



EUROPEAN CENTRAL BANK

EUROSYSTEM

Eurosystem oversight framework for electronic payment instruments, schemes and arrangements

November 2021



Contents

1	Introduction	2
2	Scope	3
2.1	A single oversight framework for electronic payment instruments, schemes and arrangements – the PISA framework	3
2.2	Electronic payment instruments	3
2.3	Schemes for electronic payment instruments	4
2.4	Arrangements for electronic payment instruments	5
3	Who this framework is aimed at	6
4	Organisation of oversight activity	7
5	Coordination with other overseers and/or supervisory authorities	8
6	Proportionality considerations	9
7	Risks and applicable oversight principles	10
Annex		13
A	Documents replaced by this framework	13

1 Introduction

Article 127(2) of the [Treaty on the Functioning of the European Union](#) (TFEU) and Article 3.1 of the Statute of the European System of Central Banks (ESCB) and of the European Central Bank (ECB) state that one of the basic tasks to be carried out through the ESCB is “to promote the smooth operation of payment systems”.

The safety and efficiency of the payment system is essential for a stable and well-functioning financial system and contributes to confidence in the currency. The term “the payment system” comprises individual payment systems¹, the set of electronic payment instruments which allow the transfer of value or the discharge of payment obligations between end users (payers and payees), schemes defining standardised procedures for such electronic payment instruments, and arrangements providing functionalities supporting the use of electronic payment instruments as well as the services of payment service providers. This framework covers electronic payment instruments, schemes and arrangements (the PISA framework). It was approved by the ECB’s Governing Council on 15 November 2021 and becomes applicable as of 15 November 2022 for schemes that are already subject to oversight by a Eurosystem central bank. Newly overseen schemes/arrangements should adhere to the PISA framework within one year, at the latest, of being informed that they fall within the scope of the PISA framework.

From a Eurosystem perspective, recent technological developments warrant the extension of the scope of the current oversight of payment instruments to all electronic payment instruments enabling transfers of value between end users. The latter consists not only of transfers of euro funds² by means of electronic payment instruments but also of representations of value backed by claims or assets denominated in euro or redeemable in euro; or other digital assets that are accepted under the rules of a scheme for payment purposes or to discharge payment obligations in euro.

The Eurosystem carries out oversight activities in respect of schemes and arrangements to promote the above-mentioned statutory objective, as well as to maintain confidence in the currency and foster an efficient economy.

This document is structured as follows: Section 2 defines electronic payment instruments, schemes and arrangements covered by the framework. Section 3 explains the role of governance bodies as addressees of the framework and expectations vis-à-vis these entities. Section 4 indicates how the oversight activities will be organised. Section 5 outlines the coordination envisaged with other overseers and/or supervisory authorities. Section 6 explains the Eurosystem’s considerations on the proportionality of the oversight approach and Section 7 outlines the relevant risks and applicable oversight principles.

¹ In the context of the Eurosystem oversight of payment systems.

² The revised [Payment Services Directive](#) (PSD2) defines “funds” as banknotes and coins, scriptural money or electronic money.

2 Scope

2.1 A single oversight framework for electronic payment instruments, schemes and arrangements – the PISA framework

This Eurosystem oversight framework applies to electronic payment instruments, schemes and arrangements (the PISA framework) and is the result of a comprehensive review of the Eurosystem’s oversight approach for payment instruments. The review took into account regulatory³ and technological developments over the last few years, as well as the experience gained by the Eurosystem in the oversight of schemes based on electronic payment instruments.

The new framework replaces the “[Harmonised oversight approach and oversight standards for payment instruments](#)” and all related oversight frameworks for cards, direct debits, credit transfers and the security objectives for e-money (see Table A.1 in the Annex).

The PISA framework is aligned, where appropriate and possible, with the relevant principles of the CPMI-IOSCO [Principles for financial market infrastructures](#) (PFMI) and the Eurosystem’s [Revised oversight framework for retail payment systems](#). It thus complements the Eurosystem’s oversight of payment systems and critical service providers and acknowledges relevant requirements set out for the prudential supervision of payment service providers.

2.2 Electronic payment instruments

The PISA framework covers schemes and arrangements based on general purpose electronic payment instruments (i.e. which are not limited, with regard to transfer of value, to a single type of payee or to specific uses), all variants thereof (such as instant and/or business-to-business versions) and the usage of electronic payment instruments to place or withdraw cash.

An electronic payment instrument is a personalised device (or a set of devices), software and/or set of procedures agreed between the end user and the payment service provider to request the execution of an electronic transfer of value.

