG combined the Level 2 and Level 3 assessments into a single exercise whereby the IMSG focused on both the measures taken by the relevant authority to fulfil the Responsibilities, including its powers and the framework and processes in place to meet the requirements under the Responsibilities (Level 2), and how these measures translated into observed outcomes (Level 3). This report is available at www.bis.org/cpmi/publ/d139.htm and www.iosco.org/library/pubdocs/pdf/IOSCOPD514.pdf.

In this respect, the EU authorities can be described as having adopted a mixture of policy-based and rules-based approaches for implementing the PFMI.

CPMI-IOSCO will continue to monitor jurisdictions' progress in implementing the Principles and Responsibilities in future assessments.

2.2 Objective and rating

The Level 2 assessment aims to determine whether, and to what degree, the contents of the legal and regulatory or oversight framework, including any relevant policy statements or other forms of implementation measures, are complete and consistent with the PFMI. The focus of the Level 2 assessment is on the relevant framework itself (implementation measures), not on the application of this framework by the authorities or the FMIs' observance.

The rating framework used in Level 2 assessments (Table 1) is an adaptation of the approach described in the PFMI Assessment Methodology (AM).¹⁵ The rating levels are: "Consistent", "Broadly consistent", "Partly consistent", "Not consistent" and "Not applicable". The ratings reflect conditions at the time of the assessment and are built on key conclusions that reflect CPMI-IOSCO's collective expert judgment regarding the impact of identified gaps and/or shortcomings. Ratings are determined for each Principle after the jurisdiction's legislative and regulatory framework – including policy statements, as relevant – is compared with the corresponding content of the PFMI.

Status rating of the Level 2 assessment		Table 1
Consistent	The jurisdiction's regulatory framework is consistent with the Principle. The assessment has identified no gaps or shortcomings, or only a few gaps and/or shortcomings that have no material impact on completeness and/or consistency.	
Broadly consistent	The jurisdiction's regulatory framework is broadly consistent with the Principle. The assessment has identified gaps and/or shortcomings that have a minor impact on completeness and/or consistency.	
Partly consistent	The jurisdiction's regulatory framework is partly consistent with the Principle. The assessment has identified gaps and/or shortcomings that have a significant impact on completeness and/or consistency.	
Not consistent	The jurisdiction's regulatory framework is not consistent with the Principle. The assessment has identified gaps and/or shortcomings that have a major impact on completeness and/or consistency.	
NA – No implementation measures needed (ie not applicable)	This status corresponds to the case where no relevant FMI exists that is within the scope of the Principle. A rating of "NA" will be indicated only if no relevant regulatory measures are being taken and no such FMI is expected to develop within the jurisdiction.	

2.3 Scope

This report covers the implementation measures in the EU for PSs and EU CSDs/SSSs.¹⁶ The primary implementation measures assessed include:

- For PSs:
 - Euro area:

¹⁵ Available at www.bis.org/cpmi/publ/d106.htm and www.iosco.org/library/pubdocs/pdf/IOSCOPD396.pdf.

¹⁶ The Level 2 assessment report for central counterparties and trade repositories – European Union was published in February 2015. See www.bis.org/cpmi/publ/d128.htm and www.iosco.org/library/pubdocs/pdf/IOSCOPD478.pdf

- Eurosystem oversight policy framework; and
- ECB Regulation on oversight requirements for systemically important payment systems (SIPS Regulation).
- Sweden:
 - Riksbank's oversight of the financial infrastructure, 2012 and 2018 (Riksbank policy statement);
 - Securities Market Act (2007:528);
 - FI regulatory code (FFFS);
 - FI policy statement (CPMI/IOSCO principles section in the supervision of financial infrastructure companies) of 25 November 2014;
 - Settlement Systems Act on systems for settlement obligations on financial markets (SFS1999:1309);
 - Bankgirot's Clearing and Settlement Service Agreement; and
 - Companies Act (2005:551).
- For CSDs/SSSs:
 - Regulation (EU) No 909/2014 (CSDR);
 - Commission Delegated Regulation (EU) 2017/390;
 - Commission Delegated Regulation (EU) 2017/392;
 - Commission Delegated Regulation (EU) 2018/1229;
 - Directive No 2014/59/EU (Bank Recovery and Resolution Directive or BRRD);
 - Eurosystem Oversight Policy Framework (July 2016); and
 - T2S Oversight Framework.¹⁷

The assessed legal, regulatory and oversight frameworks are described further in Section 3.

3. Overview of the regulatory, supervisory and oversight framework

Given that there are separate regulatory frameworks for PSs in the euro area and in Sweden, and that these are also separate from the EU-wide regime for CSDs/SSSs, the AT has assessed each of these separately.

3.1 Payment systems

3.1.1 Payment systems in the euro area

For the purposes of this assessment, the ECB is the main authority involved in the implementation of relevant EU provisions for systemically important PSs in the euro area (although the national central banks of those EU countries that have adopted the euro have also a role to play). The Eurosystem Oversight

¹⁷ Including the T2S Cooperative Arrangement and the MoU signed between the ECB as lead overseer of T2S, overseers of CSDs participating in T2S, central banks of issue for currencies settled in T2S, competent authorities for the supervision of those CSDs, which have signed the T2S Framework Agreement and ESMA in its role as coordinator of competent authorities for the supervision of CSDs.

Policy Framework¹⁸ is complemented by the ECB SIPS Regulation,¹⁹ which implements the PFMI for PSs in the euro area in a legally binding manner. The Eurosystem differentiates between systemically important PSs and non-systemically important PSs in the euro area. This distinction reflects the relative importance of a PS for the euro area and is based on quantitative criteria and determines both the applicable oversight requirements and how they are enforced. The PFMI apply to systemically important PSs, which is the scope of this assessment.

3.1.2 Payment systems in Sweden

In Sweden, both Riksbank and FI are involved in the regulation, supervision and oversight of PSs. Riksbank has a statutory responsibility to promote a safe and efficient payment system. It has adopted the PFMI through a high-level policy statement²⁰ and uses moral suasion (including public statements in its Financial Stability Reports) to induce change.²¹ The Riksbank policy statement applies to all PSs, including RIX,²² owned and operated by the Riksbank. The FI authorises and supervises PSs in Sweden, with the exception of RIX. The Securities Market Act of 2007²³ provides a framework for the regulation of PSs, supported by the FFFS; both are legally enforceable. FI has also published a policy statement ("*CPMI/IOSCO-principer del i tillsynen över finansiella infrastrukturforetag*")²⁴ that states that the PFMI are used in the supervision of FMIs. The Riksbank and FI regimes both apply to the same PSs (apart from RIX). In addition, the Settlement Systems Act on systems for settlement obligations on financial markets²⁵ transposes the EU's Settlement Finality Directive into Swedish law.

¹⁸ See www.ecb.europa.eu/pub/pdf/other/eurosystemoversightpolicyframework201607.en.pdf

¹⁹ See Regulation of the European Central Bank (EU) No 795/2014 of 3 July 2014 on oversight requirements for systemically important payment systems (ECB/2014/28)" available at www.ecb.europa.eu/pub/pdf/other/ECB_Regulation_on_the_oversight_requirements_for_systemically_important_payment_systems.pdf?60670145e6f5d19765336f9658b05a9f, and the Regulation (EU) 2017/2094 of the European Central Bank of 3 November 2017 amending Regulation (EU) No 795/2014 on oversight requirements for systemically important payment systems (ECB/2017/32) available at eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32017R2094.

²⁰ See Riksbank, *The Riksbank's oversight of the financial infrastructure*, May 2012, p 13, which states the following: "The Riksbank expects the systems in the financial infrastructure to comply with the international principles prepared by CPSS-IOSCO ["CPSS-IOSCO Principles for financial market infrastructures"]. The oversight work aims to ensure this. Monitoring takes place in that the systems assess themselves, and also in that the Riksbank carries out an in-depth analysis of specific risks in the system. If the analysis indicates shortcomings in safety or efficiency in a system, the Riksbank encourages the system to rectify them." www.riksbank.se/globalassets/media/avdelningar/engelska/afs/2014/rap_fin_infrastrukturen_120530_eng.pdf

²¹ See also Riksbank, *The Riksbank's oversight of the financial infrastructure*, Economic Commentaries no 7, May 2018, p 4: "The oversight and the Riksbank's analysis are based on CPMI-IOSCO's international principles for financial infrastructures. [...] For certain types of financial infrastructure systems, many of the international principles have also been incorporated into law. However, the Riksbank works to ensure that the infrastructure systems also comply with the parts of the principles not covered by legislation." Available at www.riksbank.se/globalassets/media/rapporter/ekonomiska-kommentarer/engelska/2018/the-riksbanks-oversight-of-the-financial-infrastructure.pdf

²² Riksbank's system for large-value payments (RIX).

