



EUROPEAN CENTRAL BANK

EUROSYSTEM

Update on the work of the digital euro scheme's Rulebook Development Group

Sixth progress report, July 2026

Executive summary

This is the sixth report informing on the status of the draft digital euro scheme's rulebook and the work of the digital euro scheme's Rulebook Development Group (RDG). The rulebook is being developed in close collaboration with the RDG, which is led by the European Central Bank (ECB) and comprises senior representatives from private market associations representing both the supply and the demand sides of the European retail payments market, together with observers from euro area national central banks and EU institutions. To ensure a high level of transparency, the ECB regularly publishes updates on the development of the rulebook and the work of the RDG. This update provides information about the RDG's activities from 30 October 2025, the date of the previous update, to 30 April 2026.¹

The digital euro scheme rulebook will establish a single set of rules, standards and procedures for the use of the digital euro across the euro area. It will include requirements to standardise the digital euro payment experience as well as optional provisions and supporting material to provide further guidance to supervised payment service providers (PSPs), the main addressees of the rulebook. The aim is to ensure that the PSPs participating in the digital euro scheme deliver consistent and standardised basic digital euro services, enabling a private, secure and uniform user experience, regardless of the euro area country or PSP involved – as is the case with cash today.

Following the delivery of the interim draft rulebook (version 0.9²) to the RDG on 30 June 2025, the Eurosystem concluded an extensive four-month widespread market consultation with the RDG and its constituents on the interim draft rulebook on 31 October 2025. The consultation provided important market input to further develop and fine-tune the draft rulebook across various areas, as it reflects the views of the digital euro stakeholders. A total of 4,009 comments were received, spanning 12 sections and seven annexes of the draft rulebook, reflecting the active engagement of the RDG and its constituents. Overall, the respondents welcomed the progress made since the previous interim draft rulebook review was launched in January 2024, both in terms of coverage and quality of content and in terms of improved structure, format and clarity. At the same time, the

¹ See ["Update on the work of the digital euro scheme's Rulebook Development Group"](#), ECB, 30 October 2025.

² See [Draft_digital_euro_scheme_rulebook_v0.9.en.pdf](#)

feedback gathered highlighted certain additional areas that would benefit from further clarification and refinement, aiding the ongoing development of the draft rulebook.

Between November 2025 and April 2026, the Eurosystem reviewed all of the comments received, clarified their follow-up and amended the draft rulebook, which resulted in a new interim draft rulebook (version 0.91). 68% of the 4,009 comments received during the consultation in 2025 have already been successfully addressed by the Eurosystem, incorporating the suggestions and clarifications requested into the revised draft of the rulebook or by providing relevant clarifications and replies to the respective requests and questions submitted. Moreover, around 28% of the comments received related to aspects of the rulebook on which work is currently still ongoing within the RDG and its workstreams or which are planned to be further refined over the course of 2026. These comments will therefore be addressed as part of this work, in close cooperation with RDG members. Only a small number of comments were ultimately not taken on board (1%), e.g. where they contrasted with design decisions or the provisions of the draft Digital Euro Regulation, concerned topics that do not directly fall within the remit of the RDG (1%) or require additional clarification from commenting members to allow a meaningful response (2%).

In parallel, the RDG continued its work on additional parts of the rulebook and launched new workstreams. Deliveries included new implementation specifications for the onboarding and offboarding of users, liquidity management and various transaction use cases including Near Field Communication (NFC) specifications. Additionally, work also began on the definition of timeouts and failure management procedures. In March 2026, the RDG **launched two new collaborative workstreams** to support the further development of the digital euro scheme rulebook. Workstream (B1) will support the development of a certification and approval framework based on digital euro standards, covering the testing and certification of end-user devices and the acceptance solutions of PSPs and technical service providers. Workstream (G5) will support the development and review of implementation specifications for the integration of digital euro into existing ATMs and payment terminals. Bringing together Eurosystem representatives and market experts through an open call, these workstreams provide a structured framework for market participation in shaping proposals on standard certification frameworks and technical implementation standards for ATMs and payment terminals, including offline integration, security and the reuse of existing infrastructures.

Next to the two mentioned workstreams, additional workstreams for collaboration are ongoing, like on risk management (D1), front-end implementation specifications (G1-3) or back-end implementation specifications (G4).

The ECB has signed agreements with European standardisation bodies, including the European Card Payment Cooperation (ECPC), nexo, and the Berlin Group, to leverage established market standards for digital euro payments. These standards, identified in collaboration with industry stakeholders through the RDG workstreams, are designed to foster synergies and ensure interoperability with other payment systems. Additionally, the ECB continues to work closely with the European Payment Council (EPC), which oversees various payment

standards, to reach a similar agreement. Following the agreements, the ECB project team will work with the standardisation bodies on any needed alignments for the digital euro.

In collaboration with the RDG, the Eurosystem will continue to work on the remaining elements of the digital euro scheme rulebook. Exemplary ongoing dossiers, which were partially also raised in the above-mentioned consultation, include updating and refining the sections on scheme participation and rulebook adherence, covering possible certification requirements, clarifying liability matters and refining the scheme onboarding procedures. Besides, further implementation specifications, notably for the offline solution and Point of Sale (POS), will be developed through continued market engagement with the RDG and RDG workstreams, incorporating the above-mentioned follow-up work with the standardisation bodies, where applicable. Moreover, the above mentioned remaining comments will be followed-up and potential areas to support readability, usability and synergies across the market will be explored.

The new version of the draft digital euro scheme rulebook (version 0.91) is made available on the ECB website (see Figure 1).³ **The rulebook will accommodate any future adjustments arising from discussions among the co-legislators on the Digital Euro Regulation proposed by the European Commission in June 2023.**⁴ The final first version of the digital euro scheme rulebook will be completed following the adoption of the Digital Euro Regulation.

Figure 1

Table of content of draft rulebook v0.91

Sections	Annexes
1. Scheme rulebook scope	
2. Participation and adherence requirements	A1. Certification, testing and approval
3. Functional requirements	B1. User journeys and minimum UX requirements B2. End-to-end process flows
4. Technical requirements	D1. Front-end implementation specifications D2. Back-end implementation specification
5. Risk management requirements	E1. Risk management requirements
6. Dispute management requirements	
7. Brand rules	
8. Digital euro fees, limits and thresholds requirements	
9. Scheme rulebook management	F1. Rulebook change management framework
10. Glossary	

Sections 8, 9 and annex F1 are currently placeholders that will be developed throughout the second half of 2026, to finalise the first complete draft rulebook.

