
STEP2-T PFMI Disclosure Report EBA CLEARING

May 2023

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Responding institution:

ABE CLEARING S.A.S. à capital variable (EBA CLEARING), hereafter referred to as “the Company”

Registered office:

40 Rue de Courcelles, 75008 France RCS Paris 419 020 193 Authorised share capital: €200,000

Jurisdiction(s) in which the FMI operates:

EU

Authority(ies) regulating, supervising or overseeing the FMI:

STEP2-T is overseen by the European Central Bank (ECB) as lead overseer, with the involvement of the national central banks of the Eurosystem. STEP2 Card Clearing service is overseen by the Deutsche Bundesbank as lead overseer, with the involvement of the ECB.

STEP2-T is classified as a Systemically Important Payment System (SIPS). The list of payment systems in the eurozone and their classification can be found at:

<https://www.ecb.europa.eu/press/pr/date/2014/html/pr140821.en.html>

https://www.ecb.europa.eu/ecb/legal/pdf/en_ecb_2014_36_f_sign.pdf

The date of this disclosure is 12 May 2023.

This disclosure can also be found at <https://www.ebaclearing.eu/about-eba-clearing/at-a-glance/reference-documents/>

For further information, please contact regulatory@ebaclearing.eu

I. Executive summary

EBA CLEARING is a provider of pan-European payment infrastructure solutions. Founded in 1998 by 52 banks, the Company is owned by 48 banks operating in Europe as of the date of this disclosure and is based on a country-neutral governance model. The payment systems of EBA CLEARING are pan-European by design and desire: they are developed in line with the Company's multinational user community needs and in close co-operation with best-of-breed technology partners.

EBA CLEARING aims to allow cost optimisation for its users and is not seeking 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 and is committed to discharging these responsibilities.

STEP2-T is a pan-European Automated Clearing House, processing retail payments in euro. EBA CLEARING launched it in 2003, following the decision to implement a retail payment system based on direct bank participation of all EU Member States with the objective to eliminate bank-internal routing costs, reduce reconciliation costs, enforce straight-through processing standards and ensure operational resilience.

The system is one of the key clearing and settlement mechanisms in the Single Euro Payments Area (SEPA), both in terms of processing volumes and participating institutions. As a cornerstone of the SEPA processing infrastructure, STEP2-T provides full reach for SEPA Credit Transfers and Direct Debits to over 11.000 payment service providers across all SEPA countries.

As of end 2021, over 150 Participants are directly connected to the STEP2 System to exchange and settle SEPA files every day; 155 Participants in SEPA Credit Transfer (SCT) and 117 Participants in SEPA Direct Debit (SDD). Since the launch of SEPA, EBA CLEARING has endeavoured to list all Scheme-adhering PSPs in the routing table(s) of the respective STEP2 SEPA Service(s), so that all other PSPs know how to reach them.

In September 2022, the daily average volumes in the STEP2 SEPA Services stood at 71.6 million processed transactions; and the daily value average of 75.7 billion in SCT; 6.65 billion in SDD Core; and 3.65 in SDD B2B.

STEP2-T has to comply with: (a) the four criteria for SEPA-compliant infrastructures defined by the ECB (processing capabilities, interoperability, reachability, choice of participants¹) and (b) the European Payments Council (EPC) Scheme Rulebooks and Implementation Guidelines for the SEPA Credit Transfer Scheme as well as for the SEPA Direct Debit Core and B2B Schemes².

The STEP2-T System is governed by the STEP2 System Documentation, including in particular the

¹ <https://www.ecb.europa.eu/pub/pdf/other/singleeuropaymentsarea200707en.pdf>

² <https://www.europeanpaymentscouncil.eu/about-sepa/sepa-political-legal-and-regulatory-framework>

STEP2-T Rules and Regulations. The STEP2-T Rules and Regulations comprehensively cover the rights and obligations arising from participation in the system. The STEP2-T System Documentation is governed by German law.

2021 saw the activation of the Continuous Gross Settlement (CGS) mechanism in the STEP2-T System, which is governed by the German law. All documents forming part of the System Documentation continue to be governed by and construed in accordance with the laws of the Federal Republic of Germany. The STEP2-T community completed the CGS migration successfully on 12 July 2022. During that the transition period, the CGS mechanism and the cycle-based settlement model co-existed to enable a phased, risk-minimising migration of the large STEP2-T user community. From a payment sending and receiving as well as from a reporting perspective, the changes for the participants were kept to a minimum.

The move to CGS was followed by further upgrades to the STEP2-T System in 2022. These enhancements have enabled the STEP2 SEPA Services to process payment transactions around the clock, seven days a week, and provide settlement results to participants within minutes.

The Principles for Financial Market Infrastructures (PFMIs) are the international standards for financial market infrastructures, i.e., payment systems, central securities depositories, securities settlement systems, central counterparties and trade repositories and issued by the Committee on Payments and Market Infrastructures (CPMI) and the International Organisation of Securities Commissions (IOSCO). The PFMIs are part of a set of 12 key standards that the international community considers essential to strengthening and preserving financial stability.

The PFMIs are implemented in the euro area by the ECB Regulation (EU 795/2014)³ on Oversight Requirements for Systemically Important Payment Systems (SIPS Regulation) as amended by ECB Regulation (EU 2017/2094⁴ and 2021/728⁵). It covers both large-value and retail payment systems of systemic importance, whether operated by the Eurosystem's national central banks or private entities. In 2014, STEP2-T and EURO1 were identified by the ECB as Systemically Important Payment Systems (SIPS). As a consequence, STEP2-T is overseen by the ECB as "Competent Authority" within the meaning of the SIPS Regulation, with the involvement of the national central banks of the Eurosystem.

As an operator of SIPS, EBA CLEARING must ensure that it meets the requirements of the SIPS Regulation. Article 20(5) of the SIPS Regulation sets out that "a SIPS operator shall complete and disclose publicly responses to the CPSS-IOSCO Disclosure framework for financial market infrastructures." Therefore, Section IV of this document contains a detailed description of how EBA CLEARING ensures compliance with the requirements for STEP2-T as outlined in the PFMIs. Section V includes various public sources for additional information about EBA CLEARING and STEP2-T.

³ <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32014R0795>

⁴ <https://eur-lex.europa.eu/eli/reg/2017/2094/oj>

⁵ [EUR-Lex - 32021R0728 - EN - EUR-Lex \(europa.eu\)](https://eur-lex.europa.eu/eli/reg/2021/728/oj)

Section II of the present document presents a summary of the changes in the system since the last disclosure report.

Section III provides the general background of the Financial Market Infrastructure (FMI).

Section IV is comprised of a principle-by-principle summary narrative disclosure and **Section V** provides links to public references and resources.

II. Summary of changes since the last update of the disclosure report

The following paragraphs detail the summary of the key changes that have impacted the STEP2-T system since May 2021:

As part of the Functional Release in November 2021, mandatory changes were implemented in the STEP2 SCT service, SDD CORE and B2B to reflect the European Payments Council (EPC) SCT Rulebook 2021, Inter-PSP Implementation Guidelines, as well as the SDD CORE and B2B Rulebooks.

EBA CLEARING also provided compatibility with the v3.0 version of the EBICS protocol to maintain the highest levels of efficiency and security for the exchange of files between the STEP2-T System and its participants. A mapping between the existing order types and the new Business Transaction Formats (BTF) was done allowing backward compatibility with the current version (v2.5) until November 2022.

In July 2022, EBA CLEARING successfully concluded the migration to the continuous gross settlement (CGS) mechanism for STEP2-T. The migration to CGS is part of a major upgrade of the STEP2-T System, which allows users to shorten end-to-end processing timelines for SEPA payments submitted in files from hours to minutes, for the benefit of European businesses and consumers. With this achievement, STEP2-T Participants from 28 countries are using this settlement mechanism and extending full reach for SEPA payments via this enhanced settlement mechanism to payment service providers across to Europe.

Most Recent Changes to the System

With the introduction of the CGS settlement mechanism, the STEP2-T System has become a payment system providing for the continuous execution of payments in immediately available euro-denominated central bank funds. The processing of bulks and settlement of resulting bilateral payment orders occurs in real-time on a transaction-by-transaction basis, and bilateral payment orders are settled immediately or at the latest at the end of the business day provided that sufficient funds are available.

With the continuous gross settlement, STEP2 SEPA transactions are settled in a continuous manner, provided there is sufficient liquidity available. This new settlement mechanism further entails an alignment of the liquidity management of the system with the other EBA CLEARING Services, in particular RT1, EBA CLEARING's Instant Payments System.

These evolutions provide participants additional controls to ensure timely processing of their payments and enhanced resilience for the system. In parallel, work was done on further evolving the business practices of the system, per request of the users in close consultation with the STEP2 Business Committee as well as with the Treasury and Liquidity Group, with the objective to define best practices supporting the smooth and timely processing of the bilateral gross settlement instructions throughout the day.

CGS provides the sorting, forwarding, and execution of high-volume bulk payment orders between entities admitted to participate in the system for the purpose of the execution of SEPA credit transfers and SEPA direct debits under the relevant SEPA schemes of the EPC.

Finally, STEP2-T settlement is processed using an RTGS-like model, based on continuous gross settlement. The principle of continuous gross settlement is that the processing of bulk transactions occurs continuously during the periods the system is open for settlement, and bilateral payment instructions are settled immediately (provided funds are available), as in other RTGS systems such as TARGET. The system will queue any bilateral payment instructions that cannot be processed immediately. At the end of the business day, transactions in the queue that have not been settled will be cancelled. Each participant provides funds for its own payments for which it acts as the debtor party. The need to introduce and control liquidity and credit risks is avoided by implementing an RTGS system design. For valid transactions, STEP2-T created sub-files by grouping all the transactions in the bulk for the same "Instructed Agent BIC" and for each of these sub-files a bilateral gross settlement instruction is created.

STEP2 Functional Releases 2022

EBA CLEARING implemented functional releases in Q2 2022 and in Q4 2022, which include the main changes listed below.

Q2 2022 (effective as of 11 June 2022):

- *Adjustment of the CGS LAC Schedule*

The cut-offs of LAC04 and LAC05 are updated from 07:00 to 08:30 CET respectively (instead of 07:30 to 09:30) to ease transactions settlement, especially for PSPs not adhering to the night-time settlement aligning the output delivery with the existing cycle (to the extent possible).

- *Enhancements of CGS reporting and information functions*

The LMR file will be enriched with the reference of the ICF/IDF original bulk identification for each LCR. The reconciliation report (DRR) will also include additional information. This change, together with that of Q4 2022 (i.e., reconciliation information for Originator PSP), enhances and eases the reconciliation process at the Originator Bank side.

- *New queries for CGS liquidity management*

Stemming from the 2021 Users consultation, additional functionalities were added to make sure the RTGS DCA is timely and sufficiently funded. The CGS module were enhanced to implement an A2A message interface with the specific functionalities: (1) GetLiquidity to retrieve the available liquidity on the designated CGS settlement position (BIC), (2) GetTransaction to retrieve the status of an LCR. The A2A queries are supported over all the connectivity channels available (SWIFTNet, SIANet, and EBICS) to send and receive files to and from STEP2-T.

- *API connectivity over SWIFTNET*

The change aims to allow participants to use json RESTful API over SWIFTNet to interact with

STEP2 Services and the CGS module.

Q4 2022 (effective as of 21 November 2022):

- *API Enhancements*

SCT and SDD Core and B2B API parameters have been changed to make them optional (before they were mandatory).

- *Liquidity management enhancements*

The change enhances some functionalities related to LCR management, in detail: (1) LCR Details command on CGS module available via DPWS and API have been enriched with the fields Credit Party BIC and Debit Party BIC, (2) LCR List and LCR Details via API were enriched with an indication to state if the amount is to be debited (e.g. “D”) or credited (e.g. “C”).

- *Reconciliation information*

Stemming from the 2021 Users consultation, the Originator PSP (SCT) will receive details of the transactions settled; i.e. a report that contains the details of the settlement at the transaction level. The aim is to help the Originator Bank with the reconciliation process in the SCT service.

- *EBICS*

Within the scope of 2022 changes, the new version of the EBICS protocol (v3.0) introduced in Q4 2021 entered into force as of November 2022 (i.e. backward compatibility with the version v2.5 ended in November 2022). EBICS users migrated to the new version and use the new Business Transaction Format (BTF) to replace the order types.