²³ Available (in Swedish) at www.riksdagen.se/sv/dokument-lagar/dokument/svensk-forfattningssamling/lag-2007528-om-vardepappersmarknaden_sfs-2007-528

²⁴ See the FI's policy statement issued on 25 November 2014 (originally in Swedish; unofficial translation provided) that states the following: "In the supervision of financial market infrastructures, Nasdaq Clearing, Euroclear Sweden and Bankgirot BGC, FI – in addition to applicable legislation and within the scope of these rules – also uses the recommendations on soundness and efficiency in international standards. [...] For FMIs [this refers to] the "Principles for financial market infrastructures" published by the Committee on Payment and Market Infrastructures (CPMI) and the International Organization of Securities Commissions (IOSCO). The Principles also include recommendations addressed to authorities and central banks that supervise or monitor the financial market infrastructures. Therefore, FI also applies such international Principles to its own supervisory work." Available at www.fi.se/sv/publicerat/nyheter/2014/cpmiosco-principer-del-i-tillsynen-over-finansiella-infrastrukturforetag/.

²⁵ Available at www.riksdagen.se/sv/dokument-och-lagar/dokument/svensk-forfattningssamling/lag-19991309-om-system-for-sfs-1999-1309/.

3.2 CSDs/SSSs

For the purposes of this assessment, the main authority for CSDs and SSSs is ESMA, in cooperation with the European Commission and the EBA. The main implementation measure for CSDs/SSSs in the EU is Regulation (EU) No 909/2014²⁶ (also known as the CSDR).²⁷ The CSDR explicitly states that “*this Regulation should follow the existing principles for financial market infrastructures developed by CPSS-IOSCO*”.²⁸ The CSDR is complemented by:

- technical implementation measures (ie regulatory technical standards and implementing technical standards), which are legally enforceable; and
- guidelines, which national competent authorities are required to attest that they have adopted or explain why they have not. In the case of the CSDR, all of the national competent authorities, that have a registered CSD in their jurisdiction, have attested compliance.

The CSDR makes a distinction between the requirements for CSDs/SSSs that provide banking-type ancillary services²⁹ and requirements for those that do not. Title IV of CSDR (specifically articles 59(3) and 59(4), which relate to the management of credit and liquidity risks), applies only to CSDs/SSSs that provide banking-type ancillary services. In addition, CSDs/SSSs operated by members of the European System of Central Banks³⁰ are subject to the CSDR with some exemptions.³¹

The Eurosystem Oversight Policy Framework³² is also relevant for CSDs/SSSs. Under the Eurosystem Oversight Framework, the Eurosystem oversees T2S as a common infrastructure offering settlement services in central bank money to many European CSDs. The Eurosystem implements the PFMI for T2S through the T2S Oversight Framework. Consequently, the T2S Oversight Framework has been assessed as part of the implementation measures for CSDs/SSSs in the EU. The T2S Oversight Framework is not public, but it was shared with the AT. It was also shared with all authorities in the T2S Cooperative Arrangement and the T2S-participating CSDs/SSSs before it was adopted, with updates introduced, as needed. The adoption of, and any subsequent changes, to the T2S Oversight Framework are approved by the ECB Governing Council.

3.3 Process

The Level 2 assessment follows an established methodology to ensure consistency across jurisdictions and time. The methodology draws heavily on the PFMI AM, published in December 2012. This Level 2

²⁶ See eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014R0909&from=EN

²⁷ This regulation entered into force on 17 September 2014. The complete name of this regulation is “Regulation (EU) No 909/2014 of the European Parliament and the Council of 23 July 2014 on improving securities settlement in the European Union and on central securities depositories and amending Directives Nos 98/26/EC and 2014/65/EU and Regulation (EU) No 236/2012, available at eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014R0909.

²⁸ It is important to note that, unlike Directives, Regulations (such as CSDR) do not need to be transposed into national legislation, but they are directly applicable in all EU member states and prevail over national laws.

²⁹ Section C of the Annex to the CSDR sets out the list of banking-type ancillary services.

³⁰ Comprised of the ECB and the national central banks of all EU member states, whether they have adopted the euro or not.

³¹ The exemptions are related to formal authorisation and supervision as well as requirements on management and shareholders, investment policy, capital, provision of banking-type ancillary services and reporting to various authorities and complying with their orders.

³² See www.ecb.europa.eu/pub/pdf/other/eurosystemoversightpolicyframework201607.en.pdf.

assessment was conducted as a peer review by an AT composed of technical experts from CPMI and IOSCO.³³ The assessment was performed in several stages and included:

- (i) gathering and reviewing responses by relevant authorities to Level 2 survey questionnaires;
- (ii) developing an understanding of the jurisdiction's legal, regulatory and oversight framework for FMIs;
- (iii) analysing the level of completeness and consistency of implementation measures against the Principles and identifying issues that warrant further exploration to follow-up with the jurisdiction;
- (iv) assessing the materiality of identified gaps and shortcomings, determining ratings, and developing key conclusions and recommendations as appropriate; and
- (v) providing the assessed jurisdiction with an opportunity to review the findings.

The AT was in regular contact with the relevant authorities to ensure that the team had a full and clear understanding of the intent and the content of the local regulatory, supervisory and oversight framework. Exchanges between the AT and relevant authorities also provided relevant authorities with an opportunity to provide ongoing feedback on the AT's analysis. Finally, discussions with and review by the Implementation Monitoring Standing Group (IMSG) helped to ensure that a approach was applied was consistent across all assessed FMI types and with previous Level 2 assessments.

4. Assessment and recommendations

4.1 Summary assessment of completeness and consistency with the PFMI

This section provides a high-level summary of the consistency and completeness of the regimes in the EU for PSs and CSDs/SSSs with respect to the Principles and Key Considerations. A more detailed assessment, including citations of the relevant legislation, regulation, policy and guidance, and notes explaining the assigned ratings, is provided in the online CPMI-IOSCO PFMI Level 2 implementation database.³⁴ Identified gaps and recommendations are tabulated in Section 4.2.

4.1.1 Overview and general observations

The AT has found that the legal, regulatory and oversight frameworks in the EU for CSDs/SSSs are complete and consistent with the Principles in most aspects, with some areas for improvement where implementation was broadly or partly consistent or not consistent. PSs were evaluated individually for different jurisdictions as different authorities cover them in the Euro area and in Sweden. For all jurisdictions, the implementation of the PFMI was determined to be complete and consistent for all Principles.

³³ The AT was made up of: AT Leads Matthew Lee (US Securities and Exchange Commission) and Emilie Walgenbach (Federal Reserve Bank of New York); Stephanie Bolt (Reserve Bank of Australia); Aaron Ferguson and Jalil El Moussadek (Ontario Securities Commission); Alejandra Valladares (Financial Market Commission, Chile); Sudhanshu Prasad (Reserve Bank of India); Nesa Deskandina (Bank Indonesia); Kseniia Galkina, Ekaterina Seredkina and Denis Tararyshkin (Central Bank of the Russian Federation, until February 2022); Wei Cheng Quek (Monetary Authority of Singapore, until September 2022); Dibora Spiegler (until January 2021) and Samuel Irwin (from January 2021) (Board of Governors of the Federal Reserve System); and Mayra Gonzalez (Federal Reserve Bank of New York, until December 2022), supported by Jenny Hancock and Raul Morales (CPMI Secretariat) and Josafat De Luna-Martínez, Hemla Deenanath and Jantakarn Pangutha (IOSCO General Secretariat).

³⁴ Available at www.bis.org/pfmi/index.htm and www.iosco.org/about/?subsection=cpmi_iosco.

4.1.2 Payment systems

4.1.2.1 *Payment systems in the euro area*

The AT found that the legal, regulatory and oversight framework for PSs in the euro area is complete and consistent with the applicable Principles. Table 2 summarises the consistency of the regulatory regime.

Ratings summary³⁵ for PSs in the euro area

Table 2

Assessment category	Principle
Consistent	Principles 1, 2, 3, 4, 5, 7, 8, 9, 12, 13, 15, 16, 17, 18, 19, 21, 22 and 23
Broadly consistent	None
Partly consistent	None
Not consistent	None
Not applicable	None

The AT did not observe any issues or make any recommendations to further strengthen the framework with respect to PSs in the euro area.

4.1.2.2 Payment systems in Sweden

The AT found that the legal, regulatory and oversight framework for PSs in Sweden is complete and consistent with the applicable Principles. Table 3 summarises the consistency of the regulatory regime.

