

ANNUAL REPORT 2022

Practitioners Creating
Pan-European
Payment Infrastructures

FROM SEPA VISION TO CORNERSTONE

When STEP2 went live in 2003, it processed an average of 23,000 transactions per day. By 2014, the system had grown into a cornerstone of the Single Euro Payments Area, enabling over 4,800 PSPs to meet the SEPA migration deadline. Today, STEP2 handles almost 63 million transactions per day on average.

Customer adoption of a service or product is not always a linear journey. Sometimes, the uptake is kick-started by new market developments, technical breakthroughs or unforeseeable events. Our Annual Report 2022 showcases examples of innovative products that had been in the market long before sky-rocketing to success.

2003

EVOLUTION
STEP2
2003-2023

2008

2013

2018

2023

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WELCOME

THE COMPANY'S MISSION AND STRATEGIC AIMS

Our mission

EBA CLEARING's mission is to deliver market infrastructure solutions for the pan-European payments industry, to support its users' needs in line with user requirements.

The strategic aims of the Company are to ensure a **pan-European** and country-neutral approach for the development and delivery of infrastructure solutions, and to ensure **excellence** and **robustness** in delivering our services. EBA CLEARING will maintain its track record of timely delivery of **user-driven** solutions responding to evolving and new demands for infrastructure solutions, thereby demonstrating its **openness to stakeholders' needs** and **agility** in its role as a market infrastructure solutions provider.

Our objectives

EBA CLEARING aims to allow cost optimisation for its users, and does not seek profit or shareholder value maximisation. In pursuing its mission, EBA CLEARING is guided by the objective to offer its users solutions that are fit for purpose and efficient, with a special focus on safety and ensuring compliance with regulatory and oversight requirements. EBA CLEARING recognises its role in supporting financial stability and promoting fair and efficient markets; it is committed to discharging these responsibilities.

E-U-R-O-P-A

Excellence
User-driven
Robustness
Openness to stakeholders' needs
Pan-European
Agility

CHAIRPERSON'S STATEMENT

Heraclitus' 2,500-year-old saying "Everything changes and nothing stands still" seems to be a very fitting description for the European payment infrastructure landscape over the past 12 to 18 months.

For the systems of EBA CLEARING and our users, the period from late 2021 to early 2023 involved several major migrations: RT1 moved its settlement process to a new technical account, STEP2-T completed its changeover to Continuous Gross Settlement (CGS), EURO1 migrated to ISO 20022 and all three systems went through further changes to adjust to the new TARGET arrangements.



So change was indeed permanent at EBA CLEARING throughout these months. But it would be inaccurate to say that it was the only constant, or even the most important one. A critical success factor in developing and managing systemically important infrastructure is certainty and continuity throughout change. We are proud that the stability, resilience and operational excellence of our systems were maintained at all times during these challenging changeovers, thanks to a substantial team effort involving all service participants and the Company's key technology partners, Nexi and Swift.

Ensuring excellence and robustness in system development and day-to-day operations has been part of the Company's mission since its creation in 1998. And for the past 25 years, EBA CLEARING has successfully demonstrated that it excels on both counts: reliably running highly resilient infrastructure systems and delivering new or enhanced services on time and budget, and in line with user needs. At a time when regulatory requirements for operational resilience continue to be strengthened for the whole financial sector, for example through DORA, there may be no need for an FMI operator to stress that the resilience

of its payment systems are the prime focus in its day-to-day operations and any strategic considerations. But I believe it is important to explain what this means in practice, especially when it comes to managing change.

At a basic level, our focus on resilience means ensuring stable foundations to enable all parties in the transaction chain to perform at their best. On our side, this requires maintaining and upgrading the IT architecture of the Company's payment systems, any supporting tools and its office automation infrastructure. It also involves the regular testing of business continuity arrangements, together with our service participants, as well as staying on top of our risk environments, including in the area of cyber security. While Covid-19-related restrictions were gradually lifted in 2022, the geopolitical and macro-economic situation remained very volatile. New or aggravated developments included the war in Ukraine, rising inflation and interest rates as well as the impact of the latter on financial sector stability and customer confidence.

A critical success factor in developing and managing systemically important infrastructure is certainty and continuity throughout change.

Aside from these changes at macro-level, the industry continued to face a great deal of transformation and transition at payments ecosystem level as well. The comprehensive infrastructure implementation and migration projects that I mentioned earlier required extensive information and testing programmes, which we underpinned with regular participant consultations and exchange to support user preparedness and ensure alignment. Reflecting on the role of EURO1 as a non-similar back-up facility for TARGET, the newly created EURO1 Payments Risk Forum is one example of a group facilitating these objectives. It was well-received by the participants, especially by their senior treasurers. The group will continue to support the community in any ad-hoc exchanges on payment processing and liquidity management matters in case of any disturbance impacting the infrastructure or the wider ecosystem.

At the request of our participants, we also try to anticipate evolving market needs and provide our users with improved services that can help them meet these demands.

But the scope of our change management is not limited to organising and supporting mandatory migrations. At the request of our participants, we also try to anticipate evolving market needs and provide our users with improved services that can help them meet these demands. With the introduction of further functionality for cross-service liquidity steering and management or the EURO1 future positioning programme, we have enabled our users to further enhance their internal processes and the services they offer to their customers. This will, for instance, allow EURO1 users to optimally take advantage of the liquidity efficiencies offered by the system, which are becoming even more relevant in times of rising interest rates.

However, the focus and impact of our forward-looking activities have probably been highest in retail payments, where we have multiplied our efforts to help speed up and enhance both SEPA and cross-border payments, in line with the agenda of the European authorities and the roadmap of the Financial Stability Board. Some of these efforts have been aimed at paving the way for faster output delivery and extended opening hours for STEP2-T based on CGS; others focused on engaging with the RT1 community to optimise end-to-end processing performance.

With the future Fraud Pattern and Anomaly Detection (FPAD) solution for STEP2-T and RT1, a proof of concept around R2P and the next steps on the Immediate Cross-Border Payments (IXB) initiative, we further intensified our commitment to enhancing retail payments during the period under report. My fellow Board members and I are convinced that these workstreams can make a real difference for the European payments ecosystem by enabling PSPs to take retail payments, and instant payments in particular, to the next level.

Minimising fraud, for instance, will be critical for the instant payment ramp-up in key areas, such as e-commerce and at the point of interaction. The FPAD solution, which we are developing with the support of fraud and product experts from our users, will help to

boost payment safety and overall customer experience. FPAD will complement the risk view of our users with patterns and anomalies we see across STEP2-T and RT1. And it will include IBAN/name check functionality, which aims to address the emerging requirements set forth by the proposed Instant Payments Regulation.

We are convinced that these workstreams – FPAD, R2P PoC and IXB – can make a real difference for the European payments ecosystem by enabling PSPs to take retail payments, and instant payments in particular, to the next level.

The request to pay proof of concept (PoC) that we are currently taking forward with a group of frontrunner institutions will leverage our users' investments in the R2P Service. The PoC is aimed at demonstrating how PSPs can implement this authorisation layer and create value around the payment in the resulting 4-corner model.

Our joint IXB initiative with The Clearing House and Swift is another example of a deliverable we are tackling to allow our user community to re-use existing building blocks in order to meet the expectations of their customers and regulators. We look forward to progressing IXB with 24 supporting PSPs from both sides of the Atlantic based on the detailed specifications for a minimal viable service and the core design for a full IXB service that were agreed over the past year.

Scaling up instant payments across Europe and connecting real-time payment systems across the globe are major endeavours, which require engagement and cooperation at many levels. Our cooperation with other infrastructure providers is already highly visible today in the reach provided for instant payments throughout Europe. EBA CLEARING also maintains a

We look forward to adding new chapters to the Company's tremendous success story of the past 25 years in line with its pan-European and collaborative vision.

regular dialogue with European authorities and brings in its vast expertise and experience to European and international scheme-building and harmonisation initiatives in these areas as well as to other forward-looking topics.

With its cooperative set-up based on strong user-say arrangements, including a highly diverse Board reflecting our multi-country shareholder base, EBA CLEARING is well-prepared to pursue this journey towards a faster and highly collaborative payments future, together with its shareholders and users. And as a market infrastructure provider that is not only European-owned, European-governed and European-regulated but, above all, European-minded, we continue to be well-placed to contribute key infrastructure components to innovative end-to-end solutions with a European identity and governance.

Looking back on the past year, I would like to thank all our shareholders and service user representatives who have participated in our committees, expert groups, working groups and country group meetings for filling our user say arrangements with life and shaping our – and their! – future enhancements and future services through their contributions.

I would also like to express my thanks to my fellow Board members, the management and the staff of this Company for their great commitment. Together, we look forward to adding new chapters to the Company's tremendous success story of the past 25 years in line with its pan-European and collaborative vision and in accordance with the requirements of our service users and the economic, environmental and social needs of the wider ecosystem.



Michele Olin

CEO'S STATEMENT

2023 is a year of important birthdays: 25 years of EBA CLEARING, 20 years of STEP2 and 10 years of PRETA. We are happy that we are able to celebrate these anniversaries together with our community.

We highly welcomed the return to in-person meetings in 2022 thanks to the lifting of all Covid-19-related travel and meeting restrictions, which allowed us to intensify our engagement with our users again. For the more than 75 user meetings we held in 2022, we went for in-person options whenever possible. As a user-driven organisation, we very much appreciated the additional quality this brought to our exchanges at PSP and community level.



The industry's agenda in 2022 certainly required a great deal of exchange, coordination and communication, not only at the level of EBA CLEARING. I am pleased to report that our user communities successfully completed the complex infrastructure migrations that took place in 2022 and early 2023, including the progressive move of the STEP2-T community to Continuous Gross Settlement. In cooperation with our technology partners Swift and Nexi, we delivered the new EURO1 System and all other service developments on time and budget. As always, we strove to minimise user impact and mitigate any risks related to the different changeovers. Based on our substantial experience in managing industry-wide migrations, we agreed on a number of risk mitigation measures together with our users, which proved to be very effective.

Among other things, these measures included extensive testing programmes underpinned by regular touchpoints and information campaigns; a phased migration approach stretched over a 13-month period for the move of our large STEP2-T community to Continuous Gross Settlement; the set-up of a Payments Risk Forum to provide quick lines of communication between our EURO1 Participants in case of any issues; and detailed changeover strategies aimed at limiting dependencies on other ecosystem actors,

I am pleased to report that our user communities successfully completed the complex infrastructure migrations that took place in 2022 and early 2023.

where possible. I take this opportunity to thank again all parties involved in these major migration programmes for the great teamwork, including Nexi, Swift and the European Central Bank.

While we focused on supporting our users' migration activities, our day-to-day operations remained on a firm course, providing reliable, efficient and cost-effective payment infrastructure services throughout the period under report. At the same time, in line with user demands, we also placed an increasing emphasis on equipping our pan-European services with new functionality and developing their value proposition in order to enable our users to further broaden or enhance their end-user offerings and to meet new or emerging regulatory requirements.

These strategic developments will especially benefit our SEPA systems, which continued to thrive during the period under report. RT1 remains the infrastructure powerhouse for the instant payment ramp-up across Europe, with 80 Participants and over 2,600 PSPs in 25 countries exchanging transactions 24/7/365. In 2022, system volumes grew by 45% year on year and they have continued to rise to over 2 million transactions per day on average in 2023. In March, the total number of transactions reached 1.5 billion, for a transaction value of EUR 1 trillion. To support congestion-free and fast end-to-end processing, the Company closely analyses the overall performance of the system, such as latency, user availability and rejection rates, and regularly engages with its users on these topics.

Approaching its 20th birthday, the STEP2-T System continued to reliably serve as the industry's pre-eminent platform for processing SEPA transactions: transaction volumes grew by close to 10% compared to 2021 and all three services attracting additional participants. STEP2-T processed around 60 million transactions per day on average and provided full reach for SEPA Credit Transfers and Direct Debits, making it one of the largest automated clearing houses in the world. With the migration to Continuous Gross Settlement successfully completed in July 2022 and further enhancements implemented in November

2022, STEP2-T underwent a major system upgrade. This upgrade will allow users to shorten end-to-end processing timelines for SEPA payments submitted in files from hours to minutes, enabling them to offer better service levels to their customers.

Consultations with our users are still ongoing to chart the best way forward for a uniform end-to-end deployment of the new STEP2-T enhancements. There is agreement among the users that the planning for the STEP2 SEPA Services will need to tie in with the evolution of euro retail payments in general and, more specifically, with any industry action aimed at scaling up the roll-out of instant payment end-user solutions. Some of these developments may still depend on the requirements of the future Instant Payments Regulation expected to be finalised in the second half of 2023. But a number of our STEP2-T and RT1 users already indicated in 2021 that they saw the deployment of enhanced fraud combatting capabilities for account-to-account payments in SEPA as a key prerequisite for taking euro retail payments to the next level.

Following a preliminary study in early 2022, EBA CLEARING delivered a blueprint for a pan-European Fraud Pattern and Anomaly Detection (FPAD) solution with interested users, which was very well received by

the STEP2-T and RT1 user communities. The development project was kicked off by the Board in December 2022 and we are confident that our users can benefit from a first basic FPAD solution, which will be delivered as an integral part of STEP2-T and RT1 and include IBAN/name check functionality, as from the end of this year.

With our work towards a request to pay proof of concept and towards the development of an Immediate Cross-Border Payments (IXB) service with The Clearing House, we are further paving the way for enhanced customer propositions leveraging instant payments and enabling our users to monetise their investments in faster processing and reporting capabilities.

The monetisation of existing capabilities also plays a substantial role for the users of EURO1, which provides liquidity savings, resilience and choice in euro large-value payments to its user community. By ensuring full alignment of the system with TARGET, EURO1 continues to facilitate the seamless switching payment flows between the two systems, which allows participants to rely on the system as a non-similar back-up for T2 RTGS. The new Payments Risk Forum has further strengthened this back-up role, while the implementation of additional functionality for cross-service liquidity steering and management has allowed users to further reap the liquidity efficiencies of the system.

We are confident that our users can benefit from a first basic FPAD solution, which will be delivered as an integral part of STEP2-T and RT1 and include IBAN/name check functionality, as from the end of this year.

The reaping of efficiencies was also at the core of many of our internal modernisation projects in the Company's IT and office automation environments. As in previous years, we also conducted numerous resilience and crisis management exercises. Additional risk mitigation measures were deployed in the course of the year in light of the heightened geopolitical tensions. These measures included frequent adjustments of our cyber alert levels and an intensified exchange with relevant stakeholders.

Going forward, the success of our cooperative undertaking, with its country-neutral approach and full-cost recovery model, will very much depend on the continued willingness of our shareholders and users to invest the resources and focus time that it takes to design and implement truly user-driven and fit-for-purpose infrastructure solutions that are pan-European by design and desire.

The financials of EBA CLEARING are robust. The Company's cash levels cover the liquidity requirements set for SIPS operators by the SIPS Regulation and enable the Company to finance some continuing investments without having to take any recourse to shareholders or bank credit lines.

Furthermore, EBA CLEARING is fully committed to continuously improving its overall performance in relation to sustainability and the Company's societal impact. In 2022, we broadened our scope in this area to further formalise and strengthen our activities with regard to managing and implementing not only environmental but also social considerations.

In the year marking its 25th anniversary, EBA CLEARING is well positioned to take on the foreseeable challenges and embrace any promising opportunities that the future may hold. We have a highly qualified and motivated team of professionals reflecting the diversity of Europe (and the world) to serve and support our multinational user community, and we often do so in their local language. During the period under report, we have continued to contribute to collaborative industry initiatives and bodies, and maintained a regular and fruitful dialogue with our stakeholders. We have further multiplied our direct interactions with our users and their technical providers, engaging with them in new ways, including our strategic outlook sessions in

tandem with the Euro Banking Association, our service information webcasts or our 25th anniversary community project "Imagine Payments 2048".

I strongly believe that, going forward, the success of our cooperative undertaking, with its country-neutral approach and full-cost recovery model, will very much depend on the continued willingness of our shareholders and users to invest the resources and focus time that it takes to design and implement truly user-driven and fit-for-purpose infrastructure solutions that are pan-European by design and desire. That is why I would like to expressly thank all the participants in our user-say bodies and community groups for their contributions during the past year and our Board members for their commitment and guidance.

We look forward to supporting our user community, in cooperation with our technology partners and relevant stakeholders, in the continued shaping of the European payments ecosystem, for the benefit of European citizens and businesses.



Hays Littlejohn

THE COMPANY'S ACTIVITIES IN 2022

AND OUTLOOK FOR 2023

The period under report is
1 January 2022 – 31 December 2022.
The outlook for 2023 is included
for information.

SERVICES

POINT OF ACCELERATION

Over four decades of research and innovation led to the first mRNA vaccine clinical trial in humans in 2013. In the following years, several clinical trials of mRNA vaccines for viruses followed. The Covid-19 pandemic brought the impetus and the funding that resulted in the first mRNA approved vaccines and opened the door for vaccines against a variety of infectious diseases. Of the over 900 million doses of Covid-19 vaccines administered in the European Union until May 2023, over 90 per cent were mRNA vaccines.

2013



INTRODUCTION

1 Service developments

Throughout the period under report, EBA CLEARING delivered best-of-breed payment infrastructure services to a large European user community on a daily basis and in accordance with the highest levels of resilience.