³ For draft rulebook v0.91 see: https://www.ecb.europa.eu/euro/digital_euro/timeline/rulebook/html/index.de.html

⁴ See [Proposal for a Regulation of the European Parliament and of the Council on the establishment of the digital euro, COM\(2023\) 369 final](#), 28 June 2023.

The digital euro scheme rulebook will serve as a single set of rules, standards and procedures aimed at standardising digital euro payments and related activities across the euro area. This will ensure that the experience of digital euro users will be the same across all euro area countries, irrespective of the payment service provider (PSP) involved – just as is the case for euro cash today. The rulebook will include only the requirements needed to standardise the provision of basic digital euro services by PSPs to end users, while retaining ample flexibility for PSPs to design and deliver additional innovative payment solutions. Where possible, the rulebook builds on existing open standards to ensure smooth integration, promote interoperability, foster cross-border competition and drive innovation in the European retail payments landscape.

The European Central Bank (ECB) is developing the draft rulebook in close collaboration with representatives of the European retail payments market through the digital euro scheme’s Rulebook Development Group (RDG).⁵ The RDG comprises senior representatives of European associations that represent both the supply and the demand sides of the European retail payments market. These include European associations respectively representing consumers, merchants, (bank and non-bank) PSPs and third-party service providers, along with representatives of euro area national central banks and observers from EU institutions.⁶ Since the last reporting, two new members representing merchants and consumers respectively – Independent Retail Europa and de Consumentenbond (Dutch consumer association) – joined the RDG, ensuring all stakeholders remain represented.⁷ The work of the RDG also builds on dedicated RDG workstreams consisting of market experts who conduct technical analyses and prepare proposals for different sections of the rulebook to the RDG. Since its establishment in 2023, the RDG has held 28 meetings and set up 11 workstreams. Seven workstreams are currently active (see Figure 2).⁸

⁵ See “[Mandate of the digital euro scheme Rulebook Development Group](#)”, ECB, January 2023.










⁶ The EU institutions concerned are the European Commission, the European Parliament and the rotating presidency of the Council of the EU.

⁷ See “[Members of the RDG](#)”, ECB, February 2026.

⁸ Other RDG workstreams have concluded their work and provided their final reports and input for the rulebook.

Figure 2

Overview of the RDG workstreams as of April 2026

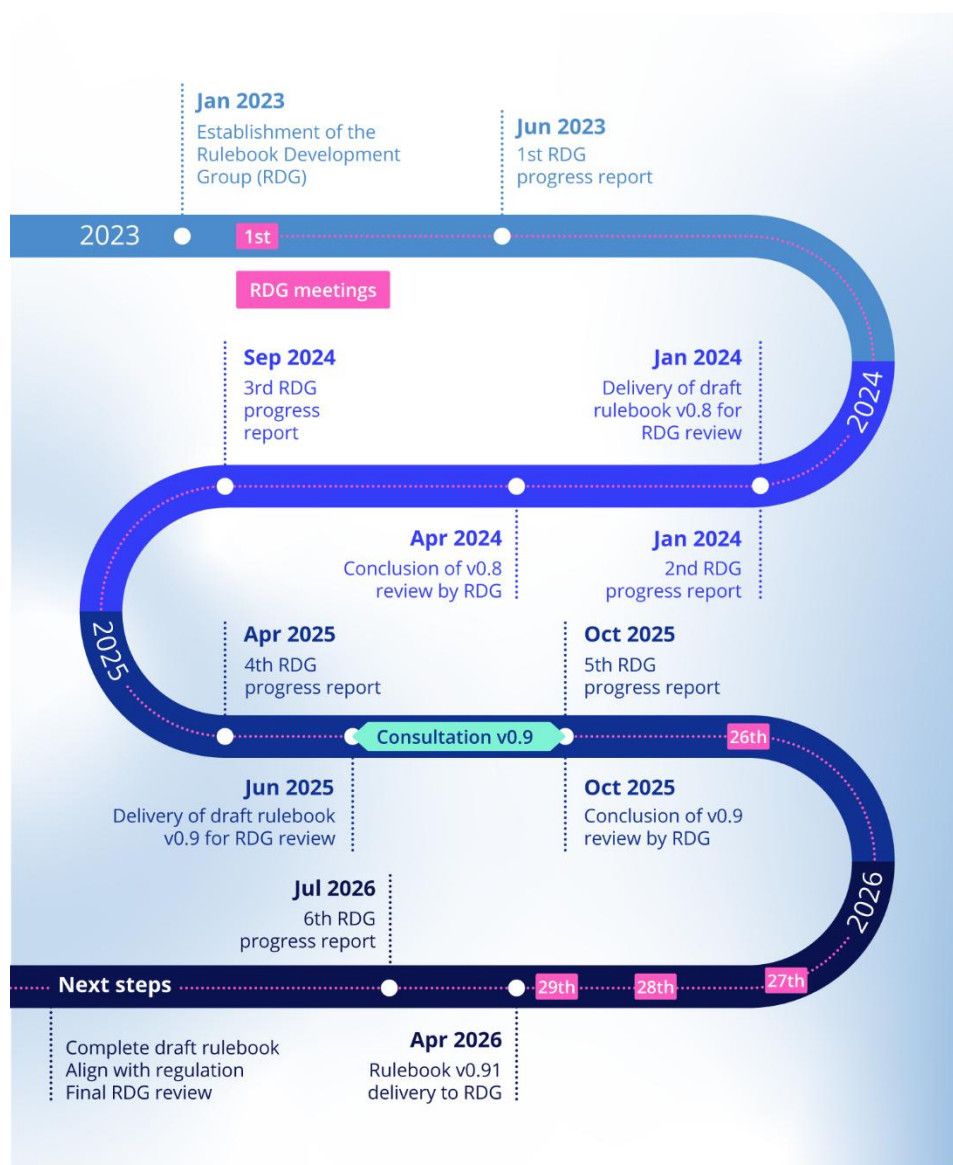
Status	RDG workstreams overview
	A1. Identification and authentication
	A2. Minimum user experience standards
	A3. Brand rules
	B1. Certification and approval framework
	C1. Technical scheme requirements
	D1. Risk management
	F1. Scheme compatibility
	G1. Front-end implementation specification for end-user interface
	G2. Front-end implementation specification for distributing PSP interface
	G3. Front-end implementation specification for acquiring PSP interface
	G4. Back-end implementation specification for PSP-to-DESP interface
	G5. Implementation specifications for ATMs and payment terminals
	<i>Continuously active workstreams between November 2025 and April 2026</i>
	<i>Newly established or revived workstreams</i>

Workstreams A1, A2, A3 and F1 have for the moment concluded their work but, in case of need, may be revived again in the future. Workstream C1 has evolved into workstreams G1–4.

