

**REPORT** 

# Final rapporteurs report on the digital euro

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#### **Foreword**

A decision to introduce a digital currency alongside physical coins and banknotes is potentially one of the most significant financial innovations of our time; one that could impact our economy and society as a whole. It is generally not known beforehand where technological developments will lead, which is an important reason why good democratic control over this development is of paramount importance. With this in mind, the parliamentary standing committee on Finance has been following developments regarding "Central Bank Digital Currencies" (CBDC) and the digital euro, which the European Central Bank (ECB) has been developing since 2020.

A good deal of experimentation and research has been conducted since then, but the exact purpose of the digital euro has not yet been firmed up. The objectives stated range from enhanced user convenience to strengthening Europe's geopolitical role, each having different preconditions. In the first report, we took the position that this should not remain a technocratic debate but rather a well-founded and public political debate on objectives, preconditions and guarantees.

Since then, the digital euro has been debated several times, both in committee debates ahead of the Eurogroup and Ecofin Council and in two committee debates specifically on the subject. That attracted a good deal of public interest. Several important framework motions were passed, enabling the government to work on coalition building in Brussels in good time. That proved instrumental in making some fundamental choices explicit at an early stage, such as ruling out programmability and underlining the importance of privacy. However, many other design choices are yet to be made in the regulation to be presented by the European Commission. Since unanimity will not be required in ultimate European decision-making, the coalition already formed could prove important, also in the future.

In short: The Netherlands placed this issue on the agenda at an early stage and made adjustments as required. At the request of the Dutch Parliament, the Dutch Minister of Finance stressed the importance of a number of key principles in Brussels. As well as informing the parliamentary committee, we as rapporteurs directly highlighted the widely shared Dutch concerns in a political dialogue and discussions with the European Commission and the ECB. With this report, we hope once again to contribute to the political debate on digital central bank currency and help the standing parliamentary committee on Finance exercise its monitoring and legislative role.

We would like to take this opportunity to thank all the discussion partners who gave us their time and the standing parliamentary committee staff for their support.

Mahir Alkaya (SP) and Eelco Heinen (VVD)

#### **Summary**

The ECB and the European Commission are looking into the possibility of introducing a digital euro alongside cash. The digital euro is a form of digital central bank currency and, therefore, a form of 'public money'. The digital euro can be seen as an upgrade of currency (banknotes and coins) to the digital age. The ECB sees a role for the digital euro mainly as a means of payment and does not intend to provide savings accounts for digital euros.

The ECB, the European Commission and the Cabinet see an important role for the digital euro in preserving public money in the digital age in the face of the declining use of cash. The digital euro could thus contribute to European strategic autonomy, act as a back-up payment system and increase diversity, competition and innovation in the financial sector.

These objectives are understandable goals for the ECB or European Commission but may not constitute an immediate reason for the average resident to start using a digital euro. On top of this, the ECB is anticipating a digital euro as a means of payment, where the possibility of using the digital euro as a means of savings subject to strict constraints. Consequently, in the Netherlands, where the regular and online payment system is recognised as being highly efficient, the added value of a digital euro as an additional payment method for consumers may be limited. On the other hand, the Netherlands is leading the way in the declining use of cash. While only 1 in 5 over-the-counter payments are still made in cash in the Netherlands, there may be space to transform the benefits of cash into the digital age.

The European Commission will present legislative proposals for a digital euro in the coming weeks. This autumn, the European Central Bank (ECB) will complete the research phase towards a digital euro, after which the ECB will decide whether to move to a realisation phase. A digital euro could be used within a few years if decided upon. That brings decision-making on a digital euro to an important point. A decision on whether a digital euro will be created and, if so, what form it will take, will be made in the near future. These design choices will largely determine how the digital euro functions and the added value of a digital euro. This report sets out for several key design choices based on what is known so far about what shape the digital euro will take.

The ECB envisages an important role for financial institutions as intermediaries in distributing a digital euro, which could minimise the ECB's involvement in processing user data. As a result, the ECB would have no insight into the digital euros held by an individual end-user or payment patterns. The ECB calls this 'privacy-by-design'. It remains unclear to what extent it will be possible to make anonymous payments with the digital euro up to a certain maximum amount per transaction and per month. With the envisaged set-up, the ECB seems more likely to end up with the level of privacy of a regular bank account rather than cash payments.

Clearly, the digital euro will not be a form of programmable money. That means that, for example, there should be no restrictions on the type of goods or services that can be purchased with a digital euro or the time period within which a digital euro can be spent.

While the digital euro is not intended to replace cash payments, it seems plausible that it could accelerate the declining use of cash. The European Commission wants legal tender status to increase the acceptance and usability of a digital euro. At this stage, it remains to be seen exactly what a legal tender status would mean and how a balance can be struck between broad access to and acceptance of the digital euro as a means of payment and avoiding acceptance coercion.

To address potential risks to financial stability when introducing a digital euro, consideration is given to limiting the maximum amount in digital euros a user can hold. While financial stability concerns are understandable, the choice to focus the digital euro only on payments, and not savings, may limit the extent to which the digital euro can boost the resilience, innovation, diversity and customer focus of the financial sector. This raises the question of whether the digital euro can provide the 'disciplining effect' that the Cabinet and the Netherlands Scientific Council for Government Policy (WRR) had envisaged earlier.

European legislation for a digital euro will define the essential building blocks of a digital euro. The rapporteurs recommend that the Finance Committee, when considering this proposal, pay specific attention to firmly establishing these essential design choices so that, also for the future, a digital euro meets the concerns and conditions the House of Representatives envisages.

#### 1 Introduction

The digital euro is a special case. In some ways it is reminiscent of the old-fashioned Chipknip, an electronic wallet to which money could be deposited and which was intended to facilitate payments. History has shown that the need for it was limited, and the electronic wallet never proved notably successful. Even the digital euro in the form that the European Central Bank (ECB) and the European Commission seem to be aiming for can sometimes look like a solution in search of a problem. That is certainly true in the Dutch payments landscape, where people can pay practically flawlessly and efficiently with a debit card, phone or smartwatch. In cases where there are also plenty of options for online payments, the added value of an additional payment method in the form of a digital euro seems limited at first glance.

At the same time, it is difficult to predict where financial innovations might lead and which future applications might benefit consumers. However, the digital euro is already raising fundamental questions. For example, no one wants a digital euro where the ECB or government can watch every payment or establish in the programming process which payments are or are not allowed.

The digital euro has long been a project discussed mainly among independent central banks beyond the reach of parliamentary democracy. Concerns about privacy, programmability and parliamentary involvement, among other things, prompted the House of Representatives to start working on the digital euro at an early stage. For instance, in 2020, the standing parliamentary committee on Finance appointed members Mahir Alkaya and Aukje de Vries as rapporteurs to monitor developments around digital central bank currency, on which they issued their final report in February 2021.¹ On 9 March 2022, the Finance Committee decided to reinstate the rapporteurship of digital central bank currency and appointed members Heinen and Alkaya as rapporteurs.² They are monitoring the digital euro review at the ECB and related developments and are tasked with enabling the House to thoroughly debate the European Commission's forthcoming legislative proposal, expected on 28 June 2023.³

The House of Representatives has passed 17 motions on a digital euro, including design, programmability, privacy, cash preservation, legal basis, and European strategic autonomy.<sup>4</sup> At the suggestion of the rapporteurs, the Finance Committee also opened a political dialogue with the European Commission on the digital euro on 13

<sup>&</sup>lt;sup>1</sup> See <u>Final report Digital central bank currency</u>; an overview of opportunities, risks and concerns, February 2021.

<sup>&</sup>lt;sup>2</sup> <u>Decision list of the procedural meeting of the Finance Committee</u>, 9 March 2022.

<sup>&</sup>lt;sup>3</sup> The rapporteurs issued an internal interim report to the standing parliamentary committee on Finance on 12 September 2022.

<sup>&</sup>lt;sup>4</sup> A summary of the motions on a digital euro is given in Annex 4.

June 2022.<sup>5</sup> In this letter, the Finance Committee communicated to the European Commission the key priorities and concerns in the development of a digital euro:

- i. The involvement of parliaments, especially national ones, and citizens is key
- ii. Privacy is essential when designing a digital euro,
- iii. A digital euro should not be programmable,
- iv. A digital euro should be an inclusive and sustainable complement to cash and not replace cash.

This report first discusses what a digital euro is, and to what extent it is needed. It then sets out the objectives for a digital euro and describes the decision-making process on how the digital euro will be shaped. Based on the envisaged design of a digital euro, an image is formed of how the digital euro could function and what added value a digital euro could offer. Finally, the rapporteurs make recommendations for the further handling of this file.

The report was based on research into public sources and discussions with De Nederlandsche Bank (DNB), the Dutch Banking Association (NVB) and the Payments Association of the Netherlands. The rapporteurs also paid a working visit to the European institutions in Brussels, where they met with think tank Bruegel. The rapporteurs also held talks with the European Central Bank in Frankfurt am Main. The rapporteurs would like to express their thanks to these discussion partners<sup>6</sup>.

<sup>&</sup>lt;sup>5</sup> See the <u>report of a political dialogue on the digital euro</u>, scheduled for the committee debate on the digital euro on 23 November 2022. The European Commission sent a reply to this letter on 22 July 2022.

<sup>&</sup>lt;sup>6</sup> For an overview of the interviews conducted by the rapporteurs leading up to this report, see Annex 5.

#### 2 Utility and need for digital euro

#### 2.1 What is a digital euro?

The digital euro is a form of central bank digital currency (CBDC). The digital euro, like euro coins and notes, is a form of 'public money'. Like cash, the digital euro will be issued by central banks and thus be a claim on the central bank. This makes the digital euro different from the digital money in an existing bank account, which is on the balance sheet of a commercial bank. The digital euro can thus be seen as an upgrade of currency (banknotes and coins) to the digital age.