The Company handled the settlement of 18.9 billion transactions across all services during 2022. This represents a rise of 9.77% compared to 2021, which was mostly related to significant volume increases in the STEP2 SEPA and Card Clearing Services as well as in RT1.

EBA CLEARING payment services:

Evolution of annual transaction volumes and values in 2021/2022

Service	2021		2022		Evolution	
	Volume*	Value*	Volume*	Value*	Volume	Value
EURO1	44.11m	46,442bn	43.07m	48,733bn	-2.35%	+4.93%
STEP1	1.23m	227bn	0.93m	225bn	-24.36%	-0.72%
STEP2 SCT	5.64bn	17,742bn	6.16bn	20,136bn	+9.37%	+13.49%
STEP2 SDD Core	7.95bn	1,500bn	8.58bn	1,714bn	+7.80%	+14.32%
STEP2 SDD B2B	89.95m	813bn	93.87m	930bn	+4.36%	+14.41%
STEP2 CC	3.04bn	144bn	3.37bn	159bn	+11.01%	+10.54%
RT1	428.85m	281bn	622m	447bn	+45.04%	+58.95%
Total	17.19bn	67,149bn	18.87bn	72,344bn	+9.77%	+7.74%

* Rounded figures, all value amounts are in EUR

2022 saw the successful conclusion of the migration to the Continuous Gross Settlement (CGS) mechanism in the STEP2 SEPA Services. Preparations for the migration of EURO1 to the ISO 20022 messaging standard continued in close coordination with the participants. In alignment with the T2/T2S Consolidation project, the planning for the EURO1 ISO 20022 migration was rescheduled to March 2023. The ISO 20022 migration of EURO1 and the changeover of the EBA CLEARING systems to the new T2 RTGS settlement environment were successfully completed in March 2023.

85%
of survey respondents
agree EBA CLEARING
delivers state-of-the-art and
best-of-breed services

Joint EBA, EBA CLEARING and PRETA survey*

* This survey was conducted in Q4 2022 by CapGemini on behalf of EBA CLEARING, the Euro Banking Association and PRETA among the member and user communities of the three entities. All figures reflect the percentage of respondents who strongly agreed or agreed with the respective statement.

During the period under report, encouraged by its users, EBA CLEARING started to explore the possibility to enrich the risk controls of its retail payment services with insights on fraud patterns and potential anomalies from a central network perspective. With the support of interested STEP2 and RT1 Participants, the Company delivered a blueprint for a Fraud Pattern and Anomaly Detection (FPAD) solution, which was submitted to a consultation with the STEP2 and RT1 user communities in Q4 2022. Based on the positive user feedback, the development project for FPAD was kicked off in December 2022.

Furthermore, EBA CLEARING continued to enhance its current systems through regular, planned service releases. As in previous years, the release planning was based on an annual change request process involving input to and from the user consultation bodies of the respective services. The relevant user-say bodies also closely accompanied the implementation of the different releases.

2 User information and interaction

EBA CLEARING held three EURO1 Business Committee and three STEP2 Business Committee meetings in 2022. The various other user and expert groups also met regularly during the year. In addition, over 20 user community meetings were organised with service participants from nine countries. During 2022, most of the user meetings returned to in-person or hybrid formats.

As part of the EURO1/STEP1 ISO 20022 migration project, regular information sessions for the community and the participants' confirmed suppliers continued to be held. Web sessions were also offered on other relevant service developments, such as the STEP2-T CGS migration and the STEP2-T and RT1 releases for 2022. To ensure broad participation, the user consultation with the STEP2 and RT1 communities on the FPAD blueprint was facilitated through online sessions as well.

Building on the success of the joint payment ecosystem session held on the day of their annual meetings in 2022, the Euro Banking Association and EBA CLEARING piloted a new event format with their German-speaking community in September 2022: strategic outlook sessions are community events aimed at EBA CLEARING users as well as EBA members and ecosystem partners. The format is highly interactive, enabling participant exchange on strategic drivers and trends shaping the European and in-country payments landscape and on the practical needs they trigger. Two additional strategic outlook sessions were held in Finland and Ireland in January and May 2023, respectively.

As in previous years, the Company pursued its regular relationship meetings with large users of the EBA CLEARING Services.

3 Industry engagement and communication

The Company contributed to collaborative industry initiatives and bodies fostering the pan-European development of instant payments and request to pay. At industry conferences and roundtables, the Company regularly provided updates on this work, as well as on its ISO 20022 migration preparations and Immediate Cross-Border Payments (IXB) initiative. Communication highlights included joint press releases with Swift and TCH in April 2022 and October 2022 to report on the progress of the IXB initiative.

EBA CLEARING also supported European and international scheme-building and harmonisation initiatives in other payments-related areas, including several building blocks of the G20 Roadmap for Enhancing Cross-Border Payments.

81%
of respondents agree that
EBA CLEARING facilitates
collaboration across
the payments industry

**Joint EBA, EBA CLEARING
and PRETA survey**

EURO1 SERVICE

The private-sector LVPS
for euro payments
providing liquidity savings,
resilience and choice

1 Overview

EURO1 is a resilient and cost-effective RTGS-equivalent large-value payment system for single euro payment transactions. During the period under report, EURO1 continued to reliably serve its participants, enabling them to optimise their liquidity efficiency and providing them with a non-identical backup for the Eurosystem's RTGS system.

Throughout 2022, EBA CLEARING put a major focus on the preparations for the ISO 20022 migration of EURO1 and on assisting its users with their testing and implementation efforts. In line with the Eurosystem's T2/T2S Consolidation project, the move to the new messaging standard was successfully completed in March 2023. This concluded the implementation of the EURO1 future positioning programme, which EBA CLEARING had started to develop and put in place with its service users in 2017 to migrate the rich functionality of EURO1 and its high levels of availability and robustness onto state-of-the-art technology rails with longer opening hours.

The Company also pursued its initiative to further strengthen the role of EURO1 as a non-similar backup for the Eurosystem's RTGS in case of any contingency situation. To this effect, EBA CLEARING created the EURO1 Payments Risk Forum to foster discussion between the service participants on different contingency scenarios and measures, and to facilitate ad-hoc exchanges on payment processing and liquidity management matters in case of incidents. This forum is especially appreciated by the participants' Treasury teams.

BENEFITS

Immediate finality of processed payments

Minimal counterparty exposure
managed by participants

Optimal liquidity recycling

Operational robustness and resilience

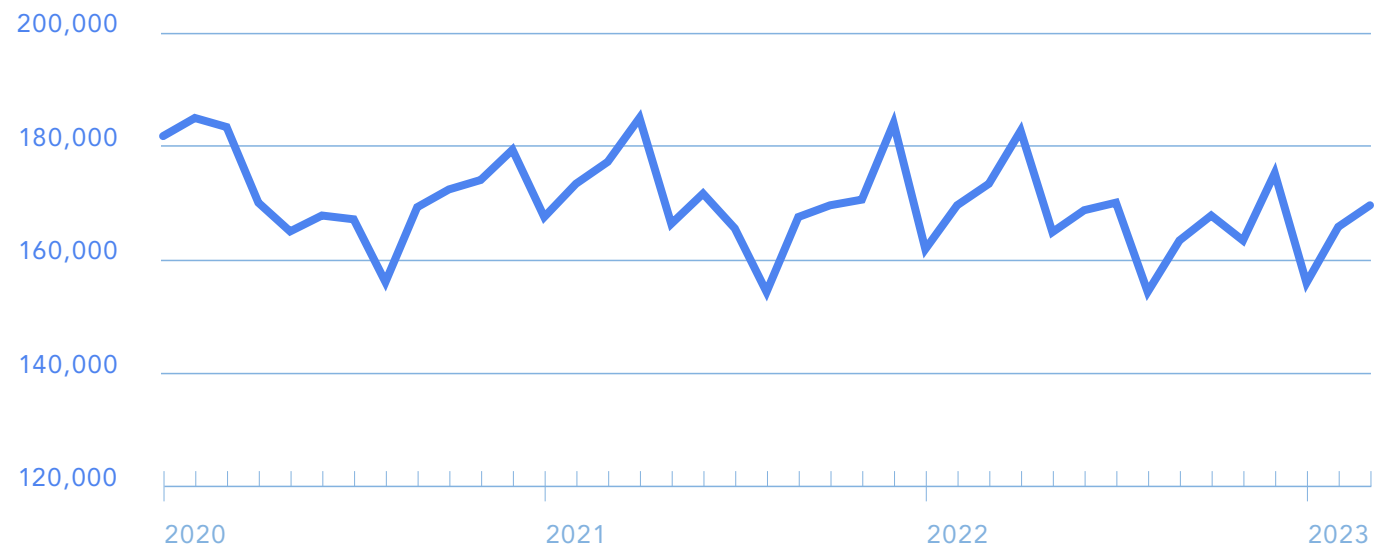
Liquidity-saving advantages of
a multilateral system

2 Evolution of EURO1 volumes, values and participation

In 2022, the average daily transaction volumes processed in EURO1 remained stable compared to 2021 while the average daily transaction values grew by nearly 5%.

Service participation went from 36 in 2021 to 34 in 2022.

EVOLUTION OF AVERAGE DAILY VOLUME OF PAYMENTS PROCESSED



AVERAGE DAILY VALUE

€ 194 billion

AVERAGE DAILY VOLUME

169,131
transactions

3 Progress on EURO1 future positioning and ISO 2022 migration

In cooperation with its technology partner Swift, EBA CLEARING finalised the system development work for the ISO 2022 migration of EURO1 in 2022 as planned. This was followed by an extensive user testing programme, covering EURO1 system functionality and T2 RTGS functionality for the EURO1 settlement procedure. EBA CLEARING's coordination efforts included maintaining optimal alignment with the T2-related planning and deliverables in order to minimise participant efforts and to support seamless rerouting of payments between the services.

92%

of respondents agree EURO1 adds resilience to the large-value payments ecosystem

Joint EBA, EBA CLEARING and PRETA survey

The Company's user support was underpinned by regular information sessions, whose focus shifted from the impact of the changes to testing and live implementation matters in the course of the project. To keep track of the project progress at user level, EBA CLEARING regularly engaged with its participants via readiness questionnaires.

EURO1 closed its first business day operating on the new message standard on 20 March 2023 according to plan. The changeover also completed the implementation of the EURO1 future positioning programme launched with the EURO1 community in 2017. With the successful delivery of this programme, EBA CLEARING has paved the way for service users to enrich their customer propositions leveraging the benefits of structured data based on international standards and of longer opening hours for EURO1. The future positioning programme also equipped users with central monitoring and steering capabilities for their payment and liquidity flows across the different payment services operated by the Company.

Thanks to the full alignment of EURO1 with TARGET, users will be able to continue switching payment flows between the two systems and to rely on the system as a non-similar back-up for T2 RTGS.

PARTICIPATION

34 Participants

16 Sub-Participants

REACH

Close to 5,000 participant BICs and over 10,000 additional BICs reachable via EURO1/STEP1 Participants

FUNCTION

Large-value payment system

RTGS-equivalent net system

Settlement of end-of-day single amounts in central bank funds in TARGET RTGS via ancillary system settlement procedure A at processing cut-off time

LEGAL BASIS

Identified by the ECB as SIPS

ECB SIPS Regulation fully applicable

LIVE DATE

4 January 1999

TECHNICAL OPERATOR

Swift

4 System developments in 2023

In 2023, the regular service release will be limited to minor updates related to the ISO changeover as well as to technical capabilities at administrator level, which will have no impact on the service participants.

// **88%**
of respondents consider EURO1
a good balance between
speed of processing and liquidity
efficiency

Joint EBA, EBA CLEARING and PRETA survey

STEP1 SERVICE

A turn-key solution for single euro payment processing

The STEP1 Service offers direct and cost-effective access to single euro payment processing via the highly resilient EURO1 System. With its limited joining and running costs as well as its wide reach, STEP1 provides a low-investment solution for the exchange of non-SEPA euro transactions with all key payment banks operating in Europe.

BENEFITS

Pan-European access and extensive reach

Operational simplicity and low costs

Full resilience and flexibility

FUNCTION

Single euro payment service for commercial transactions, mainly used by medium-sized and smaller banks

EURO1 Banks act as settlement banks for STEP1 Participants

LIVE DATE

21 November 2000

TECHNICAL OPERATOR

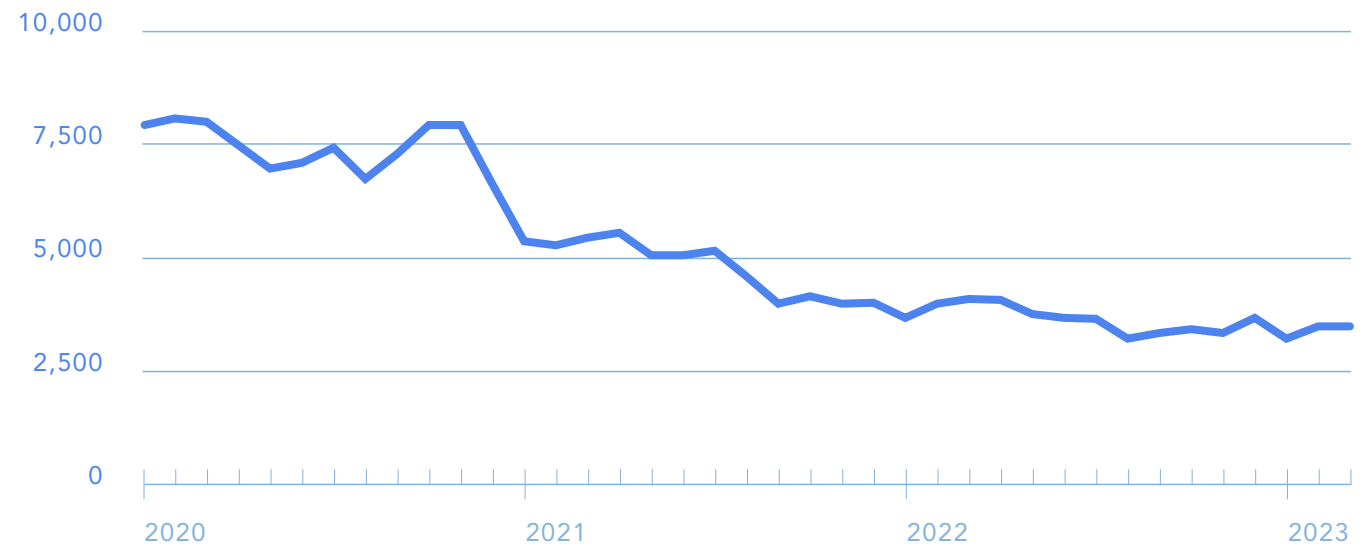
Swift

PARTICIPATION

7 Participants

REACH

Close to 5,000 participant BICs
and over 10,000 additional BICs
reachable via EURO1/STEP1
Participants

EVOLUTION OF AVERAGE DAILY VOLUME
OF PAYMENTS PROCESSED

AVERAGE DAILY VALUE

€938 million

AVERAGE DAILY VOLUME

3,478
transactions

STEP2 SEPA SERVICES

Reaching all corners of SEPA for credit transfers and direct debits

1 Overview

A cornerstone of the Single Euro Payments Area (SEPA), the STEP2-T System provides full reach to the European payments industry, processing very high volumes of euro credit transfers and direct debits in a reliable, cost-effective and disruption-free manner. STEP2-T is classified as a systemically important payment system and is of strategic importance to a number of communities and individual payment service providers (PSPs) across Europe, which use it for both their domestic and cross-border SEPA retail transactions. During the period under report, the STEP2 SEPA Services continued to grow in terms of participation numbers and transaction volumes.

As in previous years, EBA CLEARING passed on the benefits of the significant economies of scale generated by STEP2 to the service users in terms of cost savings, which kept transaction prices at a low level.

In July 2022, the STEP2-T user community successfully concluded its migration to the Continuous Gross Settlement (CGS) mechanism, which had started in June 2021. The changeover took place very smoothly, thanks to a phased, risk-minimising migration approach supported by a comprehensive information and testing programme.

The CGS mechanism enables real-time settlement of large payment volumes at any time during the business day. With the move to CGS, the STEP2-T user community completed the groundwork for faster delivery of SEPA payments and extended opening hours for the STEP2 SEPA Services.

Further system upgrades leveraging the STEP2-T CGS engine followed in November 2022 and more are scheduled for 2023. A high-level roadmap for the roll-out of these enhancements to all STEP2-T users was developed in 2022 in consultation with the user community. The dialogue will continue in 2023 with a view to making these improved service levels available to end users throughout SEPA in 2024 and beyond. This evolution of the STEP2 SEPA Services is aligned with an increasing need of users and end users for faster payment processing and extended opening hours for a wider range of payments.