- *More frequent output files (SCT)*

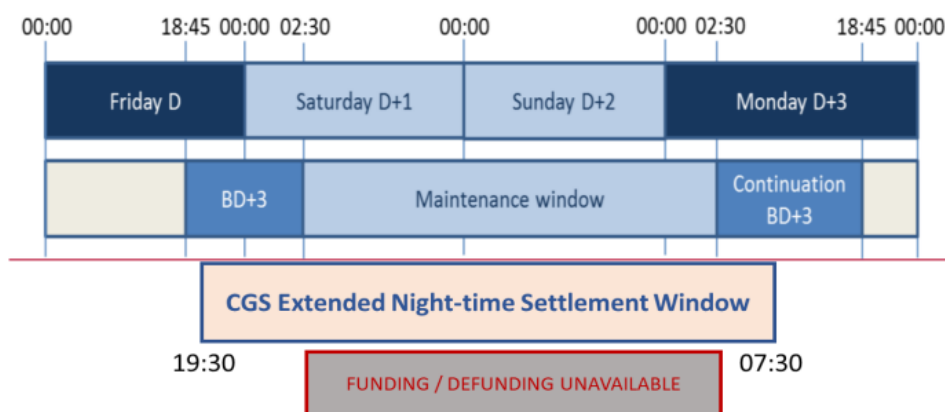
Stemming from the 2021 Users consultation, there will be more frequent distribution of output files. This change enables individual participants to opt-in for more frequent output generation and delivery every 30 minutes in addition to the distribution at the end of each LAC, as is the case today and which will remain the default option.

- *Extended opening hours (SCT) – live in November 2022*

CGS is based on dedicated liquidity on a technical account in TARGET, it is technically possible to continue processing while TARGET is closed. Funding needs to be anticipated ahead of such a TARGET closing window.

The SCT service as well as the CGS module will be open for processing on weekends and non-TARGET days. This would be an extension of the night-time settlement window; it will leverage also on future RTGS timings – which starts every Friday evening at 19:30 CET (Business date: next Monday) then stops on Saturday at 02:30 CET and resumes at 02:30 CET on Monday (unless Monday is a TARGET holiday, then Tuesday at 02:30 CET).

Maintenance windows will be planned during weekends allowing the regular infrastructure updates and technical releases to take place; in particular during the SWIFT Allowable Downtime Windows (ADW).



Impact stemming from T2/T2S consolidation:

The new RTGS platform resulting from the consolidation of TARGET2 and T2S and their migration to ISO20022 impacted the Ancillary Systems such as STEP2-T and their participants. The T2 RTGS migration was postponed until March 2023 and went live on 20 March 2023.

- *Connection via ESMIG*

Alike any TARGET2 Participant, STEP2-T will connect to the new platform via ESMIG. STEP2-T's interface to TARGET2 (T2I) has been updated to connect via ESMIG and to use the Business Application Header (BAH) as described in the RTGS UDFS. This change should have had no direct impact on STEP2-T Participants.

- *Ancillary System Procedures*

Due to the migration to CGS and the decommissioning of the cycle-based settlement mechanism, a number of ASI procedures will not be applicable in the new RTGS.

- *TARGET2 Notifications*

The migration to the new RTGS platform essentially impacts STEP2-T Participants through the notifications of debits and credits and account statements that are delivered in XML format.

It also has an impact on the timings of some specific TARGET phases of the Business Day. The TARGET maintenance windows' schedule changed as follows:

- Weekends and TARGET Closing Days: (non-optional) maintenance window start from 02:30 CET on the first closing day until 02:30 CET on the next business day.
- Optional Maintenance window: any other Business Day (i.e., Tuesday to Friday) not following a TARGET closing day, from 03:00 to 05:00 CET.

Participants have to register in the relevant settlement group of accounts and indicate the DCA number that will be used for settlement procedures of STEP2-T, i.e., Liquidity Transfers with the Technical Account and Remuneration. The migration to the new RTGS platform impacts the

messages type to perform liquidity transfers and the type of notifications received by participants upon execution of a liquidity transfer of their RTGS DCA.

Liquidity Transfers (funding / defunding), as well as Automatic Liquidity Adjustments are not possible during the mandatory/optional maintenance windows. However, CGS processing will continue during the TARGET maintenance period. In the case of optional maintenance in TARGET, the Liquidity Adjustment at the start of LAC4 might be either cancelled or postponed until 5:00 CET when TARGET will resume operations. It is assumed that the optional maintenance in TARGET will be an exceptional event.

Other upcoming key changes:

The updated STEP2-T legal documentation that took effect on 21 November 2022, as well as in March 2023 reflects the phase out of the transition period of the cycle-based settlement, the definition of the “processing day” that was amended to reflect the extension of operating hours beyond TARGET, and some further updates on terminology. Additional changes are detailed in the STEP2 Functional Release of Q4 2022 and Q1 2023.

Finally, the EPC has decided to migrate all SEPA schemes to the version 2019 of ISO20022 XML standards in November 2023.

III. General background on the FMI

General description of the FMI and the markets it serves

EBA CLEARING is a provider of pan-European payment infrastructure solutions. Founded in 1998 by 52 banks, the Company is owned by 48 of the major banks operating in Europe and based on a country-neutral governance model. The payment systems of EBA CLEARING are pan-European by design and desire: they are developed in line with the Company's multinational user community needs and in close co-operation with best-of-breed technology partners.

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, thereby ensuring excellence and robustness in delivering our services. EBA CLEARING maintains 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 market infrastructure solutions provider.

EBA CLEARING aims to allow cost optimisation for its users and is not seeking 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 and is committed to discharging these responsibilities.

EBA CLEARING manages two Systemically Important Payment Systems, the large-value euro payment system EURO1, and STEP2-T, a pan-European payment infrastructure system for retail payments in euro across Europe processing SEPA Credit Transfers and Direct Debits.

EURO1, launched in 1999, is a large-value payment system for single same-day euro transactions at a pan-European level. The EURO1 system processes transactions of high priority and urgency, and primarily of large amount, both at a domestic and at a cross-border level.

Since 2003, EBA CLEARING has been managing and operating the STEP2-T system, a pan-European Automated Clearing House (ACH) for retail payments in euro, which has been offering SEPA services since January 2008. Today, the STEP2-T system extends SEPA-wide reach to over 4,800 financial institutions through its SEPA services and is one of the key euro retail payment systems in Europe.

Leveraging the STEP2-T infrastructure, EBA CLEARING also offers STEP2 Card Clearing Service (STEP2-CC), a dedicated system for the clearing and settlement of pre-authorised card-based transactions based on the SEPA Card Clearing Framework. It is currently used for clearing and settling debit card transactions under the German girocard scheme.

In 2017, with the support of 39 funding institutions from across SEPA and its technology partner SIA at the time, which has now merged into NEXI PAYMENTS, EBA CLEARING implemented RT1, a pan-European real-time payment infrastructure system for euro transactions. The system is open to any AS-PSP adhering to the EPC's SCT Inst Scheme and has handled instant payments in line with the scheme since its launch.

General organisation of the FMI

EBA CLEARING was created in the form of a *société par actions simplifiée* (SAS) under French law registered with the Paris Trade and Company Register (RCS Paris) and its head offices are located in Paris, France.

The by-laws of EBA CLEARING as amended with effect as of 05 March 2021, are publicly available on the website of EBA CLEARING at <https://www.ebaclearing.eu/about-eba-clearing/at-a-glance/reference-documents/>.

EBA CLEARING currently has 48 shareholders. Each shareholder holds one share and has one vote at the Shareholders Meeting. The list of shareholders is publicly available on the website of EBA CLEARING at <https://www.ebaclearing.eu/about-eba-clearing/corporate-governance/the-shareholders/>.

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. EBA CLEARING's by-laws provide 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 the Shareholders Meeting for a renewable three-year term.

The Board is assisted by five Board Committees in carrying out its functions:

- the Audit & Finance Committee (AFC)
- the Board Risk Committee (BRC)
- the Strategy and Policy Committee (SPC)
- the Remuneration Committee (RemCo)
- the Nomination and Governance Committee (NGC)

The mission and activities of the Board Committees are set forth in each Committee's Terms of Reference and reflected in the Company's Annual Report.

In addition, the following expert groups have been created and are consulted on the matters under their expertise:

- Operations and Technical Group
- Treasury and Liquidity Group
- Legal Advisory Group

The responsibility for the day-to-day management rests with the Chief Executive Officer (CEO). The CEO reports to the Board. Heads of Units have delegated power for managing the activities relating to their units. The roles attributed to the various Units coincide with the functions required for carrying out the activities of EBA CLEARING.

Since 2015, a single Service Development and Management Unit has been entrusted with the management of the EURO1/STEP1, STEP2, and RT1 Services, with dedicated senior managers being assigned to the service lines respectively as well as to marketing, user relations and new initiatives.

EBA CLEARING applies a three-lines-of-defence approach for its risk management, ensuring different levels of control. The Chief Risk Officer and the Internal Audit function are independent and have a dotted reporting line to the Board Risk Committee and to the Audit and Finance Committee respectively.

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 EBA CLEARING management. During these meetings, ongoing activities and projects are discussed and user feedback is requested. In the context of specific projects, steering groups and task forces may be created to ensure efficient exchanges throughout the project or initiative. Furthermore, the Company organises individual user visits and, when appropriate or desired, roadshows and information campaigns.

An identical structure has been adopted for user consultation for the two SIPS operated by the Company. Two Business Committees have been established:

- the EURO1 Business Committee
- the STEP2 Business Committee

Business Committees are consultative bodies providing recommendations to the Board. Business Committees are chaired by a Board member.

A dedicated corporate governance section, setting forth the governance arrangements, lines of responsibility, Board and management role and composition, and relations with stakeholders is included in the Annual Report. A report on the risk management and internal control functions is equally included in the Annual Report. The Annual Report is publicly available on the website of the Company at <https://www.ebaclearing.eu/about-eba-clearing/at-a-glance/reference-documents/>.

Further, the composition and mission of the Board is published on the website of EBA CLEARING at <https://www.ebaclearing.eu/about-eba-clearing/corporate-governance/the-board/> and <https://www.ebaclearing.eu/about-eba-clearing/at-a-glance/mission-and-objectives/> respectively.

Legal and regulatory framework

EBA CLEARING, the SIPS operator of EURO1 and STEP2-T, is a limited liability company incorporated under French law in the form of a *société par actions simplifiée à capital variable*. The Company has branches in Belgium and in Germany, and representative offices in Italy and Finland.

EBA CLEARING's role is primarily that of a 'business administrator'. The Company is not interposed in STEP2-T transactions, does not incur any rights or obligations arising from the sending and receiving of Payment Orders in STEP2-T and does not own participants funds, whether on a fiduciary basis or otherwise.

STEP2-T is governed by the STEP2-T System Documentation, including in particular the STEP2-T Rules and Regulations. The STEP2-T Rules and Regulations comprehensively cover the rights and obligations arising from participation in the system. The STEP2-T System Documentation is governed by German law.

With the introduction of CGS, the System Operator took the opportunity to align the legal framework of STEP2-T with the other systems it operates. The material aspects of the STEP2-T System and relevant activities continue with the CGS mechanism being unambiguously governed by German law. All documents forming part of the System Documentation continue to be governed by and construed in accordance with the laws of the Federal Republic of Germany. An updated version of the Legal memorandum issued by external counsel to EBA CLEARING was created to substantiate the Company's self-assessment and the legality of the different components of the design of the CGS settlement mechanism.

A legal opinion, in a form satisfactory to the System Operator and to the Overseer, was obtained under the governing law of the system, and is regularly updated. Further, it is a condition for admission to a STEP2 Service of a participant that a capacity opinions is provided.

The Company selects technology partners and makes available to users their services and technology, namely processing services using software and technical infrastructure commissioned from Nexi Payments and calculation and interface capacities using software and technical infrastructure commissioned from Swift.

The STEP2-T System is a real-time gross settlement payment system, which provides for the continuous execution of payments in immediately available euro-denominated central bank funds. The processing of bulks and the settlement of the resulting bilateral Payment Orders occurs in real-time, and bilateral Payment Orders are settled, provided that sufficient funds are available. The system provides for the sorting, forwarding, and execution of high-volume bulk Payment Orders between participants in the system for the purpose of the execution of SEPA credit transfers and SEPA direct debits under the relevant SEPA schemes of the European Payment Council

Each Payment Order in the STEP2-T System is settled upon the occurrence of the transfer of funds held on the TARGET technical account from the balance of the paying participant (reduction of

balance) to the balance of the paid participant (corresponding increase of balance). The settlement of a Payment Order requires that the amount of the Payment Order does not exceed the paying participant's balance. If the relevant participant's balance held in the TARGET technical account is sufficient to settle a Payment Order, such order will be simultaneously accepted for settlement and settled. If the relevant participant's Funds Balance is insufficient for a Payment Order to be settled, such Payment Order will be queued. Queued Payment Orders will be settled as soon as the relevant participant Funds Balance is sufficient (using, where appropriate, optimisation algorithms) or, if not settled by the settlement cut-off time at the end of the day, cancelled.

Participants may include entities that have a Swift BIC or equivalent business identifier code for which a participant has been appointed (a reachable BIC) in the routing tables maintained for STEP2-T. Payment orders are not allocated to reachable BICs but constitute payment orders of, or, as applicable, addressed to the participant. The relationship between a participant and a reachable BIC for which the participant is acting in relation to the receipt or forwarding of messages contained in files is exclusively governed by their respective bilateral arrangements and is outside of the context of STEP2-T.