The ECB and the European Commission are looking into the possibility of introducing a digital euro alongside cash. The digital euro should be made accessible to all citizens and businesses - similar to banknotes, but in digital form. The ECB sees a role for the digital euro primarily as a means of payment and does not intend to provide savings accounts for digital euros. In this context, the ECB initially wants to develop a *retail* digital euro aimed at payments in physical shops and online between individuals and between the government and citizens.<sup>7</sup>

#### 2.2 What is a digital euro for?

The declining use of cash means that the role of public money in payment transactions is steadily decreasing. In the Netherlands, only 1 in 5 payments are still made in cash.<sup>8</sup> DNB writes in its report on the digital euro that it is important that public money remains available to all.<sup>9</sup> Citizens and businesses can currently exchange private money in a bank account for public cash at ATMs. DNB asserts that exchangeability is important for citizens' confidence in the monetary system. This is especially necessary in extreme situations such as financial crises, war or disruption of private payments.<sup>10</sup>

The ECB also regards the digital euro as a solution to preserving the role of public money, even in the digital age with the declining use of cash. The ECB calls this the "monetary anchor" of the payment system. The digital euro would also contribute to Europe's strategic autonomy by providing a European currency that can be used for any digital payment and is based on a European infrastructure. That would contribute to an adequate degree of independence from non-European private parties in payment transactions or private (crypto) currencies. Another consideration lies in the fact that other countries are also working hard to introduce a digital currency, or, as in China, are already experimenting with it to a large extent. The digital euro could also serve

 $<sup>^{\</sup>rm 7}$  See the ECB's slide 'Digital Euro use cases', in Annex 2.

<sup>&</sup>lt;sup>8</sup> See DNB's webpage, <u>Digital Euro: what, why and how</u>

<sup>&</sup>lt;sup>9</sup> See DNB's webpage, Central bank digital money can protect public interests in monetary system

<sup>&</sup>lt;sup>10</sup> '<u>Digital central bank currency: Objectives, preconditions and design choices</u>, Occasional Studies, Vol 18-1, DNB, 2020.

<sup>&</sup>lt;sup>11</sup> Progress on the investigation phase of a digital euro, ECB, 29 September 2022.

<sup>12</sup> For information, see, for example <u>Digital yuan: what is it and how does it work?</u>

as a back-up payment system, allowing everyone to continue making payments if other payment systems temporarily fail.

The Eurogroup envisages the digital euro playing a key role in an increasingly digitalised economy by strengthening the European Union's open strategic autonomy. The Eurogroup thus emphasises the central geopolitical role of payment systems and sees the added value of the digital euro in promoting innovation in the financial sector and delivering benefits to citizens, businesses and Member States while maintaining the role of central bank currency as the anchor of our monetary system.<sup>13</sup>

The Cabinet also cites safeguarding access to public money in a digitising world and payment autonomy as important goals for a digital euro. <sup>14</sup> The Cabinet sees the digital euro as a fallback option for cashless payment system failures and a public alternative to ensure sufficient independence from the European payment system. According to the Cabinet, the digital euro could also contribute to diversity and innovation in the financial sector and increase competition in the financial sector. At the same time, the Cabinet cited "clear benefits for consumers, businesses and the economy" as a precondition for introducing a digital euro.

In the Netherlands, the WRR commented on a possible digital euro in its 2019 report 'Money and Debt, the public role of banks'. <sup>15</sup> In this report, the WRR argues, among other things, for more diversity in the financial sector and sees a role for a digital euro in this. For instance, the WRR advocates the creation of a publicly anchored alternative to payments and savings in addition to the current banks. That could take the form of central bank digital currency. The WRR argues that such a publicly anchored alternative will also require changes in the current commercial banks, e.g., their funding. The WRR expects that the existence of such an alternative will have a disciplining effect on these banks.

<sup>&</sup>lt;sup>13</sup> Eurogroup statement on the digital euro project, Eurogroup, 16 January 2023.

<sup>&</sup>lt;sup>14</sup> Parliamentary letter on the possible design and planning of the digital euro, 16 May 2023.

<sup>&</sup>lt;sup>15</sup> Money and debt: The public role of banks, Scientific Council for Government Policy, 17 January 2019.

#### 3 Is there a need for a digital euro?

A key question in the possible introduction of a digital euro is to what extent there is demand for it among euro area residents. After all, goals such as maintaining a monetary anchor, financial stability and Europe's strategic autonomy are understandable goals for the ECB or European Commission, but for the average citizen, they could be abstract and not an immediate reason to use a digital euro. On top of this, the ECB is anticipating a digital euro as a means of payment, where the possibility of using the digital euro as a means of savings subject to strict constraints. Consequently, in the Netherlands, where the regular and online payment system is recognised as being highly efficient, the added value of a digital euro as an additional payment method for consumers may be limited. Such added value may be greater in member states with less sophisticated payment systems than in the Netherlands. <sup>16</sup>

On the other hand, the Netherlands is leading the way in the declining use of cash. While only 1 in 5 over-the-counter payments are still made in cash in the Netherlands, there may be room to transform the benefits of cash into the digital age. <sup>20</sup> A fallback option for cashless payment system failures is an example of how the digital euro could retain the benefits of cash, whose functionality as a fallback option is diminishing due to declining usage. The digital euro could potentially offer a solution for cross-border payments within the EU, which now often go through (US) credit card providers or PayPal.

#### Consumer survey on a digital euro gives mixed picture

DNB research among 2,500 Dutch citizens shows that about half of the Dutch would like to open a digital euro payment account. Privacy and security are the key considerations here. <sup>17</sup> In consumer research in Germany, with a majority indicating they still prefer to pay with cash, three quarters of respondents see the digital euro as being unnecessary and only a fifth expect that the digital euro would make payments easier. <sup>18</sup> In a study on new digital payment methods, the ECB surveyed various target groups in all euro countries about their perceptions of a digital euro. Many respondents expressed concern that introducing a digital euro would lead to cash being phased out. This concern is strongest among the 'unbanked' target group, people who do not have a bank account or live their life offline for various reasons. <sup>19</sup>

<sup>&</sup>lt;sup>16</sup> Discussions with think tank Bruegel, the Dutch Banking Association and the Payments Association of the Netherlands also cited the added value of a digital euro as an area of concern.

<sup>&</sup>lt;sup>17</sup> 'What triggers consumer adoption of CBDC', DNB Working Paper, no. 709, April 2021.

<sup>&</sup>lt;sup>18</sup> 'Kenntnis und Einstellungen zum "Digitalen Euro", Bundesverband Deutscher Banken, May 2023.

<sup>&</sup>lt;sup>19</sup> 'Study on New Digital Payment Methods', ECB, March 2022.

<sup>&</sup>lt;sup>20</sup> See, for example, DNB board member Olaf Sleijpen's speech: 'The digital euro; what and why?', 23 January 2023.

#### 4 Who decides on a digital euro?

#### 4.1 European Commission

In the 2023 work programme, the European Commission announced that it would develop a legislative proposal to lay down the principles of a digital euro.<sup>21</sup> The European Commission is expected to present these legislative proposals on 28 June 2023. The European Commission relies on Article 133 TFEU as the legal basis for this proposal. That means following the standard procedure for decision-making in the EU, with the Council having the legislative power together with the European Parliament, and deciding within the Council by qualified majority.

The Minister of Finance writes in her parliamentary letter of 16 May 2023 that the bill for a digital euro will define the essential building blocks of a digital euro. Through this bill, according to the minister, power will be placed in the hands of the [European] colegislators, who will determine whether, and under what conditions the digital euro will be introduced.<sup>22</sup>

The talks with the European Commission on 27 June 2022 show that they see the digital euro as a joint path between the ECB and the European Commission, each within their own responsibilities. The ECB is in responsible for the technical development and design of the digital euro, while the European Commission provides the legal framework within which the ECB will operate.

#### 4.2 European Central Bank

In September 2020, the ECB started the *experimental* phase for the possible development of a digital currency.<sup>23</sup> After completing this phase in summer 2021, the ECB Governing Council decided to launch the 'digital euro' project<sup>24</sup>. In that context, the ECB started a two-year *research phase* in October 2021. During the research phase, the ECB says it focuses on creating a functional design based on users' needs. The study phase will last until October 2023 after which, if decided upon, the *realisation* phase can proceed.<sup>25</sup> ECB executive board member Panetta expects that, if decided upon, the digital euro could be launched in three to four years.<sup>26</sup>

<sup>&</sup>lt;sup>21</sup> European Commission work programme 2023.

<sup>&</sup>lt;sup>22</sup> Parliamentary letter on the possible design and planning of the digital euro, 16 May 2023.

<sup>&</sup>lt;sup>23</sup> 'Digital euro experimentation: scope and key learnings', ECB, July 2021.

<sup>&</sup>lt;sup>24</sup> In late 2020, the ECB also held a <u>public consultation</u> on the digital euro, which revealed that privacy is the top priority for users.

 $<sup>^{\</sup>rm 25}$  See ECB slide: 'where do we currently stand' in Annex 2 for a timeline.