Since the last update in October 2025, the Eurosystem has concluded its four-month consultation on the comprehensive interim draft rulebook (version 0.9) delivered to the RDG and its constituents in June 2025.⁹ This consultation with market stakeholders marked an important milestone in the digital euro project (see Figure 3), allowing RDG members and their constituents to provide comprehensive feedback to ensure the rulebook aligns as closely as possible with the views of consumers, retailers and PSPs across the euro area. The RDG members led this extensive review process by gathering feedback from their constituents, resulting in 4,009 comments in total, of which 2,614 were unique. All of the comments and suggestions received during this review have been carefully evaluated and addressed. Detailed responses to all comments, outlining the relevant clarifications, rulebook amendments or identified areas for further RDG work were provided to RDG members. An updated draft version of the rulebook will be publicly shared on the ECB website in due course, after the RDG reviewed the changes for raising any major comments they may have.

⁹ See “Update on the work of the digital euro scheme’s Rulebook Development Group”, ECB, 30 October 2025.

Figure 3
Rulebook milestones



This progress report on the work of the RDG details the outcome of the recent rulebook consultation and the main amendments made in view of the feedback received, along with other key RDG activities to further develop the draft rulebook. This is the sixth progress report on the RDG’s activities that took place between 1 November 2025 and 30 April 2026, following on from the previous updates published by the ECB in June 2023, January 2024, September 2024, April 2025 and October 2025.¹⁰ The remainder of this report is organised as follows: Section 2 summarises the outcome of the RDG consultation on the interim draft version 0.9 of the digital euro scheme rulebook and the main feedback received.

¹⁰ The updates on the work of the RDG are available on the [digital euro scheme rulebook section](#) on the ECB’s website.

Section 3 describes the main amendments incorporated into the draft rulebook in light of the market feedback received and the further overall development of its content. Section 4 looks at various RDG activities for further development of the rulebook, including work on the reuse of existing market standards and the recent launch of two RDG workstreams. Lastly, Section 5 provides an overview of planned activities and deliverables.

2 Outcome of the RDG consultation

Between July and October 2025, the RDG members and their constituents conducted a comprehensive review of the latest draft version of the digital euro scheme rulebook delivered on 30 June 2025.¹¹ After the previous review of the initial draft version of the rulebook during the first quarter of 2024, this interim review provided market stakeholders with an opportunity to review the draft rulebook in its entirety and offer comprehensive feedback. The RDG members led this extensive review process by providing as well as gathering and consolidating feedback from their constituents before sharing it with the Eurosystem.

To note: the interim draft rulebook which was consulted (v0.9) remained based on the draft Digital Euro Regulation proposed by the European Commission in June 2023.

2.1 Overview of comments received and follow up

Overall, on behalf of their constituents RDG members welcomed the substantial progress made since the previous interim draft rulebook, and also identified aspects that will need further refinement and consideration. The high level of engagement and the detailed feedback provided during the review process is highly valuable, given the expertise in retail payments and the various perspectives represented in the RDG. In addition to the detailed comments provided (see section 2.2), RDG members provided broader, high-level reflections across the rulebook. Suggested areas for further consideration included, for example, the need to ensure full alignment with the legislative framework, to provide clearer definitions of different roles, to accommodate the diversity of acquiring business models, to address the possibility of holding multiple digital euro accounts, or clarifying liability aspects. Other comments that are being elaborated with the RDG relate, for instance, to the offline functionality, dispute management, risk management and fraud prevention. All these aspects are envisaged to be addressed or already in progress.

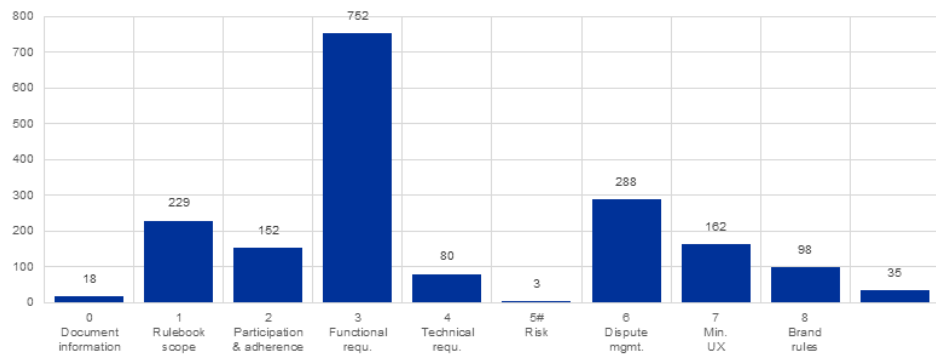
RDG members submitted a total of 4,009 comments aimed at further improving the content of the draft rulebook. After an initial analysis and clustering of the comments received, 2,615 unique comments¹² were identified. The comments span

¹¹ For details on the content of the draft rulebook shared with RDG in June 2025 as well as on the RDG consultation process, please see previous [Update on the work of the digital euro scheme's Rulebook Development Group \(October 2025\)](#)

¹² The number of unique comments accounts for duplicates and highly similar comments across the total 4,009 comments submitted.