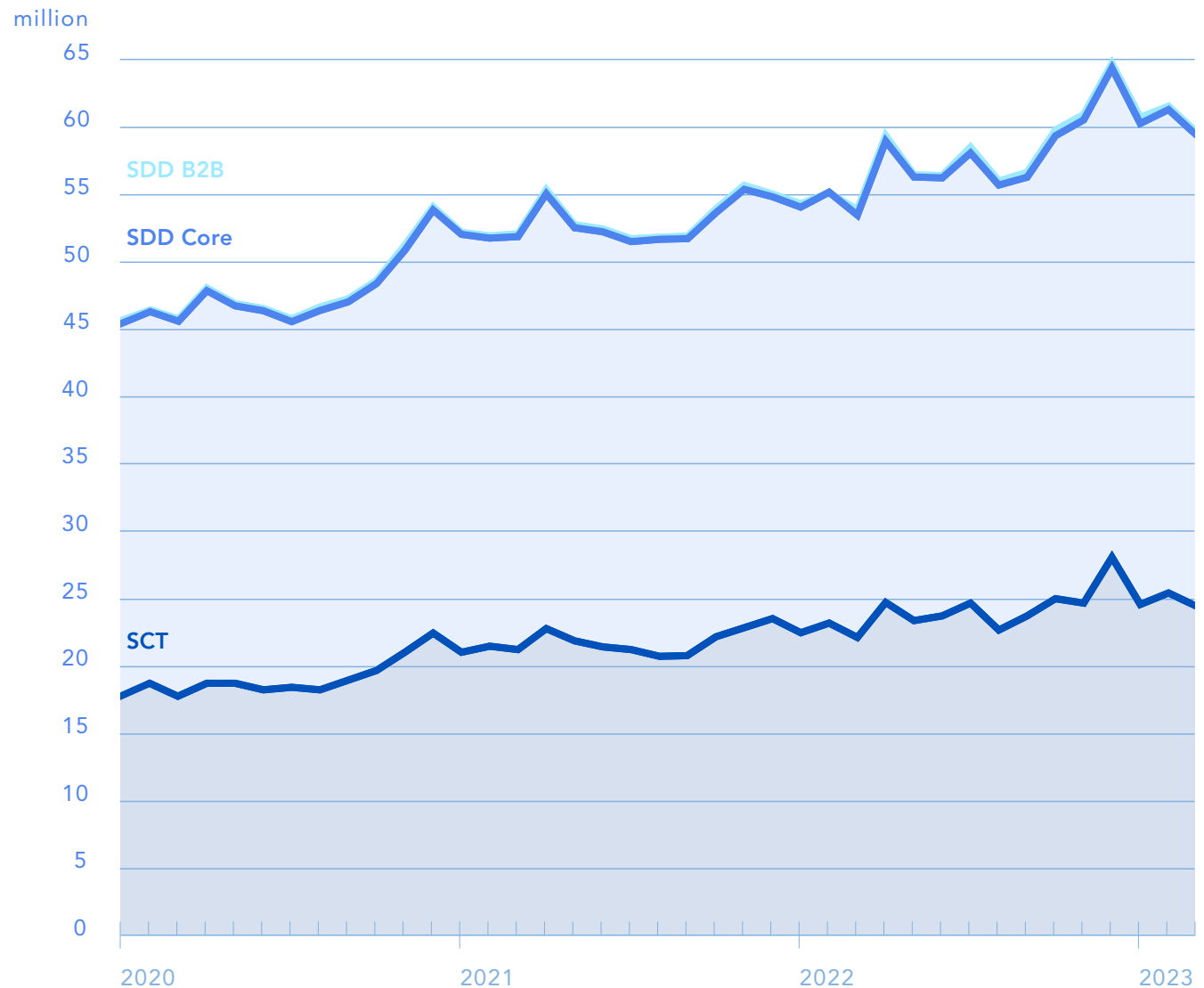
2 Evolution of STEP2 SEPA volumes and participation

Daily average volumes in the STEP2 SEPA Services climbed by 9% in 2022 to 57.8 million transactions processed per day on average.

Participation in the STEP2 SEPA Services continued to grow throughout 2022, with seven participants joining the STEP2 SEPA Credit Transfer (SCT) Service, five participants joining the STEP2 SEPA Direct Debit (SDD) Core Service and two participants connecting to the STEP2 SDD Business-to-Business (B2B) Service.

The STEP2 SEPA Services continued to extend full reachability to financial institutions across the Single Euro Payments Area.

EVOLUTION OF AVERAGE DAILY VOLUME OF PAYMENTS PROCESSED



AVERAGE DAILY VALUE

SCT

€78.8 billion

SDD CORE

€7 billion

SDD B2B

€3.7 billion

AVERAGE DAILY VOLUME

SCT

24.7 million transactions

SDD CORE

34.5 million transactions

SDD B2B

374,679 transactions

3 Successful completion of CGS migration and next steps

2022 saw the successful completion of the user community's phased migration from the cycle-based settlement mode to the CGS mechanism in STEP2-T. This concluded a 13-month-long co-existence period between both approaches and ended the use of the cycle-based settlement mode, where payment transactions had only been settled several times a day, at the end of pre-defined settlement cycles.

The co-existence period, with six migration windows from June 2021 to July 2022, had been designed to minimise changeover risks in light of the industry's extensive implementation agenda in 2021 and 2022. It allowed individual banks and communities to choose their preferred migration window in relation to their other ongoing projects. In addition to a comprehensive testing programme, the changeover was supported by a number of information and onboarding sessions.

CGS enables real-time settlement of large payment volumes at any time during the business day. The continuous settlement mechanism paves the way for STEP2 users to offer improved service levels to their customers with bulk payments being processed in near real time. Participants can also tap into a wider range of liquidity management functionalities and align their liquidity management across different EBA CLEARING Services.

Following the delivery of a high-level roadmap for the roll-out of the 2022 and 2023 system upgrades to all STEP2-T users, the Company continued to work on the detailed impact analysis together with the community. As part of the ongoing 2023 user consultation, users are providing guidance on how to optimally extend the opening hours of the system going forward.

4 Service developments in 2022

Leveraging CGS, the 2022 releases introduced new features supporting extended opening hours, including settlement capabilities on non-TARGET days, faster delivery of settlement results and cross-service liquidity management for the STEP2 SCT and SDD Services. These gains in output speed and availability will allow the participants in the STEP2 SEPA Services to shorten end-to-end processing timelines for retail payments in euro from hours to minutes.

At the same time, further improvements to the self-provisioning capabilities were implemented. Various workstation functions, including liquidity management capabilities, became also available via application programming interfaces (APIs), enabling participants to monitor the amount of available liquidity in the system as well as the status of their payment orders in real time.

PARTICIPATION

SCT

153 Participants

SDD CORE

116 Participants

SDD B2B

93 Participants

REACH

SCT

Close to 4,500 Reachable BICs

SDD CORE

Over 3,500 Reachable BICs

SDD B2B

Close to 3,000 Reachable BICs

THE STEP2-T SYSTEM IS FULLY INTEROPERABLE WITH 15 OTHER CSMs.

5 T2 migration

Throughout 2022, EBA CLEARING prepared for the migration to the new T2 RTGS system to accommodate a smooth migration of the STEP2-T user community in March 2023. The cut-over strategy that the Company agreed upon with the users allowed to safely open the settlement windows on Monday, 20 March 2023, avoiding dependencies on the T2 migration for the funding and defunding process.

SETTLEMENT

Continuous Gross Settlement (CGS):

real-time gross settlement mechanism providing for the continuous execution of euro bulk payment orders.

Participants maintain a funds balance in the system, which is adjusted upon release of each bulk payment order and funded in central bank funds from the participant's TARGET RTGS account via ancillary system settlement procedure D.

FUNCTION

ACH Services processing SEPA Credit Transfers and SEPA Core and Business-to-Business Direct Debits, which offer full pan-European reach to all financial institutions adhering to the respective EPC Scheme Rulebooks

BENEFITS

Full reach across Europe

Highly resilient and robust processing infrastructure

Rich and flexible functionality

Low-cost processing

Pan-European approach to service development

6 Service changes for 2023

After the successfully completed T2 migration, the most impactful change for users during 2023 will be the ISO 20022 XML version upgrade for all the SEPA schemes of the European Payments Council in November 2023. With the same release, STEP2-T SCT will start to open at 02:30 CET for all users and enable the delivery of output files every 15 minutes.

From November 2023 on, all STEP2-T users will benefit from fraud pattern and anomaly detection capabilities introduced by FPAD.

// 86%

of respondents agree
that the STEP2-T Services are
enhanced in a timely manner

Joint EBA, EBA CLEARING and PRETA survey

LEGAL BASIS

Identified as SIPS under the ECB SIPS Regulation

Compliant with the respective EPC Scheme Rulebooks and Implementation Guidelines

LIVE DATES

SCT: 28 January 2008

SDD Core and SDD B2B: 2 November 2009

TECHNICAL OPERATOR

Nexi Payments

RT1 SERVICE

The leading
pan-European infrastructure
for instant payments

1 Overview

A key facilitator of real-time payment connectivity and the build-up of critical mass across Europe, the pan-European instant payment infrastructure system RT1 saw a continued steep ramp-up of participation and volumes during the period under report.

EBA CLEARING maintained its focus on managing the onboarding of its users and on supporting them in scaling up their instant payment activities and maintaining 24/7 availability. Major emphasis also continued to be placed on driving the development of system functionality and support tools through semi-annual system releases, in response to user needs and regulatory requirements.

"87%

of respondents agree that
the RT1 Service supports
ecosystem requirements and the
European payments agenda

Joint EBA, EBA CLEARING and PRETA survey

BENEFITS

24/7 non-stop service

End-to-end processing within less
than 5 seconds

Full settlement certainty

Future-proof in terms of scalability
and flexibility

Use case-agnostic design

Liquidity-efficient arrangements and
24/7 liquidity management

2 Evolution of RT1 volumes and participation

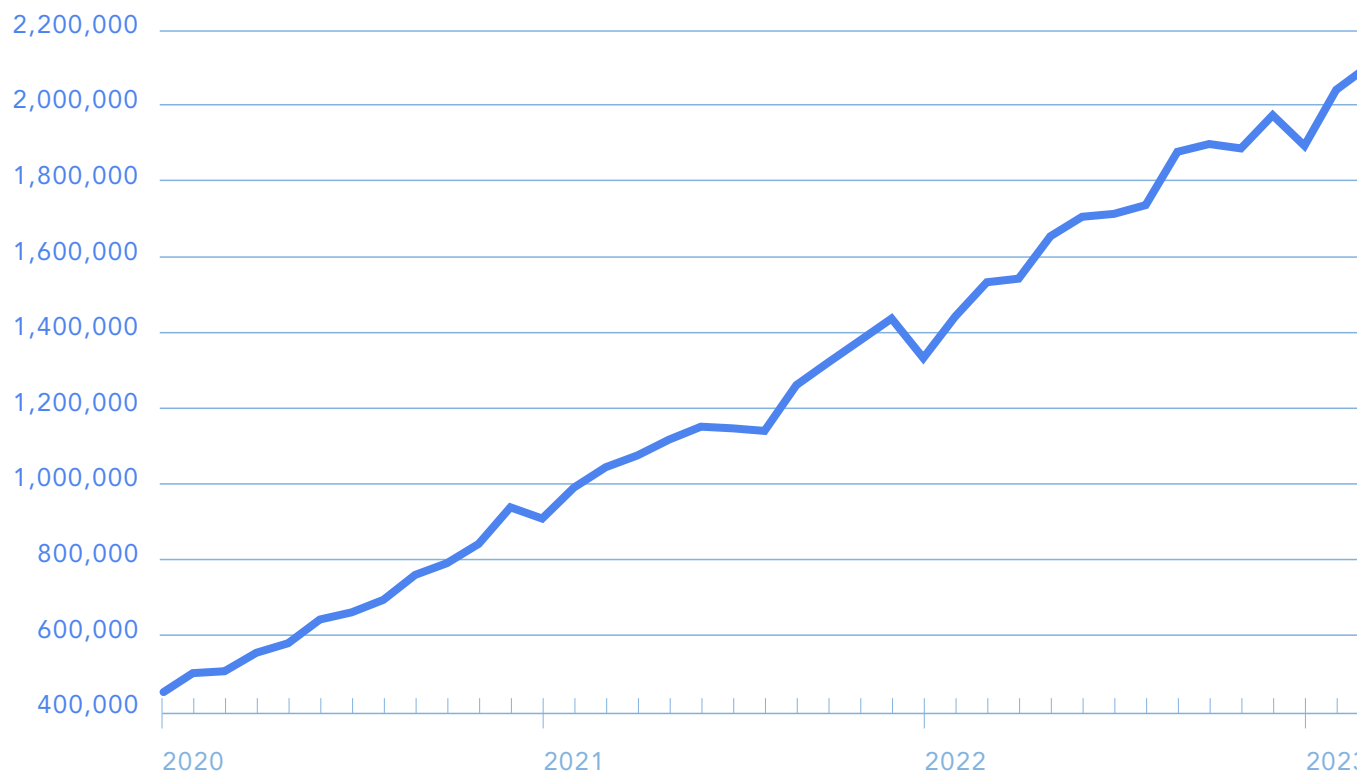
In 2022, RT1 volumes grew by 45%, bringing processing numbers across Europe to over 2 million transactions per day on average. The 2022 peak record was reached on 30 September 2022 with 2,810,355 transactions settled on that day. Since April 2022, the proportion of rejected transactions has dropped below 2% and transactions are processed between PSPs in 1.2 seconds on average. RT1 welcomed eight new joiners in 2022 and counted 80 participants by the end of the year.

86%

of respondents agree that the RT1 Service is evolved in line with user needs

Joint EBA, EBA CLEARING and PRETA survey

EVOLUTION OF AVERAGE DAILY VOLUME OF PAYMENTS PROCESSED



AVERAGE DAILY VALUE

€ 1.5 billion

AVERAGE DAILY VOLUME

2.1 million transactions

3 System developments in 2022 and outlook on 2023

EBA CLEARING continued to enrich the RT1 functionality in 2022 in line with user demand and regulatory developments. For most 2022 and 2023 changes, the focus was put on operational excellence. Since January 2023, EBA CLEARING has started to provide individual reports to its participants highlighting the respective downtime periods identified by the system. Service releases for 2023 include various smaller user change requests, as well as changes stemming from

PARTICIPATION

80 Participants

REACH

RT1 extends reach to close to 2,300 PSPs from 26 SEPA countries, which are addressable via the 80 Participants connected to the service

the adoption of the 2019 version of ISO 20022 XML for all SEPA schemes of the European Payments Council in November 2023.

From November 2023 on, all RT1 users will benefit from fraud pattern and anomaly detection capabilities introduced by FPAD.

4 Contribution to industry debates

EBA CLEARING has been fostering an open exchange on real-time payment matters with other industry players and stakeholders, participating in the AMI-Pay, the ECB's advisory group on market infrastructures for payments, as well as the TIPS consultative group and ad hoc workshops organised by the Eurosystem on pan-European reachability. The Company is also a member of the EPC Scheme Technical Player Multi-Stakeholder Group (STP MSG) and the EPC Scheme Evolution and Maintenance Task Force (SEMSTF).

EBA CLEARING further contributed to other industry bodies and fora, such as the Real-Time Payments Group (RTPG; the group under the ISO 20022 standardisation body focussing on ISO messages for real-time payments) and the Global Real Time / Instant Payment Group. In 2022, EBA CLEARING also took part in the Payments Systems Market Experts Group organised by the European Commission.

FUNCTION

Pan-European 24/7/365 real-time payment system open to any AS-PSP adhering to the EPC SCT Inst Scheme

Transactions are processed in real time and settled with instant finality in the system. Participants maintain a position in the system, which is adjusted upon release of each payment transaction. The position of each participant is funded in central bank funds.

LEGAL BASIS

Full compliance with the SCT Inst Rulebook and Implementation Guidelines of the EPC, including validation

Fully protected by the Settlement Finality Directive

LIVE DATE

21 November 2017

TECHNICAL OPERATOR

Nexi Payments

R2P SERVICE

The missing piece of the puzzle for instant payment solutions

1 Overview

EBA CLEARING's pan-European Request to Pay Service (R2P) is a real-time messaging service, developed with the support of 27 users from 11 European countries. It provides a thin infrastructure layer in the inter-PSP domain based on the ISO 20022 messaging standard and aligned with the EPC SRTP Scheme.

The need for end-user solutions with a European DNA based on instant payments was reflected in the draft regulation on instant payments by the European Commission published in late 2022. The request to pay messaging layer is considered to be a key element to support the European payments industry realising this: while R2P remains separate from the clearing and settlement infrastructure and the end-user solution layers, it links both domains and provides a building block for the creation of innovative value-added payment services.

At the request of the R2P Project Working Group supporting the development of the service, an additional connectivity option for R2P via application programming interfaces (APIs) was introduced and made available for testing in 2022. This option allows R2P

Participants to leverage technology implemented for PSD2 APIs. Its underlying aim is to facilitate easier integration of R2P in the participants' end-user solutions, which should support the build-up of reach for these solutions.

2 Interest and uptake

At the request of R2P funding institutions, EBA CLEARING decided in December 2022 to support a proof of concept for R2P in the course of 2023. The aim of this initiative is to showcase how PSPs can adopt and create value around request to pay to pave the way for live implementation. The kick-off of this initiative took place in March 2023 with a group of eight multinational banks acting as frontrunners.

STEP2 CARD CLEARING SERVICE

An ISO 20022-compliant system for settling card-initiated payments

Throughout the period under report, the STEP2 Card Clearing (STEP2 CC) Service provided a reliable service for the clearing and settlement of pre-authorised card-based transactions based on the SEPA Card Clearing Framework defined by the Berlin Group.

The Berlin Group is a pan-European payments interoperability standards and harmonisation initiative of major payments industry players from all across Europe with the primary objective of defining open and common scheme- and processor-independent standards in the inter-banking domain.