<sup>&</sup>lt;sup>26</sup> See Reuters coverage: 'ECB's Panetta: The digital euro could be launched in three to four years',24 May 2023. This is in line with DNB's estimate, see DNB's webpage for that, <u>Digital Euro: what, why and how.</u>

The ECB has now published three progress reports on the research phase towards a digital euro. These preliminary reports outline the goals the ECB sees for a digital euro, the design choices the ECB has already made and what is technically possible. Annex 2 briefly summarises the progress reports. The ECB says it will take into account any necessary adjustments to the digital euro design that may emerge from the European digital euro legislative process.<sup>27</sup>

In the second half of 2023, the ECB expects to present the overall design of a digital euro to the ECB Governing Council. The Governing Council will assess the outcome of the study phase in autumn 2023 and decide whether to proceed to the realisation phase. The ECB is independent in the performance of its duties.<sup>28</sup> This means that the ECB can independently decide whether the realisation phase will be started and whether a digital euro will ultimately be issued.

#### 4.3 The Eurogroup

The Eurogroup, which brings together eurozone Ministers of Finance, the European Commission and the ECB, adopted an initial statement on the digital euro in February 2022, announcing a work programme on the digital euro.<sup>29</sup> Speaking to the president of the Eurogroup Working Group (EWG, the highest official preparatory body of the Eurogroup) on 27 June 2022, it emerged that the Eurogroup has an informal role and acts as a sounding board for member states to communicate their priorities for a digital euro to the European Commission and the ECB.

In January 2023, the Eurogroup released another statement on the digital euro project.<sup>30</sup> In this statement, the Eurogroup lists a number of starting points for further development:

- The introduction of a digital euro and its main features and design choices require political decisions to be discussed and taken at the political level.
- A digital euro should complement cash and not replace it.
- The digital euro needs to gain the trust of users, for which privacy is very important (the Eurogroup refers to a risk-based approach). The design of a digital euro should also be consistent with policy objectives such as preventing money laundering and tax evasion. The Eurogroup also calls for offline functionalities.

<sup>&</sup>lt;sup>27</sup> For a list of all ECB publications on the digital euro, including technical elaborations, see <u>ECB Publications on Digital</u> euro.

 $<sup>^{28}</sup>$  The ECB's independence is enshrined in Article 130 of the Treaty on the Functioning of the European Union (TFEU).

<sup>&</sup>lt;sup>29</sup> <u>Eurogroup statement on the digital euro project</u>, Eurogroup, 25 February 2022. In 2022, the Eurogroup held quarterly discussions on the policy objectives and use of a digital euro, the euro as a digital currency, the trade-offs between privacy and other EU policy objectives, the effects on the financial system and the business model of public and private actors in the digital euro ecosystem through a <u>work programme</u>.

<sup>&</sup>lt;sup>30</sup> Eurogroup statement on the digital euro project, Eurogroup, 16 January 2023.

- The financial stability of the euro area must be safeguarded, for example by building limits and restrictions into the design of the digital euro while maintaining its attractiveness as a means of payment.
- On infrastructure, the Eurogroup calls for public-private partnerships, with a role for supervised financial institutions operating on European infrastructure.
- The digital euro cannot be programmable money. There can be no restrictions on the type of goods that can be purchased with the digital euro or on the time within which the digital euro can be spent.
- The digital euro should always be exchangeable throughout the euro area, on an equal footing with other forms of the euro.
- Granting legal tender status to the digital euro should be considered.
- Interoperability with other digital currencies of other central banks should be a key feature of the digital euro while mitigating and monitoring the risks associated with using a digital euro outside the euro area.

#### 4.4 The Council and the European Parliament

The Economic and Monetary Affairs Committee (ECON) holds regular talks with ECB director Panetta about the digital euro in the European Parliament.<sup>31</sup> The ECON committee has also asked several academics to analyse the digital euro.<sup>32</sup>

In the European Parliament, rapporteurs on the Digital Euro Bill will be appointed after its publication. Member States negotiate after the European Commission publishes the proposals, also in the Council. The outcome of the Eurogroup discussions is expected to be an important guide For the Council.

#### 4.5 National parliaments

In the Netherlands, the Parliamentary standing committee on Finance has been discussing CBDC and the digital euro since 2020 in debates specifically dedicated to it and almost monthly in committee debates before the Eurogroup and Ecofin Council<sup>33</sup>. The Finance Committee thus placed this issue on the agenda at an early stage. At the committee's request, the Dutch Minister of Finance also stressed the importance of this discussion in Brussels, asking the minister to highlight Dutch concerns. The Finance Committee and the rapporteurs also directly highlighted Dutch concerns through political dialogue and discussions with the European Commission and the ECB.

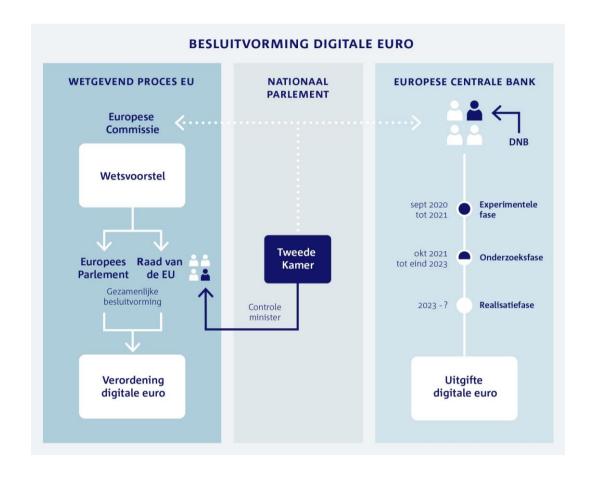
Annex 3 presents the results of a survey of Eurozone national parliaments on their commitment to the digital euro. This shows a wide variety of involvement, although by

<sup>&</sup>lt;sup>31</sup> His speeches in the European Parliament can be read on the ECB <u>Publications on Digital euro</u> website.

<sup>&</sup>lt;sup>32</sup> This resulted in six substantive analyses by independent academics. These documents are listed under the sources section.

<sup>&</sup>lt;sup>33</sup> See Annex 4 for an overview of the debates in the Finance Committee on a digital euro and an overview of the various parliamentary letters on this topic.

and large national parliaments are becoming increasingly active in the national debate on a digital euro.



## 5 What shape is the digital euro expected to take?

Based on ECB progress reports, Eurogroup statements and the various discussions held<sup>34</sup>, this chapter sets out what is known so far about the proposed design of a digital euro. These design choices will largely determine how the digital euro functions and the added value of a digital euro. Also, many of the concerns the House of Representatives highlighted through the various motions and political dialogue, such as privacy and programmability, largely depend on the design choices. These design choices also facilitate an initial assessment of the extent to which the digital euro will succeed in achieving the objectives mentioned above.

#### 5.1 Account-based or token-based

The digital euro can be designed in the form of an account (like a bank account), or the value can be stored in the instrument's carrier (like cash). This is referred to as 'account-based' or 'token-based', respectively. The ECB seems to be opting for a digital euro that, in execution, mainly resembles an account-based variant, adopting certain functionalities of a token-based currency. The ECB wants consumers to make payments through intermediaries (see section 5.2) that are executed in the ECB's systems, similar to regular payments through a bank account. Nonetheless, the ECB also wants to enable offline payments, a feature befitting a token-based variant.<sup>35</sup> In its communication, the ECB has not yet given a definitive answer as to whether the digital euro will be an account-based or token-based currency. This is also an interesting choice legally; see also Annex 1 in that light.

#### 5.2 The role of intermediaries

A key design choice made by the ECB is to distribute the digital euro through supervised market operators.<sup>36</sup> The ECB outsources this task to payment service providers within the meaning of the Payment Services Directive<sup>37</sup> (PSD2).<sup>38</sup> These parties are thus the point of contact for the customer, similar to the normal customer contact between the consumer and the bank. These financial institutions also become responsible for know-your-customer and anti-money laundering and terrorist financing controls. The necessary user interfaces (apps, websites) and exchange services are thus also provided by the respective institution.

<sup>&</sup>lt;sup>34</sup> See also in Annex 2 the ECB presentations used in the discussion with the rapporteurs. These slides summarise the design choices as already envisaged by the ECB.

<sup>&</sup>lt;sup>35</sup> <u>Progress on the investigation phase of a digital euro - second report</u>, ECB, 21 December 2022. Hereinafter: second ECB progress report.

<sup>&</sup>lt;sup>36</sup> Second ECB progress report, see also ECB slide: 'A strong private-public partnership will be needed' in Annex 2.

<sup>&</sup>lt;sup>37</sup> For information, see DNB's webpage on PSD2: What you need to know about PSD2.

<sup>&</sup>lt;sup>38</sup> Progress on the investigation phase of a digital euro - third report, ECB, 24 April 2023. Referred to below as: third ECB progress report.

Users can use the digital euro through existing apps for online banking/payments from payment service providers. Also, the ECB itself plans to offer an app that allows users to access the digital euro. This ECB app should provide a harmonised access point for basic payment functionalities.<sup>39</sup>

The ECB has completed a pilot with five companies to develop a draft user interface for the digital euro. According to the ECB, the aim is to test how the envisaged design choices for the digital euro can be technically implemented and integrated into the existing European payments landscape. The pilot's most striking outcome is that there are serious doubts about whether existing technology can deliver a production-ready and secure offline solution that meets the requirements and is at the scale envisaged for the digital euro in the short to medium term (five to seven years). 40

#### 5.3 Privacy-by-design

The ECB announced in its second progress report that the digital euro is being designed to minimise the ECB's involvement in processing user data. Thus, the ECB would not be able to infer how many digital euros an individual end-user owns, nor would it be able to see end-users' payment patterns. ECB Executive Board member Panetta called this 'privacy by design' in talks with rapporteurs and in the European Parliament<sup>41</sup>. The ECB explained in interviews that a system is being worked on to ensure that the ECB does not know which digital euro belongs to which person. To that end, the linking between the digital euros and the user to whom these digital euros belong takes place at the payment service provider where the user has a digital euro account. This intermediary does have insight into the user's data, and will also need this data to comply with, for example, anti-money laundering and terrorist financing regulations. The ECB argues that this level of privacy is critical for confidence in a digital euro and thus future use by consumers.<sup>42</sup>

The final trade-off between privacy and other policy objectives, such as anti-money laundering, counter-terrorist financing, prevention of tax evasion or compliance with sanctions, will have to be made by European co-legislators as regards the ECB. This includes the possibility of a risk-based approach that allows more privacy in less risky transactions. One possible elaboration of this is anonymity for payments below a certain amount, similar to the anonymity of cash payments. In interviews, the ECB says that the anonymity of cash payments is difficult to bring to the digital world.