Typical examples of electronic payment instruments are payment cards, credit transfers, direct debits, e-money transfers and digital payment tokens.

³ Most notably the PSD2 and the Second Electronic Money Directive (EMD2).

The PISA framework is neutral with regard to the initiation channel of an electronic payment (e.g. via personal computer, mobile device, payment terminal or automated teller machine).

From a geographical perspective, the framework covers electronic payment instruments regardless of where the governance body of the scheme or arrangement is incorporated if (i) it enables a transfer of value to/from end users within the euro area or; (ii) if the transfer of value is based on electronic payment instruments denominated in or funded in euro, partly or fully backed by euro, or redeemable in euro (regardless where the end user is located).

The following are excluded from the PISA framework:

- services for which the transfer of value from the payer to the payee is executed solely in banknotes and coins;
- services for which the transfer of value is based on a paper cheque (even if truncated/digitalised for transmission), paper-based bill of exchange, promissory note or other comparable instrument;
- paper-based vouchers or cards issued with a view to placing funds at the disposal of the payee;
- services where the transfer of value has only an investment focus (e.g. investment in digital tokens).

Where relevant, the Eurosystem assessment methodology for electronic payment instruments, schemes and arrangements (assessment methodology) considers differences between electronic payment instruments.

The objective of the oversight is to monitor the security and efficiency of (a) the rules, as established in the related schemes, governing the functioning of the individual electronic payment instruments; and (b) the functionalities for the use of the electronic payment instruments provided by payment arrangements.

2.3 Schemes for electronic payment instruments

The framework covers schemes for electronic payment instruments (schemes).

A scheme is a set of formal, standardised and common rules enabling the transfer of value between end users by means of electronic payment instruments. It is managed by a governance body.

The scheme rules describe the procedures and functions which enable payers and payees to use or accept electronic payment instruments. The rules should be applicable for at least one payment service provider⁴. The functions cover, as a minimum, the governance of the scheme and may also include payment service

⁴ The payment service provider may be the governance body itself.

provision, payment guarantee, processing, clearing or settlement. The functions, other than governance, can be provided by the governance body itself, participating payment service providers or technical service providers⁵, or other third parties.

Examples of schemes are card payment schemes, e-money schemes, digital payment token schemes, credit transfer schemes and direct debit schemes.

2.4 Arrangements for electronic payment instruments

The framework also covers arrangements for electronic payment instruments (arrangements).

An arrangement is a set of operational functionalities which support the end users of multiple payment service providers in the use of electronic payment instruments. The arrangement is managed by a governance body which, inter alia, issues the relevant rules or terms and conditions.

The operational functionalities are not essential for the functioning of the scheme and include (i) payment initiation and facilitation of transfers of value and (ii) the storage or registering of personalised security credentials or data related to electronic payment instruments⁶.

Electronic wallets are one example of an arrangement.

In the context of arrangements, this oversight framework does not apply to⁷ payment initiation services as defined in Article 4(15) of PSD2.

Acquiring of payment transactions as defined in Article 4(44) of PSD2, including “merchant aggregation”⁸, is essential for the functioning of the scheme, and the related risks are therefore assessed as part of the oversight of the scheme.

⁵ Including payment system operators.

⁶ A payee storing data related to that payer's payment instruments solely on the payee's own behalf, in order to request a payment service provider to transfer value to the payee, does not constitute a payment arrangement (e.g. a card on file).

⁷ Any exemption of this framework relates only to the specific service and not to other activities of the same entity.

⁸ I.e. signing merchant acceptance agreements with a seller on behalf of an acquirer and/or receiving settlement proceeds from an acquirer on behalf of the underlying seller (“sub-merchant”).

3 Who this framework is aimed at

This framework is aimed at the governance bodies of schemes and arrangements that should adhere to the oversight expectations. The governance body may outsource functions/functionalities or rely on third parties to perform them, but it will remain ultimately responsible for ensuring adherence with this framework.

Where an arrangement is provided by the governance body of an electronic payment instrument scheme, it will be assessed as part of the oversight of the scheme.

Governance bodies can be licensed or non-licensed entities. The overseer may jointly assess several schemes⁹ or arrangements of a governance body.

⁹ E.g. covering various electronic payment instruments.

4 Organisation of oversight activity

The Treaty assigns oversight responsibilities to the Eurosystem. As the Eurosystem oversight policy framework explains¹⁰, “To achieve effective and efficient oversight the Eurosystem shares these responsibilities in a manner that enables it to benefit from its decentralised structure, while ensuring that its oversight activities are coordinated and that its policy stance is consistently applied throughout the euro area”.