The AT observed that FI is currently using different approaches to implement different Principles and KCs. Specifically, Principles 5, 7, 15, 16, 19, 21, 22 and 23, as well as several KCs in other Principles³⁶ are not explicitly covered by the Securities Market Act and the FFFS. Instead, FI relies on its policy statement as the implementation measure, backed by broad requirements in the Securities Market Act such as public confidence objectives. However, as the AT found evidence that FI was able to induce change related to Principles and KCs where implementation relied on the FI policy statement, it concluded that a rating of “consistent” was appropriate.

Ratings summary³⁷ for PSs in Sweden

Table 3

Assessment category	Principle
Consistent	Principles 1, 2, 3, 4, 5, 7, 8, 9, 12, 13, 15, 16, 17, 18, 19, 21, 22 and 23
Broadly consistent	None
Partly consistent	None
Not consistent	None
Not applicable	None

4.1.3 CSDs/SSSs

The AT found that the legal, regulatory and oversight framework for CSDs/SSSs is comprehensive and consistent with the majority of the applicable Principles. As Articles 59(3) and 59(4) of the CSDR apply only to CSDs that provide banking-type ancillary services, the AT has come to separate conclusions with respect to the completeness and consistency of implementation measures for CSDs that do and do not provide banking-type ancillary services.

³⁵ The ratings summary lists all Principles that are applicable to different FMI types as defined in paragraphs 1.10–1.14 and shown in Table 1 of the PFMI. For further detail on ratings, see Section 4.2.

³⁶ Specifically KCs 1.5, 2.1, 2.4, 2.5, 2.7, 3.2, 3.3, 3.4, 13.1, 17.3, 17.4, 17.6 and 18.3,

³⁷ The ratings summary lists all Principles that are applicable to different FMI types as defined in paragraphs 1.10–1.14 and shown in Table 1 of the PFMI. For further detail on ratings, see Section 4.2.

4.1.3.1 CSDs/SSSs that provide banking-type ancillary services

For CSDs/SSSs that provide banking-type ancillary services, the AT concluded that the regulatory and oversight framework is consistent with 16 Principles, broadly consistent with four and not consistent with one of the Principles. Table 4 summarises the consistency of the regulatory regime for CSDs/SSSs that provide banking-type ancillary services.

Assessment category	Principle
Consistent	Principles 1, 2, 3, 4, 5, 7, 8, 12, 13, 17, 18, 19, 20, 21, 22 and 23
Broadly consistent	Principles 9, 11, 15, 16
Partly consistent	None
Not consistent	Principle 10
Not applicable	None

The AT's finding that Principle 10 (Physical deliveries) has not been completely and consistently implemented is based on its conclusion that there are no specific provisions in the implementation measures regarding the physical delivery of non-immobilised instruments. The provisions in the implementation measures concerning adequate safeguarding for physical protection of securities refer only to securities subject to immobilisation. Under CSDR Article 3(1), any issuer established in the EU must arrange for securities to be immobilised or issued in dematerialised form. The requirements entered into force on 1 January 2023 for transferable securities issued after that date and will apply from 1 January 2025 to all transferable securities. Consequently, this gap will not be fully resolved until the start of 2025.

For those Principles where the AT has concluded that implementation is broadly consistent, the following gaps have been identified:

- *Money settlements (Principle 9)*: There are two minor gaps in the implementation measures. First, with respect to requiring settlement in central bank money, the CSDR focuses only on transactions denominated in the currency of the country in which settlement takes place. However, as KC 9.1 is qualified to "where practical and available" the AT concluded that this is only likely to lead to a small (or potentially no) gap. Second, with respect to KC 9.5, no provision requires legal agreements between settlement banks and the CSD/SSS to clearly state when transfers are expected to occur.
- *Central securities depositories (Principle 11)*: there are two minor gaps in the implementation measures. First, there is a minor difference in terminology between the implementation measures (which state "reduce and manage risks") and Principle 11 (including KC 11.3) (which states "minimise and manage the risks"). A requirement to "reduce" could be met by any level of risk below a reference point, but a requirement to "minimise" would involve targeting the lowest possible level of risk subject to constraints. Second, the implementation measures for KC 11.6 focus on CSDs adopting a sound risk-management framework that comprehensively manages its risks, rather than the CSD's actions to identify, measure, monitor and manage its risks.
- *General business risk (Principle 15)*: There is a lack of specificity in linking requirements for restructuring to the recovery plans that EU CSDs/SSSs are required to have, which results in a minor gap relative to KC 15.3. It is unclear if the term "restructuring" fully covers the range of actions that may be included in a CSD/SSS's recovery plan. Additionally, it is unclear if the financial resources a CSD/SSS would need to hold to cover "restructuring" would be consistent with the financial resources it would need to hold to implement the recovery plan under KC 15.2. However,

³⁸ The ratings summary lists all Principles that are applicable to different FMI types as defined in paragraphs 1.10–1.14 and shown in Table 1 of the PFMI. For further detail on ratings, see Section 4.2.

the gap is only considered to be minor as there is a requirement for EU CSDs/SSSs to submit an adequate recovery plan to ensure continuity of their critical operations.

- *Custody and investment risks (Principle 16):* A minor gap was identified in relation to the disclosure of a CSD/SSS's investment strategy, relative to KC 16.4, under which, an FMI's investment strategy is expected to be fully disclosed to its participants, while the CSDR states that "a CSD shall disclose to all clients information that allows them to assess the risks associated with the services provided". Consequently, the level of disclosure may fall short of what is expected in the Principle.

The AT also observed that the framework could be further strengthened by public disclosure of how the ECB applies the PFMI to T2S. Subsequent to this assessment, the Eurosystem has published a policy statement setting out the Principles and Key Considerations that are applied to T2S.³⁹ The AT also notes that CSDs/SSSs that provide banking-type ancillary services are subject to regulation under the CSDR and as credit institutions. This includes both the prudential requirements for credit institutions in Directive No 2013/36/EU and the recovery and resolution requirements under Directive No 2014/59/EU (the Bank Recovery and Resolution Directive or BRRD). The potential for conflicting provisions is addressed in Article 54(3) of the CSDR, which clarifies that the stricter requirements on prudential supervision shall apply.

4.1.3.2 CSDs/SSSs that do not provide banking-type ancillary services

In addition to the gaps described above, the AT concluded that the regulatory and oversight framework for CSDs/SSSs that do not provide banking-type ancillary services is partly consistent with respect to two additional Principles (Table 5).

Assessment category	Principle
Consistent	Principles 1, 2, 3, 5, 8, 12, 13, 17, 18, 19, 20, 21, 22 and 23
Broadly consistent	Principles 9, 11, 15, 16
Partly consistent	Principles 4, 7
Not consistent	Principle 10
Not applicable	None

Principles 4 (Credit risk) and 7 (Liquidity risk) require FMIs to effectively measure, monitor and manage their credit and liquidity risks exposures. EU CSDs/SSSs that are authorised to provide only core services and non-banking-type ancillary services that do not, on their face, entail credit or liquidity risks⁴¹ and are not allowed to offer any services that would expose them to credit or liquidity risks such as provision of settlement guarantee when employing DvP2/DvP3 settlement models.⁴² However, Principles 4 (Credit risk) and 7 (Liquidity risk) require that if (i) there is no explicit settlement guarantee and (ii) participants face credit exposures arising from the payment, clearing, and settlement processes, a deferred

³⁹ See www.ecb.europa.eu/paym/pol/activ/critical/shared/pdf/CPMI-IOSCO_Principles_TARGET2-Securities.en.pdf.

⁴⁰ The ratings summary lists all Principles that are applicable to different FMI types as defined in paragraphs 1.10–1.14 and shown in Table 1 of the PFMI. For further detail on ratings, see Section 4.2.

⁴¹ As defined in Sections A-B of the Annex to the CSDR, available at eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:02014R0909-20220622#toCld111.

⁴² A settlement mechanism that links a securities transfer and a funds transfer in a way that ensures that delivery occurs if and only if the corresponding payment occurs. DvP model 2 implies the settlement of securities on a gross basis, with final transfer of securities from the seller to the buyer occurring throughout the processing cycle, but settles funds on a net basis, with final transfer of funds from the seller to the buyer occurring at the end of the processing cycle. DvP model 3 implies the settlement of both securities and funds, on a net basis, with final transfers occurring at the end of the processing cycle.

net settlement (DNS) SSS⁴³ should address those risks, including by maintaining sufficient resources to withstand various adverse events, such as default of certain participants. Consequently, the AT flagged a regulatory gap with regard to the requirements addressing the credit and/or liquidity exposures that participants may incur vis-à-vis each other when participating in the aforementioned CSDs/SSSs.