In its statement of 16 January 2023, the Eurogroup also stressed that for the digital euro to be successful, it will have to ensure user confidence, for which privacy will play a key role. At the same time, the Eurogroup believes that the design of a digital euro

<sup>39</sup> Third progress report

<sup>&</sup>lt;sup>40</sup> '<u>Digital euro - Prototype summary and lessons learned</u>', ECB, 26 May 2023.

<sup>&</sup>lt;sup>41</sup> See ECB Executive Board member Panetta's speech at the European Parliament on 23 January 2023: '<u>The digital euro</u>: our money wherever, whenever we need it'.

<sup>&</sup>lt;sup>42</sup> See also ECB slide: 'Preserving privacy by default and by design' in Annex 2.

should be consistent with other policy objectives, such as preventing money laundering, illegal financing, tax evasion and ensuring compliance with sanctions. The Eurogroup therefore proposes a risk-based approach where more privacy is possible in less risky transactions.<sup>43</sup>

It still remains to be seen to what extent such a risk-based approach would allow the digital euro to be used to make anonymous payments up to a certain maximum amount per transaction and per month, as envisaged in the Alkaya/Heinen motion of 31 March 2022<sup>44</sup>. With the envisaged set-up, the ECB seems more likely to end up with the level of privacy of a regular bank account rather than cash payments.

#### 5.4 Programmability

In the debate in the European Parliament in January 2023, Panetta stressed that the digital euro will not be a form of programmable money: "But let me be clear: the digital euro would never be programmable money. The ECB would not set any limitations on where, when or to whom people can pay with a digital euro. That would be tantamount to a voucher. And central banks issue money, not vouchers."<sup>45</sup> Rapporteurs get the same message in talks with the ECB. However, the ECB does foresee the possibility of programming payment orders. The term conditional payments is used for this: payments where people can decide to authorise an automatic payment when predefined conditions are met.

In its 16 January statement, the Eurogroup also stressed that the digital euro cannot be a programmable currency. That means that, for example, there should be no restrictions on the type of goods or services that can be purchased with a digital euro, or the time period within which a digital euro can be spent. In the parliamentary letter of 16 May 2023, the minister explained that partly at the insistence of the Netherlands, the European context will henceforth refer to 'conditional payments' instead of 'programmable payments'. The latter term is said to be confusing because it does not mean programmable money but programmable payment orders.<sup>47</sup>

<sup>&</sup>lt;sup>43</sup> Eurogroup statement of 16 January 2023.

<sup>&</sup>lt;sup>44</sup> Motion by members Alkaya and Heinen on enabling anonymous payments with the digital euro up to a certain maximum amount per transaction and per month, 31 March 2022, Parliamentary Paper, 2021-2022, 21501-07 No 1829.

<sup>&</sup>lt;sup>45</sup> The digital euro: our money wherever, whenever we need it (europa.eu)

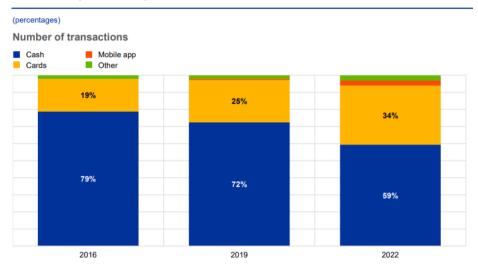
<sup>&</sup>lt;sup>46</sup> See also ECB slide: 'Programmability' in Annex 2.

<sup>&</sup>lt;sup>47</sup> Parliamentary letter on the possible design and planning of the digital euro, 16 May 2023.

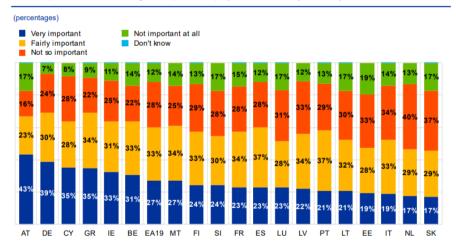
#### 5.5 Impact on the use of cash

The figures below provide insight into the use of cash and other payment options in the euro area (top) and in the different Member States (bottom).

Share of payment instruments used at the POS in terms of number and value of transactions, 2016-2022, euro area



The importance of having the option to pay with cash, by country



Source: Study on the payment attitudes of consumers in the euro area, ECB.<sup>48</sup> Although the digital euro is not intended to replace cash payments, <sup>49</sup> the declining use of cash is an important reason for the digital euro. The introduction of a new alternative to cash, which could also take over the function of cash in case of failures, is expected to replace some of the use of cash. In addition, as the Cabinet also notes, without widespread adoption the digital euro cannot achieve its policy goals.<sup>50</sup> This makes a plausible case that the digital euro could accelerate the declining use of cash. Fears

<sup>&</sup>lt;sup>48</sup> 'Study on the payment attitudes of consumers in the euro area', ECB, December 2022.

<sup>&</sup>lt;sup>49</sup> On that subject, see the Eurogroup <u>statement of 16 January</u> and, for example, the ECB's <u>FAQ</u> on the digital euro.

<sup>&</sup>lt;sup>50</sup> See Parliamentary letter draft digital euro choices, 7 May 2022.

that the digital euro could lead to a further reduction in the use of cash also frequently arise in the ECB's market research.<sup>51</sup>

#### 5.6 Legal tender and duty of acceptance

The European Commission announced in its 2023 work programme that it would prepare a proposal to regulate the legal tender status of cash in euros, in parallel to the proposal for a digital euro. <sup>52</sup> It is committed to the consistent treatment of cash and the digital euro. According to the European Commission, legal tender status supports the acceptance and usability of a digital euro.

The minister also indicates in the 16 May parliamentary letter that it remains to be seen what exactly the status of legal tender would mean and how a balance can be struck between broad access to and acceptance of the digital euro as a means of payment and avoiding acceptance coercion for the sake of contractual freedom. The minister is sceptical about enforcing the use of a digital euro, e.g. through an acceptance obligation.

#### 5.7 Ensuring financial stability

The introduction of a digital euro could pose risks to financial stability. If money is largely held as digital euros rather than at the bank, banks lose some of their deposits as a stable and secure form of funding. This could affect banks' lending operations. In addition, a digital euro, as the ultimate safe haven for savings, could increase the risk of bank runs. In a bank run, many deposits are withdrawn in a short period of time, leaving a bank without sufficient liquidity, which could place it in difficulty. Given the nature of a digital euro, large numbers of deposits could be converted to 'safe' digital euros with a single click.

To prevent bank runs and reduce threats to financial stability, the ECB plans to curb the use of the digital euro as a form of investment or savings vehicle. Previous ECB reports looked at both quantitative limits on digital euro holdings and interest rate differentiation for this purpose. Interest-rate differentiation through an *interest-tiering* would mean that holding larger sums of digital euros would be made less attractive by increasing the cost of holding digital euros in larger amounts. Discussions with the ECB suggest that a quantitative limit on digital euro holdings is seen as the most practical and feasible option.<sup>53</sup> A sum of 3,000 euros is envisaged here. The ECB is thus also setting out to prevent the digital euro from being used as a savings vehicle.

While the financial stability concerns are understandable, these limits constrain the digital euro's ease of use and functionality. This may greatly limit the possibility of increasing competition in financial sector. Indeed, the choice to focus the digital euro only on payments and not savings limits the extent to which the digital euro is an

<sup>&</sup>lt;sup>51</sup> 'Study on New Digital Payment Methods', ECB, March 2022.

<sup>52</sup> European Commission 2023 work programme.

 $<sup>^{53}</sup>$  See also ECB slide: 'Excessive use of digital euro as an investment best avoided through design' in Annex 2.

alternative to commercial banks. For this reason, the digital euro does not appear to be able to fulfil the role envisaged by the WRR to reduce the intertwining of banks' public and commercial roles. In this context, the WRR, in its report Money and Debt: the public role of banks<sup>54</sup> spoke of the digital euro as "a publicly anchored alternative to payments and savings".

In the Parliamentary Letter Draft Choices of the Digital Euro of 5 July 2022, the minister also mentions the "disciplining effect" of a digital euro, reducing the dependence of households and businesses on commercial banks by providing a fully-fledged alternative for savings, lending and payment services. This would boost banks' resilience, innovation and customer focus. By limiting the functionalities of the digital euro, the question is to what extent this disciplining effect of the digital euro will work.

<sup>&</sup>lt;sup>54</sup> Money and debt: The public role of banks, Scientific Council for Government Policy, 17 January 2019.



# 6 Subsequent steps to be taken by the House of Representatives

With this final report, the digital euro rapporteurs complete their rapporteurship. Further consideration of the European Commission's legislative proposal is a matter for the Finance Committee. The rapporteurs make the following recommendations in this regard.

The European Commission's legislative proposal for the digital euro is expected to be presented on 28 June 2023. The Finance Committee will take the lead in this proposal. At the procedural meeting on 6 July 2023 – the last procedural meeting before the summer break – the Finance Committee may decide on consideration of this proposal.