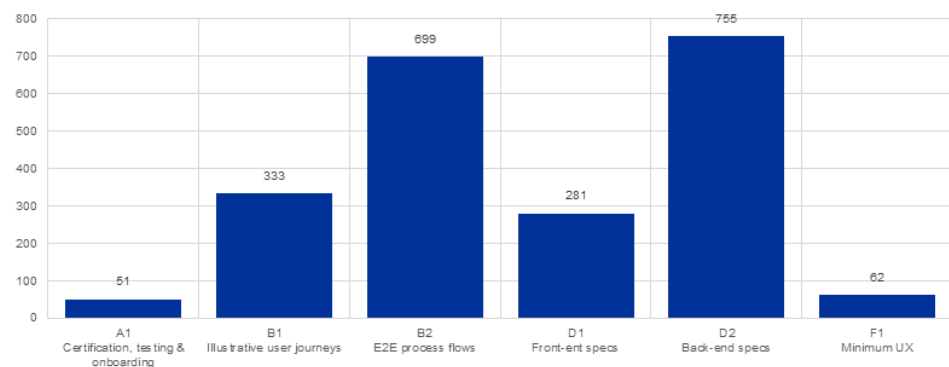
12 rulebook sections and seven annexes (see Figures 4a and 4b). Many comments focused on Section 3 (functional requirements), which outlines the digital euro services, high-level processes and applicable business rules, along with the related annexes covering user journeys (Annex B1) and end-to-end process flows (Annex B2). Other feedback concerned the technical requirements (Section 4) and the related annexes detailing the front-end and back-end implementation specifications (Annex D1 and D2, respectively). Comments also focused on Section 6 (dispute management framework) and Section 1 (scope), which outlines the rulebook’s objectives and defines its scope. The risk management requirements (Section 5 and Annex E1) were reviewed separately by a dedicated group of risk experts appointed by RDG members and were not therefore a focus of the wider RDG consultation. Finally, a total of 12 comments were provided across section 9 Fees, limits and thresholds, section 10 Rulebook management and Annex C1 Reporting Requirements, as input to the development of these parts that were placeholders in the draft rulebook v0.9.

Figure 4a
Number of RDG comments by draft rulebook section



Risk management requirements (section 5 and Annex E1) were reviewed separately by a dedicated group of risk experts appointed by RDG members

Figure 4b
Number of RDG comments by draft rulebook annex



All 4,009 comments received have been assessed, reviewed and answered by the ECB. Overall, 68% of the comments have already been closed by addressing them in the new draft version or have received the requested clarification. As shown in Figure 5, the handling of the comments can be summarised as follows;

- 28% of the comments received relate to suggestions that have been incorporated directly into the new interim draft version of the rulebook;
- The other 40% have been addressed and taken on board by providing the requested clarifications, either by incorporating them in the draft rulebook or by providing dedicated responses where draft changes were not necessary.

Another 28% of the comments were accepted and concerned work that is either ongoing or is set to take place over the course of 2026. Examples include dossiers that are planned to be incorporated in the rulebook, such as provisions for the compensation model, holding limits or offline functionalities. These topics are either being further refined or aspects contingent on further regulatory clarity. All comments belonging to this category will be used to inform the additional work on completing the rulebook, and a corresponding status log will be maintained for RDG transparency purposes. The RDG will remain closely involved in the progress of the respective dossiers and the work to address the related comments.

Only a few suggestions (1% of all comments) were ultimately disregarded , e.g. where they contrasted with design decisions or the provisions of the draft Digital Euro Regulation. The relevant explanations were provided for each of these comments.

A small number of the comments received (~1%) concerned topics and questions that fall within the remit of other areas – e.g. comments on the scope of the digital euro as set out in the draft Digital Euro Regulation or questions on liquidity management in the dedicated cash accounts. Those comments were addressed to the respective groups, like EPRB technical sessions, where applicable.

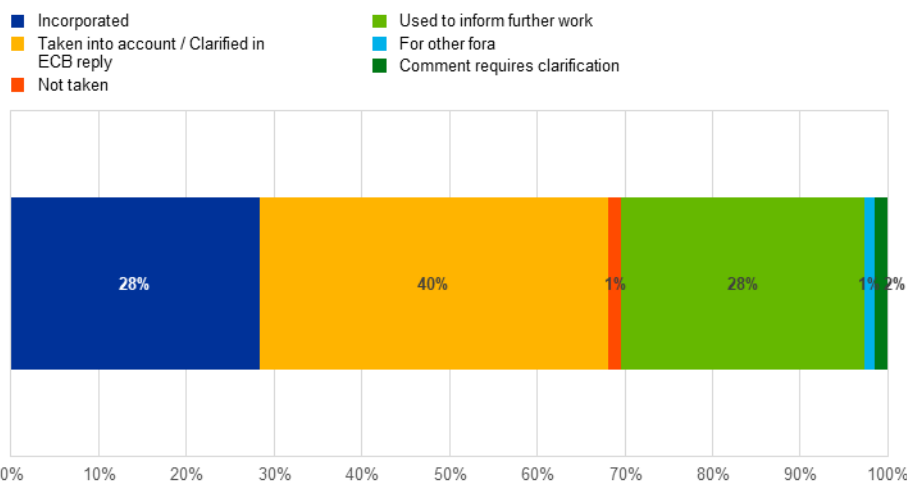
Lastly, some comments (~2%) require additional clarification from the commenting members to allow for a meaningful response.

The main feedback received from the RDG members and their constituents and how it has been handled is summarised in the following subsections.

Figure 5

Addressing RDG feedback on draft interim rulebook consulted in 2025

Number of comments by identified follow-up as a share of the total number of 4,009 comments received.



2.2 Rulebook scope and participation and adherence requirements

As part of the consultation, RDG members provided suggestions for further refining the actors, roles and digital euro services in scope of the digital euro scheme rulebook. Various comments proposed refined definitions of the key actors involved in digital euro payment services and their relationships. Several questions were raised regarding the geographical scope and the onboarding of non-EU clients. Other feedback concerned the services in scope, and the need for a clearer distinction between mandatory and optional services, and improvements identified for the categorisation of payment instruments, acceptance solutions and initiation technologies. This market input has helped to refine the scope of the rulebook and the relevant actors in the scheme, as explained in section 3.

The comments on Section 2 (participation and adherence requirements) and Annex A1 (testing, certification and approval) mainly sought further clarifications and details on how these processes would work in practice. The main feedback included suggestions for streamlined onboarding approaches for banking groups and multi-entity structures (e.g. via representatives and the reuse of shared testing/certification) and requests for clarification on the eligibility criteria and more detailed guidance on the onboarding and certification process (due to be covered in a separate Scheme Onboarding Guide).¹³ Other suggestions focused on ensuring a clear and proportionate adherence framework and enforcement measures, to inform the further adjustments to the definition of the adherence framework under the draft digital euro scheme rulebook. Whereas the RDG will continue its work on streamlining onboarding processes for PSP and banking groups, the other suggestions helped to improve the overall onboarding process,

¹³ A Scheme Onboarding Guide will be developed providing scheme applicants with a detailed step-by-step instruction of the onboarding process.

detail participation criteria and further complement the adherence framework (see section 3).