STEP2 CC is currently used by seven participants for debit card transactions under the German girocard scheme. Nearly 2,000 BICs are registered in the STEP2 CC Routing Tables.

TECHNICAL OPERATOR

Nexi Payments

LIVE DATE

14 April 2015

BENEFITS

Pan-European design

Allows re-use of SEPA interbank infrastructures

Supported by STEP2 technical infrastructure

LEGAL BASIS

Compliant with the SEPA Card Clearing Framework as developed by the Berlin Group, a group of major players in the cards industry from all across Europe

FUNCTION

High-volume, commercial and retail euro clearing service for pre-authorised card messages based on a direct debit collection mechanism capable of routing card clearing messages between the participants

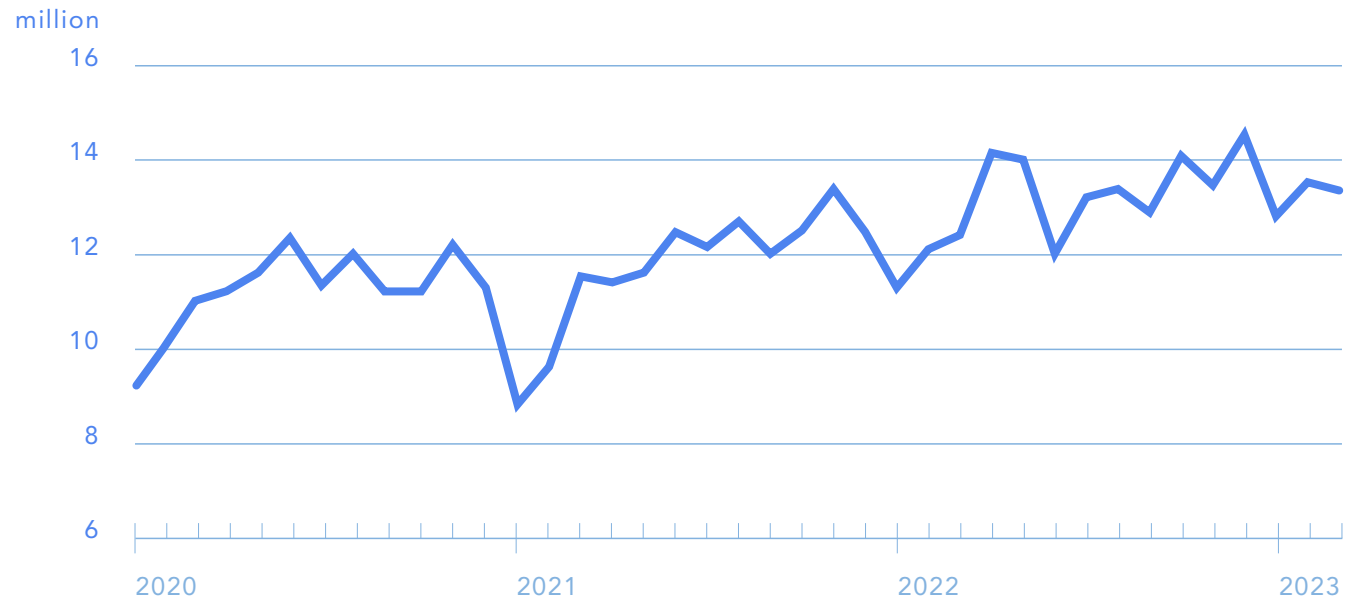
Positions are settled in TARGET RTGS via ancillary system settlement procedure A

During the period under report, STEP2 CC continued to benefit from changes in customer behaviour originally triggered by the Covid-19 pandemic. In 2022, the STEP2 CC Service handled on average over 13.1 million transactions per day, which represents an increase of 11.9% compared to 2021. The positive trend was also prominently illustrated by a peak of 363 million transactions in April 2022.

System developments in 2022 and 2023

There were no changes requested by users to be delivered in 2022. The STEP2 CC user community did not submit any change requests for 2023. The changes were limited to accommodating the ancillary system interface changes in TARGET.

EVOLUTION OF AVERAGE DAILY VOLUME OF PAYMENTS PROCESSED



PARTICIPATION

7 Participants

AVERAGE DAILY VALUE

€ 603 million

AVERAGE DAILY VOLUME

13.4 million transactions

REACH

Close to 2,000 Reachable BICs. Full reach for the clearing of pre-authorised girocard transactions in Germany through interoperability with the SCC Service offered by Deutsche Bundesbank.

SEDA SERVICE

A mandate information exchange service for SEPA Direct Debits

EBA CLEARING's SEPA-compliant Electronic Database Alignment (SEDA) Service allows financial institutions to exchange, process and route mandate-related information according to business rules specified by the Italian Banking Association (ABI). It is currently mainly used by Italian banks to exchange mandate-related information connected to SEPA Direct Debits.

Volume evolution

The SEDA Service processed a monthly average of 9.84 million mandate-related information messages during 2022, which constitutes a slight decrease of 1.9% in comparison to 2021.

System developments in 2022 and 2023

No change request was raised by the SEDA users for the 2022 and 2023 change management cycles. In November 2023, SEDA will have been in operations for 10 years, providing the Italian community with a very stable and reliable mechanism to exchange mandate information, which reduces the risks of rejected SDD collections.

LIVE DATE

14 October 2013

TECHNICAL OPERATOR

Nexi Payments

BENEFITS

Direct exchange of mandate information

Full reach of all banks that offer SEDA

FUNCTION

The purpose of SEDA is to exchange, process and route mandate-related information between two financial institutions according to the business rules specified by the Italian Banking Association (ABI)

Compliant with rules and guidelines developed by ABI

EVOLUTION OF AVERAGE DAILY VOLUME OF MESSAGES PROCESSED**PARTICIPATION**

32 Participants

REACH

Full reach of all banks that offer SEDA

OPERATIONS

EBA CLEARING's Operations are spread across several sites located in different countries. They focus on the business administration and monitoring of the EURO1, STEP1, STEP2 SEPA, RT1, STEP2 CC and SEDA Services.

Core activities include clearing and settlement, service monitoring, customer support, crisis and incident management, business continuity, data and statistical reporting, operational IT management, integration services for new products and functionality, integration of new participants as well as release and resilience testing activities.

1 Clearing and settlement

The systems operated by EBA CLEARING performed in line with the highest resilience and security standards during the period under report.

Service availability of all EBA CLEARING payment services was uninterrupted from January to December 2022.

2 Incident management

The incident management arrangements of EBA CLEARING are reviewed and tested regularly to maintain best-in-class services and processes and to ensure alignment with oversight requirements.

The Company's incident management processes allowed the accurate and timely handling of the few incidents that occurred in 2022.

The incident management framework, which consists of detection, escalation, investigation, recovery and reporting, was activated for all incidents with the highest level of attention from operational and technical experts as well as the management of EBA CLEARING and providers.

3 Business continuity and resilience exercise

EBA CLEARING conducts a significant number of business continuity exercises on an annual basis with the aim of assessing the resilience of the services against a number of adverse scenarios. These scenarios test the resilience of the infrastructure, including connectivity, communication, and escalation procedures. Furthermore, to ensure the preparedness of all parties involved, the resilience testing activities involve internal staff as well as external parties, including the Company's critical service providers and service participants.

The scope of these testing activities is regularly reviewed and updated to cover newly implemented services, functionalities, regulatory requirements and service agreements with providers. The 2022 testing programme was completed successfully. An enhanced and updated set of tests are being executed as part of the 2023 programme.

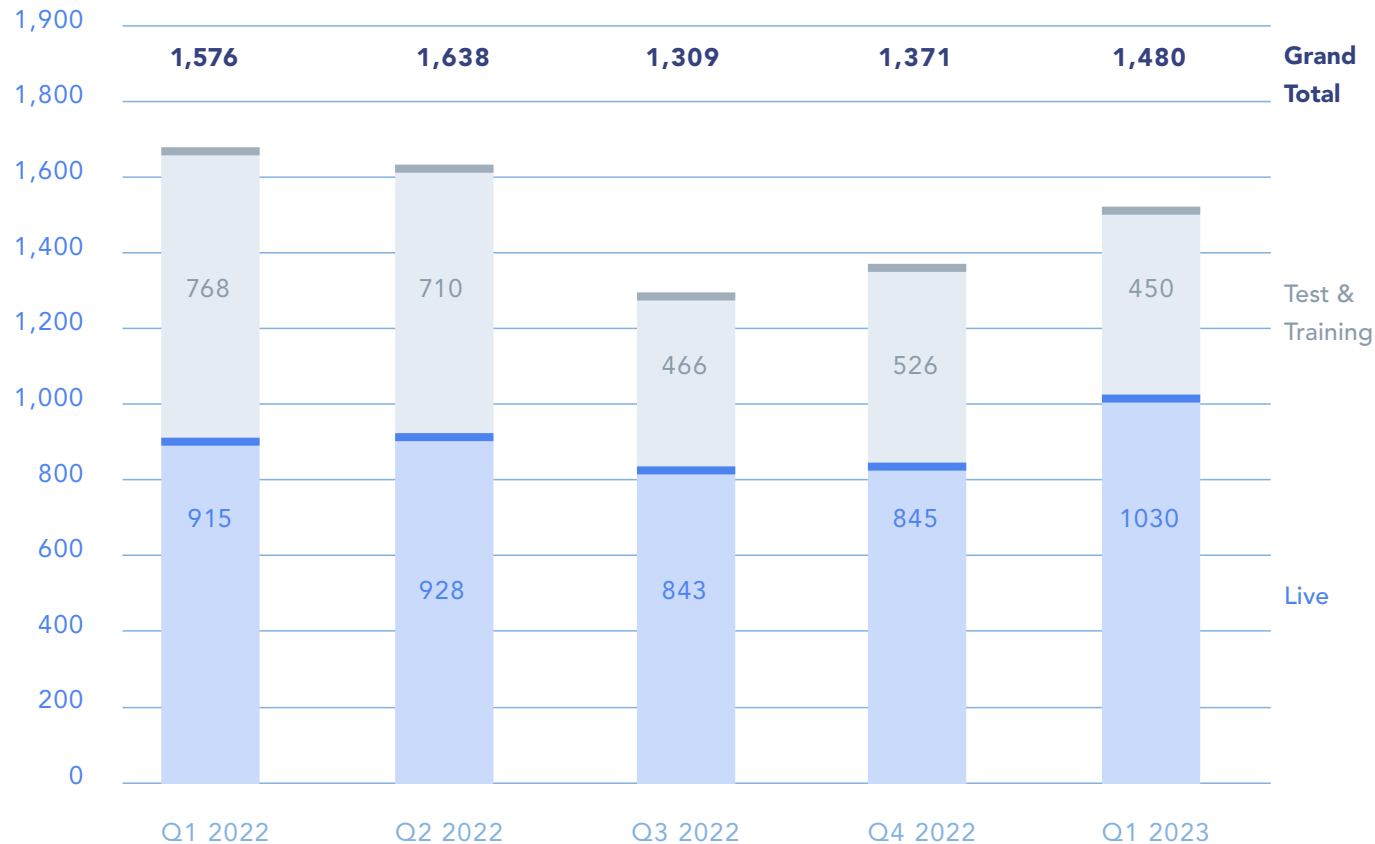
4 Customer support

EBA CLEARING's customer support service provides a fully secured first point of contact for user queries. Via an emergency helpdesk available 24/7/365, EBA CLEARING gives practical support and assists users with inquiries related to their service participation and their operations. The Company's interaction with its participants is supported by the EBA CLEARING customer portal, which enables user representatives to access online support tools as well as service-specific documentation and information.

To assess customer satisfaction with the services provided by the Company, EBA CLEARING conducts an annual quality survey. The survey looking back on 2021 was carried out from 19 April to 13 May 2022 and again showed very good results with an overall average user satisfaction rate of 4.1 (out of 5). As part of the survey, a net promoter score (NPS), which is a widely-used market research indicator for measuring customer loyalty, was calculated. With an NPS of 38, EBA CLEARING again scored above average in its 2021 survey results.

In light of the major implementation and testing activities triggered by the migration of STEP2-T to continuous gross settlement, of EURO1 to the ISO 20022 standard and of all EBA CLEARING payment systems to the new T2 RTGS settlement environment, the number of user queries related to the systems' live and test environments remained high throughout 2022 and early 2023.

CUSTOMER SUPPORT CASES RAISED IN 2022 AND Q1 2023



5 Statistics and data reporting

EBA CLEARING's statistics and data reporting services respond to a wide range of needs, including regulatory and oversight requirements as well as user requests for customised information.

FRAUD PATTERN AND ANOMALY DETECTION (FPAD) PROJECT

After a preliminary study into possibilities for EBA CLEARING to contribute to fraud combatting at a pan-European level, EBA CLEARING launched the first phase of its Fraud Pattern and Anomaly Detection (FPAD) initiative in April 2022. An FPAD blueprint was created together with an expert group of user representatives, which resulted in the presentation of the initiative to the RT1 and STEP2 Participants for a wider consultation.

Based on the strong support demonstrated in this user consultation, EBA CLEARING started an FPAD development project in December to deliver fraud prevention and detection capabilities for the STEP2 and RT1 Services. The implementation of a first basic solution is planned for the end of 2023. FPAD will be available to all STEP2 SEPA and RT1 users to complement their own anti-fraud measures by leveraging the network view.

FPAD will cover a broad range of real-time fraud prevention and detection tools. The toolset will also include 'confirmation of payee' functionality, which will allow PSPs to flexibly integrate into their service offerings the ability for customers to detect any mismatches in the IBAN/name combination they have entered for the beneficiary of a payment. This will enable users to address fraud prevention requirements outlined in the proposed Instant Payments Regulation.

IMMEDIATE CROSS-BORDER PAYMENT (IXB) INITIATIVE

Banks from both sides of the Atlantic contributed to the Immediate Cross-Border Payments (IXB) initiative pursued by EBA CLEARING, the Clearing House (TCH) in the United States and Swift during 2022.

The initiative had been started by the two financial market infrastructures at the request of their users and in response to a call to action by international and European authorities to enhance cross-border payments at a global level. Work on this initiative continued in 2022, based on a blueprint delivered in 2021 in cooperation with interested banks, a successful proof of concept completed in October 2021 and the positive results of a broader user consultation. The objective of this work is to leverage building blocks provided by EBA CLEARING, TCH as well as Swift for an IXB service that would link existing payment systems. Key features of the service should be aligned with the focus areas related to speed, access, cost and transparency, as identified by the before-mentioned authorities.

EBA CLEARING as well as TCH and Swift reached out to their shareholding institutions to form a user group across entities, consisting of 24 banks, to further design the IXB service. Detailed specifications for a minimal viable service were delivered during the period under report and the core design for a full IXB service was agreed. The first focus of this service is on linking instant payments systems in the U.S. dollar and euro currency corridor euro, but its design can be expanded to other currency corridors as well as more liquidity-efficient large-value payment systems in the future.

RISK MANAGEMENT

NEW TECHNOLOGY FOR ALL

The first commercial 3D printer entered the market in 1987, but the high cost limited widespread access. Over the next three decades, the technology matured and eventually became more affordable. As of the 2020s, 3D printing has rapidly revolutionised customisation in engineering and manufacturing.

1987

CORPORATE RISK MANAGEMENT

1 Internal Developments

Throughout 2022, the Risk Management function was duly sustained as part of the Company's 'second line of defence'. It was assured that all relevant tools and methodologies were maintained in line with best industry practice as well as relevant oversight requirements. In addition, efforts continued to keep the level of risk awareness and understanding high among the Company's Board members, management and staff.

Simultaneously, the Enterprise Risk Management Framework was appropriately maintained in line with the Company's governance, policies and guidelines.

The regular dialogue with the Board Risk Committee (BRC) continued with a view to assessing, mitigating and seeking guidance on the Company's ongoing and newly emerging risks.

Cyber security-related activities

Throughout the period under report, cyber resilience remained a prominent focus of the Risk Management function. To keep pace with its constant evolution, the Company continued to invest in enhancing its knowledge and intrusion detection capabilities as well as its ability to respond should any incidents

occur. In addition, various threat intelligence sources were continually consulted to stay abreast of any specific risks that could compromise EBA CLEARING's smooth operations. In this respect, a high level of staff alertness is expected and continuously reinforced through a comprehensive educational programme.

During the year, the interaction with the Company's critical service providers was effectively maintained. In addition, the Company remained in close contact with other financial market infrastructures on cyber threats that could affect the services. Penetration testing and red-teaming activities continued as part of the Company's business continuity test plan.

The before-mentioned work strands are aimed at achieving the highest possible levels of security given the Company's activities and its size. The Board of EBA CLEARING received regular updates on the state of cyber resilience and the impact of the geopolitical situation as well as information on the relevant risk assessments and action plans. As in previous years, the Board was provided with direct reports by the Chief Information Security Officers of the Company's most critical service providers.

EBA CLEARING continued to actively participate in various cyber-related industry initiatives. As part of these activities, the Company contributed to the maintenance of Euro Cyber Resilience Board's industry-wide threat intelligence platform and its initiative to deploy a crisis coordination group.

2 External developments

In 2022, EBA CLEARING continued to monitor the external risk factors within the scope of its risk universe and to assess their potential impact on the Company's services. While the impact of the Covid-19 pandemic gradually diminished throughout the year, a new threat arose due to the escalation of the conflict between Russia and Ukraine. The Company remained especially vigilant regarding any cyber and other risks and potential knock-on effects in this context and intensified its updates to the BRC and its dialogue with CIISI-EU (the ECB-led Cyber Intelligence and Information Sharing Initiative) as well as other threat intelligence sources and providers.