The digital euro rapporteurs suggest asking the minister not to take irreversible steps in negotiating this proposal in Brussels until the Finance Committee has consulted with the minister on the Dutch commitment after the summer break. The BNC fiche, in which the cabinet assesses new EU proposals, will also be available at that time. In addition, the rapporteurs on the digital euro propose to ask the minister to report monthly to the House on developments in the Brussels negotiations on this file. <sup>55</sup> The rapporteurs also suggest that the Finance Committee consider requesting the Ministry of Finance, jointly with DNB, to provide a technical briefing on the digital euro. This briefing can also be scheduled after the summer recess.

On 4 July 2023, the Finance Committee held online talks with euro commissioners Dombrovskis (executive vice-president for 'An economy that works for people') and Gentiloni (economy). The rapporteurs suggest to the Finance Committee that the digital euro should also be raised in this discussion.

In terms of content, this final report addressed several concerns in developing a digital euro. The rapporteurs conclude that how a significant part of these concerns is elaborated will depend on the chosen design of a digital euro. European legislation for a digital euro will define the essential building blocks of a digital euro. The rapporteurs recommend that the Finance Committee, when considering this proposal, pay specific attention to firmly establishing these essential design choices so that, also for the future, a digital euro meets the concerns and conditions that the House of Representatives envisages for it.

<sup>&</sup>lt;sup>55</sup> Normally, the House of Representatives has the instrument of 'parliamentary scrutiny reservation' to record these agreements, but the fact that the proposal is being published so soon before the summer recess means that it is not possible to take the procedural steps for a scrutiny reservation before the summer recess within the applicable legal deadlines. The procedural proposed here corresponds materially to the steps of a scrutiny reservation. For information, see the House of Representatives webpage: On top of Europe

#### Literature list

#### ECB:

- > 'Report on a digital euro', ECB, October 2020.
- Digital euro experimentation: scope and key learnings', ECB, July 2021.
- > 'Study on New Digital Payment Methods', ECB, March 2022.
- 'The case for a digital euro: key objectives and design considerations', ECB, July 2022.
- > 'Study on New Digital Payment Methods', ECB, September 2022.
- > 'Progress on the investigation phase of a digital euro', ECB, September 2022.
- → 'Progress on the investigation phase of a digital euro second report', ECB, 21
  December 2022.
- > 'Study on the payment attitudes of consumers in the euro area', ECB, December 2022.
- ➤ 'Progress on the investigation phase of a digital euro third report', ECB, 24 April 2023.
- '<u>Digital euro Prototype summary and lessons learned'</u>, ECB, 26 May 2023.

#### DNB:

- ➤ 'DNB Visie op Betalen 2022-2025', DNB, April 2020.
- <u>'Digitaal centralebankgeld Doelstellingen, randvoorwaarden en ontwerpkeuzes',</u> Occasional Study vol 18-1, DNB, 2020.
- ➤ 'What triggers consumer adoption of CBDC', Working Paper, DNB, April 2021.

#### Economic Governance and EMU Scrutiny Unit European Parliament:

- > Digital Euro: When in doubt, abstain (but be prepared), Ignazio Angeloni, April 2023
- Digital Euro: An assessment of the first two progress reports Christian Hofmann, April 2023
- Digital Euro: An assessment of the first two ECB progress reports Cyril Monnet, April 2023
- Digital Euro: An assessment of the first two progress reports, Dirk Niepelt, April 2023
- A legal framework for the digital euro An assessment of the ECB's first three progress reports, Seraina Grünewald, May 2023
- Digital euro's legal framework The legal framework concerning legal tender, privacy and inclusion, Annelieke Mooij, June 2023

#### Other:

- > 'Central bank currencies going digital', Maria Demertzis, Bruegel, 27 April 2021.
- ➤ <u>'Eindrapport Digitaal centralebankgeld; een overzicht van mogelijkheden, risico's en aandachtspunten'</u>, Rapporteurs digitaal centralebankgeld, Tweede Kamer, February 2021.
- <u>'Kenntnis und Einstellungen zum "Digitalen Euro"</u>, Bundesverband Deutscher Banken, May 2023.

#### Annex 1. Digital euro legal framework

The European Commission's legislative proposal for a digital euro takes Article 133 TFEU as its legal basis. Article 133 TFEU states that "without prejudice to the powers of the European Central Bank, the European Parliament and the Council, acting in accordance with the normal legislative procedure, shall lay down the measures necessary for the use of the euro as a single currency. These measures shall be adopted after consulting the European Central Bank." That means that the European Parliament's assent is required, and is decided within the Council by qualified majority. Nor should the proposal encroach on the ECB's powers.

In the parliamentary letter of 16 May 2023, the minister outlined which legal bases could form a basis for the digital euro. The minister also looked into whether it would be appropriate to opt for a legal basis requiring unanimity in the Council for the introduction of a digital euro. The minister concludes that there is no appropriate legal basis for the digital euro requiring unanimity.

While it is clear what legal basis the European Commission provides for the legislative proposal on a digital euro, it is not yet clear on what legal basis the ECB then decides to issue it. In its first report on a digital euro, the ECB writes that the final design of a digital euro will determine the legal basis on which it can be issued.<sup>56</sup> The ECB has two possible legal bases: Articles 127 and 128 of the TFEU.

Article 127 TFEU states that maintaining price stability is the primary objective of the ECB and that, without prejudice to the objective of price stability, the ECB supports the Union's general economic policies. Article 128 gives the ECB the exclusive right to issue banknotes in the European Union.

The main reason given in the ECB's communication on the digital euro appears to be its function as a 'monetary anchor'. This role is currently fulfilled by banknotes, which the ECB issues based on Article 128 of the TFEU. The digital euro, like euro coins and notes, should constitute a form of "public money" and is presented by the ECB as an upgrade of cash into the digital age. This argues that the legal basis for issuing banknotes should also be used for the ECB to issue a digital euro. <sup>57</sup> That would require the digital euro to qualify as a digital equivalent of a banknote.

If Article 128 TFEU is used as the legal basis for a digital euro, this has, as the ECB also argues, implications for the design of the digital euro. A digital euro issued on the legal basis of banknote issuance should adopt the essential features of banknotes.<sup>58</sup> This

<sup>&</sup>lt;sup>56</sup> 'Report on a digital euro', ECB, October 2020.

<sup>&</sup>lt;sup>57</sup> In a legal analysis for the European Parliament, Professor Grünewald also argues that Article 128 of the TFEU should serve as the legal basis for the ECB to issue a digital euro: A legal framework for the digital euro - An assessment of the ECB's first three progress reports, Seraina Grünewald, May 2023.

<sup>&</sup>lt;sup>58</sup> See also Grünewald, May 2023.

raises questions about certain design choices as now envisaged for a digital euro because they differ from the concept of banknotes in terms of privacy and strict holding limits. Also, a banknote is ideally token-based, which may complicate the choice of an account-based digital euro based on Article 128 of the TFEU.

#### Annex 2. ECB Documentation

The ECB has so far published three progress reports on the research phase towards a digital euro. These preliminary reports outline the goals the ECB sees for a digital euro, the design choices the ECB has already made and what is technically possible. The progress reports are briefly summarised below.

#### First ECB progress report

The ECB published the first progress report on 29 September 2022.<sup>59</sup> That report discusses the objectives for a digital euro, identifies its possible uses and presents an initial set of fundamental design choices. The report promotes the digital euro as a tool to preserve the role of public, government-issued money as a monetary anchor of the payment system, even in the digital age as the use of cash declines. The digital euro is also said to contribute to Europe's strategic autonomy. The report addresses the importance of privacy but at the same time notes that complete anonymity is not a viable option, also given legislation to prevent money laundering and terrorist financing. Finally, the report outlines options to mitigate the potential financial stability implications of introducing a digital euro. The ECB is concerned that if users hold large amounts, a digital euro could lead to a structural replacement of bank deposits, which in turn could affect monetary policy, financial stability and lending to the real economy. The ECB is therefore considering limits on how many digital euros can be held or interest rate differentiation to discourage the use of a digital euro as a savings vehicle.

#### **Second ECB progress report**

The ECB published the second progress report on 21 December 2022.<sup>60</sup> The report outlines a second set of choices made by the ECB and describes the roles of the ECB and supervised institutions in the future digital euro ecosystem.

The ECB envisages a digital euro issued through commercial intermediaries. That means supervised institutions (such as banks and payment service providers) will play an important role in the digital euro and be responsible for customer contact, similar to normal customer contact between consumers and banks. These financial institutions also become responsible for *know-your-customer* and anti-money laundering and terrorist financing controls. The necessary user interfaces (apps, websites) and exchange services are thus also provided by the respective financial institution.

An additional advantage for the ECB is that when a digital euro is issued through commercial intermediaries, the ECB needs less insight into privacy-sensitive data. This allows the digital euro to be designed to minimise the ECB's involvement in processing user data. For instance, the ECB would not be able to infer how many digital euros an individual end-user owns nor see end-users payment patterns. The ECB wants payment in digital euro to always be an option, including offline, regardless of country of origin

<sup>&</sup>lt;sup>59</sup> 'Progress on the investigation phase of a digital euro', ECB, September 2022.

<sup>&</sup>lt;sup>60</sup> 'Progress on the investigation phase of a digital euro - second report', ECB, 21 December 2022.

or chosen intermediary. The ECB is working on a common set of rules, standards and procedures for this purpose. The digital euro, like cash and unlike commercial bank money, will be a direct claim on the central bank. This places every digital euro on the ECB's balance sheet. Partly for this reason, the ECB wants to keep transaction processing for the digital euro in-house.