The AT also observed that the framework could be further strengthened by explicitly requiring EU CSDs/SSSs that do not provide banking-type ancillary services to provide relevant authorities with the information needed for resolution planning (consistent with KC 3.4 of the PFMI). The CSDR leaves it up to the national competent authorities to ensure that the CSDR requirement is duly implemented under the relevant national rules. For EU CSDs/SSSs that provide ancillary banking services, this gap is filled by the information gathering powers provided to the resolution authority under the BRRD (Directive No 2014/59/EU).

In addition, on Principle 16, a potential minor gap was identified in relation to KC 16.2 regarding prompt access to assets. Where participants provide collateral under security financial collateral arrangements or non-cash assets are placed in a guarantee fund, and those assets are not held at the CSD/SSS, it is not clear if the CSD/SSS would have timely access to these assets in all cases.

4.2 Assessment of completeness and consistency with the Principles – observations and recommendations

4.2.1 Payment systems

There are no observations or recommendations for PSs.

4.2.2 CSDs/SSSs

4.2.2.1 CSDs/SSSs that provide banking-type ancillary services

Principle 9: Money settlements	
An FMI should conduct its money settlements in central bank money where practical and available. If central bank money is not used, an FMI should minimise and strictly control the credit and liquidity risk arising from the use of commercial bank money.	
<i>Principle rating</i>	Broadly consistent
<i>Implementation measure</i>	<ul style="list-style-type: none"> • Regulation No 909/2014/EU (CSDR) • Commission Delegated Regulation (EU) 2017/392 • Eurosystem Oversight Policy Framework • T2S Oversight Framework
<i>Key conclusions/recommendations</i>	<p>Key conclusions</p> <p>There are two minor gaps in the implementation measures. The CSDR focuses on the use of central bank money only on transactions denominated in the currency of the country in which settlement takes place. However, as KC 9.1 is qualified “where practical and available” the AT concluded that this is only likely to lead to a small (and potentially no) gap. In addition, there is no provision stating that “An FMI’s legal agreements with any settlement banks should state clearly when transfers on the books of individual settlement banks are expected to occur.”</p> <p>Recommendation</p> <p>The EU authorities are recommended to implement measures to address the minor gaps related to KCs 1 and 5.</p>
KC 1	<p>Key consideration text</p> <p>An FMI should conduct its money settlements in central bank money, where practical and available, to avoid credit and liquidity risks.</p>

⁴³ Deferred (or designated-time) net settlement.

Implementation measure

- Regulation No 909/2014/EU (CSDR)
- Commission Delegated Regulation (EU) 2017/392
- Eurosystem Oversight Policy Framework
- T2S Oversight Framework

Key conclusion

The CSDR focuses on the use of central bank money only on transactions denominated in the currency of the country in which settlement takes place. However, as KC 9.1 is qualified to “where practical and available”, the AT concluded that this is only likely to lead to a small (or potentially no) gap.

KC 5

Key consideration text

An FMI’s legal agreements with any settlement banks should state clearly when transfers on the books of individual settlement banks are expected to occur, that transfers are to be final when effected, and that funds received should be transferable as soon as possible, at a minimum by the end of the day and ideally intraday, in order to enable the FMI and its participants to manage credit and liquidity risks.

Implementation measure

- Regulation No 909/2014/EU (CSDR)
- Commission Delegated Regulation (EU) 2017/392
- EU Directive 98/26/EC
- Eurosystem Oversight Policy Framework
- T2S Oversight Framework

Key conclusion

There is no provision stating that “an FMI’s legal agreements with any settlement banks should state clearly when transfers on the books of individual settlement banks are expected to occur”.

Principle 10: Physical deliveries

An FMI should clearly state its obligations with respect to the delivery of physical instruments or commodities and should identify, monitor, and manage the risks associated with such physical deliveries.

Principle rating Not consistent

Implementation measure

- Regulation No 909/2014/EU (CSDR)
- Commission Delegated Regulation (EU) 2017/392
- Eurosystem Oversight Policy Framework
- T2S Oversight Framework

Key conclusions/recommendations **Key conclusions**

There are no specific provisions in the implementation measures regarding the physical delivery of non-immobilised instruments. The provisions in the implementation measures concerning adequate safeguarding for physical protection of securities refer only to securities subject to immobilisation. Under CSDR Article 3(1), any issuer established in the EU must arrange for securities to be immobilised or issued in dematerialised form. The requirements entered into force on 1 January 2023 for transferable securities issued after that date and will apply from 1 January 2025 to all transferable securities. Consequently, this gap will not be fully resolved until the start of 2025.

Recommendation

The EU authorities are recommended to implement measures to address the gaps or inconsistencies related to KC 1 and 2.

KC 1

Key consideration text

An FMI’s rules should clearly state its obligations with respect to the delivery of physical instruments or commodities.

Implementation measure

- Regulation No 909/2014/EU (CSDR)
- Commission Delegated Regulation (EU) 2017/392
- Eurosystem Oversight Policy Framework
- T2S Oversight Framework

Key conclusion

There are no specific provisions in the implementation measures regarding the physical delivery of non-immobilised instruments. The provisions in the implementation measures concerning adequate safeguarding for physical protection of securities refer only to securities subject to immobilisation. Under CSDR Article 3(1) any issuer established in the EU must arrange for securities to be immobilised or issued in dematerialised form. The requirements entered into force on 1 January 2023 for transferable securities issued after that date and will apply from 1 January 2025 to all transferable securities. Consequently, this gap will not be fully resolved until the start of 2025.

KC 2

Key consideration text

An FMI should identify, monitor, and manage the risks and costs associated with the storage and delivery of physical instruments or commodities.

Implementation measure

- EU Regulation No 909/2014 (Central Securities Depositories Regulation or CSDR)
- Commission Delegated Regulation (EU) 2017/392
- Eurosystem Oversight Policy Framework
- T2S Oversight Framework

Key conclusion

There is no specific provision regarding the delivery of physical instruments; however, Article 59(3) of Commission Delegated Regulation (EU) 2017/392 provides that: “Where the reconciliation process concerns securities subject to immobilisation, a CSD shall put in place adequate measures to protect the physical securities from theft, fraud and destruction. Those measures shall at least include the use of vaults whose design and location ensure a high level of protection against floods, earthquakes, fire and other disasters.”

Principle 11: Central securities depositories

A CSD should have appropriate rules and procedures to help ensure the integrity of securities issues and minimise and manage the risks associated with the safekeeping and transfer of securities. A CSD should maintain securities in an immobilised or dematerialised form for their transfer by book entry.

Principle rating Broadly consistent

- Implementation measure*
- Regulation No 909/2014/EU (CSDR)
 - Commission Delegated Regulation (EU) 2017/392
 - Eurosystem Oversight Policy Framework
 - T2S Oversight Framework

Key conclusions/recommendations **Key conclusions**

The implementation measures refers to “reduce” rather than “minimise” in regard to the risks associated with the safekeeping and transfer of securities. The AT is comfortable that the CSDR implements the requirement that a CSD should maintain securities in an immobilised or dematerialised form for their transfer by book entry, despite the gradual application of Article 3(1) for securities that are not traded on a trading venue.

Recommendation

The EU authorities are recommended to implement measures to address the gaps or inconsistencies related to KCs 3 and 6.

KC 3

Key consideration text

A CSD should maintain securities in an immobilised or dematerialised form for their transfer by book entry. Where appropriate, a CSD should provide incentives to immobilise or dematerialise securities

Implementation measure

- Regulation No 909/2014/EU (CSDR)
- Commission Delegated Regulation (EU) 2017/392
- Eurosystem Oversight Policy Framework
- T2S Oversight Framework

Key conclusion

The AT is comfortable that the CSDR implements the requirement that a CSD should maintain securities in an immobilised or dematerialised form for their transfer by book entry, despite the gradual application of Article 3(1) for securities that are not traded on a trading venue.

KC 6

Key consideration text

A CSD should identify, measure, monitor, and manage its risks from other activities that it may perform; additional tools may be necessary in order to address these risks.

Implementation measure

- Regulation No 909/2014/EU (CSDR)
- Eurosystem Oversight Policy Framework
- T2S Oversight Framework

Key conclusion

There is an absence of specific implementation measures to address “risks from other activities”.

Principle 15: General business risk

An FMI should identify, monitor, and manage its general business risk and hold sufficient liquid net assets funded by equity to cover potential general business losses so that it can continue operations and services as a going concern if those losses materialise. Further, liquid net assets should at all times be sufficient to ensure a recovery or orderly wind-down of critical operations and services.