3 Risk information sessions

During 2022, the broader topic of enterprise risk management was a central item on the agenda of the 'compliance days' organised by EBA CLEARING. Updates were also provided at country group meetings and, upon request, at other user meetings. Yet again, special attention was given to the evolution of cyber risk and threat management.

4 Business Continuity Management System

As in previous years, the maintenance and evolution of EBA CLEARING's Business Continuity Management System (BCMS), which is aligned with the international ISO 22301 standard, continued to be a top priority. The BCMS covers all the Company's capabilities, i.e. policies, plans, procedures, processes, structures, tools and people, necessary to maintain and further strengthen the business continuity capabilities and resilience of the Company's services and activities. This was achieved in line with industry best practice. With regular reports towards the BRC, a strong focus was put on the organisation and timely execution of the business continuity tests plan, including tests in co-operation with the Company's critical service providers and service participants.

5 Information security

EBA CLEARING's Information Security Management System (ISMS), formally certified against the ISO 27001 standard, was duly maintained in the period under report. The surveillance audit that was conducted at the end of 2022 confirmed the Company's continued compliance with the applicable controls to protect an organisation's information assets and to give the expected confidence to all stakeholders.

Throughout the period under report, the Company's Information Security Coordination Group, which is composed of information security coordinators of each unit, continued to meet frequently to discuss any new developments and to stay focused on further strengthening the Company's information and cyber security risk awareness, culture and controls.

INTERNAL AUDIT

EBA CLEARING's Internal Audit function was maintained in line with best practice and continued its mission as the 'third line of defence' within the Company during the period under report.

The Company's audit strategy and planning for 2022 was established under the guidance of the Audit and Finance Committee (AFC), with which an open dialogue on all audit-related matters was maintained throughout the year. In line with the annual audit plan, various internal and external audits were completed in the course of the year as scheduled. The AFC met four times in 2022 and, among other things, received updates on the audit plan completion and follow-ups on any relevant audit findings. The 2023 audit plan was also presented to and validated by the AFC during the period under report.

2022 saw the completion of audit assessments of the Company's key critical service providers, Nexi and Swift, where no points of attention were identified. Internal audits conducted during the period under report included assessments of the Data Reporting Unit, which is part of the Operations Unit, and the Risk Management Unit; these audits were concluded with no major findings identified. A compliance assessment of Swift's Customer Security Programme was also carried out in 2022 and confirmed EBA CLEARING's compliance with the programme.

LEGAL AND REGULATORY

1 Oversight of the SIPS operated by EBA CLEARING

In August 2014, the Governing Council of the European Central Bank (ECB) identified the EURO1 and STEP2-T Systems as Systemically Important Payment Systems (SIPS) under the ECB Regulation on Oversight Requirements for Systemically Important Payment Systems (the SIPS Regulation).

In 2016, the ECB as lead Overseer (with the involvement of Eurosystem national central banks) carried out comprehensive oversight assessments of the EURO1 and STEP2-T Systems against the requirements of the SIPS Regulation.

In the context of the Revised SIPS Regulation requirements, notably for credit and liquidity risks, EBA CLEARING took the opportunity to also assess the evolution of the STEP2-T design, in particular with regard to the settlement model. As a result, the Company developed the new STEP2-T Continuous Gross Settlement (CGS) mechanism and implementation plan. In April 2020, the Company submitted a self-assessment of the compliance of the CGS mechanism with the Revised SIPS Regulation. The Overseer issued the closure report of the major change assessment in January 2022.

During 2021, a dedicated oversight assessment was conducted regarding the introduction of the Overnight Return Function in EURO1, which had been classified as a major change. With respect to the continuous oversight cycle for EURO1 and STEP2-T in 2022, the Company was advised of the planned oversight activities at the beginning of the year. The activities were successfully completed and tracked closely through the regular meetings with the Overseer.

In addition to the planned oversight activities, EBA CLEARING also updated the Overseer regularly regarding the measures taken by the Company to withstand any adverse effects on the Company due to the war in Ukraine, including as regards cyber resilience and legislative compliance.

During 2022 and early 2023, a dedicated major change oversight assessment was conducted regarding the migration of EURO1 to the ISO 20022 standard and the extension of the EURO1 operating hours.

In early 2023, the Company also submitted preliminary documentation to the Overseer regarding changes to EURO1 and STEP2-T that are expected to be implemented in 2023. The Company also completed the review process of a number of items as per its annual review calendar in line with the requirements of the

Revised SIPS Regulation. Finally, the Overseer informed EBA CLEARING that it would conduct comprehensive assessments of EURO1 and STEP2-T against all relevant Articles of the Revised SIPS Regulation during the course of 2023.

2 Oversight of the STEP2 CC System operated by EBA CLEARING

The STEP2 Card Clearing (CC) System, classified as Other Retail Payment System (ORPS) as per the Revised Eurosystem Oversight Framework for Retail Payment Systems (RPSs), has been under the Oversight of the Deutsche Bundesbank since 2015. A comprehensive oversight assessment of STEP2 CC against the Principles for Financial Market Infrastructures by the Committee on Payments and Market Infrastructures (CPMI) and the International Organisation of Securities Commissions (IOSCO) applicable to ORPS as outlined in the Revised Eurosystem Oversight Framework for RPSs has been carried out. The closure report was shared with EBA CLEARING in January 2020.

During the period under report, formal oversight meetings took place between the Deutsche Bundesbank, the ECB and EBA CLEARING. Upcoming changes in relation to the STEP2 CC System are advised to

the Deutsche Bundesbank in view of a classification to determine whether the changes would attract a dedicated oversight assessment. As no changes to the STEP2 CC System were scheduled or carried out during the reporting period, no change assessments were necessary.

3 Oversight of the RT1 System operated by EBA CLEARING

In May 2017, EBA CLEARING was notified of the decision of the Governing Council of the ECB to assign oversight competence for EBA CLEARING's new instant payment system, RT1, to the ECB.

RT1 has been classified as Other Retail Payment System (ORPS) as per the Revised Eurosystem Oversight Framework for Retail Payment Systems (RPSs) since 2017. In June 2018, the ECB completed the comprehensive oversight assessment of RT1 against the CPMI-IOSCO Principles for Financial Market Infrastructures applicable to ORPS as outlined in the Revised Eurosystem Oversight Framework for RPSs. The closure report was shared with EBA CLEARING in January 2020.

During the course of 2022, regular formal oversight meetings took place between the ECB and EBA CLEARING in relation to RT1 oversight.

4 Cyber resilience

Cyber Resilience Oversight Expectations (CROE)

As an operator of SIPS and ORPS, EBA CLEARING falls under the scope of the CROE, for EURO1 and STEP2-T at the Advancing level and for STEP2 CC and RT1 at the Evolving level. EBA CLEARING is in a regular dialogue with the Overseer to close all recommendations stemming from EBA CLEARING's self-assessments against the CROE in 2019.

Endpoint security

In May 2018, the CPMI issued its final strategy paper on reducing the risk of wholesale payments fraud related to endpoint security. In July 2019, the Overseer communicated to EBA CLEARING a number of recommendations for the implementation of this strategy in EURO1. Since 1 January 2020, EURO1 Participants have, in particular, been required to have adequate security controls and processes and provide access to their compliance self-attestation against the Swift Customer Security Programme to each other and the system operator, with the understanding that the responsibility for endpoint security remains with the participants.

More generally, EBA CLEARING promotes the use of fraud preventive practices and tools such as intraday reconciliation amongst the users of its systems and monitors developments in this space. To this effect, the Company is in continuous dialogue with the Overseer and its close stakeholders, and participates in relevant industry events, such as the CPMI industry workshop on wholesale payments endpoint security in May 2023.

5 Legal Advisory Group activities

Four regular meetings of the Legal Advisory Group (LAG) took place in 2022, on 18 May, 28 June, 7 September and 20 October.

These meetings focused on: (i) updating the EURO1 Rules and Regulations to reflect the roll-out of the EURO1 future positioning programme, including most notably the migration of EURO1 to ISO 20022 messaging standards, (ii) the impact of the T2/T2S Consolidation on the legal documentation for EURO1, STEP2-T, STEP2 CC and RT1, in particular, the participation agreements with the ECB for fund transfer services in TARGET for each system, (iii) the update of

the STEP2-T documentation in view of the November 2022 release, (iv) the legal resourcing and legal aspects, including user arrangements, for the IXB initiative, and (v) the privacy-related questions and the approach for the legal documentation for the Fraud Pattern and Anomaly Detection (FPAD) solution.

Throughout the year, the LAG was also consulted and updated by correspondence on other changes to the systems' documentation, in particular the updates to the Rules and Regulations of STEP2-T and RT1 in July 2022, and STEP2 CC in March 2023.

The LAG further met in an extended set-up at the end of Q1 2023, including representatives of institutions involved in the FPAD project. This meeting was devoted to reviewing the privacy approach and documentation for implementation of this additional feature in STEP2-T and RT1.

6 Public consultations

During the period under report, EBA CLEARING responded to the European Commission's public consultations on a digital euro and the Payment Services Directive (PSD2). EBA CLEARING also continued to contribute to various building blocks of the G20 Roadmap for Enhancing Cross-Border Payments, in particular as regards service level agreements and schemes, and the key performance indicators proposed by the Financial Stability Board (FSB).

EBA CLEARING is also closely following the Instant Payments Regulation proposed by the European Commission and has engaged with the European Commission and the European Central Bank on this topic.

EBA CLEARING's responses to public consultations are available on the [website](#) of EBA CLEARING.

OVERSIGHT OF EBA CLEARING

1 Oversight of EURO1 and STEP2-T

The ECB Regulation (EU 795/2014) on Oversight Requirements for Systemically Important Payment Systems (the SIPS Regulation), amended in 2017 by EU Regulation 2017/2094 and in 2021 by EU Regulation 2021/728 (the Revised SIPS Regulation), covers both large-value and retail payment systems of systemic importance, whether operated by Eurosystem national central banks or private entities.

The SIPS Regulation implements the Principles for Financial Market Infrastructures (PFMIs), issued by the Committee on Payments and Market Infrastructures (CPMI) and the International Organization of Securities Commissions (IOSCO) in 2012, and applies to Systemically Important Payment Systems (SIPS) in the Eurozone. The system's importance is determined by an appraisal of financial impact, degree of market penetration, a system's cross-border activity and whether the system provides settlement for other financial market infrastructures. Under the Revised SIPS Regulation, the Governing Council of the European Central Bank (ECB) may also identify a system as a SIPS where such a decision would be appropriate, taking into account criteria listed in the Regulation.

No distinction is made for the application of the Regulation between large-value and retail payment systems. In 2014, STEP2-T and EURO1 were identified by decision of the Governing Council of the ECB as Systemically Important Payment Systems under the SIPS Regulation.

The EURO1 System is overseen by the ECB as Competent Authority, with voluntary involvement by national central banks of the Eurosystem. EURO1 has been under oversight of the ECB since its launch. The STEP2-T System is also under the oversight of the ECB as Competent Authority with the voluntary involvement by national central banks of the Eurosystem. Therefore, EBA CLEARING is in the unique position of being the system operator of two SIPS.

The ECB publishes on its website the list of systems that fall under the SIPS Regulation and of other classified systems. In line with the Revised Oversight Framework for Retail Payment Systems of the Eurosystem and with reference to the most current published list of payment systems according to the Eurosystem's payment system classification, a distinction is made in relation to retail payment systems between:

- Systemically Important Retail Payment Systems (SIRPS)
- Prominently Important Retail Payment Systems (PIRPS) and
- Other Retail Payment Systems (ORPS)

STEP2-T also qualifies as a European Systemically Important Retail Payment System (ESIRPS).

2 Dialogue with the Overseer and oversight assessments for SIPS

Formal oversight meetings between the ECB / Eurosystem central banks and EBA CLEARING are scheduled to take place on a semi-annual basis with the participation of the CEO and senior management of the Company. The ECB also meets annually with the Chairperson and the Outside Director of the Board of Directors. Regular exchanges at technical level take place on any plans and upcoming changes in relation to topics within the scope of the SIPS Regulation.

Any change to the SIPS and ORPS that EBA CLEARING operates are subject to classification. In accordance with this classification, the Overseer determines whether changes to the systems require an ex ante or an ex post facto oversight assessment. The result of these change assessments is formally advised to EBA CLEARING by the Overseer. The Overseer further conducts comprehensive oversight assessments of the systems it oversees with a regular frequency.

The above-mentioned meetings and assessments are carried out in parallel to the continuous oversight activities by the Overseer on EBA CLEARING's SIPS. An annual plan for these oversight activities is established by the ECB and notified to EBA CLEARING at the beginning of each year.

3 Oversight of STEP2 Card Clearing

The primary oversight responsibility for STEP2 CC is entrusted to the Deutsche Bundesbank as lead Overseer, with the cooperation of the ECB.

In accordance with the Revised Oversight Framework for Retail Payment Systems of the Eurosystem, the PFMLs and the oversight expectations for links between retail payment systems (OELRPS) form the core of the standards to be applied to retail payment systems other than SIRPS by the Eurosystem national central banks. Nine principles of the PFMLs apply to both PIRPS and ORPS, of which six with the same level of strictness and three with a slight differentiation (namely Governance, Participant Default Rules and Procedures, and Access and Participation Requirements).

Formal classification of STEP2 CC as an Other Retail Payment System is based on the market share of the system at euro area country level. Regular formal oversight meetings take place between the Deutsche Bundesbank / ECB and EBA CLEARING. Upcoming changes in relation to the STEP2 CC system are advised to the Deutsche Bundesbank, which determines whether the changes would attract a dedicated oversight assessment.

4 Oversight of RT1

The primary oversight responsibility for RT1 has been assigned to the ECB.

Prior to the go-live in November 2017, the RT1 System was classified as an Other Retail Payment System and to date, this classification remains applicable. Therefore, the oversight standards for ORPS are applicable to RT1.

Since 2018, regular formal oversight meetings have taken place between the ECB and EBA CLEARING. Upcoming changes in relation to the RT1 System are advised to the ECB in view of a classification to determine whether the changes would attract an ex ante or ex post facto assessment from the Overseer. A comprehensive oversight assessment against compliance with the applicable Principles for Other Retail Payment Systems was carried out during 2018 for RT1. The Joint Oversight Team also conducts change assessments of RT1.

5 Eurosystem cyber resilience strategy

The global Guidance on Cyber Resilience for Financial Market Infrastructures was published by the CP-MI-IOSCO in June 2016. The Guidance was developed to supplement the PFMI adopted by the ECB Governing Council on 3 June 2013 for the conduct of Eurosystem oversight in relation to all types of FMIs. FMIs were required from an oversight perspective to apply the Guidance immediately, and Overseers developed an oversight approach for assessing the FMIs within their jurisdiction against the Guidance.

To this effect, the ECB issued the Cyber Resilience Oversight Expectations (CROE) in December 2018.

The CROE provides:

- FMIs with detailed steps on how to operationalise the Guidance
- Overseers with clear expectations to assess the FMIs for which they are responsible and
- a basis for a meaningful discussion between the FMIs and their respective Overseers.

In May 2018, the CPMI issued its final strategy paper on reducing the risk of wholesale payments fraud related to endpoint security. The strategy is composed of seven elements aimed at encouraging and helping to focus industry efforts to reduce the risk of wholesale payments fraud and, in doing so, support financial stability. In July 2019, the ECB, in its role as Overseer of the EURO1 payment system, issued recommendations for the implementation of the strategy in the system and at the level of its participants.

GOVERNANCE

FROM NICHE TO MAINSTREAM

Released in 1994, the first smartphone was taken off the market after only six months. Too expensive and limited in function, it never gained popular interest. Fast forward to the mid-2000s: with their touchscreens, increased functionality, and extended data capacity, next-generation smartphones took the world by storm. Today, 85% of people worldwide use a smartphone to stay connected, listen to music, get directions, play games, take photos, pay their bills, and much more.

1994

CORPORATE GOVERNANCE

1 Board of directors

Board composition

The Company's by-laws stipulate that the Company is managed by a Board composed of not more than seventeen (17) members including the Chairperson, the Deputy Chairperson and up to two (2) but not less than one (1) Outside Director, who are appointed *intuitu personae* by Ordinary Shareholders Resolutions for a renewable three-year term.

The number of Board members was set at sixteen (16) including one (1) Outside Director by decision of the Shareholders Meeting on 17 June 2019.

Since the Shareholders Meeting on 30 May 2022, further to which were appointed for a three-year term of office Robert Heisterborg as Deputy Chairperson and four other Board members, i.e. Niklas Lemberg, Frantz Teissèdre, Stefan Wloch and Carl Tilkin-Franssens (Outside Director), the changes to the membership of the Board have been the following:

- Following Kirstine Nilsson Edström's resignation from the Board effective as of 30 April 2022, the Board appointed Jenny Winther as replacing Board member with effect as from 15 September 2022 for the remainder of the term of office of Kirstine Nilsson Edström, i.e. until the end of the Shareholders Meeting 2024.
- Following Stefan Wloch's resignation from the Board effective as of 31 October 2022, the Board appointed Simone Löfgen as replacing Board member with effect as from 11 November 2022 for the remainder of the term of office of Stefan Wloch, i.e. until the end of the Shareholders Meeting 2025.
- Following Frantz Teissèdre's resignation from the Board effective as of 28 February 2023, the Board appointed Nicolas Cailly as replacing Board member with effect as from 3 March 2023 for the remainder of the term of office of Frantz Teissèdre, i.e. until the end of the Shareholders Meeting 2025.