2.3 Functional requirements, user journeys and end-to-end flows

The market feedback on functional requirements focused on ensuring full clarity across all functional aspects of the digital euro, given the central role this section plays in translating the scheme rules into operational digital euro processes. Questions on section 3 Functional Requirements were raised regarding the digital euro account number (DEAN), including portability-related issues¹⁴ when users switch PSPs. Those questions have been clarified in dedicated responses and where applicable by revising and complementing the rulebook provisions on the DEAN. Other comments addressed the use of aliases,¹⁵ for which the first use case would be a phone number, providing input to ensure clear rules on registration, modification and additional safeguards against misuse. In the sub-section outlining the digital euro services and the business rules for access-, liquidity- and transaction management services, market input was used to ensure clear and implementable rules. Stakeholders also asked for additional operational guidance on switching procedures and stressed the importance of defining fallback procedures for unhappy flows¹⁶, both of which feed into ongoing work for the rulebook and the RDG for a next release of the rulebook.

The feedback on the illustrative user journeys mainly focused on making it easier to apply user journeys across use cases. Market stakeholders provided input on Annex B1 Illustrative User Journeys on how journeys should reflect typical end-user and merchant interactions (including at POS), how online and offline variants are presented from a user perspective, and how journeys cover key lifecycle steps across relevant form factors. Helpful suggestions were made to further streamline user journeys, which were incorporated.

The comments on end-to-end process flows helped to streamline E2E flows and ensure consistency with other parts of the rulebook, such as user journeys. The feedback on Annex B2 E2E flows also emphasised the importance of a coherent approach to timing aspects (e.g. timeouts, authentication time windows and validity periods for pre-authorisation) and the presentation of consent and authentication steps within flows.

¹⁴ Portability refers to the unique functionality of carrying over (porting) a digital euro account number when a user switches from one PSP to another, which is different from today's International Bank Account Number (IBAN) system.

¹⁵ An alias is an alternative means of identification, for example a phone number, that a user will be able to register with their PSP and use in the same way as a DEAN

¹⁶ Transactions or operations that deviate from the successful path, e.g. due to an error, failure, system timeout, or user intervention.

2.4 Technical requirements and implementation specifications

The comments on technical requirements focused primarily on the reuse of open standards, non-functional requirements and ensuring that the related implementation specifications (Annexes D1 and D2) can be translated into real deployments. For Section 4 Technical Requirements market stakeholders emphasised the importance of clearly defining the reuse of industry standards (e.g. where such standards are mandated or simply recommended) and provided input on the reliability and performance (i.e. latency) requirements.

- The market feedback on the **front-end specifications** (Annex D1) focused on improving cross-document alignment to support smoother implementation and clarifying the extent to which PSPs can rely on existing capabilities (in particular, for authentication and notification). Stakeholders also made suggestions to further clarify key front-end data concepts, including surrogate values, tokenisation lifecycles and related core data elements. Input on authentication will help the planned work, while other input on the front-end implementation specifications and data concepts already has been reflected as outlined in section 3 of this report.
- In the case of **back-end specifications** (Annex D2), the comments mainly sought to facilitate implementation by further specifying and harmonising Automated Programming Interfaces (APIs), message-handling and data definitions (including alignment with ISO standards¹⁷), ensuring consistency with the accompanying YAML files¹⁸, and clarifying common identifiers and status fields across services. Additional points raised included exploring options to adapt the API design to technically separate authorisation and settlement flows, allowing for more synergies with existing market practices. This request has been addressed in the meantime and elaborated in the implementation specifications and E2E flows.

2.5 Dispute management

The feedback on dispute management requirements focused primarily on ensuring that the dispute framework is clear in its scope and roles and is aligned with the applicable regulatory expectations and operationally workable at scale. Market stakeholders emphasised with regard to section 6 Dispute Management Requirements, the importance of a clear scope, defining the types of transactions and actors covered, and how the different use cases are treated. Further input was given on the proposed timeframes, evidence expectations and communication to users and merchants. Given that the draft section on dispute management requirements is currently undergoing a wider review to further define the underlying framework, including the involvement of the RDG in the finalisation of this section over the course of 2026, the input received has not yet yielded any

¹⁷ ISO refers to International Organization for Standardization which sets out standards across different industries, including the financial sector.

¹⁸ YAML is a human-readable data serialisation format used for writing configuration files.

immediate changes to the draft rulebook. Nonetheless, it will feed directly into this ongoing work and will be reflected in a subsequent version of the draft rulebook.

2.6 Minimum user experience (UX) requirements

The comments on the minimum UX requirements mainly related to the need to ensure that the minimum UX requirements can be applied consistently across different payment contexts, channels and form factors. With regard to section 7 and Annex F1 covering the minimum UX requirements, stakeholders highlighted the importance of clear and broadly applicable requirements for authentication and app interactions, including support for different authentication methods and redirects and how inclusion needs (e.g. for users without smartphones) can be accommodated. Other feedback addressed notifications, transaction history and language/accessibility aspects, with an emphasis on supporting usability while allowing PSPs sufficient implementation flexibility. The efforts to streamline minimum UX requirements and ensuring a focus on digital euro specific processes are captured in section 3 of this report.

2.7 Brand rules

The feedback on brand rules was broadly supportive of the goal of delivering a consistent and recognisable digital euro brand experience across the ecosystem. Stakeholders provided further input to support the brand rules approach set out in section 8, covering visibility in physical and digital contexts, fair positioning of the brand and QR-related presentation. They also recommended adding a set of clear, practical examples and reusable assets to help PSPs and merchants to smoothly integrate the brand into existing design systems. The market also highlighted the value of ensuring that brand visibility works well in real-world checkout and acceptance environments, and that accessibility considerations are applied consistently.