#### Third ECB progress report

The ECB published the third progress report on 24 April 2023.<sup>61</sup> In this report, the ECB addresses design choices regarding access to the digital euro, balances and onboarding, distribution, services and functionalities. In the first releases, the ECB aims to make the digital euro available to EU residents, traders and euro-area governments. The ECB provides a uniform limit for the maximum sum of digital euros that can be held. This limit should be enough to cover daily payments. Onboarding for the digital euro (e.g. the identification and authorisation steps required to open a digital euro account) should follow the established legal procedures for opening a 'normal' current account.

Within the meaning of PSD2, payment service providers would become responsible for distributing the digital euro. Users can access their digital euros through the already existing online banking or payment environment or through an application that the ECB will provide. The ECB anticipates that the first digital euro releases will allow end users to pay via contactless payments, QR codes and online. Offline payments should also become possible. Once the digital euro is successfully introduced in the euro area, the ECB will consider supporting *cross-currency functionalities* (between different currencies) as well.

#### Working visit rapporteurs ECB

On 3 April 2023, the digital euro rapporteurs paid a working visit to the ECB. Given below is a summary of the presentations made by the ECB during this working visit.

<sup>&</sup>lt;sup>61</sup> 'Progress on the investigation phase of a digital euro - third report', ECB, 24 April 2023.

#### Welcome session: Digital Euro - future of public money -

# What is a digital euro?

"The digital euro is a digital central bank liability for retail payments of citizens and businesses in the entire euro area"



Complementing, not substituting, cash and wholesale central bank deposits



Supervised intermediaries (payment service providers - PSPs, such as banks) will facilitate the distribution of a digital euro



Digital euro as source of innovation and public good, shall not crowd out banks nor hinder innovation in payments

# Why issue a digital euro?



Ensure access to public money and its role as monetary anchor





Protect the European strategic autonomy and monetary sovereignty, while avoiding market dominance of private providers

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# Where do we currently stand?

Tentative - timeline is subject to change

- Use case prioritisation Report on focus groups
- Design options to Distribution model
- Compensation model
- Access to ecosystem Value-added services Advanced functionalities
- Decision-making document including advice on potential issuance of the digital euro, its design and



investigation phase Q4-2021

July 2021 Governing Council decision to launch











**Q2-2022** 

Q3-2022

**Q**4-2022

**Q1-2023** 

Autumn 2023 Governing Council decision to possibly launch next project phase



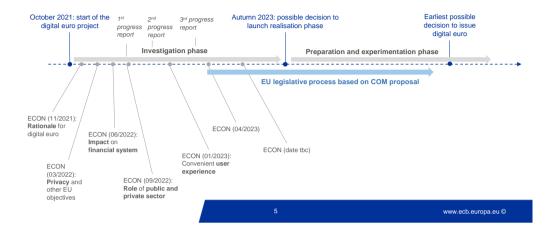
- Project team onboarding Governance set-up



- Online/offline availability
- Data privacy level Transfer mechanism
- Settlement model
- Delivery approach and form •
- High-level design & holistic review
- Prototyping results
  Finalise user requirements
  Prepare for possible project realisation phase

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# Timeline of EU legislative process



# Stakeholder engagement

Engagement with stakeholders to facilitate the appropriate specification and implementation of a digital euro:

European Parliament European Commission Eurogroup	Close coordination with the Eurosystem on design and business model decisions. The European institutions and policymakers provide important input/feedback on the analysis of design decisions. The European Parliament and euro area finance ministers in the Eurogroup discuss major design issues and policy-relevant aspects of a digital euro on a regular basis. The Union co-legislators (European Parliament, EU Council) will also adopt legislation to establish a digital euro, based on a legislative proposal by the Commission.
Digital Euro Market Advisory Group (MAG)  Euro Retail Payments Board (ERPB)	Listening to the market stakeholders both from the demand and supply sides of the retail payments ecosystem, this includes consumers, merchants, payment institutions and banks.
ECB Civil Society Seminars	Seminars where ECB experts present the work and exchange views with representatives from European civil society organisations.

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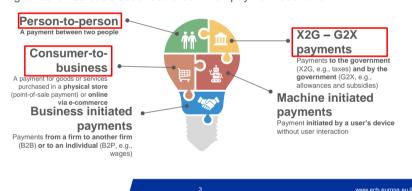
#### Session 1: Digital Euro - foundational design options

### Taking stock and road ahead



## Digital euro use cases

A digital euro use case describes a common payment scenario:



# Preserving privacy by default and by design



The digital euro design will ensure privacy of personal data and payments...

- The ECB will not have information on people's holdings, their transaction histories or payment patterns.
- Data are only accessible to intermediaries for regulatory compliance.
- The digital euro is NOT about programmable money.

...while legislators will decide on the right balance between privacy and other public policy objectives.

- A risk-based approach could allow more privacy for less risky transactions.
- Offline digital euro could provide a level of privacy similar to cash.

4 www.ecb.europa.eu ⊚

# Programmability

The digital euro will never be programmable money...

X

The ECB would not set **any limitations** on where, when or to whom people can pay with a digital euro.

...but it will allow for conditional or automated payments



People could decide to authorise an automatic payment where predefined conditions of their own choosing are met.

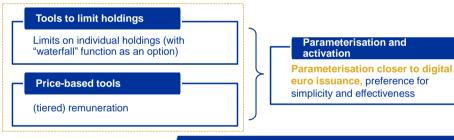
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# Excessive use of digital euro as an investment best avoided through design

Any undesirable consequences that may result from the issuance of a digital euro for financial stability, monetary policy or the provision of services by financial intermediaries are best mitigated through its design

#### Potential design features



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Session 2: Digital Euro - role of intermediaries

# A strong private-public partnership will be needed



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Supervised intermediaries will play a key role in the distribution and making the digital euro as a public good accessible to citizens:

- · Managing digital euro end users (incl. opening account/wallets).
- Funding and defunding of user's digital euro holdings (individuals and merchants).
- Initiating, processing and managing of digital euro transactions (incl. fraud prevention and management as well as dispute management).
- · Potentially offering value added services to improve user experience.

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# A scheme approach will ensure pan-European reach and common payment experience

If a citizen is provided with a **digital euro payment instrument** by one intermediary in one country, they should be able to use this instrument without barriers to pay **at any merchant in the euro area, independent of the intermediary and the country** of the merchant.



The Eurosystem pursues a scheme approach to distribute digital euro:

- Digital euro scheme would define a set of common rules, standards and procedures which would ensure pan euro area reach.
- Promote a harmonised end-user payment experience.
- Provides the flexibility to respond to user preferences and habits.
- Allows for the most degrees of freedom for the market to distribute the digital euro and develop innovative front-end solutions.

3

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# Enabling users to pay with digital euro



Supervised intermediaries could integrate the digital euro into their existing mobile banking applications



In addition, a new 'digital euro app' would provide access to digital euro services of intermediaries, increasing choice for end-users and intermediaries & contributing to financial inclusion, an approach strongly supported by consumers and merchants.



Users could initiate payments via QR-codes (P2P, e-commerce & in-store), "alias/proxy" functionalities (P2P & e-commerce), or NFC technology (instore)

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# Core principles of a compensation model to incentivise distribution

- 1 Free of charge for consumers to meet their basic payments needs
- 2 Network effects which generate economic incentives for acquirers and merchants
- 3 Comparable economic incentives for issuers
- 4 Eurosystem bears its own costs, as for the production and issuance of banknotes

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#### Annex 3. Digital euro debate in other national parliaments

In July 2021<sup>62</sup> and April 2023<sup>63</sup> questions on the digital euro were sent out from the Dutch parliament via the European Centre of Parliamentary Research and Documentation (ECPRD) to the various national parliaments of the Eurozone to gauge their commitment to the digital euro. Countries such as Lithuania, Latvia, Spain, Germany and France are working on the subject through active communication with national central banks and active positioning in Europe. Austria is also active at the European level, focusing mainly on ensuring that cash is preserved. This contrasts with countries including Slovakia, Slovenia, Belgium, Portugal and Cyprus, where there has been no or minimal discussion of the digital euro.

The responses provided show that other parliaments, on the whole, have similar concerns around privacy, safeguarding cash, legal tender status, ensuring financial stability and the programmability of a digital euro. More parliaments have been actively involved in the digital euro since 2021, and this trend is likely to continue as the implementation of a digital euro approaches.