The use of networks for the sending and receiving of files containing payment and other messages to and from the STEP2-T system is outside of the scope of the STEP2-T system. Each entity that is a participant is responsible for its contractual relationship with its network provider(s).

STEP2-T, on which the STEP2 SEPA Services are running, is designated under the Settlement Finality Directive (SFD)⁶ and settles in central bank money in TARGET.

Following the identification of STEP2-T as a systemically important payment system under the SIPS, EBA CLEARING is overseen by the ECB and the Eurosystem's national central banks which monitor the compliance of the Company and the payment systems it operates with the requirements covered in the SIPS Regulation.

In addition, STEP2 has to comply with the four criteria for SEPA-compliant infrastructures defined by the ECB (processing capabilities, interoperability, reachability, choice of banks) and the EPC Scheme Rulebooks and Implementation Guidelines for the SEPA Credit Transfer Scheme as well as for the SEPA Direct Debit Core and B2B Schemes.

The STEP2-T System

STEP2-T is a pan-European Automated Clearing House, processing retail payments in euro. Launched in 2003, following the decision to implement a retail payment system based on direct bank participation from all EU Member States with the objective to eliminate bank-internal routing costs, reduce reconciliation costs, enforce straight-through processing standards and ensure operational resilience.

Today, the system is one of the key clearing and settlement mechanisms in the SEPA, both in terms

⁶ [EUR-Lex - 31998L0026 - EN - EUR-Lex \(europa.eu\)](#)

of processing volumes and participating institutions. As a cornerstone of the SEPA processing infrastructure, STEP2-T provides full reach for SEPA Credit Transfers and Direct Debits to payment service providers across all SEPA countries.

STEP2-T has been a major building block of SEPA. The timely delivery of its SEPA services as well as the processing capacity, operational robustness and rich functionality of the system made STEP2-T the system of first choice of many Eurozone communities during the SEPA migration. It allows payment service providers to send and receive SEPA Credit Transfers and Direct Debits to and from any counterparty in Europe through one channel. A growing number of banks and banking communities across Europe are taking advantage of this single channel approach for both their domestic and cross-border SEPA transactions. It provides fast and reliable processing and settlement of SEPA Credit Transfers and SEPA Direct Debits to its participants all across SEPA.

STEP2-T allows participants from the different SEPA countries to exchange payments directly. Routing tables enable reach to all other banks offering SEPA payments which are not STEP2-T Participants. Creating reach through this concept has proven to be a most efficient way for payment service providers (PSPs) to route their payments all over Europe and an effective integration factor for the European payments markets.

Today, over 150 Participants are directly connected to the STEP2-T system to exchange and settle SCT or SDD files every day. On the STEP2 routing tables, there are more than 11,000 PSPs from all over SEPA. Since the launch of SEPA, EBA CLEARING has endeavoured that all Scheme-adhering PSPs are listed in the routing table(s) of the respective STEP2 SEPA Service(s), so that all other PSPs know how to reach them.

STEP2-T and 15 other SEPA CSMs have established interoperability, which facilitates reach to around 20 percent of the 4,700 reachable BICs listed in the STEP2 SCT routing table. The STEP2-T reachability model enables participants to comply with their obligation to be reachable in SEPA. The model is based on:

- **open access:** any SEPA CSM can channel payments via STEP2 on behalf of its participants and designate a participant for settlement in TARGET.
- **central routing tables:** all participants that can be addressed via the STEP2 SEPA Services are listed in the routing table(s) of the respective service(s), to show that they are reachable. Participants that are reachable through STEP2-T Participants are themselves neither participants nor reachable BICs in the system.
- **standard formats:** the use of standard SEPA formats by all SEPA CSMs enables a seamless exchange of data between the infrastructures.
- **direct exchange of files between the CSMs involved:** CSMs that interoperate with STEP2-T send and receive files of payments, validation reports, settlement information and reconciliation reports directly to/from STEP2-T over one of the currently supported networks.

- **settlement obligation for payment messages sent or received via STEP2-T by other SEPA CSMs:** the settlement obligation is assumed by financial institutions enabling the protections of payments under the Settlement Finality Directive.

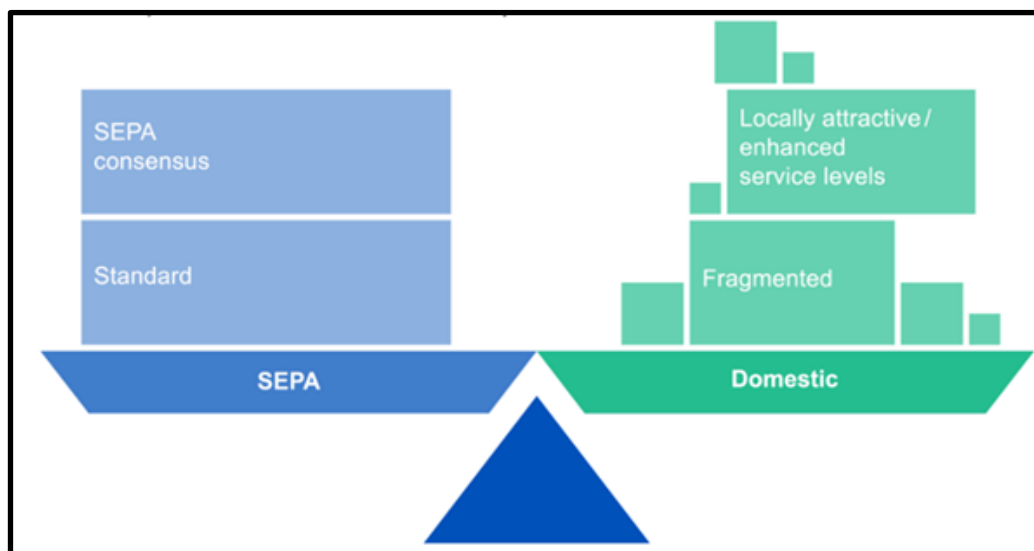


Fig.1 Balancing the PSPs' different needs in SEPA

As per EBA CLEARING's user say governance⁷, STEP2-T is intrinsically user-defined and has evolved as a result of user requirements. Practicality and costs for the users are prime considerations underlying the design of the system, without compromising the resilience and robustness of the system and its compliance with oversight requirements.

In August 2014, the STEP2-T System has been classified as a systemically important payment system by the European Central Bank and is held to the highest oversight requirements.

AOS, VAS and Rulebook Scheme options

The EPC Framework allows for Additional Optional Services (AOS) to accommodate the different customer needs and expectations across SEPA. AOS are services agreed between a closed user group of SEPA participants, usually a national community, that are not covered by the EPC SCT or SDD Scheme Rulebooks. The development of AOS allows best-of-breed innovation to enter into the schemes and enables them to evolve over time.

All AOS introduced by one or more communities are listed on the EPC website. They should be available for use by any PSP that wishes to offer this service and should not impact the participants

⁷ see corporate governance section of EBA CLEARING website for more details:
<https://www.ebaclearing.eu/about-eba-clearing/corporate-governance/user-say-governance/>

that are not members of the user group.

Additional Optional Services supported by STEP2-T

The STEP2-T System was designed with the flexibility to include additional features for a group of participants on a closed user group basis. The system currently supports the following AOS:

- acceptance date field, which is used to ensure local compliance in Finland (AOS1)
- extended remittance information, which enables creditors to reference multiple invoices and credit notes in one payment (AOS2).
- account transferability, which is used to ensure local compliance in Italy by seamlessly transferring a payment received for a customer who has left the bank to the new bank (AOS3)
- Greek character set, which can be used as long as a bilateral agreement exists between the sending and the receiving bank
- Slovakian specific symbols for payment identification for SCT, which can be used as long as a bilateral agreement exists between the sending and the receiving bank
- Non-Target Day Settlement for Participants who choose to configure for exchange and settlement in CGS also for Non-TARGET days.

Any community interested in an AOS may request its implementation on the STEP2-T System. As a pan-European provider, EBA CLEARING also works with its user community on harmonising requirements across communities where possible. The objective is to deliver AOS satisfying the needs of several national communities.

Value-added services supported by STEP2-T

The STEP2-T System supports the following value-added services (VAS):

The Change of Account Identification (CAI) option allows participants to inform each other via a standardised identification modification advice message (camt.022.001.02) about changes in the PSP or account details of a customer. CAI is based on the ISO 20022 “Account Modification Advice” message and already in use in France. EBA CLEARING has removed the annual fee for the CAI option in order to promote it as a standardised solution for the exchange of account information messages across SEPA. In consultation with its user community, EBA CLEARING will align its format with the ones used in France to further facilitate its usage.

SEPA COM Pacifique supports the exchange of credit transfers and direct debits in the SEPA formats between banks in the French SEPA territories FR, GP, RE, MQ, GF, PM, BL, MF and YT and in the non-SEPA overseas territories New Caledonia (NC), French Polynesia (PF) as well as the Wallis and Futuna Islands (WF), which together are known as “SEPA COM”.

Dutch Statutory Direct Debit Tax Collection enables Participants in a closed user group to use a specific value in the Local Instrument field for SDD Core collections as per a local practice defined by the Dutch Payment Association.

STEP2 Stand Alone Testing Partner

The STEP2 Stand Alone Testing Partner is a web-based service that allows participants of various STEP2 Services to simulate a testing partner available to submit and receive transactions to the STEP2 System. Access to the tool can be granted by the EBA CLEARING Customer Support Unit (ICU).

System Design and Operations

Functionality and technology

STEP2-T provides a state-of-the-art network-independent processing engine, which is based on global XML-based ISO standards and fully compliant with the EPC SCT and SDD Scheme Rulebooks and Implementation Guidelines.

The system ensures full straight-through processing of all transactions in the interbank space and offers its users the most advanced standard functionality based on the latest technology.

Payment cancellation and recall functionality: STEP2-T provides its participants with the possibility to cancel sent payments after they have been validated but before they have been settled, using a payment cancellation request (camt.056) message. If the payment has already been settled, the message will be forwarded to the beneficiary bank as a Request for Recall in accordance with the EPC Scheme Rulebook requirement.

Network independence: Participants can connect to the STEP2-T central system through SwiftNet, SIANet, Nexi Payments and EBICS. Participants can use two networks in parallel for sending files to STEP2. For receiving their files, participants use a primary channel, which can be switched intraday to a pre-configured secondary channel if the default channel is affected by a technical issue. This intra-day channel switch feature helps banks to mitigate processing risks.

Machine-readable routing tables: EBA CLEARING publishes routing tables of all reachable entities for each STEP2 Service, one week ahead of the monthly activation date. They are distributed through a secure network in machine-readable format for automatic import into the banks' participants' systems and are also available for download. The routing tables contain further information on which Additional Optional Services (AOS), optional settlement cycles and processing options each bank has subscribed to.

Interactive workstation: Participants have access to an interactive workstation for the monitoring of files and payments, the Participant Web Station (DPWS).

Via the DPWS, users can directly:

- monitor their real-time bilateral liquidity balances against other participants and against the system
- view the status of individual files, bulks or payments
- request details on archived payments
- ask for the re-transmission of a file

- cancel transactions or create a bilateral relationship with any other participant to exchange files in the batch processing mode

Liquidity reports: Two new reports were added stemming from the Continuous Gross Settlement (CGS) module with the objective to provide regular information on the processing of the LCRs in the CGS module (LMR) and provide alerts when liquidity is reaching certain thresholds (LNR).

Reconciliation reports: STEP2 SCT Service delivers files of settled payments, returns and positive answers to recalls to the receiving participants (SCF files) and reconciliation reports summarising the activity since the previous checkpoint (Payment and Settlement Report – PSR). By default, STEP2 SCT delivers output files after the end of each LAC. The PSR is transmitted to the participants shortly after each checkpoint in the CGS settlement mechanism. The information included in the PSR allows participants to reconcile the transactions processed during a specific LAC. At the end of a STEP2-T Business Day, reconciliation information is forwarded to all participants in files (Daily Reconciliation Report, DRR). All files are designed to be machine-readable. Participants may also choose to receive monthly statistical information on the usage of the STEP2 system to assist data retrieval.

This set of advanced standard features optimally supports participants in managing their payment traffic on the STEP2-T system and their own processing capacities in a very efficient and flexible manner.