Principle rating Broadly consistent

Implementation measure

- Regulation No 909/2014/EU (CSDR)
- Commission Delegated Regulation (EU) 2017/390
- Commission Delegated Regulation (EU) 2017/392
- Eurosystem Oversight Policy Framework
- T2S Oversight Framework

*Key conclusions/
recommendations*

Key conclusions

There is a lack of specificity in linking requirements for restructuring to the recovery plans that CSDs are required to have.

Recommendation

The EU authorities are recommended to implement measures to address the gaps or inconsistencies related to KCs 2 and 3.

KC 2

Key consideration text

An FMI should hold liquid net assets funded by equity (such as common stock, disclosed reserves, or other retained earnings) so that it can continue operations and services as a going concern if it incurs general business losses. The amount of liquid net assets funded by equity an FMI should hold should be determined by its general business risk profile and the length of time required to achieve a recovery or orderly wind-down, as appropriate, of its critical operations and services if such action is taken.

Implementation measure

- Regulation No 909/2014/EU (CSDR)
- Commission Delegated Regulation (EU) 2017/390
- Commission Delegated Regulation (EU) 2017/392
- Eurosystem Oversight Policy Framework
- T2S Oversight Framework

Key conclusion

There is a lack of specificity in linking requirements for restructuring to the recovery plans that CSDs are required to have. It is unclear if the financial resources a CSD/SSS would need to hold to cover “restructuring” would be consistent with the financial resources it would need to hold to implement the recovery plan under KC 15.2.

KC 3

Key consideration text

An FMI should maintain a viable recovery or orderly wind-down plan and should hold sufficient liquid net assets funded by equity to implement this plan. At a minimum, an FMI should hold liquid net assets funded by equity equal to at least six months of current operating expenses. These assets are in addition to resources held to cover participant defaults or other risks covered under the financial resources principles. However, equity held under international risk-based capital standards can be included where relevant and appropriate to avoid duplicate capital requirements.

Implementation measure

- Regulation No 909/2014/EU (CSDR)
- Commission Delegated Regulation (EU) 2017/390
- Commission Delegated Regulation (EU) 2017/392

- Commission Delegated Regulation (EU) 2018/1229
- ESMA Guidelines on CSD participants default rules and procedures
- Eurosystem Oversight Policy Framework
- T2S Oversight Framework

Key conclusion

There is a lack of specificity in linking requirements for restructuring to the recovery plans that CSDs are required to have. It is unclear if the term “restructuring” fully covers the range of actions that may be included in a CSD/SSS’s recovery plan.

Principle 16: Custody and investment risks

An FMI should safeguard its own and its participants’ assets and minimise the risk of loss on and delay in access to these assets. An FMI’s investments should be in instruments with minimal credit, market, and liquidity risks.

Principle rating Broadly consistent

- Implementation measure*
- Regulation No 909/2014/EU (CSDR)
 - Eurosystem Oversight Policy Framework
 - T2S Oversight Framework

Key conclusions/recommendations **Key conclusions**

There is a potential minor gap regarding the full disclosure of a CSD’s investment strategy.

Recommendation

The EU authorities are recommended to implement measures to address the minor gap or inconsistency related to KC 4.

KC 4

Key consideration text

An FMI’s investment strategy should be consistent with its overall risk-management strategy and fully disclosed to its participants, and investments should be secured by, or be claims on, high-quality obligors. These investments should allow for quick liquidation with little, if any, adverse price effect.

Implementation measure

- Regulation No 909/2014/EU (CSDR)
- Commission Delegated Regulation (EU) 2017/390
- Commission Delegated Regulation (EU) 2017/392
- ESMA Guidelines on CSD participants default rules and procedures
- Eurosystem Oversight Policy Framework
- T2S Oversight Framework

Key conclusion

The implementation measures lack a specific requirement regarding full disclosure of a CSD/SSS’s investment strategy.

4.2.2.2 CSDs/SSSs that do not provide banking-type ancillary services

In addition to the observations and recommendations set out in Section 4.2.2.1, the following additional observations and recommendations were identified for CSDs/SSSs that do not provide banking-type ancillary services.

Principle 3: Framework for the Comprehensive management of risks

An FMI should have a sound risk-management framework for comprehensively managing legal, credit, liquidity, operational, and other risks.

Principle rating Consistent

- Implementation measure*
- Regulation No 909/2014/EU (CSDR)
 - Commission Delegated Regulation (EU) 2017/392
 - Eurosystem Oversight Policy Framework
 - T2S Oversight Framework

Key conclusions/recommendations **Recommendations**

None

KC 4

Key consideration text

An FMI should identify scenarios that may potentially prevent it from being able to provide its critical operations and services as a going concern and assess the effectiveness of a full range of options for recovery or orderly wind-down. An FMI should prepare appropriate plans for its recovery or orderly wind-down based on the results of that assessment. Where applicable, an FMI should also provide relevant authorities with the information needed for purposes of resolution planning.

Implementation measure

- Regulation No 909/2014/EU (CSDR)
- Commission Delegated Regulation (EU) 2017/392
- Eurosystem Oversight Policy Framework
- T2S Oversight Framework

Key conclusion

There is no specific implementation measure with respect to the following part of KC 4: “Where applicable, an FMI should also provide relevant authorities with the information needed for purposes of resolution planning.” Instead, it is up to the national competent authorities to ensure that the CSDR requirement is duly implemented under the relevant national rules. This is considered to be a minor gap and so the Principle has been rated as consistent.

Principle 4: Credit risk

An FMI should effectively measure, monitor, and manage its credit exposures to participants and those arising from its payment, clearing, and settlement processes. An FMI should maintain sufficient financial resources to cover its credit exposure to each participant fully with a high degree of confidence. In addition, a CCP that is involved in activities with a more-complex risk profile or that is systemically important in multiple jurisdictions should maintain additional financial resources sufficient to cover a wide range of potential stress scenarios that should include, but not be limited to, the default of the two participants and their affiliates that would potentially cause the largest aggregate credit exposure to the CCP in extreme but plausible market conditions. All other CCPs should maintain additional financial resources sufficient to cover a wide range of potential stress scenarios that should include, but not be limited to, the default of the participant and its affiliates that would potentially cause the largest aggregate credit exposure to the CCP in extreme but plausible market conditions.

Principle rating Partly consistent

Implementation measure

- Regulation No 909/2014/EU (CSDR)
- Commission Delegated Regulation (EU) 2017/390
- Eurosystem Oversight Policy Framework
- T2S Oversight Framework

Key conclusions/recommendations **Key conclusions**

An SSS that employs DvP2/DvP3 settlement models and that does not provide any settlement guarantee should effectively measure, monitor and manage the credit risk exposures arising from its payment, clearing, and settlement processes as well as maintain, at a minimum, sufficient resources to cover the exposures of the two participants and their affiliates that would create the largest aggregate credit exposure in the system. In this case there are no implementation measures.

Recommendation

The EU authorities are recommended to implement measures to address the gaps or inconsistencies related to KCs 1, 2, 3, and 7.

KC 1

Key consideration text

An FMI should establish a robust framework to manage its credit exposures to its participants and the credit risks arising from its payment, clearing, and settlement processes. Credit exposure may arise from current exposures, potential future exposures, or both.

Implementation measure

- Regulation No 909/2014/EU (CSDR)
- Commission Delegated Regulation (EU) 2017/390
- Eurosystem Oversight Policy Framework
- T2S Oversight Framework

Key conclusion

A CSD that employs DvP2/DvP3 settlement models and that does not provide any settlement guarantee should adopt the measures prescribed above in relation to credit exposures that participants may incur vis-à-vis each other. In this case there are no implementation measures.

KC 2

Key consideration text

An FMI should identify sources of credit risk, routinely measure and monitor credit exposures, and use appropriate risk-management tools to control these risks.

Implementation measure

- Regulation No 909/2014/EU (CSDR)
- Commission Delegated Regulation (EU) 2017/390
- Eurosystem Oversight Policy Framework
- T2S Oversight Framework

Key conclusion

A CSD that employs DvP2/DvP3 settlement models and that does not provide any settlement guarantee should adopt the measures prescribed above in relation to credit exposures that participants may incur vis-à-vis each other. In this case there are no implementation measures.

KC 3

Key consideration text

A payment system or SSS should cover its current and, where they exist, potential future exposures to each participant fully with a high degree of confidence using collateral and other equivalent financial resources (see Principle 5 on collateral). In the case of a DNS payment system or DNS SSS in which there is no settlement guarantee but where its participants face credit exposures arising from its payment, clearing, and settlement processes, such an FMI should maintain, at a minimum, sufficient resources to cover the exposures of the two participants and their affiliates that would create the largest aggregate credit exposure in the system.