Digital euro activities by national parliaments

Cou ntry	Activities at the time of call for tenders in 2021	Activities at the time of call for tenders in 2023
BE	The topic was briefly touched upon in a briefing in the finance committee.  Otherwise, it was left undiscussed.	The Belgian parliament has involved itself with the digital euro to a limited extent through the Finance and Budget Committee following monthly Ecofin debates.
CY	No response provided	Cyprus is not active regarding the digital euro.
DE	At the request of the chairman of the Finance Committee, the Ministry of Finance produced a report on the subject, which was published in 2018. Since then, it has been discussed several times in committee.	The German Parliament has been kept informed of developments by the government. A motion calling for risk analysis and active German involvement at the European level and for cash to be preserved was also discussed. The German government released a report on progress and participation in April 2023. <sup>64</sup> In addition, on 5 June 2023, the Finance Committee will discuss the ECB's

 $<sup>^{62}</sup>$  This concerns query #4800 issued to the ECPRD platform

 $<sup>^{\</sup>rm 63}$  This concerns query #5460 issued to the ECPRD platform

 $<sup>^{\</sup>rm 64}$  Report available via the  $\underline{\text{link}}$  (text in German).

		proposed framework for a digital euro with the Deutsche Bundesbank.
EE	The subject has not yet been discussed as a separate agenda item. It did emerge at a Finance Committee session that Estonia's central bank participated in the ECB's experiment to offer a possible blockchain solution <sup>65</sup> .	Estonia has focused on accelerating digitalisation, including the digital euro since the summer of 2021. The Bank of Estonia is actively involved in two projects looking into whether the technology behind Estonia's egovernment would also work for the digital euro infrastructure. Parliament is aware of the digital euro's development and ongoing research phase.
FI	The Ministry of Finance informed the Finance Committee. The committee took note of this. It was not deemed necessary to adopt a position.	Finland discussed the ECB report on the digital euro through parliamentary committee debates. No other actions were taken on the subject.
FR	A report <sup>66</sup> on digital currencies was presented to the Finance Committee in 2019. 2021 Banque de France also wrote a report <sup>67</sup> on digital currencies. It did not address whether the French parliament has any intended actions regarding the digital euro.	France has taken various steps concerning the digital euro, including through a public position being taken <sup>68</sup> by the House of Commons and Senate. The Banque de France is also studying the digital euro's development, implementation and effects. The French national privacy watchdog (CNIL) is also involved in the project <sup>69</sup> and France is an active actor at the European level.
EL	The Greek parliament has reported that the digital euro has not been discussed in parliament or the government.	The Greek parliament again reports that no substantive discussion has taken place or is planned on the digital euro.
IE	The central bank digital currency has not been raised in parliament, nor are there any plans to do so in the Finance, Public Expenditure and Reform	Ireland has addressed the issue to some extent through debates on information technology and banking union. Talks were also held between

<sup>&</sup>lt;sup>65</sup> The Bank of Estonia, together with DNB (among others), was able to establish through the <u>research</u> that a blockchain solution reduces the ecological footprint of the payment system and also improves its efficiency.

Committee.

<sup>&</sup>lt;sup>67</sup> The <u>report</u> elaborates on the 'venus initiative' where France has researched CBDCs in collaboration with Luxembourg and the European Investment Bank (EIB).

<sup>&</sup>lt;sup>68</sup> The public position can be read <u>here</u> (in French).

 $<sup>^{69}</sup>$  CNIL's survey results can be read in French  $\underline{\text{here}}$  ).

the central bank governor<sup>70</sup>, euro commissioner McGuinness and parliament.<sup>71</sup>

IT Although not strictly about the digital euro, there is a cycle of roundtable discussions on the EU digital financial package. Some six EU documents are discussed in it.

No response has been provided (yet).

LV In July 2021, the cabinet approved the 'Guidelines for digital transformation 2021-2027', supporting active participation in developing laws and regulations on digital currencies. The Bank of Latvia is currently overseeing the development of digital currencies in Latvia.

Latvia's parliament debated the digital euro in the European Affairs Committee in December 2021. It was noted in this debate that the digital euro should be functional, accessible, compatible with other payment instruments, userfriendly, secure and free, and allow online and offline transactions. The Ministry of Finance said the digital euro would be an addition to the currencies issued by the central bank, not a replacement. The national bank (Latvijas Bankas) is also involved<sup>72</sup>.

LT Lithuania introduced the LBCOIN a year ago. The experience gained from this has been used to aid the discussions on the feasibility of a digital euro. There was a debate in the Finance Committee on 7 April 2021 on the opportunities and threats of the digital euro and cryptocurrencies. Delegates from the Central Bank of Lithuania and the Ministry of Finance were present.

In April 2023, representatives of the Ministry of Finance and the Bank of Lithuania presented the digital euro project at the parliament's European Affairs Committee meeting. The committee was informed that the ministry is supporting the project.

At the Finance Committee meeting on 22 June 2021, committee members also discussed the digital euro with the governor and deputy governor of the Central Bank<sup>73</sup>. The subject was also raised on 8 June 2021, when a

The Austrian parliament held a referendum<sup>76</sup> on 22 November 2022 in which it voted to keep cash as the sole legal tender. Austria is publicly lobbying at the EU level to keep cash as legal tender. A Foresight and Technology Assessment was also

<sup>&</sup>lt;sup>70</sup> A report of the talks with the central bank can be found <u>here</u> (in English).

 $<sup>^{71}</sup>$  The report of the talks with Eurocommissioner McGuinness can be found  $\underline{\text{here}}$  (in English).

 $<sup>^{72}</sup>$  Latvijas Bankas' publication identifying areas of concern and attention can be read  $\underline{\text{here}}$  .

<sup>&</sup>lt;sup>73</sup> A summary report of the debate is available <u>here</u> (in German only).

<sup>&</sup>lt;sup>76</sup> The referendum and related documents can be found <u>here</u> (in German only).

question about the euro was asked<sup>74</sup>. This has since been clarified<sup>75</sup>.

released<sup>77</sup> which covered the digital euro.

PT The issue has not yet been discussed in parliament, nor has it been on the agenda.

The Portuguese parliament has not addressed the issue. The Portuguese Central Bank (Banco de Portugal) involves itself in developing the digital euro on its own initiative through a market contact group for the digital euro<sup>78</sup>.

- The issue has not yet been debated in parliament. However, the Slovenian Bank does participate in Eurosystem activities concerning the digital euro and talks to stakeholders about it.
- **SK** The issue has not yet been debated in parliament. There were no reports of involvement or other activities by other parties.
- ES The PSOE group has proposed that the government and parliament form a study group to study a possible digital euro. The issue was yet to be addressed at the time of replying.

Parliament has not yet specifically addressed the issue of the digital euro. Options for implementing the digital euro are currently being examined at the ECB and Bank of Slovenia levels.

The digital euro is not under consideration by Slovakia's parliament. Nor does parliament make any mention of Central Bank involvement.

A debate was held on 14 December 2021 in the Spanish Congress of Deputies<sup>79</sup> plenary session on the digital euro following an initiative by a parliamentary group. This was a non-legislative motion. This initiative aimed to urge the government, in collaboration with the Banco de España, to set up a study group to explore the possible implementation of a digital euro as a public digital currency (the CBDC).

<sup>&</sup>lt;sup>74</sup> This was a <u>written question</u> to the Minister of Finance on the possible introduction of a digital euro (in German only).

<sup>&</sup>lt;sup>75</sup> See the <u>link</u> for the minister's response (in German only).

 $<sup>^{77}</sup>$  See the  $\underline{\text{link}}$  for the report (in German only).

<sup>&</sup>lt;sup>78</sup> See the <u>link</u> for a progress report from the market contact group dated 22 April 2022 (in Portuguese).

<sup>&</sup>lt;sup>79</sup> A report on the debate can be found <u>here</u> (in Spanish).

#### Annex 4. Digital euro debate in House of Representatives

The parliamentary standing committee on Finance has frequently debated the digital euro since 2020, both in committee debates specifically dedicated to it and almost monthly in the Commission debates ahead of the Eurogroup and Ecofin Council. The digital euro was also discussed in the roundtable<sup>80</sup> and the plenary debate on the future of the euro<sup>81</sup>. Member Slootweg (CDA), on behalf of the Finance Committee, participated in the European Parliament Interparliamentary Week on 27 and 28 February 2023 in Brussels. Both national parliaments and the European Parliament participated in this interparliamentary conference. The agenda at this Interparliamentary meeting included the digital euro. <sup>82</sup> During the consultation on the digital euro, the House of Representatives set out a number of principles to the European Commission through a political dialogue.<sup>83</sup>

Activities on the digital euro

Activity	Subject	Date	Туре
and			
calendar			
2022A06305	Eurogroup/Ecofin Council	11-05-2023	Committee debate
2022A06301	Eurogroup/Ecofin Council	09-02-2023	Committee debate
2022A09374	Two-minute debate Digital euro (CD 23/11)	23-11-2022	Plenary debate (two-minute debate)
2022A06252	Digital Euro	23-11-2022	Committee debate
2022A06301	Eurogroup-Ecofin Council	31-10-2022	Committee debate
2022A04267	Eurogroup/Ecofin Council/IMF	29-09-2022	Committee debate
2022A05993	Eurogroup/Ecofin Council	07-07-2022	Committee debate
2022A07952	Eurogroup/Ecofin Council	31-03-2022	Committee debate

<sup>&</sup>lt;sup>80</sup> Roundtable discussion on the future of the euro, 13 February 2023.

<sup>&</sup>lt;sup>81</sup> Debate on the future of the euro, 9 March 2023

<sup>&</sup>lt;sup>82</sup> European Parliamentary Week, 27-28 February 2023. Issues discussed included: 'The impact of the decreasing use of cash - the case of digital currencies'.

<sup>&</sup>lt;sup>83</sup> See the exchange of letters between the Finance Committee and the European Commission, via agenda at committee debate <u>Digital Euro</u>, 23 November 2022.