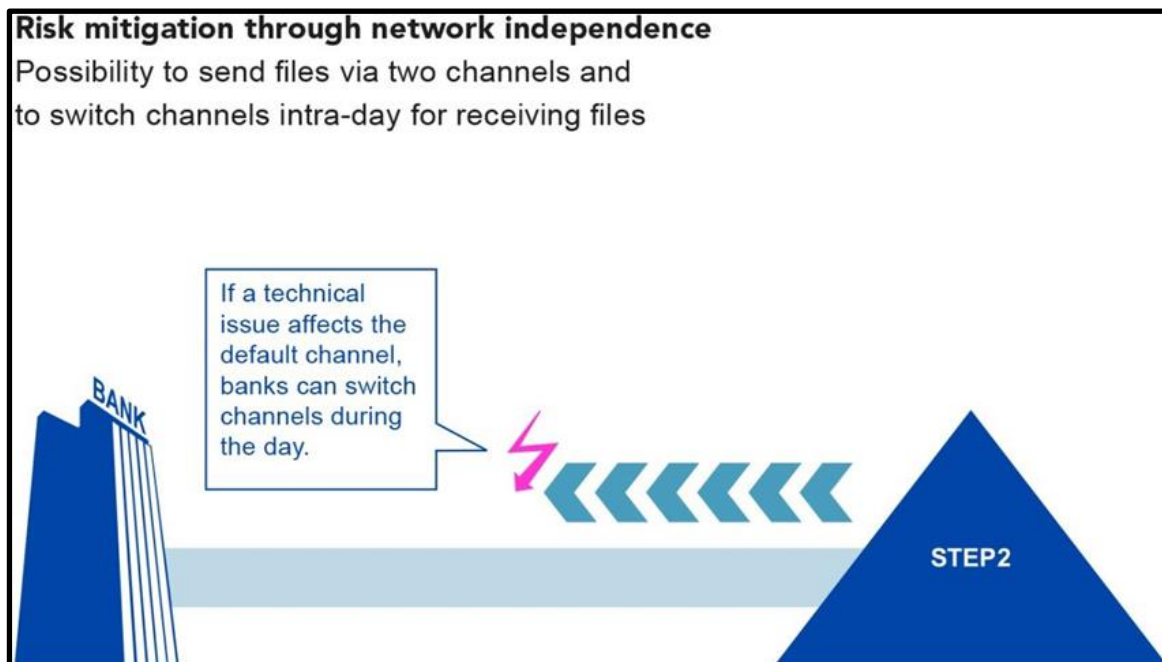


Fig.2 - Network independence in STEP2-T

Processing modes

STEP2-T offers different processing modes depending on the requirements of sender and receiver: All participants are included by default in the CGS processing mechanism.

Participants may optionally join the batch processing mode in addition, which is applied only to designated payment files exchanged with nominated counterparties and offered at considerably lower cost.

Participants opting for the use of STEP2-T to exchange high volumes of SEPA payments can additionally benefit from a committed volume pricing (CVP) pricing option, which further reduces their transaction fees for both single and batch processing modes.

Both processing methods offer secure and reliable payment processing. The CGS processing mechanism is adapted for cross-border usage, since it includes carrying out a wide range of business validation at the level of STEP2-T. The batch processing mode is useful for the exchange of large volumes of domestic and/or recurrent payments among a smaller group of participants.

Sorting and validation differences

Sorting:

Upon receipt of the input files (ICF/IDF) and validation of the individual transactions, the STEP2-T System sorts the bulks into so-called “Sub-files” according to the receiving participant.

In the batch processing mode, the sending bank will sort and group payments for counterparties with whom they have agreed to exchange payments in this mode. As a result, STEP2-T does not have to re-sort millions of payments into new files: after the necessary checks, the system simply delivers to the receiving parties the pre-sorted files submitted by the sending participant.

Validation checks for both modes:

STEP2-T provides real-time validation of files, reporting back for each file whether the payments inside have been accepted for processing or rejected. STEP2-T checks that:

- the file is encrypted, signed, and received over a secure network, which supports non-repudiation
- the security credentials of the sender are correct by validating them against stored business data
- the same file has not been previously sent
- the receiver of the payments is present in the respective STEP2-T routing table with the correct status
- the number of payments in the file is the same as the number of payments reported in the file header
- the amount in the file header equals the sum of the amounts in the individual transactions
- the XML schema format is respected

STEP2-T ensures that:

- mandatory fields are present
- no forbidden fields are present
- field lengths are respected
- field formats are respected

With respect to the CGS mechanism validated batches generate one single sub-file and thus, one single bilateral instruction.

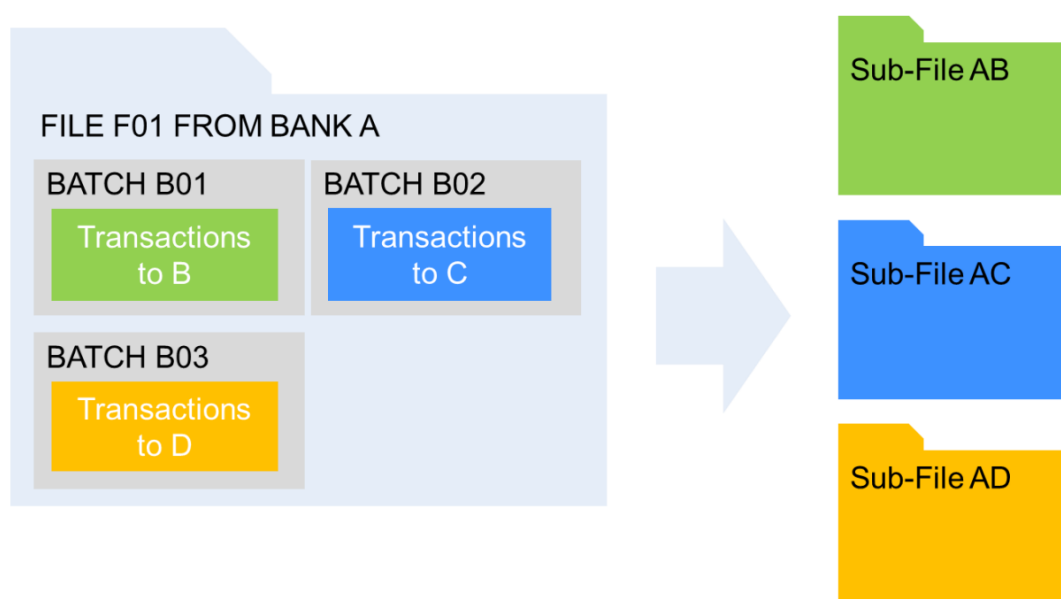


Fig. 3 STEP2 Batch processing in CGS

STEP2 SCT, SDD Core and SDD B2B

STEP2-T is fully compliant with the EPC Scheme Rulebook and Implementation Guidelines of the EPC. It processes a high volume of mass retail payments sent to the system through a secure network. Participation in STEP2-T, i.e., being able to send and receive transactions from the service, is restricted to entities operating in SEPA.

In addition to the technical processing features, business practices have been introduced in relation to the handling of payments in a wider, "end-to-end" approach.

The key features that the STEP2-T System offers to participants are:

- fully Scheme-compliant payment processing
- send - settle - deliver principle
- highly automated processes of maximum resilience
- full Straight-Through-Processing (STP) of all transactions including R-transactions, such as

returns

- use of ISO 20022 standards
- multiple intra-day liquidity check points and optional night-time liquidity check points
- payment warehousing, which allows participants to choose in advance on which date a payment should be processed
- monitoring facilities via the Participant Web Station (DPWS), which provides real-time information on liquidity balances, the status of payments in the system, and routing table information.

By using the STEP2-T System, participants can:

- benefit from the low entry costs, from competitive transaction pricing and the fastest delivery channel;
- provide their customers with a high-level Scheme-compliant service;
- decrease costs by reaching SEPA financial institutions through one access point, by using one channel with one standard interface and by integrating their liquidity for retail SEPA payments in one place.

STEP2-T has the following generic functions:

- **Returns:** returns can be sent/received mixed with other payments or in separate files.
- **Resending of settlement instructions:** this feature enables the resending of failed settlement instructions in order to limit the occurrence of cases when settlement is not completed and leads to the sending of cancelled payments.
- **Payments and files warehousing:** payments or files sent ahead of the value date are warehoused and released to the system on the value date.
- **Cancellation of warehoused files and payments:** a web service allows cancellation of warehoused payments prior to the start of the relevant processing cycle.
- **Online services:** participants can inquire upon the status of their payment instructions using an interactive Workstation. Additionally, they can download the entire up-to-date routing table.

STEP2 SEPA Core Direct Debit (SDD Core)

SDD Core provides banks in the Single Euro Payments Area with an interbank processing infrastructure for domestic and pan-European direct debits. The SDD Core Service on the STEP2-T system validates, routes, clears, settles and delivers direct debit collections in line with the Scheme Rulebooks of the European Payments Council for SEPA Core Direct Debits.

STEP2 SEPA Business-to-Business Direct Debit (SDD B2B)

SDD B2B provides banks in the Single Euro Payments Area with an interbank processing infrastructure for domestic and pan-European direct debits. The SDD B2B Service on the STEP2-T system validates, routes, clears, settles, and delivers direct debit collections in line with the Scheme Rulebooks of the European Payments Council for SEPA B2B Direct Debits.

Key features of STEP2-T

Each Payment Order (as defined in the STEP2-T System Rules) is settled on a continuous real-time basis by a payment in euro-denominated central bank funds which Participants may transfer for such purpose to a dedicated technical account in TARGET-ECB (Settlement Account).

The settlement of Payment Orders is supported by using in TARGET the real-time gross settlement ancillary system settlement procedure (RTGS AS Settlement Procedure D) in line with the Settlement Account Agreement. EBA CLEARING entered this agreement with the European Central Bank (ECB) as the operator of TARGET-ECB by which the relevant provisions of the TARGET Guideline are implemented (the Participation Agreement can be amended from time to time).

Pursuant to the Participation Agreement, the ECB has opened a dedicated technical account for STEP2-T in TARGET-ECB, the so-called Settlement Account. On the Settlement Account, central bank funds denominated in euro are paid in by the participants from their RTGS DCA in TARGET (Funding Transfers). A Funding Transfer occurs when the amount thereof is credited to the Settlement Account to increase a participant's Funds Balance (and simultaneously debited to the relevant RTGS DCA).

The central bank funds credited to the Settlement Account constitute funds of the participants. EBA CLEARING as the designated holder of the Settlement Account is not the holder of such funds or any related monetary rights, whether in a fiduciary capacity or otherwise. The legal ownership structure for those funds ensures that at any time they belong to the participants and are insulated from any risks affecting EBA CLEARING, including Insolvency.

Each participant is the holder of a specified amount of the central bank funds credited to the Settlement Account (Funds Balance). Participants may use any amount of their Funds Balance to make payments within STEP2-T (STEP2 Payments) or withdraw funds from the Settlement Account to their RTGS DCA in TARGET (Withdrawals), in each case up to the amount of their Funds Balance. A Withdrawal occurs when the amount thereof is debited to the Settlement Account (and simultaneously credited to the relevant RTGS DCA).

The amount of such central bank funds owned by a participant (i.e., its Funds Balance) is increased by the amount of each Processed Payment Order in relation to which such participant is the Payee. Such increase of the central bank funds held by the Payee occurs in real time immediately upon the Processing of the related Payment Order and constitutes a payment (as well as the settlement of the related Payment Order) in central bank funds.

A Participant's Funds Balance is continuously determined and recorded by the Data Processor IT System used for STEP2-T and is, at any time in respect of a participant's Settlement BIC, equal to (a) all credits to the Settlement Account resulting from its Funding Transfers in respect of such Settlement BIC, plus (b) all STEP2 Payments received by such participant in respect of such Settlement BIC, minus (c) all STEP2 Payments made by such participant in respect of such Settlement BIC, minus (d) all debits to the Settlement Account resulting from its Withdrawals or any

Interest Deductions in respect of such Settlement BIC. For avoidance of doubt, as per the STEP2-T Rules, a participant's Funds Balance cannot be negative and the sum of all Funds Balances (being zero or positive), is at all times equal to the total amount of Funds credited to the Settlement Account. Each Funds balance is continuously determined and recorded by the Data Processor IT System.

During the opening times of TARGET, each participant may at any time cause a Withdrawal, i.e., a transfer of its central bank funds in the Settlement Account to its RTGS DCA in TARGET by way of an electronic withdrawal instruction, thus exercising full and exclusive control over its central bank funds in the Settlement.

A participant's fund balance in the technical account (always positive or at a minimum equal to zero) is adjusted in real time upon settlement of each individual bilateral payment instruction of which the STEP2-T Participant is the recipient or sender.

Clearing and Settlement

Payment Orders within STEP2-T ("Payment Orders") are settled using the CGS mechanism according to the following rules, which are set out in the STEP2-T Documentation:

(a) Participants are able to send files, including bulks of individual payment messages (credit transfers as well as direct debits) to STEP2-T. These files are sorted into sub-files and validated so that each sub-file contains individual payment messages of the same message type addressed to the same BIC address with the same intended interbank settlement date. The STEP2-T System Documentation specifies that each validated sub-file constitutes a Payment Order for the purposes of STEP2-T.

(b) Each Payment Order is settled (i.e., carried out within the meaning of Article 3(1) SFD) by the execution of a STEP2 Payment from the participant specified in such Payment Order as the payer (Payer) to the participant specified in such Payment Order as the payee (Payee) in the aggregated amount of all individual payment messages included in the relevant sub-file.