Implementation measure

- Regulation No 909/2014/EU (CSDR)
- Commission Delegated Regulation (EU) 2017/390
- Eurosystem Oversight Policy Framework
- T2S Oversight Framework

Key conclusion

A CSD that employs DvP2/DvP3 settlement models and that does not provide any settlement guarantee should adopt the measures prescribed above in relation to credit exposures that participants may incur vis-à-vis each other. In this case there are no implementation measures.

KC 7

Key consideration text

An FMI should establish explicit rules and procedures that address fully any credit losses it may face as a result of any individual or combined default among its participants with respect to any of their obligations to the FMI. These rules and procedures should address how potentially uncovered credit losses would be allocated, including the repayment of any funds an FMI may borrow from liquidity providers. These rules and procedures should also indicate the FMI's process to replenish any financial resources that the FMI may employ during a stress event, so that the FMI can continue to operate in a safe and sound manner.

Implementation measure

- Regulation No 909/2014/EU (CSDR)
- Commission Delegated Regulation (EU) 2017/390
- Eurosystem Oversight Policy Framework
- T2S Oversight Framework

Key conclusion

A CSD that employs DvP2/DvP3 settlement models and that does not provide any settlement guarantee should adopt the measures prescribed above in relation to credit exposures that participants may incur vis-à-vis each other. In this case there are no implementation measures.

Principle 7: Liquidity risk

An FMI should effectively measure, monitor, and manage its liquidity risk. An FMI should maintain sufficient liquid resources in all relevant currencies to effect same-day and, where appropriate, intraday and multiday settlement of payment obligations with a high degree of confidence under a wide range of potential stress scenarios that should include, but not be limited to, the default of the participant and its affiliates that would generate the largest aggregate liquidity obligation for the FMI in extreme but plausible market conditions.

<i>Principle rating</i>	Partly consistent
<i>Implementation measure</i>	<ul style="list-style-type: none"> • Regulation No 909/2014/EU (CSDR) • Commission Delegated Regulation (EU) 2017/390 • Eurosystem Oversight Policy Framework • T2S Oversight Framework
<i>Key conclusions/recommendations</i>	<p>Key conclusions</p> <p>An SSS CSD that employs DvP2/DvP3 settlement models and that does not provide any settlement guarantee should effectively measure, monitor, and manage liquidity risk as well as maintain sufficient liquid resources in all relevant currencies to effect same-day settlement and, where appropriate, intraday or multiday settlement of payment obligations with a high degree of confidence under a wide range of potential stress scenarios that should include, but not be limited to, the default of the participant and its affiliates that would generate the largest aggregate payment obligation in extreme but plausible market conditions. In this case there are no implementation measures.</p> <p>Recommendation</p> <p>The EU authorities are recommended to implement measures to address the gaps or inconsistencies related to KCs 1, 2, 3, 5, 6, 7, 8, 9, and 10.</p>
<i>KC 1</i>	<p>Key consideration text</p> <p>An FMI should have a robust framework to manage its liquidity risks from its participants, settlement banks, nostro agents, custodian banks, liquidity providers, and other entities.</p> <p>Implementation measure</p> <ul style="list-style-type: none"> • Regulation No 909/2014/EU (CSDR) • Commission Delegated Regulation (EU) 2017/390 • Eurosystem Oversight Policy Framework • T2S Oversight Framework <p>Key conclusion</p> <p>A CSD that employs DvP2/DvP3 settlement models and that does not provide any settlement guarantee should adopt the measures prescribed above in relation to liquidity exposures that participants may incur vis-à-vis each other. In this case there are no implementation measures.</p>
<i>KC 2</i>	<p>Key consideration text</p> <p>An FMI should have effective operational and analytical tools to identify, measure, and monitor its settlement and funding flows on an ongoing and timely basis, including its use of intraday liquidity.</p> <p>Implementation measure</p> <ul style="list-style-type: none"> • Regulation No 909/2014/EU (CSDR) • Commission Delegated Regulation (EU) 2017/390 • Eurosystem Oversight Policy Framework • T2S Oversight Framework <p>Key conclusion</p> <p>A CSD that employs DvP2/DvP3 settlement models and that does not provide any settlement guarantee should adopt the measures prescribed above in relation to liquidity exposures that participants may incur vis-à-vis each other. In this case there are no implementation measures.</p>
<i>KC 3</i>	<p>Key consideration text</p> <p>A payment system or SSS, including one employing a DNS mechanism, should maintain sufficient liquid resources in all relevant currencies to effect same-day settlement, and where appropriate intraday or multiday settlement, of payment obligations with a high degree of confidence under a wide range of potential stress scenarios that should include, but not be limited to, the default of the participant and its affiliates that would generate the largest aggregate payment obligation in extreme but plausible market conditions.</p> <p>Implementation measure</p> <ul style="list-style-type: none"> • Regulation No 909/2014/EU (CSDR) • Commission Delegated Regulation (EU) 2017/390 • Eurosystem Oversight Policy Framework • T2S Oversight Framework <p>Key conclusion</p>

A CSD that employs DvP2/DvP3 settlement models and that does not provide any settlement guarantee should adopt the measures prescribed above in relation to liquidity exposures that participants may incur vis-à-vis each other. In this case there are no implementation measures.

KC 5

Key consideration text

For the purpose of meeting its minimum liquid resource requirement, an FMI's qualifying liquid resources in each currency include cash at the central bank of issue and at creditworthy commercial banks, committed lines of credit, committed foreign exchange swaps, and committed repos, as well as highly marketable collateral held in custody and investments that are readily available and convertible into cash with prearranged and highly reliable funding arrangements, even in extreme but plausible market conditions. If an FMI has access to routine credit at the central bank of issue, the FMI may count such access as part of the minimum requirement to the extent it has collateral that is eligible for pledging to (or for conducting other appropriate forms of transactions with) the relevant central bank. All such resources should be available when needed.

Implementation measure

- Regulation No 909/2014/EU (CSDR)
- Commission Delegated Regulation (EU) 2017/390
- Eurosystem Oversight Policy Framework
- T2S Oversight Framework

Key conclusion

A CSD that employs DvP2/DvP3 settlement models and that does not provide any settlement guarantee should adopt the measures prescribed above in relation to liquidity exposures that participants may incur vis-à-vis each other. In this case there are no implementation measures.

KC 6

Key consideration text

An FMI may supplement its qualifying liquid resources with other forms of liquid resources. If the FMI does so, then these liquid resources should be in the form of assets that are likely to be saleable or acceptable as collateral for lines of credit, swaps, or repos on an ad hoc basis following a default, even if this cannot be reliably prearranged or guaranteed in extreme market conditions. Even if an FMI does not have access to routine central bank credit, it should still take account of what collateral is typically accepted by the relevant central bank, as such assets may be more likely to be liquid in stressed circumstances. An FMI should not assume the availability of emergency central bank credit as a part of its liquidity plan.

Implementation measure

- Regulation No 909/2014/EU (CSDR)
- Eurosystem Oversight Policy Framework
- T2S Oversight Framework

Key conclusion

A CSD that employs DvP2/DvP3 settlement models and that does not provide any settlement guarantee should adopt the measures prescribed above in relation to liquidity exposures that participants may incur vis-à-vis each other. In this case there are no implementation measures.

KC 7

Key consideration text

An FMI should obtain a high degree of confidence, through rigorous due diligence, that each provider of its minimum required qualifying liquid resources, whether a participant of the FMI or an external party, has sufficient information to understand and to manage its associated liquidity risks, and that it has the capacity to perform as required under its commitment. Where relevant to assessing a liquidity provider's performance reliability with respect to a particular currency, a liquidity provider's potential access to credit from the central bank of issue may be taken into account. An FMI should regularly test its procedures for accessing its liquid resources at a liquidity provider.

Implementation measure

- Regulation No 909/2014/EU (CSDR)
- Commission Delegated Regulation (EU) 2017/390
- Eurosystem Oversight Policy Framework
- T2S Oversight Framework

Key conclusion

A CSD that employs DvP2/DvP3 settlement models and that does not provide any settlement guarantee should adopt the measures prescribed above in relation to liquidity exposures that participants may incur vis-à-vis each other. In this case there are no implementation measures.

KC 8

Key consideration text

An FMI with access to central bank accounts, payment services, or securities services should use these services, where practical, to enhance its management of liquidity risk.