EBA CLEARING currently has 48 Shareholders, each holding one share of EBA CLEARING and having one vote at the Shareholders Meetings and/or at any consultation of the Shareholders by correspondence. All the current members of the Board, other than the Outside Director, are employees or officers of EBA CLEARING Shareholders or of a legal entity belonging to the group of a Shareholder and are considered to be independent since none of the Shareholders have a controlling stake in EBA CLEARING.

As provided by the Company's by-laws Board members, other than the Outside Director(s), shall be elected from among employees or officers of EBA CLEARING Shareholders or of a legal entity belonging to the group of a Shareholder. The policy for the nomination of candidates to the EBA CLEARING Board of Directors (the Board Nomination Policy) sets the framework for the Board members' nomination process.

The Nomination and Governance Committee of the Board maintains a Board target profile to track the desirable collective attributes for ensuring an appropriate mix of technical skills, knowledge and experience

on the Board, and assists the Board in ensuring that the Board's composition allows the Board to fulfil its respective roles and responsibilities.

As in previous years, the Board undertook a review of its effectiveness in 2022. In accordance with EBA CLEARING's Board Evaluation Policy and Methodology, this review of the Board's overall performance and the performance of its individual Board members is conducted on an annual basis.

The members of the Board, other than the Outside Director(s), do not receive any director's fees, but are reimbursed for the travel expenses incurred in the discharge of their duties for the Company.

This year, the Shareholders will be asked through an Annual Ordinary Shareholders Resolution to proceed with the election of five Board members for a three-year term of office.

Board role and responsibilities

The Board is responsible for setting the strategic direction, overseeing management and adequately controlling the Company, with the ultimate aim of directing the Company towards the fulfilment of its strategic aims and long-term objectives.

Board meetings

The following Board meetings took place in 2022 and in 2023 to the date of this report:

- 15 March 2022
- 27 April 2022
- 10 May 2022
- 5 July 2022
- 21 September 2022
- 16 November 2022
- 8 March 2023
- 11 May 2023
- 30 May 2023

Overview of Board members who held office in 2022–2023



Chairperson of the Board
MICHELE OLIN

Allied Irish Banks, p.l.c.

Head of Payments RCB Digital Products and Payments

Appointed on 25.06.2021

End of term of office: SHM 2024

Chair of the Nomination and Governance Committee

Chair of the Remuneration Committee



JAMES BARCLAY
JP Morgan Chase Bank N.A.

Executive Director Wholesale
Payments EMEA

Appointed on 26.06.2020

End of term of office: SHM 2023

Chair of the EURO1 Business
Committee since 12.05.2023



SERGIO DALLA RIVA
Intesa Sanpaolo S.p.A.

Head of GTB Product Development

Appointed on 25.06.2021

End of term of office: SHM 2024



IVO DE MEERSMAN
KBC Bank N.V.

General Manager Payments Belgium

Appointed on 26.06.2020

End of term of office: SHM 2023



GIUSEPPINA FEMIANO
UniCredit S.p.A.

Vice President – Payments & Cash
Management – Channels

Appointed on 24.09.2021

End of term of office: SHM 2023



Deputy Chairperson of the Board
ROBERT HEISTERBORG

ING Wholesale Bank

CEO Bank Mendes Gans

Appointed on 30.05.2022

End of term of office: SHM 2025

Chair of the Strategy and Policy Committee



CHRISTOF HOFMANN
Deutsche Bank AG

Global Head of Corporate Cash
Management / Managing Director

Appointed on 26.06.2020

End of term of office: SHM 2023



TANJA KONRAD
Erste Group Bank AG

Head of Daily Banking Services

Appointed on 25.06.2021

End of term of office: SHM 2024



NIKLAS LEMBERG
Nordea Bank Abp

Head of Industry Engagement

Appointed on 30.05.2022

End of term of office: SHM 2025

Chair of the STEP2 Business
Committee



KIRSTINE NILSSON
EDSTRÖM

Swedbank AB (publ)

Head of Business Infrastructure
GCP & GCM

Appointed on 25.06.2021
End of term of office: 30.04.2022
Chair of the Board Risk Committee
until 30.04.2022



JENNY WINTHER
Svenska Handelsbanken

Head of Payment Schemes

Appointed on 15.09.2022
End of term of office: SHM 2024



LUIS PEDRO SIMÕES
Novo Banco S.A.

Co-Head of Payments Division

Appointed on 25.06.2021
End of term of office: SHM 2024
Chair of the Audit and Finance
Committee



RAOUF SOUSSI LAGHMICH
BBVA S.A.

Head of Payments Strategy for
Corporates

Appointed on 25.06.2021
End of term of office: SHM 2024
Chair of the Board Risk Committee
since 01.05.2022



FRANTZ TEISSÈDRE
Société Générale S.A.

Head of Interbank Relationships

Appointed on 30.05.2022
End of term of office: 28.02.2023
Chair of the EURO1 Business
Committee until 28.02.2023



NICOLAS CAILLY
Société Générale S.A.

Global Head of Payments &
Cash Management

Appointed on 03.03.2023
End of term of office: SHM 2025



STEFAN WLOCH
Commerzbank AG

Corporate Clients, Transaction
Banking, Cluster Payments

Appointed on 30.05.2022
End of term of office: 31.10.2022



SIMONE LÖFGEN
Commerzbank AG

Global Head of Payment Platforms,
Managing Director

Appointed on 11.11.2022
End of term of office: SHM 2025



NARINDA YOU
Crédit Agricole S.A.

Payment Services
Head of Strategy and Interbank
Relations

Appointed on 26.06.2020
End of term of office: 16.03.2022



SOPHIE GIORGI
Crédit Agricole S.A.

Head of Payment System and
Infrastructure Relationships

Appointed on 17.03.2022
End of term of office: SHM 2023



CARL TILKIN-FRANSENS
Outside Director

Appointed on 30.05.2022
End of term of office: SHM 2025

Board Committee membership in 2022–2023

	Audit and Finance Committee	Board Risk Committee	Strategy and Policy Committee	Nomination and Governance Committee	Remuneration Committee
Number of Meetings in 2022	5	4	6	5	1
Michele Olin		Observer	Observer	Chair	Chair
Robert Heisterborg		Member	Chair		Member
James Barclay			Member	Member	
Nicolas Cailly					
Sergio Dalla Riva	Member		Member (since 11 May 2022)		
Ivo De Meersman					
Giuseppina Femiano		Member (since 11 May 2022)			
Sophie Giorgi	Member (since 17 March 2022)				
Christof Hofmann			Member		
Tanja Konrad	Member (since 28 April 2022)				
Niklas Lemberg				Member (since 15 July 2021)	
Simone Löfgen		Member (since 12 May 2023)			
Kirstine Nilsson Edström		Chair (until 30 April 2022)			
Luis Pedro Simões	Chair			Member	
Raouf Soussi Laghmich		Chair (since 1 May 2022)			
Frantz Teissèdre					
Carl Tilkin-Franssens		Member			
Jenny Winther	Member (since 12 May 2023)				
Stefan Wloch		Member (until 31 October 2022)			
Narinda You	Member (until 16 March 2022)		Member (until 16 March 2022)		

2 Board Committees

Introduction

In 2022, the Board was supported by five Board Committees, composed of Board members, in carrying out its functions: the Audit and Finance Committee, the Board Risk Committee, the Strategy and Policy Committee, the Nomination and Governance Committee as well as the Remuneration Committee.

Audit and Finance Committee

The Audit and Finance Committee (AFC) assists the Board in fulfilling its oversight responsibilities for setting out the policy and the guidelines for the internal and external audit of the Company, for defining and monitoring the internal audit requirements and the tasks entrusted to the external auditors, and for reviewing and monitoring the financial situation of the Company.

To this end, the AFC regularly reports on its activities to the Board and

- examines the annual and interim statutory and consolidated financial statements of EBA CLEARING submitted by the Company's management, prior to their examination by the Board. As part of these tasks, the committee reviews and analyses the budget variance, forecast and financial statements.
- gives its opinion on the development of the internal audit function, determines the internal audit plan and receives a summary of the internal audit reports on a regular basis.
- reviews the key audit findings from the report of the Company's statutory auditors.

The AFC met five times in 2022. Its work particularly focused on the following items:

- regular review of the predefined key performance indicators for finance and for audit, including analysis against budget to adapt the 2022 forecast, cashflow projections and outlook
- examination of the statutory and consolidated financial statements for 2022 in view of their closing in 2023 and review of the 2023 budget and capital investment plan

- examination of the external auditors' reports
- guidance on further standardisation of reporting and on alignment of reports provided to different governance bodies
- review of the internal audit 2022 activity report and approval of the internal audit plan for 2023
- ensuring that the Highly Liquid Assets (HLA) reserve was at the appropriate level at all times during 2022, in line with SIPS requirements
- review of the Company's Treasury & Investment Policy for subsequent endorsement by the Board.

Board Risk Committee

The Board Risk Committee (BRC) assists the Board in fulfilling its oversight responsibilities with regard to the risk tolerance of the Company and the risk management and compliance frameworks.

The BRC is composed of Board members designated by the Board; meetings of the BRC are attended by the Company's Chief Executive Officer, the Chief Risk Officer and the Head of Regulatory and Finance.

Four regular BRC meetings took place in 2022, which included updates on emerging and priority items such as the geopolitical tensions, risk assessments regarding the ISO 20022 migration as well as on service incidents and their impact on the services of EBA CLEARING. Throughout the period under report, cyber-security intelligence and threats as well as regulatory oversight expectations remained high on the agenda. As a result, the BRC regularly advised the Board on progress in these fields in close co-operation with delegates from the Company's most critical service providers.

In line with its mission, the BRC also monitored the maintenance of the Company's Enterprise Risk Management Framework and the follow-up of outstanding risks in accordance with the Company's Risk Treatment Plan. The BRC received reports on the top actual and emerging risks and monitored the follow-up actions relating thereto.

It is expected that cyber-related risks will remain persistent and regulatory oversight expectations will remain prominently on the agenda of the Committee throughout 2023.

Strategy and Policy Committee

The Strategy and Policy Committee (SPC) addresses the longer-term planning for the positioning and the development of the Company, its payment infrastructure systems and solutions as well as potential new service offerings. In 2022, the Committee met six times; two of the meetings were attended by all interested Board members.

In line with its mission, the SPC provided guidance on the positioning of the Company's existing and emerging services, contributed to the evolution and the monitoring of new and ongoing initiatives, reviewed the proposed content of the (semi-)annual service releases and gave advice on the pricing principles for the different services. Throughout 2022 and early 2023, special emphasis was placed on the following areas in particular:

- continuous alignment of the ISO 20022 migration of EURO1 with the T2/T2S Consolidation project and strengthening of the role of the system as a non-similar back-up for the Eurosystem's RTGS in case of contingency situations
- way forward regarding the roll-out and adoption of enhanced functionality based on the continuous gross settlement mechanism for the STEP2 SEPA Services and the future positioning of these up-graded services

- market developments, including the evolution of the regulatory agenda for instant payments, the related positioning and evolvement of RT1 and R2P
- the Company's role and deliverables in the area of fraud pattern and anomaly detection based on the outcome of the related study, blueprint and user consultation
- principles for and high-level design of the minimal viable service for the Immediate Cross-Border Payments (IXB) initiative with The Clearing House and Swift

Other relevant strategic topics on which the SPC was consulted included cross-service considerations as well as oversight developments of strategic relevance.

Based on a close monitoring of relevant developments, industry initiatives and public consultations in the European and global payments ecosystem, the Committee also reflected on the general future evolution of the Company's service offerings and, in particular, their capability to support the development of end-user solutions and value-added services.

Nomination and Governance Committee

The Nomination and Governance Committee (NGC) assists the Board in implementing and reviewing the nomination policy and process for Board members and the policy and methodology for Board and individual Board member evaluation. The NGC further monitors the effectiveness of the Company's governance framework. During 2022, five meetings of the NGC were held.

The NGC carried out a significant number of tasks in 2022, including:

- review of the outcome of the Board performance evaluation for 2021 and guidance on follow-ups
- ratification of changes in the composition of the EURO1 Business Committee (EURO1 BC) and the STEP2 Business Committee (STEP2 BC)
- ratification of changes in the composition of the Legal Advisory Group (LAG), Operations and Technical Group (OTG), RT1 Working Group (RT1 WG) as well as Treasury and Liquidity Group (TLG)
- nomination process for the appointment by the Board of three replacing Board members.

- recommendations for the appointment by the Board of a new Chair for the BRC, of two new AFC members, of a new BRC member, and of a new SPC member
- nomination process for the appointment by the Shareholders of the Deputy Chairperson and four other Board members, including the Outside Director, for a three-year term of office
- review of the target Board profile for 2023 and review of changes to the Board Nomination Policy and Board Evaluation Policy and methodology
- scoping and launch of the annual Board performance evaluation for 2022.

From January to mid-May 2023, the activities of the NGC were devoted to:

- review of the outcome of the Board performance evaluation for 2022 and guidance on follow-ups
- nomination process for the appointment by the Board of a replacing Board member
- recommendations for the appointment by the Board of a new Chair for the EURO1 Business Committee, of a new AFC member and of a new BRC member

- ratification of changes in the composition of the EURO1 BC, STEP2 BC, LAG, OTG, RT1 WG and TLG
- review of the Terms of Reference of the RT1 WG
- accompanying the nomination process for the candidates to fill five seats on the Board, which will become vacant on the date of the approval by the Shareholders of the accounts of the fiscal year ending on 31 December 2022. In the context of this nomination process, the NGC reviewed the letter to the Shareholders inviting them to propose candidacies to the Board, screened the Board candidacies received, and prepared the "slate" for approval by the Board ahead of its submission to the Shareholders for the appointment of five Board members for a three-year term of office.

Remuneration Committee

The Board is assisted by the Remuneration Committee in establishing a sound remuneration framework, which fosters high performance and motivation of staff members in line with the resourcing strategy and the interests of the Company. The Remuneration Committee has delegated powers from the Board in these matters. In 2022, the Remuneration Committee met once.

3 User say governance

Relations with users

In order to ensure that all types of users are considered in the design and evolution of its systems and offerings, the Company maintains a broad range of communication channels with its (current and potential) users and other stakeholders. There are regular country or regional user meetings with the participation of all respective users and attended by EBA CLEARING executives, where ongoing activities and projects are discussed and feedback is registered.

In the context of specific projects, steering groups or task forces may be created to ensure efficient liaison throughout the project or initiative. For example, an IXB Task Force was set up in November 2020 followed by a broader IXB Sounding Board continuing the exploration of the immediate cross-border payments topic in 2022. In April 2022, EBA CLEARING created an FPAD Expert Group to deliver a blueprint for a pan-European fraud pattern and anomaly detection solution and provide guidance to the Company's work in this area.

Furthermore, the Company organises individual user visits and, when appropriate or desired, roadshows and information campaigns.

User consultations for EBA CLEARING's Systems and Services

The design, maintenance and evolution of the Company's services are subject to thorough user consultations, to meet the community's needs. The consultation process on changes is, in principle, composed of the following steps: submission of proposals by or to the relevant stakeholders, evaluation of the proposals by the Company, including technical feasibility and cost analysis, and submission of a proposal to the Board for decision on implementation of all or part of the recommended changes.

The user say governance for the different systems and services is designed to effectively respond to the stakeholders' needs for efficient organisation of the different groups and their remit. Broadly representative user groups have clear visibility and engagement vis-à-vis the Board of Directors level, with key groups being chaired by Board Directors.

To allow the Board and management to take account of the interests of the users in its decision-making in relation to the design, rules, overall strategy and major changes to the various systems and services, the Company has established the following user groups:

EURO1 Business Committee

Its objective is to serve as a forum in which participants in the EURO1 System can express their interests, requirements or proposals towards the Board of the Company. The EURO1 Business Committee is chaired by an EBA CLEARING Board member.

STEP2 Business Committee

Its objective is to serve as a forum for the participants in the STEP2 SEPA Services to express their interests, requirements or proposals towards the Board of the Company. The STEP2 Business Committee is chaired by an EBA CLEARING Board member.

RT1 Working Group

Its objective is to serve as a forum in which direct participants in the RT1 System can discuss and provide feedback on the development, change management and evolution of the RT1 Service, as well as related initiatives.

R2P Project Working Group

Its objective is to serve as a forum in which R2P funding institutions can discuss and provide feedback on the development and evolution of the R2P Service, as well as related initiatives.

STEP2 CC Group

Its objective is to serve as a forum in which participants in the STEP2 CC Service can discuss and provide feedback on the development, change management and evolution of the service.

Expert Groups and other expert fora

Expert Groups provide expert advice for all systems for which a Business Committee is established and can be solicited for input in relation to other systems or services when required or appropriate. The following permanent Expert Groups are in place:

Operations & Technical Group (OTG)

Its mission is to analyse and review proposals and to formulate recommendations relating to operational, procedural, functional and technical aspects of the systems of EBA CLEARING.