(c) Each STEP2 Payment is executed in real time by a simultaneous reduction of the Funds Balance of the Payer of the relevant Payment Order and increase of the Funds Balance of the Payee of the relevant Payment Order, each in the amount of the relevant Payment Order. This simultaneous adjustment of the Funds Balances of the Payer and the Payee is defined in the STEP2-T System Documentation and constitutes an equal and simultaneous adjustment of the related Funds Balances (Processing of the relevant Payment Order).

(d) The Data Processor IT System shall Process each Payment Order during the relevant Settlement Window⁸ on the Interbank Settlement Date specified in the relevant Payment Order, provided that

⁸ The Settlement Windows designate the period of time during the business day in which the STEP2 settlement module is open for the processing of Payment Orders (resulting from the set of positively validated messages sorted in sub-files). Settlement Windows' timings/duration/numbers vary depending on the STEP2 Services,

the Funds Balance of the Payer is determined by the Data Processor IT System to be sufficient for such Funds Balance not to become negative as a result of such Processing (including by way of an Optimisation Mechanism).

(e) Payment Orders that are not immediately Processed at the point in time at which they are included in the settlement process as a result of an insufficient Funds Balance of the relevant Payer will be queued until such Funds Balance is sufficient in order to Process the relevant Payment Order. To determine if a Payer's Funds Balance is sufficient for the Processing of a Payment Order, bilateral and multilateral optimisation algorithms similar to those used in other RTGS systems such as TARGET are used.

If the relevant Payer's Funds Balance remains insufficient for the Processing of a Payment Order and such Payment Order is not Processed by the relevant settlement cut-off time (Settlement Cut-off Time) at the end of the intended interbank settlement date, such Payment Order is cancelled.

Settlement and Finality

Final settlement takes place no later than the end of the intended settlement date.

Article 9 of the SIPS Regulation requires that a SIPS Operator establishes rules and procedures to enable final settlement to take place no later than at the end of the intended settlement date. This requirement is met in the STEP2-T System by respective provisions in the STEP2-T System Documentation as well as in the technical specifications of STEP2-T pursuant to which:

- Processing of Payment Orders occurs during one or more Settlement Windows on the intended interbank settlement date specified in the relevant Payment Order, provided that the amount of the relevant Payment Order does not exceed the Funds Balance of the relevant Payer (using, where appropriate, optimisation algorithms).
- If the relevant Payer's Funds Balance remains insufficient for the Processing of a Payment Order and such Payment Order is not Processed by the relevant Settlement Cut-off Time at the end of the intended interbank settlement date, such Payment Order is cancelled, as noted above. This means that settlement of any Payment Orders only takes place on the intended interbank settlement date, no unsettled Payment Order survives the intended interbank settlement date, and no settlement is deferred to the next business day of STEP2-T.

Resilience and business continuity

The STEP2-T System is a highly resilient processing system with full disaster recovery features and operational procedures that are regularly practised with the user community and the operator. It provides the following key benefits:

e.g. SCT has night time and day time settlement windows, whilst SDD Core and B2B only have a day time settlement window.

A scalable processing engine: the STEP2 Services are based on a highly efficient and robust processing engine capable of handling all the SEPA traffic if needed.

A highly experienced operator: the technical provider and operator of the STEP2-T System is Nexi Payments, one of the largest financial processors in Europe. The Nexi Payments processing environment offers state-of-the-art technology with high resilience and security features.

Three processing sites: the primary site maintained by Nexi Payments runs in cluster configuration with data sharing facility and a power distribution layout that has a fully radial configuration. The second processing site, also maintained by Nexi Payments, is equivalent to the primary site and works in a synchronous mode, meaning that all data is replicated in real time. Moreover, the STEP2-T infrastructure has a third processing site to ensure business continuity in case of a regional disaster.

Three operations centres for system monitoring: EBA CLEARING runs three separate operations centres in different countries. Two of these independent sites operate in parallel mode during the processing day. The three sites are engaged in a regular rotation of shifts and ensure a constant monitoring of the different STEP2 Services.

Customer support for operations-related queries and emergency situations: The Investigations and Customer support Unit (ICU) is EBA CLEARING's single point of contact for all operations-related queries.

Several channels and tools for incident and crisis communication: while the common language is English, customer support is additionally provided in other languages by the multilingual staff.

Crisis simulation exercises: these exercises are organised on an annual basis. Their main objective is to test the functionality of the disaster recovery arrangements, both in terms of file sending/receiving and connectivity to participants' workstations.

ISO 27001 certification: since January 2013, EBA CLEARING's Information Security Management System, which is geared at managing and securing the Company's information assets, has been certified as ISO 27001-compliant. In early 2022, the Company's Information Management System was re-certified to the ISO 27001:2013 standard.

Admission & default rules

In order to fulfil the admission criteria for STEP2-T, a participant must:

- be authorised to act as a credit institution within the meaning of Article 4(1) point (1) of Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012 (CRD);

- either: (i) have TARGET account access, i.e., have the status of a direct participant in TARGET and hold and have access to an RTGS Dedicated Cash Account (DCA) with the central bank operating the respective TARGET component system or (ii) have an agreement with a liquidity provider that has the status of a direct participant in TARGET and holds and has access to an RTGS DCA with the central bank operating the respective TARGET component system;
- be able to comply with the technical and operational requirements of the STEP2-T System, including requirements aiming at ensuring availability of the participant during the operational times of the system and the participant's ability to send STEP2 files in the required format;
- have its registered office in a Member State of the EU, the EEA or the OECD, or a country or territory which is part of SEPA;
- participate in the system via its registered office or a branch located in the geographical area of SEPA;
- adhere to the corresponding SEPA Scheme Rulebook of the European Payments Council; and
- provide a capacity opinion, with respect to its participation in each relevant STEP2 Service.

In addition to the above, for each of the STEP2 SEPA Services (SCT, SDD Core and SDD B2B), it is a condition for admission that the applicant adheres to the corresponding SEPA Scheme Rulebook of the European Payment Council.

Participants may include in the routing tables, maintained for STEP2-T, entities which have a BIC (ISO9362) for which a participant has been appointed (a "reachable BIC"). Reachable BICs do not send or receive payment orders directly through STEP2-T; all payment orders are included in the files sent and received by the participants they are associated with. The relationship between a participant and a reachable BIC for which the participant is acting in relation to the receipt or forwarding of messages contained in files is exclusively governed by their respective bilateral arrangements and is outside of the context of the STEP2-T System.

Exclusion, suspension, and withdrawal from the STEP2-T System

The occurrence of a suspension or exclusion event and the consequences thereof for the suspended/excluded participant and for the other participants are determined solely in accordance with the STEP2-T System Documentation.

In particular, the Rules of the STEP2-T System list in an exhaustive manner the events giving rise to exclusion/suspension, describe the method for identifying an event giving rise to exclusion/suspension and detail the consequences of a suspension and of an exclusion.

Operational issues of a participant will be addressed in first instance through the activation of incident handling and, as applicable, crisis management arrangements.

Exclusion

Events that may give rise to exclusion comprise in particular:

- insolvency or comparable situations (unless an exclusion or suspension would contravene legislation implementing the EU Bank Recovery and Resolution Directive (BRRD) or equivalent third country legislation)
- dissolution of the participant
- relocation of registered office outside of the countries listed in the Participation Criteria
- loss of banking licence
- termination of TARGET access
- failure to remedy a Suspension Event within 30 calendar days

Suspension

The occurrence of a suspension event shall give rise to temporary suspension of a participant in the STEP2-T System. The suspension events could be summarised as follows:

- insolvency or comparable situations (unless an exclusion or suspension would contravene legislation implementing the EU Bank Recovery and Resolution Directive (BRRD) or equivalent third country legislation)
- dissolution of the participant
- relocation of registered office outside of the countries listed in the Participation Criteria
- loss of banking licence
- relocation outside of SEPA or dissolution of the branch through which the participant participates in the relevant STEP2 Service(s)
- loss of access to the communication network used to participate in the system
- failure to pay applicable fees due for a period of more than 30 consecutive calendar days
- suspension of TARGET access
- failure to comply with the technical and operational requirements of the system
- where the continued participation of the participant threatens the orderly operation and integrity of the system

Consequences of Suspension/Exclusion

Subject to the specific provisions of the STEP2-T Rules, in the event of Suspension or Exclusion, no payment orders will be processed in relation to an excluded or suspended participant (in the case of suspension, as long as the suspension continues). Payment orders to or from an excluded or suspended participant that cannot be processed will be cancelled at the end of the relevant settlement day.

Withdrawal from the system

A STEP2-T Participant can withdraw from the system by giving notice – at least five TARGET Business Days in advance – of terminating the System Agreement.

Basic statistical data

The average daily volumes and values on a monthly basis are published on the public website: STEP2 SCT: <https://www.ebaclearing.eu/services/step2-sct/statistics/>

STEP2 DD Core: <https://www.ebaclearing.eu/services/step2-sdd-core/statistics/>

STEP2 DD B2B: <https://www.ebaclearing.eu/services/step2-sdd-b2b/statistics/>

A monthly statistical country report on the SDD Core and SDD B2B Services, including on the R-transactions, reason codes and technical rejections, is available to all participants on EBA CLEARING Customer Portal. These reports are also made available to the EPC and to the ECB.

A dedicated statistical report on operational performance is made available via the EBA CLEARING user portal.

IV. Principle-by-principle summary narrative disclosure

STEP2-T has been classified as a SIPS falling under the SIPS Regulation implementing the PFMI for payment systems in the euro area, and notification of such classification was made to EBA CLEARING on 21 August 2014.

The below table details how STEP2-T complies with the Principles for Financial Market Infrastructures applicable to payment systems.

Principles	Summary of compliance
<p>Principle 1: Legal Basis (Article 3 SIPS Regulation) An FMI should have a well-founded, clear, transparent, and enforceable legal basis for each material aspect of its activities in all relevant jurisdictions</p>	<p>STEP2-T has a well-founded legal basis under all relevant jurisdictions.</p> <p>It is governed by the STEP2-T System Documentation, which include inter alia the STEP2-T Rules and Regulations, which comprehensively cover the rights and obligations arising from participation in the system. The STEP2-T System Documentation is governed by German law.</p> <p>The STEP2-T System is included in the list of designated systems under the Directive 98/26/EC of the European Parliament and of the Council of 19 May 1998 on settlement finality in payment and securities settlement systems (Settlement Finality Directive or SFD) since 2009. Considering admission and participation criteria, STEP2-T thus benefits from the application of the SFD protections.⁹ https://www.esma.europa.eu/sites/default/files/library/designated_payment_and_securities_settlement_systems.pdf.</p> <p>A legal opinion, in a form satisfactory to the System Operator and to the Overseer, has been obtained under the governing law of the system, and is periodically updated. Further, capacity opinions must be provided by each</p>

⁹ The SFD aims at reducing the systemic risk associated with participation in payment and securities settlement systems, and in particular the risk linked to the insolvency of a Participant in such a system. In particular, the SFD obliges Member States to ensure that transfers orders and netting should be legally enforceable under all EU jurisdictions and binding on third parties, that transfer orders cannot be revoked after a moment defined by the rules of the system, that insolvency proceedings should not have a retroactive effect on the rights and obligations of Participants in a system and that collateral security should be insulated from the effects of the insolvency law applicable to the insolvent Participant. The SFD further determines that in the event of insolvency proceedings being opened against a Participant in a system, the rights and obligations arising from, or in connection with, the participation of that Participant shall be determined by the law governing that system.

Principles	Summary of compliance
	<p>STEP2-T Participant for being admitted to a STEP2 Service.</p> <p>The STEP2-T System Documentation, as well as related operational and technical documents concerning the operation of the system are available to all participants. Updates and changes, as well as explanatory notes when relevant, are notified prior to their effective date to all participants.</p> <p>In 2014, STEP2-T was identified by decision of the Governing Council of the European Central Bank (ECB) as a Systemically Important Payment System under the SIPS Regulation. In this sense, the STEP2-T System is overseen by the ECB as Competent Authority, with voluntary participation by national central banks of the Eurosystem. Details of the oversight framework can be found in the Company’s Annual Report in the “Oversight of the Payment Systems of EBA CLEARING” section.</p> <p>The STEP2-T System is a real-time gross settlement payment system, which provides for the continuous execution of payments in immediately available euro-denominated central bank funds. The processing of bulks and the settlement of the resulting bilateral Payment Orders occurs in real-time, and bilateral Payment Orders are settled, provided that sufficient funds are available. The system provides for the sorting, forwarding, and execution of high-volume bulk Payment Orders between participants in the system for the purpose of the execution of SEPA credit transfers and SEPA direct debits under the relevant SEPA schemes of the European Payment Council.¹⁰</p> <p>The STEP2-T System works as follows:</p> <ul style="list-style-type: none"> • a ‘technical account’ held in TARGET-ECB is open for the purpose of receiving central bank funds, which the participants may transfer to it for the purpose of the continuous gross settlement of Payment Orders; • each participant is entitled to one (or more) funds balance(s) of central bank funds credited on this technical account; each participant is the sole owner of the funds to the credit of its funds balance(s);

¹⁰ Under the SEPA Credit Transfer Scheme Rulebook, SEPA Direct Debit Scheme Rulebook and SEPA Direct Debit Business to Business Scheme Rulebook.