3 Main rulebook amendments following the rulebook v0.9 review

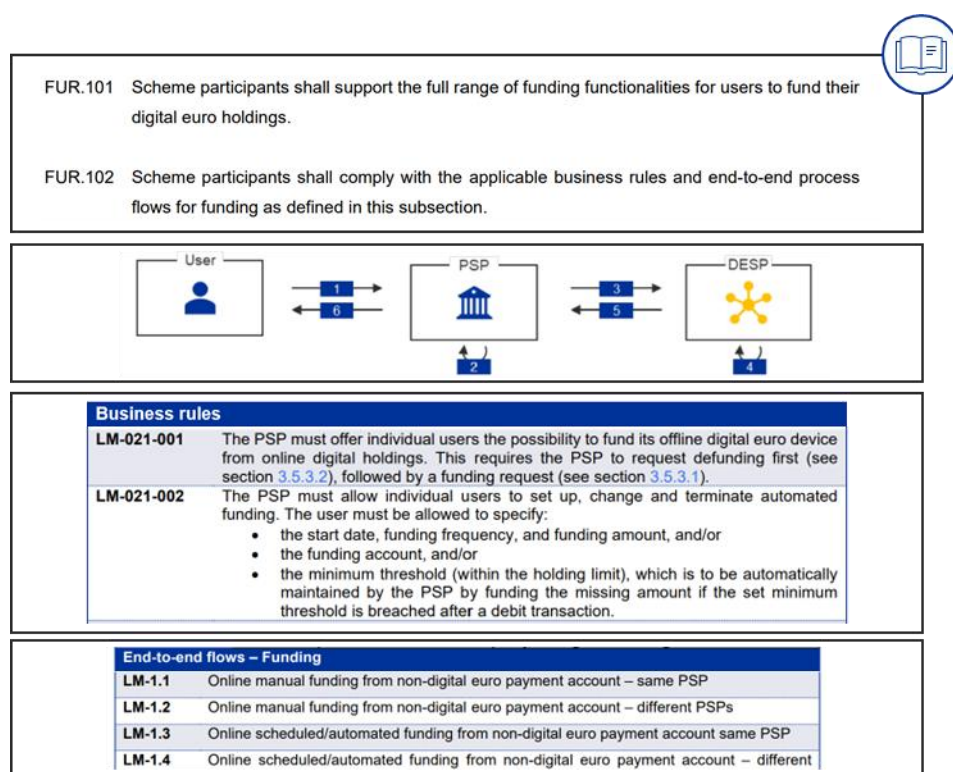
The comprehensive market feedback has led to an improved interim draft version of the rulebook (v0.91). Some of the key amendments to the draft rulebook are detailed in the section below.

Market input was used to refine the definitions of key concepts throughout the scheme rulebook further clarifying the onboarding process and adherence framework for PSPs. The overview setting out the scope of payment instruments, acceptance- and communication technologies for the digital euro has been refined and the descriptions of the scheme actors, their roles and relationships have been defined in greater detail. In terms of the participation requirements, the eligibility criteria have been further clarified, and events or circumstances that could affect a PSP's eligibility have now been added. In response to market feedback, the

onboarding process has been streamlined further, and work will continue under the RDG (e.g. in relation to possible synergies for banking and PSP groups). The updates to the adherence framework include communication requirements around changes in PSPs' scheme participation, enabling suspension measures to be challenged, and further clarifications on the adherence process.

As part of the functional requirements, the business rules have been refined where necessary, and the related E2E flows incorporated improvements based on market feedback. The high-level transaction flows and underlying E2E flows have also been adjusted to reflect the separation of the authorisation and settlement flows, as initially discussed in the RDG workstream G4 on back-end implementation specifications, allowing PSPs to better leverage synergies with existing PSP processes. This change is also reflected in the updated back-end implementation specifications (Annex D2) described in more detail below. Figure 6 provides an example of how the functional requirement for each digital euro service are captured structurally into the rulebook.

Figure 6
Functional requirements, business rules and E2E flows for funding service.



The rules on the identification and authentication of digital euro users have been restructured and supplemented with additional information, in particular on DEAN values and the related procedures. The values for the fifth character, acting as the indicator digit, have now been added to the rulebook. This indicator digit enables the DEANs assigned to individual end users, identified by the value “0”,

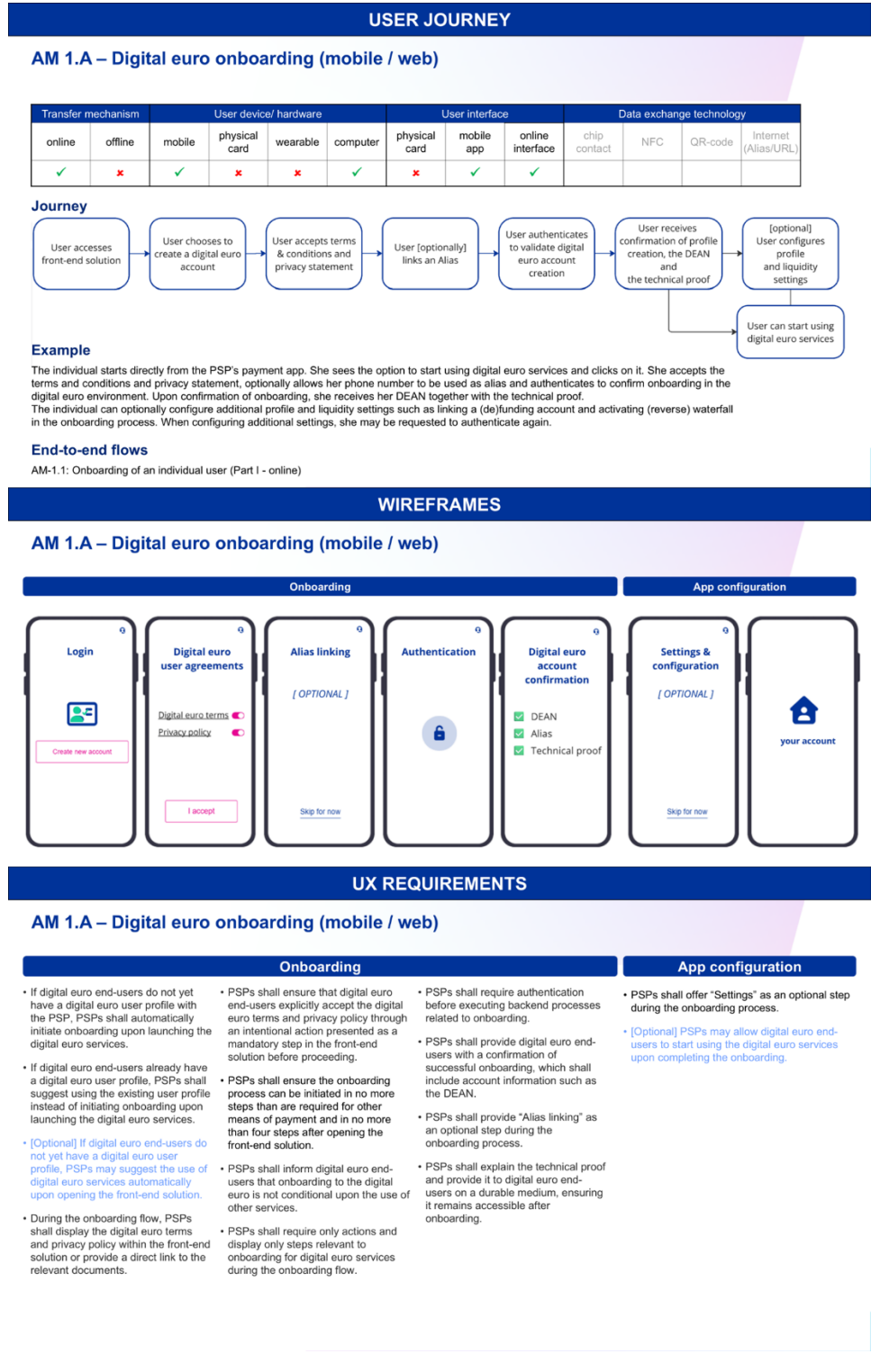
to be differentiated from those allocated to business end users, denoted by the value “1” (see Figure 7). Further clarifications have been added on requests for and the registration and validation of aliases.