The framework applies in the same way to all overseen schemes and arrangements. Exempted or monitored schemes/arrangements are encouraged to apply the principles of the framework on a voluntary basis.

For the purpose of conducting oversight, including the collection and assessment of information and the implementation of measures aimed at inducing change, the Eurosystem assigns the primary oversight responsibility to the central bank that is best placed to undertake these tasks (the lead overseer). In this assignment, the Eurosystem considers the proximity to the entity subject to oversight (e.g. the country of incorporation, national laws attributing specific oversight responsibilities to central banks concerned, subject to any Treaty-based requirements). Typically, national central banks are the lead overseer for schemes/arrangements with a clear national anchor, i.e. schemes/arrangements being legally incorporated in a jurisdiction or serving that particular national market. If there is no clear national anchorage, for example, where the scheme or arrangement provides pan-European services or is incorporated outside the euro area, the lead overseer is the ECB. In cases in which the pan-European scheme/arrangement has a traditional oversight or supervisory relationship with a national central bank (NCB) of at least three years, the ECB jointly conducts oversight with the respective NCB.

In the case of multiple licensed entities incorporated in different euro area Member States, the Governing Council assigns the Eurosystem’s lead overseer. For pan-European schemes or arrangements, oversight is conducted under a cooperative oversight arrangement with interested central banks, coordinated by the lead overseer. The oversight of national schemes and arrangements is conducted by the respective NCB which reports oversight activities conducted in accordance with this framework to the Governing Council of the ECB via the respective ESCB committee structure. The assignment of a Eurosystem lead overseer is notwithstanding any cooperation with authorities outside the euro area as indicated in the following section.

¹⁰ See the “[Eurosystem oversight policy framework](#)”, ECB, Frankfurt am Main, July 2016.

5 Coordination with other overseers and/or supervisory authorities

In line with “Responsibility E” under “Cooperation with other authorities” defined in the PFMI and as stipulated in the Eurosystem oversight policy framework¹¹, the Eurosystem lead overseer of a scheme/arrangement will seek to cooperate, to the extent possible, with all relevant regulatory bodies which have a legitimate interest in overseeing, supervising or regulating the scheme/arrangement.

Moreover, as mentioned in Section 2, this framework complements the oversight of individual payment systems and critical service providers¹² as well as the supervision of payment service providers with aspects that are relevant from a scheme/arrangement perspective.

Where a scheme’s function or an arrangement is already overseen or supervised as a licensed payment service provider, the PISA framework will take this into account. For instance, the scheme or arrangement’s governance body may provide oversight or supervisory findings as evidence for meeting the key considerations of the PISA framework principles or the overseer of the scheme/arrangement may have exchanged with the relevant other authority whether the requirements are sufficiently similar. Systemically important and retail payment systems that are overseen by the Eurosystem (including where the Eurosystem participates in a cooperative oversight arrangement) are exempt from the PISA framework; other activities of the same governance body may, however, still fall into the scope of the PISA framework as scheme or arrangement.

¹¹ See “[Eurosystem oversight policy framework](#)”, ECB, Frankfurt am Main, July 2016.

¹² In the context of the Eurosystem’s competences under Article 127 of the TFEU.

6 Proportionality considerations

Eurosystem oversight concentrates its activities on those schemes/arrangements which have reached a considerable level of importance for the euro area, and which therefore also bear a potential risk to the efficiency and safety of the overall payment system. The criteria the Eurosystem takes into consideration when deciding on the application of the PISA framework to a scheme/arrangement are defined in the exemption policy for implementing this framework, as reviewed over time.

Moreover, in its practical oversight implementation, the Eurosystem takes an approach that is proportionate to the risks introduced by a scheme/arrangement and considers the major changes within it.

The focus of assessments under the PISA framework is on risks that may have a scheme/arrangement-wide impact¹³ and for which the respective efforts to mitigate this impact can be expected to be under the control of the responsible governance body.

¹³ E.g. a potential issue caused by a deficiency of the rules or a security standard.

7 Risks and applicable oversight principles

Schemes and arrangements are exposed to legal, business, operational (including service provision and cyber), interdependencies and financial risks. The governance body is expected to take all necessary and appropriate measures to mitigate these risks and maintain confidence in the schemes/arrangements and electronic payment instruments used.

The PFMI have been specifically developed to enable financial market infrastructures (FMIs) to manage these and other risks. In June 2013 the Governing Council of the ECB adopted the PFMI as the standards for Eurosystem oversight of all types of FMIs in the euro area under Eurosystem responsibility. In respect of systemically important payment systems (SIPS), the PFMI have been implemented through the SIPS Regulation¹⁴.