Principles	Summary of compliance
	<ul style="list-style-type: none"> • participants may send input files containing SEPA payments. Each file upon validation and sorting by STEP2 in sub-files generates a number of aggregated bilateral Payment Orders which are settled individually and in real-time in STEP2-T, continuously throughout the day¹¹; • a Payment Order is settled upon a final transfer, i.e., an irrevocable and unconditional transfer of funds, which is effected upon the simultaneous reduction of the balance of the paying participant and increase of the balance of the paid participant in the system; • settlement of bilateral Payment Orders upon processing is subject to sufficient funds: it is not possible to have a negative balance; • each participant provides funds for the execution of payments for which it acts as debtor and is thus in control of (the timing of) the settlement of its own payments. Funding for Payment Orders may be provided at any time when TARGET allows by transferring liquidity to the technical account from another TARGET account or through incoming STEP2 payments; • liquidity management tools are made available to allow participants to make best possible use of their funds, in particular <ul style="list-style-type: none"> ○ participants are allowed to fund and withdraw funds to/from their balance at any time of the day when TARGET allows; ○ Payment Orders for which funds are not available are queued and algorithms for optimal queue resolution are used similar to what exists in RTGS payment systems; ○ participants can use the automatic liquidity adjustments features proposed by STEP2 based on configurable thresholds; • reporting of settled transactions regular intervals or immediately following settlement is available for participants. <p>The material aspects of STEP2-T that require a high degree of certainty include:</p>

¹¹ The STEP2-T System defines the moment of finality for the interbank fund transfers between the Participants in the system. The discharge of payment obligations between end payer and payee is outside the scope of the STEP2-T System.

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	<p>The clarity of the moments of entry, irrevocability, and finality, especially when there is an insolvency; as part of the use of TARGET for funding transfers and withdrawals, the legal basis for the funds of the participants held in the so-called 'technical account' maintained in the TARGET system.</p> <p>Relevant legal systems</p> <p>All material aspects of the STEP2-T System and activities relevant thereto are governed by the documents forming part of the System Documentation, which are governed by and construed in accordance with the laws of the Federal Republic of Germany.</p> <p>Amongst the historical reasons for the choice of German law has been the aim to reduce the number of governing laws for the various aspects of the system. This is in particular relevant for STEP2-T, since the ECB as TARGET-ECB operator, having its seat in Germany, acts as provider of the technical account. In this respect, the current Agreement for Participation and Provision of Funds transfer services in TARGET-ECB for the STEP2-T System of EBA CLEARING (Participation Agreement) has been drafted by the ECB in discussion with EBA CLEARING as System Operator and is also governed by German law.</p> <p>The use of networks by participants for the sending and receiving of files containing Payment Orders and other messages to and from STEP2-T is outside the scope of the STEP2-T System. Each participant must ensure it is able to send and receive files in the format specified by the STEP2-T System Operator in the System Documentation and is responsible for its contractual relationship with the network provider(s) of its choice. The System and the System Operator are therefore not a part of these contractual relationships.</p> <p>Legal basis for each material aspect</p> <p>FMI legal basis</p>

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	<p>To ensure that the STEP2-T System provided the adequate legal certainty for all relevant aspects, the System Operator followed the established approach applied for the System’s legal basis, summarised hereafter:</p> <p>The STEP2-T System Documentation has been elaborated and is maintained by German law external counsel, allowing for a continued high degree of legal certainty. At the occasion of changes to the STEP2-T System, the legal documentation is amended and updated as required in a timely manner. The Legal & Regulatory Affairs Unit of EBA CLEARING analyses changes required to the legal documentation and closely liaises with the business, risk, and operations teams. Proposals on the approach for major changes are discussed by the Legal Advisory Group of EBA CLEARING (LAG), and the LAG also reviews the draft provisions for new versions of or amendments to the legal documentation.</p> <p>A reasoned legal opinion is provided on issues arising under the laws of Germany in connection with the participation by credit institutions in the STEP2-T System, including the validity and enforceability of the System Documentation.</p> <p>It is a condition for admission of a participant that a capacity opinion is provided confirming, <i>inter alia</i>, that (i) the adoption or execution and performance by the participant of the rights and obligations under the STEP2-T System Documentation to which the participant is a party will not violate in any respect any provision of the laws or regulations applicable to the participant, and that (ii) the participant has taken all necessary corporate action and other steps necessary under the laws of the jurisdiction where the participant is located to ensure that its obligations under the STEP2 System Documentation are legal, valid and binding.</p> <p>The legal basis of STEP2-T System supports the finality of transactions as follows:</p> <p>Finality of payment orders: Each Payment Order in the STEP2-T System is settled on a gross basis in real-time by and upon the occurrence of the transfer of funds held on the TARGET technical account from the balance of the paying participant (reduction of</p>

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	<p>balance) to the balance of the paid participant (corresponding increase of balance). The settlement of a Payment Order requires that the amount of the Payment Order does not exceed the participant's balance. If the relevant participant's balance held in the TARGET technical account is sufficient to settle a Payment Order, such order will be simultaneously accepted for settlement and settled. Payment Orders are thus final, and shall be deemed to be made by the paying participant and be received by the paid participant, at the moment when the related Payment Orders are processed, and at such moment the related Payment Order shall be finally settled. The Processing (or related terms such as Processed) means, in respect of a Payment Order, the data processing by which the occurrence of the STEP2 Payment which settles such Payment Order, is recorded in the IT system of a STEP2 data processor. In other words, an irrevocable and unconditional transfer of funds has occurred within the meaning of the SFD, upon completion of the adjustment of the participants' balances.</p> <p>Moment of Entry: The Moment of entry of a Payment Order into the STEP2-T System pursuant to the System Documentation is the point in time during a Settlement Window¹² at which the Payment Order is included in the settlement module.</p> <p>Irrevocability: point in time at which such Payment Order is Processed Payment Orders can be revoked by the sending participant until they are settled. A Payment Order shall thus become irrevocable within the meaning of the SFD at the point in time at which it is Processed.</p> <p>The features of STEP2-T in terms of finality and settlement of Payment Orders are recognised under German law.</p> <p>Payment Orders in STEP2-T that have been included in the settlement module will remain effective notwithstanding any subsequent opening of insolvency proceedings in respect of the relevant participants. The right of a participant</p>

¹² To clarify the Settlement Windows designate the period of time during the business day in which the STEP2 settlement module is open for the processing of Payment Orders (resulting from the set of positively validated messages sorted in sub-files). Settlement Windows' timings/duration/numbers vary depending on the STEP2 Services, e.g. SCT has night time and day time settlement windows, whilst SDD Core and B2B only have a day time settlement window.

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	<p>to revoke a Payment Order will likewise not be affected by the participant's insolvency.</p> <p>The fund transfers in TARGET for the funding and withdrawal operations between the technical Account and the RTGS DCA of the participants, including the finality of such transfers, are a matter of the legal framework of the TARGET system and thus outside the scope of the STEP2-T System Documentation.</p>
<p>Principle 2: Governance (Article 4 SIPS Regulation) An FMI should have governance arrangements that are clear and transparent, promote the safety and efficiency of the FMI, and support the stability of the broader financial system, other relevant public interest consideration sand the objectives of relevant stakeholders</p>	<p>EBA CLEARING has a user-say governance, meaning it is based on the needs and feedback of its users.</p> <p>The governance arrangements of STEP2-T are effective, accountable, and transparent, thereby supporting the stability of its payment services. For more information about the Company's governance bodies see the Corporate Governance section on the EBA CLEARING website (https://www.ebaclearing.eu/about-eba-clearing/corporate-governance/).</p> <p>The involvement of stakeholders in decisions, as well as the objectives of the system, are specified in an unambiguous and transparent manner within the Company's internal policies and procedures. Governance arrangements are clearly and thoroughly documented ensuring clear and direct lines of responsibility and accountability. The set of governance arrangements are fit-for-purpose to meet the strategic aims and objectives of the Company, and they are designed to make them future-proof. The Board Nomination and Governance Committee supports in monitoring the effectiveness of the corporate governance framework.</p> <p>In addition to the Company's governance bodies, to ensure that all types of users are represented 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. An identical structure has been adopted for user consultation for the two SIPS operated by the Company in the form of two business committees: the EURO1 Business Committee and the STEP2 Business Committee. Business committees are consultative bodies providing recommendations to</p>

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	<p>the Board. Business committees are chaired by a Board member.</p> <p>In order to ensure tools provided are adequate for the participants of the STEP2-T System, EBA CLEARING’s governance comprises an active collaboration with its participants in order to seek continuous feedback on its systems. The STEP2 Business Committee, the Operations and Technical Group, the Treasury and Liquidity Group and the Legal Advisory Group serve as the main consultation mechanisms to receive feedback, discuss any issues related to the system and highlight any potential changes to the functionalities of the systems operated by EBA CLEARING.</p> <p>As per EBA CLEARING’s user-say governance model, the Company uses these channels to ensure that the systems and the tools provided in them, evolve as per user needs and are found to be adequate on a consistent basis.</p>
<p>Principle 3: Framework for the comprehensive management of risks (Article 5 SIPS Regulation) An FMI should have a sound risk-management framework for comprehensively managing legal, credit, liquidity, operational, and other risks.</p>	<p>EBA CLEARING’s risk management activities are organised in a “three lines of defence” model. The Heads of Units are the first line of defence, the Risk Management Unit and the Regulatory and Oversight Affairs Unit are the second line of defence and Internal Audit is the third line of defence. The three lines of defence model incorporates the embedding of risk management and risk awareness throughout the entire Company. Moreover, the model highlights the different levels of control and means for escalation, if required.</p> <p>The second line of defence, the risk management function supported by the Chief Risk Officer, ensures high standards of risk management through the development and maintenance of the risk management framework, including specific guidelines and policies. It coordinates the implementation of risk initiatives and raises the Chief Executive Officer’s awareness of risks and consolidated levels, and it supports the Board in optimising EBA CLEARING’s overall risk tolerance and risk limits. In addition, organisational arrangements are in place to ensure operational independence of the Chief Risk Officer from the rest of the organisation.</p>

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	<p>EBA CLEARING’s risk management framework has been developed based on EBA CLEARING’s specific risk universe. The risk management framework is composed of the risk assessment methodology, risk tolerance methodology, risk tolerance statement, risk universe and risk identification.</p> <p>The Company’s risk management framework governance policy (approved by the Board of Directors) describes the organisational structure, management oversight, roles, responsibilities, and activities that EBA CLEARING considers necessary to support the embedding of strong risk management throughout its activities.</p> <p>Reviews of the policies and methodologies of the risk management framework are prepared annually by the Chief Risk Officer and updates are communicated to the Chief Executive Officer, senior management and to the Board Risk Committee (and reported to the Board via the Board Risk Committee).</p> <p>In addition, in order to manage risks in the STEP2-T System, participants are required to have technical and operational controls and procedures in place, particularly with regards to security. EBA CLEARING monitors and collects further information about those additional requirements on those participants that are regarded as critical due to their significant participation in the system.</p> <p>As part of the third line of defence, Internal Audit provides assurance on the proper design and implementation of the risk governance framework and observance of guidelines, policies and processes. The purpose of Internal Audit is to bring a systematic and disciplined approach to evaluate and improve the effectiveness of EBA CLEARING’s risk management, control, and governance processes. The Internal Audit function determines an annual internal audit plan, based on prioritisation using a risk-based methodology, including input of senior management and the Board of Directors. The execution of the annual audit plan is monitored closely by the Audit and Finance Committee (AFC), and audit reports relevant to the SIPS are shared with the Overseer.</p>

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	<p>Finally, the Risk Management Framework is audited by external firms periodically in order to determine whether it is still aligned with best industry practices.</p>
<p>Principle 4: Credit risk (Article 6 SIPS Regulation) An FMI should effectively measure, monitor, and manage its credit exposures to Participants and those arising from its payment, clearing, and settlement processes. An FMI should maintain sufficient financial resources to cover its credit exposure to each Participant fully with a high degree of confidence.</p>	<p>Credit risk, i.e., the risk arising from the inability of a participant to pay its settlement obligations when due or at a later time in the future, does not arise in the context of the STEP2-T System given that in accordance with its legal design, participants do not incur payment obligations vis-à-vis the System, nor towards each other or vis-à-vis the community of all other participants arising from the clearing and settlement process of a payment order. Therefore, participation in and sending and receiving payment transactions through the STEP2-T System does not entail credit risk.</p> <p>Reference is made to the description of the system’s design in the preceding sections of this disclosure report.</p>
<p>Principle 7: Liquidity risk (Article 8 SIPS Regulation) An FMI should effectively measure, monitor, and</p>	<p>Participants are responsible for the smooth settlement of their transactions in STEP2-T and for taking all appropriate measures to ensure that sufficient liquidity is available in a timely manner.</p> <p>With the evolution of the settlement model of STEP2-T, EBA CLEARING improved the settlement flow in STEP2-T</p>