Figure 7
Digital Euro Account Number composition



User journeys, wireframes and minimum UX requirements have been further streamlined and incorporated into the rulebook’s section and related annexes detailing the functional requirements. The minimum UX requirements, previously captured in section 7 and Annex F1, have now been integrated into section 3 on the functional requirements and Annex B1, covering now user journeys, wireframes and minimum UX requirements (see Figure 8). The section on functional requirements and its related annexes now provides PSPs with a comprehensive functional overview of digital euro services, covering the business rules, user journeys, wireframes, minimum UX requirements and E2E flows. Functional and technical requirements that do not relate to user journeys and user experience have been removed. Flows have been combined into a single journey where the UX is the same for online and offline payments, and consolidated where user journeys apply across different interfaces or payment instruments. User journeys have been revisited to focus on digital euro payment services, excluding non-payment related processes that can vary greatly from case to case (e.g. onboarding of business users) and operational processes that are not specifically related to the digital euro, such as Know Your Customer checks during user onboarding.

Figure 8
Example of consolidated user journey, wireframe and minimum UX requirements



The market feedback has been used to further develop the overview of the open standards under consideration for digital euro use and to refine the technical front-end and back-end implementation specifications. A detailed update on the work to reuse open market standards is set out in Section 4.1 of this report. Based on the market feedback, updates have been made to front-end and back-end specifications, ensuring consistent functionality from the end-user device to the back-end infrastructure, the Digital Euro Service Platform (DESP). Further work has been done by the RDG workstreams (G1-3 and G4) to deliver additional implementation specifications. Front-end implementation specifications now cover on-boarding and offboarding for individual and business users, manual (de)funding and transaction management, P2P online payments (with DEAN and Alias), P2B online SoftPOS¹⁹ payments with NFC, e-commerce payments (with DEAN and Alias) and refunds, m-commerce (app-to-app) payments, online balance enquiries and transaction history via mobile apps, as well as offline P2P NFC payments and offline balance enquiries. Back-end implementation specifications have been delivered for the messages between PSPs and the DESP required for user onboarding and offboarding, lifecycle management, DEAN and alias lookup, NFC tokens for the secure exchange of payment information and settlement service specifications covering payment transactions, (de)funding, combined transactions and refunds.²⁰ Both front-end and back-end specifications have undergone a thorough review to ensure alignment both across the specification documents and with ISO20022 terminology (the market standard for financial messaging).

The risk management requirements have been revised in line with market suggestions to improve clarity, further align with existing regulatory frameworks, and transfer the general risk rules into the main rulebook. The general rules on setting the approach on fraud, operational risk and financial crime have been transferred to the core rulebook, whereas payment instrument risks and other aspects will remain in a separate and confidential document following a scenario-based approach. These additions ensure transparency and assurance on high-level scenarios and mitigations as part of the main rulebook, while scheme participants will have access to a risk-scenario library with specific requirements for certain scenarios including details about remediation actions, control descriptions, tools, and recommendations for specific responses by scheme participants for the most relevant scenarios.

The brand rules have been restructured according to the different user touchpoints and scenarios, and changes have been made to clarify the principle of equal prominence, as requested by the market. The equal prominence guidance has been refined to ensure consistent visibility and clarity for the digital euro across physical and digital touchpoints where multiple payment brand acceptance marks share limited space. Key principles include parity in logo size, colour, and placement alongside other core payment schemes, adherence to neutral ordering rules, clear grouping as central bank money, and equivalent exposure in

¹⁹ Traditional POS (Point of Sale) systems are dedicated hardware terminals e.g. used at a checkout counter. SoftPOS or Software POS converts NFC-enabled devices (e.g. smartphones or tablets) into a payment terminal via an app.

²⁰ A combined transaction is a digital euro transaction involving payment with funding (reverse waterfall) or payment with defunding (waterfall).

rotating or swipeable lists. The consultation feedback also requested more detailed guidance on animated branding which has now been added to the section. Other changes have been made to ensure that PSPs retain sufficient flexibility and can maintain current market practices, e.g. with regard to acceptance signalling and integration in PSP' environments such as mobile applications, websites or wallets.

4 Other RDG activities for further development of the rulebook

4.1 Update on standards work

The digital euro scheme's rulebook has the objective to use existing, open market standards where this is possible. This to support drawing synergies and interoperability. The RDG, through the work of its workstreams, identifies candidate open market standards, which are then further assessed to determine whether they correspond to digital euro requirements without requiring substantial changes to the standard itself. Even where this would be the case, elements of a standard are still considered in the rulebook to the extent possible (e.g. data dictionaries or business logics) and the respective standard development still informs the digital euro rulebook going forward. The digital euro rulebook itself will be public and with that provide a standardisation that can be used by others as well.