Implementation measure

- Regulation No 909/2014/EU (CSDR)
- Eurosystem Oversight Policy Framework
- T2S Oversight Framework

Key conclusion

A CSD that employs DvP2/DvP3 settlement models and that does not provide any settlement guarantee should adopt the measures prescribed above in relation to liquidity exposures that participants may incur vis-à-vis each other. In this case there are no implementation measures.

KC 9

Key consideration text

An FMI should determine the amount and regularly test the sufficiency of its liquid resources through rigorous stress testing. An FMI should have clear procedures to report the results of its stress tests to appropriate decision makers at the FMI and to use these results to evaluate the adequacy of and adjust its liquidity risk-management framework. In conducting stress testing, an FMI should consider a wide range of relevant scenarios. Scenarios should include relevant peak historic price volatilities, shifts in other market factors such as price determinants and yield curves, multiple defaults over various time horizons, simultaneous pressures in funding and asset markets, and a spectrum of forward-looking stress scenarios in a variety of extreme but plausible market conditions. Scenarios should also take into account the design and operation of the FMI, include all entities that might pose material liquidity risks to the FMI (such as settlement banks, nostro agents, custodian banks, liquidity providers, and linked FMIs), and where appropriate, cover a multiday period. In all cases, an FMI should document its supporting rationale for, and should have appropriate governance arrangements relating to, the amount and form of total liquid resources it maintains.

Implementation measure

- Regulation No 909/2014/EU (CSDR)
- Commission Delegated Regulation (EU) 2017/390
- Eurosystem Oversight Policy Framework
- T2S Oversight Framework

Key conclusion

A CSD that employs DvP2/DvP3 settlement models and that does not provide any settlement guarantee should adopt the measures prescribed above in relation to liquidity exposures that participants may incur vis-à-vis each other. In this case there are no implementation measures.

KC 10

Key consideration text

An FMI should establish explicit rules and procedures that enable the FMI to effect same-day and, where appropriate, intraday and multiday settlement of payment obligations on time following any individual or combined default among its participants. These rules and procedures should address unforeseen and potentially uncovered liquidity shortfalls and should aim to avoid unwinding, revoking, or delaying the same-day settlement of payment obligations. These rules and procedures should also indicate the FMI's process to replenish any liquidity resources it may employ during a stress event, so that it can continue to operate in a safe and sound manner.

Implementation measure

- Regulation No 909/2014/EU (CSDR)
- Eurosystem Oversight Policy Framework
- T2S Oversight Framework

Key conclusion

A CSD that employs DvP2/DvP3 settlement models and that does not provide any settlement guarantee should adopt the measures prescribed above in relation to liquidity exposures that participants may incur vis-à-vis each other. In this case there are no implementation measures.

Principle 16: Custody and investment risks

An FMI should safeguard its own and its participants' assets and minimise the risk of loss on and delay in access to these assets. An FMI's investments should be in instruments with minimal credit, market, and liquidity risks.

Principle rating Broadly consistent

Implementation measure

- Regulation No 909/2014/EU (CSDR)
- Eurosystem Oversight Policy Framework
- T2S Oversight Framework

Key conclusions/recommendations

Key conclusions

Where participants provide collateral under security financial collateral arrangements or non-cash assets are placed in a guarantee fund, and those assets are not held at the CSD/SSS, it is not clear if the CSD/SSS would have timely access to these assets in all cases.

Recommendation

The EU authorities are recommended to implement measures to address the gaps or inconsistencies related to KC 2.

KC 2

Key consideration text

An FMI should have prompt access to its assets and the assets provided by participants, when required.

Implementation measure

- EU Regulation No 909/2014 (Central Securities Depositories Regulation or CSDR)
- Commission Delegated Regulation (EU) 2017/392
- ESMA Guidelines on CSD Participants default rules and procedures
- Eurosystem Oversight Policy Framework
- T2S Oversight Framework

Key conclusion

There is a minor potential gap with respect to the requirement for prompt access to the assets provided by participants where participants provide collateral as a security interest or non-cash assets are placed in a guarantee fund and those assets are not held in the CSD/SSS operated by the CSD.

Annex A: List of abbreviations

AM	Assessment methodology
AT	Assessment team
BRRD	Bank Recovery and Resolution Directive
CCP	Central counterparty
CPMI	Committee on Payments and Market Infrastructures
CPSS	Committee on Payment and Settlement Systems
CSD	Central securities depository
CSDR	Central Securities Depositories Regulation
ECB	European Central Bank
ESMA	European Securities and Markets Authority
FFFS	Finansinspektionen regulatory code
FI	Finansinspektionen
FMI	Financial market infrastructure
FSB	Financial Stability Board
IMSG	Implementation Monitoring Standing Group
IOSCO	International Organization of Securities Commissions
MoU	Memorandum of Understanding
PFMI	Principles for financial market infrastructures
PS	Payment system
SSS	Securities settlement system
T2S	TARGET2-Securities
TR	Trade Repository

Annex B: Reference documents

Payment systems

Euro area

- Eurosystem Oversight Policy Framework
- ECB Regulation on oversight requirements for systemically important payment systems (SIPS Regulation)

Sweden

- Riksbank's oversight of the financial infrastructure (Riksbank policy statement, 2012 and 2018)
- Securities Market Act (2007:528)
- Finansinspektionen regulatory code (FFFS)
- FI policy statement (CPMI/IOSCO principles part in the supervision of financial infrastructure companies) – 25 November 2014)
- Settlement Systems Act on systems for settlement obligations on financial markets (1999:1309)
- Bankgirot's Clearing and Settlement Service Agreement
- Companies Act (2005:551)

EU CSDs/SSSs

- Regulation No 909/2014/EU (Central Securities Depositories Regulation or CSDR)
- Commission Delegated Regulation (EU) 2017/390
- Commission Delegated Regulation (EU) 2017/392
- Commission Delegated Regulation (EU) 2018/1229
- Directive No 2014/59/EU (Bank Recovery and Resolution Directive or BRRD)
- Directive No 98/26/EC
- Directive No 2013/36/EU
- Regulation (EU) No 575/2013
- ESMA Guidelines on CSD participants default rules and procedures
- Eurosystem Oversight Policy Framework
- T2S Oversight Framework, including the Memorandum of Understanding on the T2S Cooperative Arrangement signed between the ECB as lead overseer of T2S, overseers of CSDs participating in T2S, central banks of issue for currencies settled in T2S, competent authorities for the supervision of those CSDs which have signed the T2S Framework Agreement, and ESMA in its role as coordinator of competent authorities for the supervision of CSDs.

Annex C: Detailed response from the EU authorities

As described in Section 1.3, the legal and regulatory framework applicable to CSDs, i.e. the CSDR, was reviewed by Regulation (EU) 2023/2845⁴⁴ (the so-called “CSDR REFIT”) that gradually applies as of January 2024. A summary of observations regarding the findings of this L2 assessment under the new provisions of CSDR REFIT are set out in this annex. The review of the CSDR leads to an even greater consistency of the EU regulatory framework with the PFMI and will help authorities address some of the gaps identified in this assessment.

The response of the EU authorities concerning assessment of CSDs follows the same structure employed in the previous sections of the report, making a distinction between CSDs that provide banking-type ancillary services and CSDs that do not provide such services.

Finally, the EU authorities did not have observations regarding the assessment findings concerning PSs.

CSDs/SSSs that provide banking-type ancillary services

Money settlements (Principle 9): With regard to the first minor gap that the AT flagged regarding KC 9.1, the EU authorities note that the KC requires that settlement be conducted in central bank money “where practical and available”, while the CSDR⁴⁵ imposes such a requirement only for settlement of “transactions denominated in the currency of the country where the settlement takes place”. Given that national central banks retain discretion on which types of entity may have access to various central bank services, it may be challenging for CSDs to perform settlement in central bank money in foreign currencies, especially if the value settled in a certain currency is not substantial. However, the EU authorities acknowledge that central bank money should be the default settlement asset and underline that there are various requirements in the CSDR framework which incentivise settlement in central bank money. Regarding the second minor gap that the AT pointed out regarding KC 9.5, the EU authorities note that the concept of settlement bank is not defined in the CSDR regulatory framework and therefore there are no specific provisions on the legal arrangements between CSDs and the concerned banks.

Physical deliveries (Principle 10): Regarding the gap related to KC1, as the AT also correctly pointed out, a staggered application of the CSDR Article 3(1) is in place, which eventually contributes to a closure of the concerned regulatory gap as of 1 January 2025.