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<p>manage its liquidity risk. An FMI should maintain sufficient liquid resources in all relevant currencies to effect same-day and, where appropriate, intraday and multiday settlement of payment obligations with a high degree of confidence under a wide range of potential stress scenarios that should include, but not be limited to, the default of the Participant and its affiliates that would generate the largest aggregate liquidity obligation for the FMI in extreme but plausible market conditions.</p>	<p>and removed the dependency of participants on other participants for settlement of their payment orders, through the implementation of an RTGS model for settlement. If a participant has insufficient funds, the transactions are queued until the liquidity is available and if the participant does not update its liquidity, then the transactions are cancelled at the end of the day.</p> <p>To further support this enhancement, liquidity, and queue management tools are available to allow for:</p> <ul style="list-style-type: none"> • Discretionary Funding Transfers and Withdrawals throughout the day during TARGET opening times. • Optional automatic liquidity adjustments based on configurable thresholds. • Debit/Credit notifications and Liquidity alerts. • Messaged based and APIs allowing Participants to enquire the fund balance and the status of payment orders • Monitoring and revocation of queued Payment Orders. <p>STEP2 Participants hold a specific amount in central bank funds kept by the ECB in the technical account (RTGS AS Technical Account) used for the STEP2-T System. Such amount (always positive or minimum zero) is adjusted in real time upon settlement of each individual bilateral payment instruction of which the STEP2 Participant is the recipient or sender.</p> <p>During TARGET opening times, each participant may at any time transfer its central bank funds in the RTGS AS Technical Account to its RTGS DCA.</p> <p>Funding in the RTGS AS technical account may be provided by available liquidity or through incoming payments. Further, optimisation mechanisms run from time to time allowing the settlement of queued instructions in a liquidity efficient manner.</p> <p>Participants are able to manage all SEPA products (SCT, SDD CORE and SDD B2B) from a single queue allowing an efficient use of liquidity or can opt for distinct queues for each SEPA instrument.</p>

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	<p>In terms of monitoring, each STEP2 Participant is able to view its own funds balance throughout the business day. Participants are able to fund and defund their funds balance during TARGET opening hours. With the introduction of the extension of opening hours for SCT in November 2022, EBA CLEARING allows for the SCT service as well as the settlement module to be open for processing on weekends and non-TARGET days. Such an extension of night-time settlement window leverages also on the new RTGS timings.</p> <p>STEP2-T- provides liquidity management tools allowing participants to set upper and lower thresholds which are monitored by the STEP2-T System and trigger alerts when a participant's balance goes above or below the liquidity thresholds, they have set for themselves.</p> <p>Optionally, automatic liquidity adjustments based on such configurable thresholds can be triggered.</p> <p>Different thresholds can be set during different periods throughout the day.</p> <p>STEP2-T provides high frequency intraday reports to the participants for reconciliation purposes (and during 2023 new daily liquidity reconciliation reports to allow participants view all individual LMRs at the end of day). This helps the participants manage their funds balances in an appropriate manner.</p> <p>The following reports support liquidity management:</p> <ul style="list-style-type: none"> • The <u>Liquidity Management Report</u> is a file that contains the liquidity operations between Liquidity Adjustment Checkpoints and is distributed to participants at LAC settlement cut-off time. The file provides the information required to perform reconciliation processes. The file is sent via the participant's preferred channel, which can be any of the services where the given Settlement BIC is used in association with a participant configuration. • The <u>Liquidity Notification File</u> is a file sent to participants when a liquidity adjustment takes place, or a configured optional threshold is breached. The file is also sent via the preferred channel, which can be any of

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	<p>the services where the given Settlement BIC is used in association with a participant configuration.</p> <p>The files containing settled transactions and periodic <u>reconciliation reports</u> are delivered at scheduled checkpoints during the day. Further, participants have access to real-time information in the Participant Workstation (DPWS) which can be used to monitor and manage the instructions for which the participant has to provide liquidity, held in queue. The STEP2- T workstation (DPWS) provides a consolidated view on the queue(s). This enables the participant to examine their funds balance with respect to each other participant.</p> <p>The information available via this interface can assist participants with their day-to-day operations by supplementing the summary information and statistics made available via the Daily Reconciliation Report and Monthly Statistics Report.</p> <p>Detailed information on specific credit messages is available only via the DPWS. Information related to interest calculation and liquidity management is also available from this interface.</p> <p>In addition, a set of APIs are available allowing machine to machine integration and automation of the queue management function. The information available for each instruction (sub-file) includes:</p> <ul style="list-style-type: none"> • The underlying service (i.e. SCT, COR, B2B) • The original bulk reference (Message ID) • The timestamp of entry in the queue • The Creditor Party BIC • The amount of the instruction • Number of payments included in the sub-file <p>The API calls cover the same operations:</p>

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	<ul style="list-style-type: none"> • View current and historic funds balances in STEP2 • Add funds to fund balance from RTGS DCA via the Technical account in RTGS AS System • Authorise funding request • Withdrawal from funds balance to RTGS DCA • Authorise withdrawal • Set/Authorise default values for LAC's funds balance bandwidth determined by base position, minimum position and maximum position and can be set per LAC • Set/Authorise custom values for LAC position bandwidth up to one year in the future. <p>Further, STEP2-T much like other RTGS systems such as TARGET, executes optimisation algorithms which may also be triggered when certain conditions are being fulfilled like a set number and / or value of queued instructions and thus regardless of the set time interval between two optimisation rounds.</p> <p>The following optimisation run equentially and for a certain number of iterations depending on the liquidity situation and / or presence of gridlocks:</p> <ul style="list-style-type: none"> • Optimisation mechanism #1: Simultaneous gross settlement • Optimisation mechanism #2: Bilateral offsetting • Optimisation mechanism #3: Multilateral offsetting <p>EBA CLEARING as System Operator of STEP2-T, monitors the liquidity funds balances of the participants of the System. It also receives alerts when a participant has insufficient funding (or excess of funds) in line with set thresholds. The system may – under certain conditions – automatically adjust the participant's funds balance (i.e. if the participant has explicitly approved, in line with the thresholds that the participant has set). STEP2-T uses the Ancillary System settlement procedure D of TARGET-ECB allowing participants to fund or withdraw funds from their funds balances at any time when TARGET is open.</p>

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	<p>In addition to the above, EBA CLEARING has a specific tool to monitor the flows between RTGS AS and STEP2-T to make sure each liquidity transaction (inbound and outbound) is properly executed.</p> <p>In order to ensure tools provided are adequate for the participants of the STEP2-T System, EBA CLEARING's governance comprises an active collaboration with STEP2-T participants in order to seek continuous feedback on its systems. The STEP2 Business Committee, the Operations and Technical Group, the Treasury and Liquidity Group and the Legal Advisory Group serve as the main consultation mechanisms to receive feedback, discuss any issues related to the System and highlight any potential changes to the functionalities of the Systems operated by EBA CLEARING.</p> <p>As per EBA CLEARING's User Say Governance model, the Company uses these channels to ensure that the Systems and the tools provided in them, evolve as per user needs and are found to be adequate on a consistent basis.</p>
<p>Principle 8: Settlement finality (Article 9 SIPS Regulation) An FMI should provide clear and certain final settlement, at a minimum by the end of the value date. Where necessary or preferable, an FMI should provide final settlement intraday or in real time.</p>	<p>STEP2-T benefits from the protection of the Settlement Finality Directive (SFD) and is included in the list of designated systems under the SFD.</p> <p>The STEP2-T System is governed by German law and is designated under and thus benefiting from the protections of the SFD. STEP2-T is dedicated to the processing of high-volume bulk payment orders in relation to the execution of SEPA payments.</p> <p><u>Final settlement takes place no later than at the end of the intended settlement date</u></p> <p>Article 9 of the SIPS Regulation requires that a SIPS Operator establishes rules and procedures to enable final settlement to take place no later than at the end of the intended settlement date. This requirement is met through the respective provisions in the STEP2-T System Documentation, as well as in the technical specifications of</p>

Principles	Summary of compliance
	<p>STEP2-T pursuant to which:</p> <p>(a) Processing of Payment Orders occurs during one or more Settlement Windows on the intended interbank settlement date specified in the relevant Payment Order, provided that the amount of the relevant Payment Order does not exceed the Funds Balance of the relevant Payer (using, where appropriate, optimisation algorithms).</p> <p>(b) If the relevant Payer's Funds Balance remains insufficient for the Processing of a Payment Order and such Payment Order is not Processed by the relevant Settlement Cut-off Time at the end of the intended interbank settlement date, such Payment Order is cancelled, as noted above. This means that settlement of any Payment Orders only takes place on the intended interbank settlement date, no unsettled Payment Order survives the intended interbank settlement date, and no settlement is deferred to the next business day of STEP2-T.</p>
<p>Principle 9: Money settlements (Article 10 SIPS Regulation) An FMI should conduct its money settlements in central bank money where practical and available. If central bank money is not used, an FMI should minimise and strictly control the credit and liquidity risk arising from the use of commercial bank money.</p>	<p>Money settlements among participants take place on a continuous basis in STEP2-T, with funding and defunding possible via TARGET.</p>

Principles	Summary of compliance
<p>Principle 13: Participant default rules and procedures (Article 12 SIPS Regulation) An FMI should have effective and clearly defined rules and procedures to manage a Participant default. These rules and procedures should be designed to ensure that the FMI can take timely action to contain losses and liquidity pressures and continue to meet its obligations.</p>	<p><u>Financial default:</u> A financial default is not applicable in the case of STEP2-T, given that in accordance with its legal design, participants do not incur payment obligations vis-à-vis the System, nor towards each other or vis-à-vis the community of all other participants arising from the clearing and settlement process of a Payment Order.</p> <p>If a participant has insufficient funds to settle a Payment Order, Payment Orders are queued and not accepted for settlement until the liquidity is available and if the participant does not update its liquidity, then the transactions are cancelled at the end of the day. There is no obligation for a participant to fund its STEP2-T settlement account.</p> <p><u>Suspension and exclusion:</u> The occurrence of a suspension or exclusion event and the consequences thereof for the suspended/excluded participant and for the other participants are determined in the STEP2-T Rules and Regulations¹³. The Rules of the STEP2-T System list in an exhaustive manner the events giving rise to exclusion/suspension, describe the method for identifying an event giving rise to exclusion/suspension and detail the consequences of a suspension and of an exclusion.</p> <p><u>Insolvency:</u> A participant will be removed from the system by the System Operator in case of a confirmed insolvency event affecting the participant.</p> <p><u>Operational defaults:</u> Any operational or technical issues affecting a participant are addressed in first instance through the activation of incident handling process and, as applicable, crisis management arrangements.</p>

¹³ The system's Rules and Regulations are proprietary and confidential, and are available to all participants, to prospective participants that have applied to become a participant, and to relevant authorities including in particular the European Central Bank / Eurosystem as overseer of STEP2-T.