As a result of the above RDG process, in April 2026, the ECB signed agreements with three European standardisation bodies to reuse existing open technical market standards, accessible to all stakeholders, for processing digital euro online payments.²¹ These standards include:

- **the CPACE standards**, developed by the **European Card Payment Cooperation (ECPC)**, which support contactless “tap-to-pay” payments using near field communication between a payment device and a payment terminal;
- **the nexo standards** specifications which connect merchants' systems with the back-end systems of payment service providers and acquirers. These standards can be used, e.g. to support payment acceptance and cash-machine transactions;
- **the Berlin Group** standards, which allow payments to be made using an alias (such as a mobile phone number) and support balance checks and reconciliation across mobile devices and payment acceptance in areas such as digital euro transactions initiated in merchant apps on smartphones.

Since none of these standards were originally developed for the digital euro, technical discussions have been held to assess the need for limited adjustments to ensure a smooth interplay between the industry standards and digital euro front-end payment processing.

²¹ See “[ECB signs agreements with European standard setters to facilitate digital euro payments](#)”, Press release, ECB, 24 April 2026

Looking forward, a similar agreement is envisaged with the European Payments Council (EPC). The EPC oversees several standards that were identified as candidates for the digital euro. One key example is the standard for QR-code payments (EPC024-22), which could be used for online POS, e-commerce, m-commerce and, potentially, ATM transactions using QR codes. Technical investigations are underway to explore the potential reuse of other EPC standards, such as Verification of Payee.

By leveraging open standards and working closely with the relevant standardisation bodies, the ECB minimises adoption costs for the market and encourages early coordination among all of the actors involved. This is particularly important as the euro-area currently lacks universally available open standards, e.g. for support across payment terminals. The use of widely adopted European standards will simplify digital euro acceptance and create a uniform user experience across the euro area, while enabling other European payment solution providers to build on these common standards and expand geographically and diversify use cases.

Ultimately, the open standards adopted will be reflected in the implementation specifications of the draft rulebook. The testing and certification framework of the rulebook will also reflect the necessary validation for these standards, which PSPs and technical solution providers would have to obtain for their front-end solutions.

4.2 Update on RDG workstreams

To support the further development and finalisation of the digital euro scheme rulebook, the RDG launched two additional workstreams in early 2026. The RDG revived workstream B1, initially established in March 2024, to develop a proposal for the rulebook in relation to the certification and approval framework²². In addition, the RDG set up a new workstream (G5) on implementation specifications for ATM and terminal providers. In March 2026, the ECB launched a call for candidates to participate in the workstreams, inviting experts in payments, certification, and testing frameworks (B1), as well as experts in payment infrastructure and architecture, technical specifications and scheme management, with particular expertise in the interfacing with or the provision of ATM and payment terminals (G5). The call for candidates closed on 10 April 2026 and the workstreams are expected to begin their work in May 2026, bringing together market participants and Eurosystem representatives.

The main objective of workstream B1 is to develop content recommendations for draft sections of the rulebook annex on testing, certification and approval. The workstream will focus on a proposal for a certification, testing and approval framework based on the standards used for the digital euro. This work includes the definition of the functional and security certification scope covering end-user devices and the acceptance solutions of payment service providers and technical service

²² See “[Creation of seven additional workstreams of the digital euro Rulebook Development Group](#)”, MIP News, ECB, 18 March, 2024.

providers (e.g. (soft)POS, e-commerce gateways, apps), as well as the internal rules for scheme participants in regard to their corresponding compliance.

The main objective of workstream G5 is to review and develop proposals on the technical implementation specifications for the ATM and payment terminal domains. These include different communication technologies, offline digital euro integration and the reuse of existing standards. More specifically, the focus of the workstream will include but is not limited to: i) initiation factors for digital euro payments at ATMs and payment terminals (e.g. NFC, QR-code); ii) assessing nexo as a candidate reference implementation for enabling digital euro payments at ATMs and potentially at payment terminals; iii) assessing the integration and deployment of the offline digital euro functionality into the existing certified POS and ATM infrastructure; iv) assessing security standards in the field of POS and ATM; v) analysing the implementation specifications and standards applicable to softPOS and mPOS payment acceptance devices; and vi) exchanging information on the current ATM and payment terminal ecosystem.

4.3 Update on digital euro pilot documentation

Parallel to the rulebook development process, a set of documentation for the digital euro pilot has been published.²³ These documents contain information relevant for PSPs to participate in the pilot, including functional requirements, user journeys, minimum UX requirements, E2E flows and front-end and back-end implementation specifications. Whereas these documents have been tailored to the scope and specificities of the digital euro pilot, their content is based on the rulebook version available at that time and work of the RDG. While the rulebook development with the support of the RDG will progress as planned, any insights gained from the pilot will be shared with the RDG for a potential consideration in future versions of the rulebook's functional and technical requirements.

5 Next steps

In collaboration with the RDG, the Eurosystem will continue to work on areas of the rulebook that have yet to be fully developed and make progress on areas identified for further refinement in the rulebook consultation. This will include identifying additional open industry standards, efforts to further refine the participation and adherence requirements (including the liability regime) and additional operational guidance on switching processes, timeouts and fallback procedures, as well as finalising the PSP onboarding procedure (including the development of a separate onboarding guide). Furthermore, the requirements in terms of availability and performance, minimum user experience and dispute management will be defined in greater detail. As part of this work, the Eurosystem will address all of the remaining comments received during the recent RDG review,

²³ See https://www.ecb.europa.eu/euro/digital_euro/pilot/html/index.en.html

which have not yet been fully closed given the additional work and discussions due to take place within the RDG in the coming months.

The Eurosystem will continue to collaborate with the RDG to identify other opportunities for possible improvements in readability and usability of the rulebook and to explore individual topics in deep dive sessions. This will include a dedicated RDG workshop focused on possible further simplifications in the rulebook, as well as deep dive sessions on timeouts, switching of PSPs by users and the handling of requirements by PSP groups or through common providers.

The final draft of the rulebook will incorporate any future amendments stemming from discussions among the co-legislators on the European Commission's proposed Digital Euro Regulation. The Eurosystem closely monitors legislative developments, such as the General Approach of the Council of the EU adopted in December 2025 and the position of the Economic and Monetary Affairs Committee (ECON) of European Parliament adopted on 23 June 2026, in order to understand any potential rulebook amendments that may be needed.²⁴ In the meantime, the ECB and the RDG will continue to refine the rulebook's content and maintain their ongoing dialogue with the market.

²⁴ See "Council agrees position on the digital euro and on strengthening the role of cash", 19 December 2025.