2022A02798	Two-minute debate Eurogroup/Ecofin Council (CD 10/3)	10-03-2022	Plenary debate (two-minute debate)
2021A06463	Digital Euro	11-11-2021	Committee debate
2021A01445	Eurogroup/Ecofin Council	08-09-2021	Committee debate
2020A06533	Eurogroup/Ecofin Council	16-06-2021	Committee debate
2020A06529	Eurogroup/Ecofin Council	14-04-2021	Committee debate
2020A00390	Eurogroup/Ecofin Council	25-11-2020	General consultation
2020A00389	Eurogroup/Ecofin Council	29-10-2020	General consultation

Parliamentary letters on the digital euro

Number	Subject	Date	Туре	From
27863-136	Digital euro: possible design and planning	16-05- 2023	Government letter	Minister of Finance, S.A.M. Kaag
27863-133	CBDC projects in Japan, Sweden and Switzerland	20-12- 2022	Government letter	Minister of Finance, S.A.M. Kaag
27863-106	Digital euro update	22-11- 2022	Government letter	Minister of Finance, S.A.M. Kaag
27863-103	Design choices of the digital euro	05-07- 2022	Government letter	Minister of Finance, S.A.M. Kaag
27863-95	Developments regarding the digital euro	17-09- 2021	Government letter	Minister of Finance, W.B. Hoekstra
27863-90	Digital euro progress	27-10- 2020	Government letter	Minister of Finance, W.B. Hoekstra

Motions adopted: Impact of decline in cash use

Number	Subject	Tabled by	Votin	Follow-up
			g ratio	
<u>27863-</u> <u>123</u>	Motion by Member Ephraim on confirming and communicating that phasing out cash is not under consideration	O.R. Ephraim (Groep Van Haga)	For: 150	In progress
<u>27863-</u> <u>113</u>	Motion by Member Van der Plas on ensuring the use of cash and conducting an impact analysis in 2023	C.A.M. van der Plas (BBB)	For: 150	In progress
<u>35925-</u> <u>102</u>	Motion by Member Van Houwelingen on ensuring that cash remains legal tender	P. van Houwelingen (FVD)	For: 150	Settled in Parliamentar y Paper 27863-100
32545- 140	Motion by member Nijboer et al on continued free cash withdrawals	H. Nijboer (PvdA)	For: 135	Settled in Parliamentar y Paper 27863-100
35107-7	Motion by member Alkaya on the broad acceptance of cash as a means of payment	M.Ö. Alkaya (SP)	For: 150	Settled in Parliamentar y Paper 27863-100

Motions tabled on the digital euro

Number	Subject	Tabled by	Voting ratio	Follow-up
<u>27863-</u> <u>131</u>	Motion by Member Van Houwelingen on ensuring that there will be no negative interest rates in the future digital euro	P. van Houwelingen (FVD)	For: 51	Not applicable
<u>27863-</u> <u>130</u>	Motion by Member Van Houwelingen on preventing by all possible means that European digital identity is linked to a digital euro at all times	P. van Houwelingen (FVD)	For: 56	Not applicable
<u>27863-</u> <u>129</u>	Motion by member Van Houwelingen on preventing by all possible means and at all times that government income support can in future only be paid to citizens via the digital euro	P. van Houwelingen (FVD)	For: 51	Not applicable

<u>27863-</u> <u>128</u>	Motion by Member Van Houwelingen on making efforts at the European level to make it legally impossible to set an expiry date or spending purpose for the digital euro	P. van Houwelingen (FVD)	For: 149	In progress
<u>27863-</u> <u>127</u>	Motion by member Van Houwelingen on a letter outlining how the government is trying to prevent the digital euro from having a spending target or expiry date in the future in the European context	P. van Houwelingen (FVD)	For: 144	In progress
<u>27863-</u> <u>126</u>	Motion by member Dassen on European commitment to a clear geopolitical strategy behind the implementation of the digital euro	L.A.J.M. Dassen (Volt)	For: 119	In progress
<u>27863-</u> <u>125</u>	Motion by Member Dassen on advocating at the European level that the digital euro should be fully based on European infrastructure	L.A.J.M. Dassen (Volt)	For: 124	In progress
<u>27863-</u>	Motion by member Tony van	A.P.C.	For: 51	Not
<u>124</u>	Dijck on abandoning the introduction of the digital euro	(Tony) van Dijck (PVV)		applicable
27863- 122	_		For: 57	applicable  Not applicable
27863-	introduction of the digital euro Motion by member Ephraim on negotiating an opt-out around	Dijck (PVV) O.R. Ephraim (Groep Van	For: 57  For: 146	Not
27863- 122 27863-	introduction of the digital euro Motion by member Ephraim on negotiating an opt-out around the introduction of a digital euro  Motion by member Ephraim on the government declaring that the Netherlands will never participate in a programmable	Dijck (PVV) O.R. Ephraim (Groep Van Haga) O.R. Ephraim (Groep Van	For:	Not applicable

<u>27863-</u> <u>118</u>	Motion by member Van Weyenberg et al on including concerns and questions about the digital euro in discussions at the European level	S.P.R.A. van Weyenberg (D66)	For: 150	In progress
<u>27863-</u> <u>117</u>	Motion by member Eppink on opposing a digital euro that further expands the transfer union	D.J. Eppink (JA21)	For: 48	Not applicable
27863- 116	Motion by members Grinwis and Inge van Dijk on setting out the social added value of the digital euro over a publicly owned national bank	P.A. Grinwis (ChristenUni e)	For: 150	Settled in the Report Eurogroup and Ecofin Council 16 and 17 January 2023
<u>25863-</u> <u>115</u>	Motion by members Grinwis and Heinen on setting out whether or not it is possible within the current Treaty provisions for the ECB to take on the role of provider	P.A. Grinwis (ChristenUni e)	For: 133	Settled in Parliament letter on digital euro design and planning
<u>27863-</u> <u>114</u>	Motion by members Grinwis and Heinen on abandoning the preference for an account-based application of the digital euro and being open to alternatives	P.A. Grinwis (ChristenUni e)	For: 116	Settled in the written consultations on, among other things, Eurogroup and Ecofin Council 16 and 17 January 2023
27863- 112	Motion by member Van der Plas on holding a referendum on whether or not to add a digital euro to the official payment options in the eurozone	C.A.M. van der Plas (BBB)	For: 44	Not applicable
<u>27863-</u> <u>111</u>	Motion by member Alkaya on stating that the digital euro is pointless in a system with private intermediaries and should be rejected out of hand	M.Ö. Alkaya (SP)	For: 48	Not applicable
<u>27863-</u> <u>110</u>	Motion by Member Alkaya on looking into whether a different legal basis for the introduction of a digital euro, requiring unanimity in the Council for	M.Ö. Alkaya (SP)	For: 131	Settled in Parliamentar y letter: Digital euro: possible

	decision-making, might be more appropriate			design and planning.
<u>27863-</u> <u>109</u>	Motion by members Alkaya and Heinen on ensuring that the statements in the motion Heinen/Alkaya (21501-07, no. 1874) and the motion-Alkaya/Heinen (21501-07, no. 1829) have a place in the European Commission regulation	M.Ö. Alkaya (SP)	For: 150	In progress
<u>21501-</u> <u>07-1874</u>	Motion by members Heinen and Alkaya on also committing to a neutral, accessible digital euro that is not programmable	E. Heinen (VVD)	For: 142	Settled in Parliamentar y letter Update digital euro, Parliamentar y Paper 27863-106
<u>21501-</u> <u>07-1829</u>	Motion by members Alkaya and Heinen on enabling anonymous payments with the digital euro up to a certain maximum amount per transaction and per month	M.Ö. Alkaya (SP)	For: 120	Deal with letter Update digital euro, Parliamentar y paper 27863-106

# **Annex 5: Discussion partners**

Date	Discussions
26 April 2022	Interview with DNB representatives:
	<ul> <li>Inge van Dijk (divisional director for payments)</li> </ul>
	<ul> <li>Sandra Schriek (Digital Euro programme manager)</li> </ul>
	<ul> <li>Ria Roerink (senior policy officer on payments)</li> </ul>
23 May 2022	Interview with representatives of the Dutch Banking Association (NVB):
	<ul> <li>Teunis Brosens (chairman NVB Expert Group Digital Euro/ING Head Economist Digital Finance &amp; Regulation)</li> <li>Jim Verhoef (public affairs adviser)</li> <li>Maurits de Neree (senior adviser Digital Finance)</li> </ul>
23 May 2022	Interview with representatives of the Payments Association Netherlands:  • Gijs Boudewijn (acting managing director)
27 June 2022	Marnix Blom (team leader strategy and association affairs)  The minute with representatives of the Firmman Commission.
27 Julie 2022	<ul> <li>Interview with representatives of the European Commission:</li> <li>Aliénor Margerit (Gentiloni cabinet),</li> <li>Andre Beltramello (Dombrovskis cabinet)</li> <li>Pim Lescrauwaet (cabinet expert Dombrovskis)</li> <li>Agnieszka Skonieczna (Breton cabinet)</li> <li>Florian Denis (McGuinness cabinet).</li> </ul>
27 June 2022	Talks with Eurogroup Working Group (EWG, the highest official
	vestibule of the Eurogroup):
	Tuomas Saarenheimo, (chairman EWG)
27 June 2022	Talks with think tank Bruegel:
	Maria Demertzis (deputy director)
27 June 2022	Discussion in the Permanent Representation of the Netherlands to the EU:  Robert de Groot (Netherlands permanent representative
	to the EU)
	Peter Stein (financial council)
	Ruben Slot (relations with the European Parliament)
	<ul> <li>Thijs Reiling (financial markets attaché)</li> </ul>
27 June 2022	Talks with the European Parliament:
	<ul> <li>Johan van Overtveld, (Chairman, Committee on Budgets and member, ECON Committee)</li> </ul>
03 April 2023	<ul> <li>Working visit to the European Central Bank:</li> <li>Fabio Panetta (ECB executive board member)</li> <li>Evelien Witlox (digital euro programme manager ECB)</li> <li>Fátima Pires (Deputy Director-General in DG International and European Relations)</li> <li>Menno Broos (project manager digital euro DNB)</li> <li>Ignacio Terol (Senior Adviser)</li> </ul>

- Andrea Pinna (Team Lead Market Infrastructure)
- Stephanie Bergbauer (Lead Market Infrastructure Expert)
- Marcus Härtel (Market Infrastructure Expert)
- Alessandro Giovannini (Team Lead)
- Nele Nomm (Economist)
- Ferdinand Dreher (Economist)