Legal Advisory Group (LAG)

Its mission is to analyse and review proposals from a legal point of view and to formulate legal recommendations regarding the same. The LAG also assists in the monitoring of legal projects and formulates recommendations regarding the resourcing for given projects.

Treasury And Liquidity Group (TLG)

Its mission is to act as an advisory expert group relating to the management and use of liquidity within the systems operated by EBA CLEARING.

The Company may also establish other expert fora in accordance with identified needs. Aside from the FPAD Expert Group mentioned earlier, a EURO1 Payments Risk Forum was created in 2022 to foster discussion between the service participants on different contingency scenarios and measures, and to facilitate ad-hoc exchanges on payment processing and liquidity management matters in case of incidents.

4 Other stakeholders

Potential users and other stakeholders

Apart from the consultation and coordination with user and expert groups mentioned above, the Company organises roadshows and information sessions for wider stakeholder groups when and where relevant. Consultations may also take place on an ad-hoc basis.

Overseer and policy stakeholders

The Company's mission underpins its resolve to contribute to industry initiatives and to engage with industry and policy stakeholders, including regulators, overseers, the European Payments Council, standardisation bodies, and the constituencies entrusted with policy setting.

5 Management

Hays Littlejohn has been serving as CEO of EBA CLEARING since 1 May 2015.

The CEO is responsible for the day-to-day management of the Company, and delegates authorities to the Heads of Unit and staff of the Company. As per best practice and in line with the requirements of the SIPS Regulation, the Company has in place a set of codes and policies including a code of ethics and business conduct, a remuneration policy and a policy on selection, monitoring and removal of members of management.

Prior to his role as CEO of EBA CLEARING, Hays Littlejohn held managerial and executive positions in global transaction banking at UBS AG. Having joined the Swiss bank in 1991, Hays covered a wide range of areas during his international career at UBS, including information technology, operations, trade finance, product management, relationship management, sales, business development and market infrastructures. Hays also served on the Board of CLS and, for more than 10 years, on the Board of EBA CLEARING.

6 Country Representatives



EVA HERSKOVICOVA

Czech Republic, Hungary,
Poland, Slovakia and Slovenia



KATJA HEYDER

Austria, Bulgaria, Croatia,
Cyprus, Germany, Greece,
Liechtenstein, Luxembourg,
Malta, Romania, Spain and
Switzerland



ERWIN KULK

Portugal



DOINA NICOLICI

United Kingdom and Ireland



PETRA PLOMPEN

Belgium



DAVID RENAULT

France



JETTE SIMSON

Scandinavian Countries



FREDRIK TALLQVIST

Baltic countries and Finland



DANIELA VINCI

Italy



ANDRÉ VINK

The Netherlands

ENVIRONMENTAL, SOCIAL AND GOVERNANCE STATEMENT

EBA CLEARING is fully committed to continuously improving its overall performance in relation to sustainability and the Company's societal impact. In this sense, the Company has embedded Environment, Social and Governance (ESG) values into its corporate policies by setting guidelines for its Board, employees and providers in relation to their behaviour and actions, in line with the expectations of its stakeholders.

Concretely, in relation to Environment, the Company began in 2020 the process of implementing a comprehensive policy and framework to manage its environmental impact, in a phased approach, which is now embedded across the Company through its decision-making processes and long-term strategic planning.

In 2020, the Company created a task force with the mission of designing a framework around environmental protection and climate change efforts across the Company inspired by the ISO 14005 standard. In 2021, the Company decided to create the Green Steering Group, a permanent group tasked with actively supporting the Company in the management and implementation of its framework around environmental protection and climate change prevention.

In 2022, the Green Steering Group evolved into an Environmental, Social and Governance Steering Group, to support the Company in the management and implementation of not only environmental but also social considerations. Throughout 2022, the Company defined a framework reflecting this broader scope. It also took forward the implementation of environmental metrics to measure the impact of its efforts in this area and report progress to its governing bodies accordingly.

In addition, the staff of the Company undertook and contributed to a number of activities and initiatives with regard to environmental and social matters. Specifically, for climate change awareness and protection of the environment, EBA CLEARING has counted more than 90 separate actions within the scope of its own operations, in relation to waste reduction and recycling, water usage, energy efficiency, travel CO2 emissions and procurement. The staff also participated in a sustainability awareness campaign supported by the Company.

EBA CLEARING undertakes on an ongoing basis several activities under the umbrella of ‘Social’. These include the implementation of a number of policies to ensure compliance of the Company and its staff with all labour, data protection, anti-bribery, anti-corruption, health and safety and competition laws applicable to its operations. The Company also maintains a Code of Ethics and Business Conduct, which sets out the high-level standards of ethics and conduct required from all who work for and/or represent EBA CLEARING.

Further, EBA CLEARING attracts and actively supports its diverse workforce and is committed to fostering a work environment where all individuals are treated with respect, fairness and dignity. In this sense, the Company organises training to support staff in their continuous learning and development in this area.

In relation to Governance, as required by the Revised SIPS Regulation, EBA CLEARING has been maintaining a solid corporate governance framework, comprised of the Company by-laws and a set of corporate documents, processes and policies. These documents, processes and policies set out the governance

arrangements within EBA CLEARING. These arrangements have been determined to be effective in providing clear and direct lines of responsibility and accountability.

A detailed overview of the Company’s governance bodies and user say governance can be found under Corporate Governance.

In early 2023, the Company appointed a Sustainability Officer, who is in charge of supporting the achievement of the ESG Steering Group’s objectives. These mainly consist in continuing the measurement of performance in Environment, introducing metrics for Social and carrying out market research on the medium to long-term ESG objectives of peers, all whilst promoting staff awareness and engagement in this collective effort.

FINANCIALS

ROAD TO SUCCESS

The first usable light-emitting diode (LED) was developed in 1962. But it took five decades before LED light made its way into people's homes.

When the first LEDs for household-lamps entered the market in 2007, they were more energy-efficient and longer-lasting, but also more expensive than incandescent light bulbs. The success story of LEDs began when regulators across the globe mandated the phase-out of incandescent light bulbs. In the EU, they have been the new normal since 2012.

1962

FINANCIAL REPORT ON STATUTORY ACCOUNTS

Statutory accounts¹

EBA CLEARING completed the fiscal year 2022 with a new strong positive net result before consolidation of EUR 4.0 M.

The Company's cash position for 2022 was stable (EUR 26.4 M compared to EUR 26.9 M in 2021); EBA CLEARING still fulfils its obligations to cover General Business Risk, as foreseen under the SIPS Regulation.

The 2022 results show EBA CLEARING's continuing solid business performance, which again led to a continuous decrease of the Company's average costs per unit and further strengthened the Company's ability to self-fund a number of investments in new service features.

¹In the text of this section, the following abbreviations are used:
EUR for euro, K for thousands and M for millions.

Overview of revenues²

The revenue increased by EUR 3.1 M (+3.7% vs 2021), totalling EUR 87.5 M.

Profit & Loss Statement	2021	2022	2022 vs 2021
Fixed fees	22,521	22,641	120
Transaction fees	58,406	61,899	3,493
Other fees	3,413	2,931	(482)
Revenues	84,340	87,471	3,131

The revenue growth was mainly due to greater service participation as well as rising transaction volumes of the STEP2 SEPA, STEP2 Card Clearing and RT1 Services.

The fixed fee revenues remained stable at EUR 22.6 M versus EUR 22.5 M in 2021.

The transaction revenues for EURO1 remained stable due to fixed price arrangements. The total transaction fee revenues amounted to EUR 61.9 M, which is an increase of EUR 3.5 M compared to 2021 (+6%).

The revenues from other fees amounted to EUR 2.9 M, which corresponds to a decrease of EUR 482 K compared to 2021. Other fees are revenues from service agreements and one-off administrative fees related to provisioning, joining and exit fees.

²All figures in the tables of this section refer to year-end actuals (rounded) and are indicated in euro (EUR).

Overview of direct costs

The direct costs increased by EUR 3.5 M (+6% vs 2021), totalling EUR 59.3 M.

Profit & Loss Statement	2021	2022	2022 vs 2021
Operating charges	51,521	53,938	2,417
Other charges	4,298	5,401	1,103
Direct costs	55,818	59,339	3,521

Service-related operating charges from external providers amounted to EUR 53.9 M, which represents an increase of EUR 2.4 M compared to 2021. The operating charges increased in line with the transaction increase in STEP2-T and RT1. Other charges saw a growth of EUR 1.0 M, mainly because of an increase in amortisation related to past years' investments in the systems as well as Board-approved costs related to investments in new service features, such as the Fraud Pattern and Anomaly Detection (FPAD) project for the SEPA Services.

Gross margin

The gross margin decreased by EUR 0.4 M (–1.4% vs 2021), totalling EUR 28.1 M.

Profit & Loss Statement	2021	2022	2022 vs 2021
Revenues	84,340	87,471	3,131
– Direct costs	55,818	59,339	3,521
Gross margin	28,522	28,132	(390)

The evolution of the gross margin is slightly better than expected, thanks to the positive evolution of the STEP2-T and RT1 Services, enabling the Company to absorb the costs for new service features.

Overview of operating costs

The costs of operating the Company increased in 2022 totalling EUR 22.2 M.

Profit & Loss Statement	2021	2022	2022 vs 2021
Operating costs			
Human resources	13,816	14,185	369
External relations & communication	238	1,183	945
Consultancies	676	934	258
Equipment, services	2,388	2,681	293
Rent, premises, maint. & cleaning	1,463	1,556	93
Other expenses, taxes	359	1,156	798
Internal amortisation	490	518	28
Total operating costs	19,429	22,212	2,783

The Company restarted its normal business meetings and events after two years of reduced activity due to the pandemic. The Company also recruited additional staff with expertise to support the business growth and specific initiatives. The growth in revenue led to

higher taxes than in 2021. Consultancies as well as equipment and services costs supported the exploration of new business initiatives, such as IXB, throughout 2022.

Overview from gross margin to net result

Profit & Loss Statement	2021	2022	2022 vs 2021
Gross margin	28,522	28,132	(390)
– Total operating costs	19,429	22,212	2,783
Earnings before taxes	9,093	5,920	(3,173)
– Exceptional revenue, expense	(235)	(283)	(48)
– Income taxes and participation	3,220	2,206	(1,014)
Net result before consolidation	6,108	3,997	(2,111)

The earnings before taxes (EBT) amounted to EUR 5.9 M, which represents a decrease of EUR 3.2 M compared to 2021, resulting from a net decrease of the gross margin and higher operating costs.

The estimated income tax and participation item stands at EUR 2.2 M for 2022, resulting in a net income before consolidation of close to EUR 4.0 M.

For 2022, the Company has been able to further decrease the provision related to future tax liabilities, which explains the negative exceptional item of EUR 283 K.

Cash flow

The cash flow generated by the Company's activities in 2022 continues to be healthy.

Cash Flow Statement	2021	2022	2022 vs 2021
Result before consolidation	6,108	3,997	(2,111)
Depreciation & provision	2,524	3,467	943
Cash flow from operating activities	8,632	7,464	(1,168)

The net cash position of EBA CLEARING continues to be stable, going from EUR 26.9 M in 2021 to EUR 26.4 M at the end of 2022, thanks to a continuous growth of cash from operating activities.

Statutory balance sheet

Assets	2021	2022	2022 vs 2021
Current assets	Net value	Net value	Net value
Cash position	16,124	15,557	(568)
HLA reserves (cash)	10,807	10,810	2
Receivables	21,088	24,600	3,512
Total current assets	48,020	50,966	2,946
Fixed assets			
Intangible fixed assets	8,889	7,231	(1,658)
Tangible fixed assets	175	207	32
Intangible fixed assets – under construction	4,077	7,442	3,365
Tangible fixed assets – under construction	22	306	285
Financial fixed assets	5,910	6,165	254
Total fixed assets	19,074	21,352	2,278
Total assets	67,093	72,318	5,224
Liabilities	2021	2022	2022 vs 2021
Payables	23,600	24,796	1,197
Provision for risk and liabilities	852	882	30
Equity	42,641	46,639	3,998
Retained earnings & shareholders' equity	36,533	42,641	6,108
Result of the year	6,108	3,997	(2,111)
Total liabilities	67,093	72,318	5,224

Allocation of result of the year

The equity position of EBA CLEARING before consolidation with PRETA reached EUR 46.6 M with a net result of EUR 4.0 M. The equity position includes EUR 10.8 M in highly liquid assets, which are carried as a special reserve per the SIPS Regulation.

Since the creation of the Company, no dividends have been paid to Shareholders. It is proposed to maintain this policy and allocate the result of the period under report to retained earnings to support the continued growth of the Company.

EBA CLEARING'S SUBSIDIARY PRETA



During the period under report, EBA CLEARING's fully owned subsidiary PRETA S.A.S. met its objectives set for 2022 in terms of projected turnover. PRETA recorded a net profit of EUR 296 K. A provision for EUR 250 K in EBA CLEARING's accounts for depreciation of the shares of PRETA was reversed in 2022 given PRETA's current valuation.

Despite the context and uncertainties generated by the war in Ukraine, the increase in energy costs and inflation, a high number of merchants continued to express their interest in the MyBank solution thanks to growing brand awareness. There also is an increasing understanding in the market of the MyBank value proposition compared to the Open Banking-based approach: payees and PSPs especially recognise the benefits MyBank brings through its standardised messaging layer and ecosystem, enabling seamless and reliable end-to-end processing and automated reconciliation.

MyBank saw a 23% increase in terms of volumes and of 37% in terms of values compared to 2021; more than EUR 10 billion of goods and services were paid with MyBank in 2022. A new monthly transaction value record of EUR 1 billion was reached in December 2022. Throughout the year, PRETA put particular at-

tention on growing brand awareness through media coverage on specialised news sites, TV and radio channels in Italy as well as contributions to online conferences and webinars.

PRETA has the ambition to enter new markets in the course of 2023. The objective is to extend the reach of the solution into Portugal, Spain, Belgium and Austria and allow payers to pay for goods and services online with MyBank.

With regard to request to pay, PRETA concentrated on the delivery of RTP+ in 2022. The first module consists of a set of rules and operational guidelines between participating entities in their role of payer service providers and payee service providers within the SEPA Request-to-Pay (SRTP) Scheme to ensure the certainty of payment in the exchange of requests to pay for their customers, i.e. payers and payees. Going forward, the Company will continue its analysis to understand if current RTP+ participants require additional support for the take-up of request to pay through the development of functionalities within the cooperative space to reduce implementation costs and time to market.

APPENDICES

Appendix 1

List of EBA CLEARING Shareholders

Status: 15 May 2023

ABN AMRO Bank NV	HSBC Continental Europe
Allied Irish Banks Plc	ING Bank NV
Banca Monte dei Paschi di Siena SpA	Intesa Sanpaolo SpA
Banco Bilbao Vizcaya Argentaria SA	J.P. Morgan Chase Bank, NA
Banco BPM SpA	KBC Bank NV
Banco Comercial Português SA	Landesbank Baden-Württemberg
Banco de Sabadell SA	Landesbank Hessen-Thuringen (HELABA)
Banco Santander SA	MUFG Bank, Ltd
Bank of America Europe DAC	National Bank of Greece SA
Banque et Caisse d'Épargne de l'État	National Westminster Bank Plc
Banque Internationale à Luxembourg	Nordea Bank Abp
Barclays Bank Plc	Novo Banco SA
BNP Paribas SA	OP Corporate Bank Plc
BPCE	OTP Bank Plc
CaixaBank SA	Rabobank Nederland
Citibank Europe Plc	Raiffeisen Bank International AG
Commerzbank AG	Skandinaviska Enskilda Banken AB (publ)
Crédit Agricole SA	Société Générale
Crédit Mutuel – CIC Banques	Standard Chartered Bank AG
Danske Bank A/S	Svenska Handelsbanken
Deutsche Bank AG	Swedbank AB (publ)
DNB Bank ASA	UBS AG
DZ BANK AG	UniCredit Bank AG
Erste Group Bank AG	UniCredit SpA

Appendix 2

List of EURO1/STEP1
Participants

Status: 15 May 2023

Banca di Imola S.p.A.	STEP1 Bank	Commerzbank AG	EURO1 Participant
Banca Monte dei Paschi di Siena S.p.A.	EURO1 Participant	Crédit Agricole S.A.	EURO1 Participant
Banco Bilbao Vizcaya Argentaria S.A.	EURO1 Participant	CA-CIB – Crédit Agricole Corporate and Investment Bank	EURO1 Sub-Participant
Banco BPM S.p.A.	EURO1 Participant	LCL – Le Crédit Lyonnais	EURO1 Sub-Participant
Banco Comercial Português S.A.	EURO1 Participant	Danske Bank A/S	EURO1 Participant
Banco de Sabadell S.A.	EURO1 Participant	Deutsche Bank AG	EURO1 Participant
Banco Santander S.A.	EURO1 Participant	DNB Bank ASA, Filial Finland	EURO1 Participant
Banco Santander Totta, SA	EURO1 Sub-Participant	DNB Bank ASA, Norway	EURO1 Sub-Participant
Bank GPB International S.A.	STEP1 Bank	ERSTE Group Bank AG	EURO1 Participant
Bank of America Europe Designated Activity Company	EURO1 Participant	HSBC Continental Europe	EURO1 Participant
Banque Michel Inchauspé – BAMl	STEP1 Bank	ING Bank NV	EURO1 Participant
Barclays Bank Ireland Plc, Frankfurt branch	EURO1 Participant	Bank Mendes Gans N.V.	EURO1 Sub-Participant
BNP-Paribas S.A.	EURO1 Participant	ING Belgium N.V./S.A.	EURO1 Sub-Participant
Banca Nazionale del Lavoro S.p.A.	EURO1 Sub-Participant	Intesa Sanpaolo S.p.A.	EURO1 Participant
BNP Paribas Fortis (Fortis Bank SA/NV)	EURO1 Sub-Participant	J.P. Morgan SE	EURO1 Participant
BPCE	EURO1 Participant	J.P. Morgan SE, Dublin Branch	EURO1 Sub-Participant
BRED Banque Populaire	EURO1 Sub-Participant	J.P. Morgan SE, Luxembourg Branch	EURO1 Sub-Participant
NATIXIS	EURO1 Sub-Participant	KBC Bank N.V.	EURO1 Participant
BPER Banca S.p.A	STEP1 Bank	La Cassa di Ravenna S.p.A.	STEP1 Bank
CaixaBank S.A.	EURO1 Participant	MUFG Bank, Ltd., Paris branch	EURO1 Participant
Caixa Central de Crédito Agrícola Mútuo	STEP1 Bank	National Bank of Greece S.A.	EURO1 Participant
Cassa di Risparmio di Fermo S.p.A.	STEP1 Bank	Nordea Bank Abp	EURO1 Participant
Citibank Europe Plc	EURO1 Participant	OP Corporate Bank Plc	EURO1 Participant

Raiffeisen Bank International AG	EURO1 Participant
Société Générale	EURO1 Participant
Standard Chartered Bank AG	EURO1 Participant
Svenska Handelsbanken AB	EURO1 Participant
Swedbank AB (publ.)	EURO1 Participant
Swedbank AB, Lithuania	EURO1 Sub-Participant
Swedbank AS, Estonia	EURO1 Sub-Participant
Swedbank AS, Latvia	EURO1 Sub-Participant
UBS Europe SE, Germany	EURO1 Participant
UniCredit S.p.A.	EURO1 Participant
UniCredit Bank AG (Hypovereinsbank)	EURO1 Sub-Participant
UniCredit Bank Austria AG	EURO1 Sub-Participant

Appendix 3

List of Participants
in STEP2-T

Status: 15 May 2023

STEP2 SCT

ABN AMRO Bank N.V.