Central securities depositories (Principle 11): Concerning the slight difference in terminology between KC 11.3 and the corresponding requirements set out in the CSDR, the EU authorities emphasise that the minor gap has been addressed via CSDR REFIT, which updated those requirements accordingly.⁴⁶ Regarding the other minor gap that the AT noted on the identification, monitoring and management of CSDs’ risks, the EU authorities refer to specific provisions laid out in the CSDR⁴⁷ and related technical standards⁴⁸ that set

⁴⁴ Regulation (EU) 2023/2845 of the European Parliament and of the Council of 13 December 2023 amending Regulation (EU) No. 909/2014 as regards settlement discipline, cross-border provision of services, supervisory cooperation, provision of banking-type ancillary services and requirements for third-country central securities depositories and amending Regulation (EU) No 236/2012.

⁴⁵ Reference is made to Article 40(1) of the CSDR on cash settlement.

⁴⁶ Reference is made to Article 36 of the CSDR on General provisions, as amended by CSDR REFIT.

⁴⁷ Articles 26(1) and 42–47 of the CSDR

⁴⁸ Articles 47 and 66–69 of Commission Delegated Regulation (EU) No. 2017/392 of 11 November 2016 supplementing Regulation (EU) No 909/2014 of the European Parliament and of the Council with regard to regulatory technical standards on authorisation, supervisory and operational requirements for central securities depositories

out EU CSDs' obligation to have various arrangements in place to identify, manage, monitor and report the risks to which the CSDs are or might be exposed.

General business risk (Principle 15): On the gaps that the AT flagged in relation to KCs 15.2 and 15.3, the EU authorities consider that, to a very large extent, they were addressed with the introduction of enhanced regulatory requirements on recovery and wind-down plans via CSDR REFIT.⁴⁹ To that end, the emphasis is put on the recovery plan, while the restructuring action is now part of that plan. With these revised provisions, which are expected to be reflected accordingly in the updated EU technical standards, the link between the recovery plan and the financial resources that a CSD needs to hold to implement the plan is clearer.

Custody and investment risks (Principle 16): Regarding the potential minor gap related to the full disclosure of a CSD's investment strategy, the EU authorities agree that more detailed requirements would be useful, so that no ambiguity exists about a CSD's obligation to ensure transparency in that respect.

CSDs/SSSs that do not provide banking-type ancillary services

Credit risk (Principle 4) and Liquidity risk (Principle 7): Regarding the settlement risk (i.e. credit exposures and/or liquidity exposures) that participants may incur vis-à-vis each other in an SSS operated by a CSD which does not provide an explicit settlement guarantee, the EU authorities indicate that the regulatory gap was addressed via specific new provisions on deferred net settlement included in the CSDR.⁵⁰

Finally, in relation to *Principle 3 (Framework for the comprehensive management of risks)*, concerning resolution planning for CSDs that do not provide banking-type ancillary services, the EU authorities indicate that the new requirements⁵¹ introduced by the CSDR REFIT were calibrated considering the flexibility set out in the text of KC 3.4 and corresponding explanatory note with regard to the obligation of FMIs to provide information needed for purposes of resolution planning.

⁴⁹ Reference is made to the new Article 22a of the CSDR on plans for recovery and orderly wind-down, introduced by CSDR REFIT.

⁵⁰ Reference is made to Article 47a, of the CSDR introduced by CSDR REFIT.

⁵¹ Reference is made to Article 22a(7) of the CSDR.

Annex D: FMIs subject to the Principles in European Economic Area (as at 30 October 2019)⁵²

Systemically important PSs

Euro area

- TARGET2
- EURO1
- STEP2-T
- Mastercard Clearing Management System
- CORE(FR)

Sweden

- Bankgirot
- RIX

CSDs/SSSs

- Hellenic Central Securities Depository S.A (ATHEXCSD)
- Central Securities Depository (BG)
- Centrální depozitář cenných papírů, a.s. (CSD Prague)
- Centrálny depozitár cenných papierov SR, a.s. (SK)
- Clearstream Banking AG (DE)
- Clearstream Banking S.A. (LU)
- Depozitarul Central (Central Depository) (RO)
- Euroclear Bank (BE)
- CIK (Euroclear Belgium)
- Euroclear Finland Ltd.
- Euroclear France
- Euroclear Nederland
- Euroclear Sweden AB
- Euronext Securities Oslo (Verdipapirsentralen ASA)
- IBERCLEAR (ES)
- Euronext Securities Porto (former Interbolsa, SGSCSLVM, S.A.) (PT)
- KELER Központi Értéktár Zrt. (KELER Central Depository Ltd) (HU)
- LuxCSD S.A (LU)
- Malta Stock Exchange Plc
- Euronext Securities Milan (former Monte Titoli S.p.A.)

⁵² The United Kingdom was part of the EU before the cutoff date for this review, however, the IMSG decided to conduct a separate UK L2 assessment and therefore UK FMIs are excluded from the list of FMIs evaluated in this report.

- Národný centrálny depozitár cenných papierov, a.s. (SK)
- Nasdaq CSD SE (LV)
- OeKB CSD GmbH (AT)
- Središnje klirinško depozitarno društvo d.d – SKDD (HR)
- Verðbréfamiðstöð Íslands hf
- Euronext Securities Copenhagen (former VP Securities A/S)
- NBB-SSS (National Bank of Belgium)
- Central Depository Central Registry (CDCR) operated by the Cyprus Stock Exchange
- BOGS (Bank of Greece)
- BNBGSSS (Bulgarian National Bank)
- SKD (Czech National Bank)
- SKARBNET4 (Narodowy Bank Polski)
- SaFIR (National Bank of Romania)

Annex E: Members of the IMSG⁵³

IMSG co-chairs

European Central Bank

Bank of France

Securities and Exchange Commission, US

Fiona Van Echelpoel (from Mar 2022)

Valérie Fasquelle (until Jul 2021)

Elizabeth L. Fitzgerald (from Dec 2021)

Christian Sabella (until Jun 2021)

IMSG members

Reserve Bank of Australia

Kylie Stewart (from Oct 2022)

Matthew Gibson (until Sep 2022)

Bank of Canada

Harold Gallagher (from Jan 2023)

Nikil Chande (from Aug 2021 to Jan 2023)

Wade McMahon (until Aug 2021)

European Central Bank

Beata Wróbel (from Oct 2021)

Tom Kokkola (until Oct 2021)

European Securities and Markets Authority

Maud Timon

Bank of France

Katia Pascarella (from Aug 2021)

Thomas Carré (until Jul 2021)

Bundesanstalt für Finanzdienstleistungsaufsicht, Germany

Edip Acat (until May 2020)

Hong Kong Monetary Authority

Osbert Lam

Securities and Exchange Board of India

Visha Shukla (from Dec 2022)

Sudeep Mishra (from Jan 2020 to Nov 2022)

Sanjay Puro (until Dec 2019)

Bank of Italy

Enrico Silvaggi (from Jan 2023)

Alessio Abbate (until Dec 2022)

Bank of Japan

Takashi Hamano

Financial Services Agency, Japan

Atsushi Yamada (from Dec 2022)

Megumi Ota (from Jan 2022 to Dec 2022)

Fumikazu Nishio (until Jan 2022)

Bank of Korea

Young Seok Kim (from Jan 2022)

Hyung Koo Lee (until Dec 2021)

Central Bank of the Russian Federation*

Ekaterina Peregudova (until Feb 2022)

Monetary Authority of Singapore

Tze Hon Lau

Edward Oei (from Nov 2021)

Joey Ho (until Nov 2021)

Sveriges Riksbank

Hanna Eklöf (from Dec 2022)

⁵³ The Central Bank of the Russian Federation's access to all BIS services, meetings and other BIS activities has been suspended.

Capital Markets Board of Türkiye	Loredana Sinko (until Dec 2022)
Bank of England	Nalan Sahin Urkan
	Priya Mistry (from Sep 2023)
	Francesco Fici (from Mar 2022 to Sep 2023)
	James Hoskins (until Mar 2022)
Board of Governors of the Federal Reserve System	Dibora Spiegler (from Oct 2021)
	Kathy Wang (until Oct 2021)
Federal Reserve Bank of New York	Emilie Walgenbach (from May 2021)
	John Rutigliano (until May 2021)
Commodity Futures Trading Commission, US	Jennifer Levin (from Oct 2022)
	Andrea Musalem (from Feb 2021 to Oct 2022)
	Alicia Lewis (until Feb 2021)
Securities and Exchange Commission, US	Stephanie Kim Park
IOSCO Assessment Committee	Raluca Tircoci-Craciun
IOSCO Secretariat	Tajinder Singh
	Josafat De Luna Martínez
	Hemla Deenanath (from Feb 2024)
	Jantakarn Pangutha (from Jun 2024)
	Raul Morales (from Nov 2023)
CPMI Secretariat	Jenny Hancock (until Oct 2023)

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