The PISA framework identifies those principles of the PFMI that schemes/arrangements should comply with, concluding that up to 16 principles may be relevant for schemes/arrangements (see Table 1). In some cases, adjustments have been made to the text of the PFMI and/or the key considerations where these were considered not to be proportional to the risks implied by schemes/arrangements or if they did not sufficiently address aspects relevant to the interests of end users with regard to the safety and efficiency of schemes/arrangements. As an example, schemes and arrangements will have to ensure resilience against cyber threats and the assessment methodology has therefore integrated relevant considerations under Principle 17 on operational risk.

The Eurosystem assessment methodology for electronic payment instruments, schemes and arrangements specifies the key considerations and assessment questions for each principle to ensure a consistent and harmonised application and indicates whether or not a specific function of a scheme or functionality of an arrangement is concerned and whether the requirement is specifically for certain electronic payment instruments. The lead overseer will take this into account when identifying which principle, key consideration and questions are relevant for the assessment of the scheme/arrangement concerned and will justify and reflect this transparently when submitting the final assessment reports for approval to the Governing Council.

Moreover, as concerns operational resilience, schemes and arrangements are expected to respond to the regular surveys on critical service providers as specified in the “Eurosystem policy for the identification and oversight of critical service

¹⁴ [Regulation of the European Central Bank \(EU\) No 795/2014 of 3 July 2014 on oversight requirements for systemically important payment systems \(ECB/2014/28\) \(OJ L 217, 23.7.2014, p. 16\).](#)

providers of FMIs¹⁵” which serve to identify the main third-party providers for essential services and to detect areas of concentration risk within the overall payment system.

Table 1
PFMI versus the principles applicable¹⁶ to schemes/arrangements (non-editorial differences are highlighted in bold text)

	Principle	Principles for financial market infrastructures	Principles for electronic payment instrument schemes/arrangements
1	Legal basis	An FMI should have a well-founded, clear, transparent, and enforceable legal basis for each material aspect of its activities in all relevant jurisdictions.	A scheme/arrangement should have a well-founded, clear, transparent and enforceable legal basis for each material aspect of its activities in all relevant jurisdictions.
2	Governance	An FMI should have governance arrangements that are clear and transparent, promote the safety and efficiency of the FMI, and support the stability of the broader financial system, other relevant public interest considerations , and the objectives of relevant stakeholders.	A scheme/arrangement should have governance that is clear and transparent, promotes the safety and efficiency of the payment scheme/arrangement, and supports the objectives of relevant stakeholders.
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.	A scheme/arrangement should have a sound risk management framework for comprehensively managing its legal, credit, liquidity, operational and other risks.
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. [...]	A scheme should effectively measure, monitor and manage its credit exposures to payment service providers and/or end users as well as those arising from its payment, clearing and settlement processes. A payment scheme should maintain sufficient financial resources to fully cover its credit exposure to each payment service provider with a high degree of confidence.
5	Collateral	An FMI that requires collateral to manage its or its participants' credit exposure should accept collateral with low credit, liquidity and market risks. An FMI should also set and enforce appropriately conservative haircuts and concentration limits.	A scheme that requires collateral to manage its or its payment service providers' credit exposures should accept collateral with low credit, liquidity and market risk.
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.	A scheme should measure, monitor and manage its liquidity risk effectively. A payment scheme should maintain sufficient liquid resources in all relevant currencies to meet its payment obligations in a timely manner with a high degree of confidence. This should be under a wide range of potential stress scenarios that should include, but not be limited to, the default of the payment service provider and its affiliates that would generate the largest aggregate liquidity obligation for the payment scheme under extreme, but plausible, market conditions.
8	Settlement finality and crediting of end user	An FMI should provide clear and certain final settlement, at a minimum by the end of the value date. Where necessary or preferable, an FMI should provide final settlement intraday or in real time.	A scheme should define clear rules for final settlement.

¹⁵ In August 2017 the Governing Council approved the “Eurosysteem policy for the identification and oversight of critical service providers [CSPs] of FMIs”. The policy outlines a three-step approach: (1) identify the CSPs of FMIs which fall under the legal mandate of the Eurosysteem; (2) determine the eligibility of the CSPs for oversight; and, if deemed necessary, (3) apply direct or indirect oversight.” See Eurosysteem oversight report 2016, November 2017.

¹⁶ Applicable only if the respective functions, functionalities and electronic payment instruments are offered by the scheme/arrangement.