AION SA

Adyen B.V.

Aktia Bank Plc

Alisa Bank

Allied Irish Banks Plc

Alpha Bank Cyprus Ltd

APS Bank

Arbejdernes Landsbank A/S

AS LHV Bank

AS SEB Bank

AS TBB bank

Banca Carige SpA

Banca d'Italia

Banca Monte dei Paschi di Siena SpA

Banca Popolare di Sondrio SCPA

Banca Sella Holding SpA

Banco Bilbao Vizcaya Argentaria S.A.

Banco BPI S.A.

Banco BPM SpA

Banco Comercial Português S.A.

Banco Cooperativo

Banco de España

Banco de Sabadell S.A.

Banco Santander S.A.

Banco Santander Totta S.A.

Bank of Aland Plc

Bank of America Europe DAC

Bank of Cyprus Public Company Ltd

Bank of Greece S.A.

Bank of Ireland

Bank of Slovenia / Banka Slovenije

Bank of Valletta Plc

Bankinter S.A.

Banque de France

Banque de Luxembourg

Banque Delubac & Cie

Banque Eni S.A.

Banque et Caisse d'Épargne de l'État

Banque Internationale à Luxembourg S.A.

Barclays Bank Ireland Plc

Barclays Bank Plc

Barclays Bank UK Plc

Belfius Bank SA/NV

BFF Bank SpA

BGL BNP Paribas

BNF Bank Plc

BNP Paribas Fortis SA/NV

BNP Paribas S.A.

Bonum Bank Plc

BPCE

bpost SA

bpost Bank NV/SA

BRED Banque Populaire

Bunq B.V.

Caixa Central de Crédito Agrícola Mútuo

Caixa Economica Montepio Geral, SA

Caixa Geral de Depósitos S.A.

CaixaBank S.A.

Cassa Centrale Banca –

Credito Cooperativo Italiano SpA

Cassa Depositi e Prestiti SpA

Cecabank S.A.

Central Bank of Malta

Central Bank of Savings Banks Finland Plc

Central Cooperative Bank AD

Citibank Europe Plc

Commerzbank AG

Crédit Agricole S.A.

Credit Agricole Italia SpA

Crédit Mutuel Arkéa

Crédit Mutuel – CIC Banques

Credit Suisse (Schweiz) AG

Credito Emiliano SpA

Danske Bank A/S

De Nederlandsche Bank N.V.

Deutsche Bank AG

Deutsche Bundesbank

DNB Bank ASA

DZ BANK AG

Elavon Financial Services Limited

Erste Group Bank AG

First Investment Bank AD

Hellenic Bank Public Company Ltd

HSBC Bank Plc

HSBC Continental Europe

HSBC UK Bank Plc

ICCREA Banca SpA

ING Bank NV

ING Belgium NV/SA

ING Luxembourg SA

International Asset Bank AD

Intesa Sanpaolo SpA

J.P. Morgan SE

Jyske Bank AS

KBC Bank N.V.
 Klarna Bank AB (publ)
 La Banque Postale
 Lån & Spar Bank A/S
 Landesbank Baden-Württemberg
 Landesbank Hessen-Thüringen (HELABA)
 Latvijas Banka
 Lietuvos Bankas / Bank of Lithuania
 Lloyds Bank Plc
 Medirect Bank (Malta) plc
 Memo Bank
 MUFG Bank, Ltd
 Narodowy Bank Polski /
 National Bank of Poland
 National Bank of Slovakia /
 Národná Banka Slovenska
 National Westminster Bank Plc
 Nordea Bank Abp
 Novo Banco S.A.
 Novum Bank Ltd
 Oesterreichische Nationalbank
 OP Corporate Bank Plc
 OTP Bank Plc
 PayPal (Europe) S.a r.l. et Cie, S.C.A.
 Rabobank
 Raiffeisen Bank International AG
 Raiffeisen Landesbank Südtirol AG
 RCB Bank Ltd
 Revolut Bank UAB
 RiverBank S.A.
 S-Bank Ltd
 Santander Consumer Bank AG

SECB Swiss Euro Clearing Bank GmbH
 Skandinaviska Enskilda Banken AB (publ)
 Skandinaviska Enskilda Banken S.A.,
 Luxembourg
 Société Générale
 Société Générale Bank and Trust S.A.
 Spar Nord Bank AS
 Sparekassen Kronjylland
 Sparkasse Bank Malta Plc
 Standard Chartered Bank AG
 Svenska Handelsbanken AB
 Swedbank AB (publ)
 Sydbank A/S
 The Royal Bank of Scotland Plc
 UBS AG
 UBS Europe SE
 UBS Switzerland AG
 UniCredit Bank AG (HypoVereinsbank)
 UniCredit Bank Austria AG
 UniCredit SpA
 Western Union International Bank GmbH

STEP2 SDD CORE

ABN AMRO Bank N.V.
 AION S.A.
 Aktia Bank Plc
 Allied Irish Banks, Plc
 APS Bank
 AS LHV PANK
 Banca Carige SpA
 Banca d'Italia
 Banca Generali SpA
 Banca Monte dei Paschi di Siena SpA
 Banca Popolare di Sondrio SCPA
 Banco Bilbao Vizcaya Argentaria S.A.
 Banco BPI S.A.
 Banco BPM SpA
 Banco Comercial Português SA
 Banco Cooperativo
 Banco de Sabadell S.A.
 Banco Santander S.A.
 Banco Santander Totta S.A.
 Bank of America Europe DAC
 Bank of Greece S.A.
 Bank of Ireland
 Bank of Valletta Plc
 Bank of Slovenia / Banka Slovenije
 Banque de France
 Banque de Luxembourg
 Banque Delubac & Cie
 Banque Eni S.A.
 Banque et Caisse d'Épargne de l'État
 Banque Internationale à Luxembourg S.A.

Barclays Bank Ireland Plc
 Barclays Bank Plc
 Barclays Bank UK Plc
 Belfius Bank SA/NV
 BFF Bank SpA
 BGL BNP Paribas
 BNF Bank Plc
 BNP Paribas Fortis SA/NV
 BNP Paribas S.A.
 Bonum Bank Plc
 BPCE
 BPER Banca SpA
 bpost SA
 bpost Bank NV/SA
 BRED Banque Populaire
 Bunq B.V.
 Caixa Central de Crédito Agrícola Mútuo
 Caixa Economica Montepio Geral, S.A.
 Caixa Geral de Depósitos S.A.
 CaixaBank S.A.
 Cassa Centrale Banca –
 Credito Cooperativo Italiano SpA
 Cassa Depositi e Prestiti SpA
 Cecabank S.A.
 Central Bank of Malta
 Central Bank of Savings Banks Finland Plc
 Citibank Europe Plc
 Commerzbank AG
 Crédit Agricole S.A.
 Credit Agricole Italia SpA
 Crédit Mutuel – CIC Banques
 Crédit Mutuel Arkéa

Credit Suisse (Schweiz) AG
 Credito Emiliano SpA
 Danske Bank A/S
 De Nederlandsche Bank N.V.
 Deutsche Bank AG
 Deutsche Bundesbank
 DZ BANK AG
 Elavon Financial Services Limited
 Erste Group Bank AG
 HSBC Bank Plc
 HSBC Continental Europe
 HSBC UK Bank Plc
 ICCREA Banca SpA
 ING Bank NV
 ING Belgium NV/SA
 ING Luxembourg S.A.
 Intesa Sanpaolo SpA
 J.P. Morgan SE
 KBC Bank N.V.
 Klarna Bank AB (publ)
 La Banque Postale
 Landesbank Baden-Württemberg
 Landesbank Hessen-Thüringen (HELABA)
 Lietuvos Bankas / Bank of Lithuania
 Lloyds Bank Plc
 Memo Bank
 MUFG Bank, Ltd
 National Bank of Slovakia /
 Národná Banka Slovenska
 National Westminster Bank Plc
 Nordea Bank Abp
 Novo Banco S.A.

Oesterreichische Nationalbank
 OP Corporate Bank Plc
 PayPal (Europe) S.a r.l. et Cie, S.C.A.
 Rabobank
 Raiffeisen Bank International AG
 Raiffeisen Landesbank Südtirol AG
 Revolut Bank UAB
 RiverBank S.A.
 Santander Consumer Bank AG
 S-Bank Ltd.
 SECB Swiss Euro Clearing Bank GmbH
 Skandinaviska Enskilda Banken AB (publ)
 Société Générale
 Spar Nord Bank A/S
 Standard Chartered Bank AG
 Svenska Handelsbanken AB
 UBS Europe SE
 UniCredit Bank AG (HypoVereinsbank)
 UniCredit Bank Austria AG
 UniCredit SpA
 Western Union International Bank GmbH

STEP2 SDD B2B

ABN AMRO Bank N.V.
 AION S.A.
 Banca Carige SpA
 Banca d'Italia
 Banca Generali SpA
 Banca Monte dei Paschi di Siena SpA
 Banca Popolare di Sondrio SCPA
 Banco Bilbao Vizcaya Argentaria S.A.
 Banco BPI S.A.
 Banco BPM SpA
 Banco Comercial Português SA
 Banco Cooperativo
 Banco de Sabadell S.A.
 Banco Santander S.A.
 Banco Santander Totta S.A.
 Bank of America Europe DAC
 Bank of Greece S.A.
 Bank of Slovenia / Banka Slovenije
 Banque de France
 Banque de Luxembourg
 Banque Delubac & Cie
 Banque Eni S.A.
 Banque et Caisse d'Épargne de l'État
 Banque Internationale à Luxembourg S.A.
 Barclays Bank Ireland Plc
 Barclays Bank Plc
 Barclays Bank UK Plc
 Belfius Bank SA/NV
 BFF BANK SpA
 BGL BNP Paribas
 BNP Paribas Fortis SA/NV

BNP Paribas S.A.
 BPCE
 BPER Banca SpA
 bpost SA
 BRED Banque Populaire
 Bunq B.V.
 Caixa Central de Crédito Agrícola Mútuo
 Caixa Economica Montepio Geral, S.A.
 Caixa Geral de Depósitos S.A.
 CaixaBank S.A.
 Cassa Centrale Banca –
 Credito Cooperativo Italiano SpA
 Cassa Depositi e Prestiti SpA
 Cecabank S.A.
 Central Bank of Malta
 Citibank Europe Plc
 Commerzbank AG
 Crédit Agricole S.A.
 Credit Agricole Italia SpA
 Crédit Mutuel – CIC Banques
 Crédit Mutuel Arkéa
 Credit Suisse (Schweiz) AG
 Credito Emiliano SpA
 Danske Bank A/S
 De Nederlandsche Bank N.V.
 Deutsche Bank AG
 Deutsche Bundesbank
 DZ BANK AG
 Erste Group Bank AG
 HSBC Continental Europe
 ICCREA Banca SpA
 ING Bank NV

ING Belgium NV/SA
ING Luxembourg S.A.
Intesa Sanpaolo SpA
J.P. Morgan SE
KBC Bank N.V.
La Banque Postale
Landesbank Baden-Württemberg
Landesbank Hessen-Thüringen (HELABA)
Lloyds Bank Plc
Memo Bank
MUFG Bank, Ltd
National Bank of Slovakia /
 Národná Banka Slovenska
National Westminster Bank Plc
Nordea Bank abp
Novo Banco S.A.
Oesterreichische Nationalbank
Rabobank
Raiffeisen Bank International AG
Raiffeisen Landesbank Südtirol AG
Santander Consumer Bank AG
SECB Swiss Euro Clearing Bank GmbH
Skandinaviska Enskilda Banken AB (publ)
Société Générale
Spar Nord Bank A/S
Svenska Handelsbanken AB
UBS Europe SE
UniCredit Bank AG (HypoVereinsbank)
UniCredit Bank Austria AG
UniCredit SpA
Western Union International Bank GmbH

Appendix 4

List of STEP2 CC Participants

Status: 15 May 2023

Citibank Europe Plc
Commerzbank AG
Deutsche Bank AG
Landesbank Hessen-Thüringen (HELABA)
Santander Consumer Bank AG
UniCredit Bank AG (HypoVereinsbank)

Appendix 5

List of RT1 Participants

Status: 15 May 2023

ABN AMRO Bank N.V.	BGL BNP Paribas	Illimity Bank SpA	TeamBank AG
AION SA	BNP Paribas Fortis NV/SA	ING Belgium NV/SA	UniCredit Bank AG
Aktia Bank Plc	BNP Paribas SA	Intesa Sanpaolo SpA	UniCredit Bank Austria AG
AS LHV Pank	Bonum Bank Plc	J.P. Morgan SE	UniCredit SpA
AS SEB Pank	BPER Banca	KBC Bank	
Banca Generali SpA	BRED Banque Populaire	Klarna Bank AB (Publ)	
Banca Nazionale del Lavoro SpA	Bunq B.V.	La Banque Postale	
Banca Patrimoni Sella & C. SpA	Caixabank S.A.	Landesbank Baden-Wuerttemberg	
Banca Popolare di Sondrio	Cassa Centrale Banca –	Landesbank Hessen-Thuringen	
Banca Sella Holding SpA	Credito Cooperativo Italiano	Latvijas Banka / Lietuvos bankas	
Banca Sella SpA	Cecabank	Memo Bank	
Banco Bilbao Vizcaya Argentaria S.A.	Central Bank of Savings Banks Finland Plc	N26 Bank GmbH	
Banco BPM SpA	Citibank Europe PLC	Nordea Bank Abp	
Banco Sabadell S.A.	Commerzbank AG	OP Corporate Bank Plc	
Banco Santander S.A.	Coop Pank AS	Raiffeisen Bank International AG	
Bank of Aland Plc	Credit Agricole Italia SpA	Raiffeisenlandesbank Oberoesterreich AG	
Bank of America Europe DAC	Crédit Agricole SA	Revolut Bank UAB	
Banque et Caisse d’Epargne de L’Etat	Crédit Mutuel Arkéa	Santander Consumer Bank AG	
Banque Fédérative du Crédit Mutuel	Danske Bank A/S	S-BANK PLC	
Banque Internationale à Luxembourg	Deutsche Bank AG	Skandinaviska Enskilda Banken AB (publ)	
Barclays Bank Ireland PLC	DZ BANK AG	Société Générale	
BAWAG P.S.K. Bank f. Arbeit u. Wirtschaft	Erste Group Bank AG	Svenska Handelsbanken AB (publ)	
u. Oesterreichische Postsparkasse AG	FinecoBank SpA	Swedbank AB	
Belfius Bank SA	FlatexDEGIRO Bank AG	Swedbank AS	
BFF Bank SA	HSBC Continental Europe	Targobank	

Annual Accounts for 2022

The annual accounts for 2022 (and for 2021) are available separately.

GIVING WAY TO THE UNDERDOG

In 1899, the first electric car hit the market, but ultimately had to give way to the combustion engine. Advances in battery technology, combined with the climate crisis, have led to an increased commercial interest in electric cars over the last decade. Since the pandemic, electric car sales have increased tenfold. In 2022, more electric cars were sold worldwide per week than in all of 2013.

1899

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