	Principle	Principles for financial market infrastructures	Principles for electronic payment instrument schemes/arrangements
9	Money settlement	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.	If central bank money is not used for the money settlement of the obligations of the end users or the payment service providers of a scheme , the governance body should minimise and strictly control the credit and liquidity risk arising from the use of commercial bank money.
13	Payment service provider default rules and procedures	An FMI should have effective and clearly defined rules and procedures to manage a participant default. These rules and procedures should be designed to ensure that the FMI can take timely action to contain losses and liquidity pressures and continue to meet its obligations.	A scheme should have effective and clearly defined rules and procedures for managing the default of a payment service provider . These rules and procedures should be designed to ensure that a payment scheme can take timely action to contain losses and liquidity pressures and, thereby, continue to meet its obligations.
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.	A scheme/arrangement should identify, monitor and manage its general business risk and it should hold sufficient liquid net assets funded by equity to cover potential general business losses. This would allow it to continue operations and provide services as a going concern if such losses were to materialise.
16	Custody and investment risk	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.	A scheme should ensure that end users' assets are safeguarded and minimise the risk of losses on these assets or delayed access to them. A payment scheme should invest in instruments that carry minimal credit, market and liquidity risks.
17	Operational risk	An FMI should identify the plausible sources of operational risk, both internal and external, and mitigate their impact through the use of appropriate systems, policies, procedures, and controls. Systems should be designed to ensure a high degree of security and operational reliability and should have adequate, scalable capacity. Business continuity management should aim for timely recovery of operations and fulfilment of the FMI's obligations, including in the event of a wide-scale or major disruption.	Schemes/arrangements should identify the plausible sources of operational risk, whether internal or external, and mitigate their impact by implementing appropriate systems, policies, procedures and controls. Systems should be designed to ensure a high degree of security and operational reliability and should have adequate, scalable capacity. Business continuity management should aim for timely recovery of operations and the fulfilment of the obligations of the payment scheme/arrangement – including in the event of a wide-scale or major disruption.
18	Access and participation requirements	An FMI should have objective, risk-based, and publicly disclosed criteria for participation , which permit fair and open access.	A scheme/arrangement should have objective, risk-based criteria for participation that permit fair and open access , and which are disclosed to existing and potential participants on a "need to know" basis .
21	Efficiency and effectiveness	An FMI should be efficient and effective in meeting the requirements of its participants and the markets it serves.	A scheme/arrangement should be efficient and effective in meeting the requirements of the payment service providers, end users and the markets it serves.
22	Communication procedures and standards	An FMI should use, or at a minimum accommodate, relevant internationally accepted communication procedures and standards in order to facilitate efficient payment, clearing, settlement and recording .	A scheme/arrangement should use, or at least accommodate, relevant internationally accepted communication procedures and standards to facilitate the efficient transfer of value between end users .
23	Disclosure of rules, key procedures and market data	An FMI should have clear and comprehensive rules and procedures and should provide sufficient information to enable participants to have an accurate understanding of the risks, fees, and other material costs they incur by participating in the FMI. All relevant rules and key procedures should be publicly disclosed.	A scheme/arrangement should have clear and comprehensive rules and procedures and it should provide sufficient information to enable payment service providers, technical service providers and end users to reach an accurate understanding of the risks, fees and other material costs they incur by participating in/making use of the payment scheme/arrangement. All relevant rules and key procedures should be publicly disclosed on a "need to know" basis, bearing in mind those rules and procedures which, if disclosed, could pose a threat to the security of a scheme or arrangement .

Source: CPMI-IOSCO with respect to the [Principles for financial market infrastructures](#), other ECB.
Note: Only principles that are relevant for schemes and arrangements are listed.

Annex

The terms used in this framework may, if necessary, deviate from those used in EU legal and regulatory documents as well as those used in other ECB regulatory documents to address current technological developments. All relevant terms of this framework are defined in the [ECB glossary](#) (available in English only.) For terms not defined in the ECB glossary, payment specific definitions from Article 4 of PSD2 or Article 2 of EMD2 apply.

A Documents replaced by this framework

Table A.1:

Documents replaced by this framework

PI standards	Harmonised oversight approach and standards for payment instruments , ECB February 2009.
EMSSO	Electronic money system security objectives , ECB, May 2003.
Oversight framework for cards	Oversight framework for card payment schemes , ECB, January 2008.
Oversight framework for credit transfers	Oversight framework for credit transfer schemes , ECB, October 2010.
Oversight framework for direct debits	Oversight framework for direct debit schemes , ECB, October 2010.

© **European Central Bank, 2021**

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

All rights reserved. Reproduction for educational and non-commercial purposes is permitted provided that the source is acknowledged.

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