Principles	Summary of compliance
	<p><u>Non-compliance with participation criteria:</u> Failure by a participant to comply with the criteria for participation, including operational criteria, may also give rise to a suspension or exclusion. The STEP2-T legal documentation will continue to define a number of criteria for participation to the system including legal criteria and primarily requirements related to the entity having the ability to comply and to ensure compliance on a continuous basis with the technical and operational requirements of the System. This includes technical and operational requirements to enable sending and receiving files, and requirements that are necessary to enable participation in the settlement arrangements, aiming at ensuring availability of the participant and minimising operational disruption when sending and receiving STEP2 Files, STEP2 Sub-Files containing Messages during the operational times of the system, as set forth in the System Documentation.</p> <p>A Participant may be suspended if non-compliance with the ongoing criteria for participation cannot be mitigated, e.g., in the case of relocation outside SEPA.</p> <p>The declaration of an exclusion or suspension is decided by EBA CLEARING. In case of an insolvency proceeding or moratorium against a participant, EBA CLEARING has no discretion, as it must either exclude or suspend the participant upon receiving confirmation by competent authorities or the participant itself of such events, always taking into account requirements set out in the Bank Recovery and Resolution Directive.</p> <p>In case of other exclusion or suspension events, EBA CLEARING has certain discretion to declare suspension or exclusion as it may but is not obliged to do so if it receives sufficient evidence to conclude to the existence of such exclusion or suspension event. Importantly, EBA CLEARING’s decision will depend on the precise circumstances, and EBA CLEARING would seek to mitigate and solve any adverse circumstances, in particular in the case of an operational issue, through the activation of the incident handling and crisis management arrangements to avoid recourse, if not required, to a suspension or exclusion.</p> <p>A summary of the admission criteria and default rules is available on the EBA CLEARING website:</p>

Principles	Summary of compliance
	<p>https://www.ebaclearing.eu/services/step2-t-system/admission-criteria-and-default-rules/</p>
<p>Principle 15: General business risk (Article 13 SIPS Regulation) An FMI should identify, monitor, and manage its general business risk and hold sufficient liquid net assets funded by equity to cover potential general business losses so that it can continue operations and services as a going concern if those losses materialise. Further, liquid net assets should at all times be sufficient to ensure a recovery or orderly wind-down of critical operations and services.</p>	<p>Within its enterprise risk management framework, EBA CLEARING has robust management and controls systems to identify, monitor and manage general business risks, including losses resulting from poor execution of business strategy, negative cash flows, or unexpected and excessively large operating expenses.</p> <p>Further, in compliance with Article 13 of the SIPS Regulation, the Company has developed a Recovery and Orderly Wind Down (ROWD) Policy, a ROWD Plan and a detailed Plan to Raise Additional Capital, if ever required, to ensure the Company holds sufficient (ring-fenced) liquid net assets to cover potential general business losses so that it can continue operating its critical services, including the operation of STEP2-T, as a going concern. (N.B. this amount shall be no less than that represented by six months of current operating expenses).</p> <p>Finally, the Company has designed a number of Early Warning Indicators that are assessed and presented to the Board Risk Committee on a semi-annual basis in order to determine whether there are any initial signs of financial distress that can be anticipated, managed, and dealt with in adequate time frame in order to prepare the Company to withstand any financial deterioration.</p> <p>The Recovery and Orderly Wind Down Policy and Plan are reviewed on a yearly basis to ensure it is up to date with current circumstances.</p> <p>Finally, the Plan is overseen by the European Central Bank as lead overseer of EBA CLEARING’s core payment systems and the Eurosystem Central Banks, as part of their ongoing oversight activities of EBA CLEARING, as per the relevant Oversight frameworks and applicable regulation.</p>

Principles	Summary of compliance
<p>Principle 16: Custody and investment risks (Article 14 SIPS Regulation) An FMI should safeguard its own and its Participants' assets and minimise the risk of loss on and delay in access to these assets. An FMI's investments should be in instruments with minimal credit, market, and liquidity risks.</p>	<p>EBA CLEARING does not incur any rights or obligations arising from the sending and receiving of payment messages. At no time does EBA CLEARING hold any funds or deposits in relation to the operation of its systems.</p> <p>The Company has developed and maintains a Treasury and Investment Policy which documents how the liquid net assets funded by equity are held and how the monitoring of whether the amount remains sufficient is done. The review of this policy is under the responsibility of the Audit and Finance Committee.</p>
<p>Principle 17: Operational risk (Article 15 SIPS Regulation) An FMI should identify the plausible sources of operational risk, both internal and external, and mitigate their impact through the use of appropriate systems, policies, procedures, and controls.</p>	<p>EBA CLEARING has embedded the identification of operational risks to its services within its enterprise risk management framework, through which operational risks are monitored and the implementation of mitigating controls are tracked. Further, it leverages its Business Continuity Management System and its ISO 27001 certified Information Security Management System to ensure a high degree of security and operational reliability and that it has adequate contingency arrangements in place for the timely completion of daily processing in its services.</p> <p>The STEP2-T System is a highly resilient processing system with full disaster recovery features and operational procedures, including an information and cyber security strategy and framework, that are regularly practiced with the user community. It provides the following key benefits:</p> <ul style="list-style-type: none"> • A scalable processing engine: the STEP2 Services are based on a highly efficient and robust processing engine capable of handling all the SEPA traffic if needed.

Principles	Summary of compliance
<p>Systems should be designed to ensure a high degree of security and operational reliability and should have adequate, scalable capacity. Business continuity management should aim for timely recovery of operations and fulfilment of the FMI's obligations, including in the event of a wide-scale or major disruption.</p>	<ul style="list-style-type: none"> • A highly experienced operator: the technical provider of STEP2-T is NEXI PAYMENTS, one of the largest financial processors in Europe. The NEXI PAYMENTS processing environment offers state-of-the-art technology with exceptional resilience features. • Three processing sites: the primary site maintained by NEXI PAYMENTS runs in cluster configuration with data sharing facility and a power distribution layout that has a fully radial configuration. The second processing site, also maintained by Nexi Payments is equivalent to the primary site and works in a synchronous mode, meaning that all data is replicated in real time. A third processing site, which ensures business continuity in case of a regional disaster, was put in place by Nexi Payments and IBM and activated in January 2014. • Three operations centres for system monitoring: EBA CLEARING runs three separate operations centres in different countries. Two of these independent sites operate in parallel mode during the processing day. The three sites are engaged in a regular rotation of shifts and ensure a constant monitoring of the different STEP2 Services. • Customer support for operations-related queries and emergency situations: the Investigations and Customer Support Unit (ICU) is EBA CLEARING's single point of contact for all operations-related queries. • The Company also has several channels and tools in place for incident and crisis communication. • Crisis simulation exercises: these exercises are organised by EBA CLEARING and Nexi Payments on an annual basis. Their main objective is to test the functionality of the disaster recovery arrangements, both in terms of file sending/receiving and connectivity to participants' workstations, including in a cyber-attack scenario. • ISO 27001 certification: since January 2013, EBA CLEARING's information security management system, which is geared towards managing and securing the Company's information assets, has been certified as ISO27001- compliant. In 2018 and in 2022, the Company's information management system was re-certified to the new 27001:2013 standard, valid until 2025.

Principles	Summary of compliance
	<p>On a quarterly basis, EBA CLEARING provides a service report to its participants, containing information related to STEP2-T's performance and availability indicators.</p> <p>Finally, EBA CLEARING participates in the Euro Cyber Resilience Board for Financial Infrastructures (ECRB) as per the applicable mandate¹⁴ to contribute to the overall stability of the EU financial system and enhance the cyber resilience of financial market infrastructures, as well as in the ECRB's Cyber Information and Intelligence Sharing Initiative (CIISI-EU).</p>
<p>Principle 18: Access and participation requirements (Article 16 SIPS Regulation) An FMI should have objective, risk-based, and publicly disclosed criteria for participation, which permit fair and open access.</p>	<p>STEP2-T has objective and publicly disclosed criteria for participation, which permit fair and open access.</p> <p>These criteria have been defined based on a risk-based approach as well as applicable legal and regulatory factors, to prevent unnecessary risk in the system; and are available on the EBA CLEARING website: https://www.ebaclearing.eu/services/step2-t-system/admission-criteria-and-default-rules/</p> <p>In order to fulfil the admission criteria for STEP2-T, a participant must:</p> <ul style="list-style-type: none"> • be authorised to act as a credit institution within the meaning of Article 4(1) point (1) of Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012 (CRD);¹⁵ • either: (i) have TARGET account access, i.e., have the status of a direct participant in TARGET and hold and have access to an RTGS Dedicated Cash Account (DCA) with the central bank operating the respective TARGET component system or (ii) have an agreement with a liquidity provider that has the status of a direct participant in TARGET and holds and has access to an RTGS DCA with the central bank operating the respective TARGET component system;

¹⁴ See https://www.ecb.europa.eu/paym/groups/euro-cyber-board/shared/pdf/ECRB_mandate.pdf

¹⁵ The STEP2-T Rules allow also entities qualifying as central banks or any entity listed in Article 2(5) points (2) to (24) CRD IV, Section 28.2.

Principles	Summary of compliance
	<ul style="list-style-type: none"> • be able to comply with the technical and operational requirements of the STEP2-T System, including requirements aiming at ensuring availability of the participant during the operational times of the system and the participant's ability to send STEP2 files in the required format; • have its registered office in a Member State of the EU, the EEA or the OECD, or a country or territory which is part of SEPA; • participate in the system via its registered office or a branch located in the geographical area of SEPA; • adhere to the corresponding SEPA Scheme Rulebook of the European Payments Council; and • provide a capacity opinion, with respect to its participation in each relevant STEP2 Service. • Service. <p>In addition to the above, admission to each of the STEP2 SEPA Services (SCT, SDD Core and SDD B2B) is conditional on the participant's adherence to the corresponding EPC SEPA Scheme Rulebook.</p> <p>Participants may include in the routing tables, maintained for STEP2-T, entities which have a BIC for which a participant has been appointed (a reachable BIC). Reachable BICs cannot send or receive files, sub-files or messages (including payment messages) through the STEP2-T System. A participant may forward data and information, received from a Reachable BIC outside of the context of the system, in its files or sub-files, and may act as recipient of payment orders and messages addressed to a Reachable BIC for which it acts as "Appointed Participant". Payment orders and messages are not sent to or received by Reachable BICs but constitute payment orders or messages of, or as applicable addressed to, the relevant Appointed Participant. The relationship between a participant and a Reachable BIC for which the participant is acting as Appointed Participant is exclusively governed by their respective bilateral arrangements.</p>
<p>Principle 19: Tiered participation arrangements (Article 17 SIPS)</p>	<p>In line with the PFMI, EBA CLEARING's approach to determining tiered participation in STEP2-T is based on the premise that tiered participation arrangements occur in a payment system when some firms (tiered participants) rely on the services provided by other firms (participants) to use the system's central payment, clearing or settlement facilities.</p>

Principles	Summary of compliance
<p>Regulation) An FMI should identify, monitor, and manage the material risks to the FMI arising from tiered participation arrangements.</p>	<p>For STEP2-T, participants and the management of risks they present are fully covered by the Rules and Regulations and related procedures for STEP2-T. Risks are addressed according to the standards of the PFMI implemented by the SIPS Regulation. The Rules and Regulations of STEP2-T establish the duties of participants relating to reachable BICs. They include the duty to promptly provide upon request any information deemed necessary by the STEP2-T System operator to identify, monitor, and manage any material risks to the STEP2-T System arising from arrangements with such reachable BICs in accordance with the STEP2-T System Operator’s regulatory duties.</p> <p>For STEP2-T, EBA CLEARING has defined tiered participation based on the following observations:</p> <ul style="list-style-type: none"> a) Tiered participation concerns the relationship between participants and Reachable BICs. b) Tiered participation concerns immediate customers of the participants. c) Where a Reachable BIC refers to a branch of a participant, the risks are considered to be addressed at the level of the participant, and such Reachable BIC is <u>not</u> considered within the scope of tiered participation arrangements. d) Where a Reachable BIC refers to an entity that belongs to the same banking group as a participant, the risks are considered to be addressed at the level of the participant (and its affiliates), and such Reachable BIC is <u>not</u> considered within the scope of tiered participation in STEP2-T. <p>Therefore, EBA CLEARING considers that “tiered participants” are Reachable BICs that are neither in the same banking group as, nor are a branch of, a STEP2-T Participant.</p>
<p>Principle 21: Efficiency and effectiveness (Article 18 SIPS Regulation) An FMI should be efficient and effective in meeting</p>	<p>Principle 21: Efficiency and effectiveness (Article 18 SIPS Regulation)</p> <p>STEP2-T has to comply with the four criteria for SEPA-compliant infrastructures defined by the ECB (processing capabilities, interoperability, reachability, choice of banks) and the EPC Scheme Rulebooks and Implementation</p>

Principles	Summary of compliance
<p>the requirements of its Participants and the markets it serves</p>	<p>Guidelines for the SEPA Credit Transfer Scheme as well as for the SEPA Direct Debit Core and B2B Schemes.</p> <p>To ensure the Company understands its users' needs and in accordance with its user say governance structure, and in order to facilitate 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. An identical structure has been adopted for user consultation for the two SIPS operated by the Company in the form of two business committees: the EURO1 Business Committee and the STEP2 Business Committee.</p> <p>These business committees are consultative bodies providing recommendations to the Board. All decisions affecting a system for which a Business Committee has been established are made by the Board upon consultation with the relevant Business Committee. Business Committees are chaired by a Board member.</p> <p>In addition, the following expert groups have been established:</p> <ul style="list-style-type: none"> • Operations & Technical Group (OTG): analyses and reviews proposals, and formulates recommendations relating to operational, procedural, functional and technical aspects of the systems of EBA CLEARING. • Legal Advisory Group (LAG): analyses and reviews proposals from a legal point of view and formulates legal recommendations regarding same. It also assists in the monitoring of legal projects and formulates recommendations regarding the resourcing for given projects. • Treasury and Liquidity Group (TLG): acts as an advisory expert group relating to the management and use of liquidity within the systems operated by EBA CLEARING.¹⁶ • Other expert fora may be established in accordance with identified needs. <p>Finally, availability and performance indicators are published on a quarterly basis on the EBA CLEARING Customer</p>

¹⁶ The EURO1 Payments Risk Forum is also a forum for exchange of information among EURO1 Participants, in the first instance in preparation of and during the migration of the EURO1 System to the ISO20022 standard. The group does not replace any existing escalation and decision-making processes embedded in the company's crisis management arrangements.

Principles	Summary of compliance
	<p>Portal for users and other relevant stakeholders.</p> <p>(See section III on system design and operation for more details on STEP2-T's efficiency and effectiveness to meet user and market needs).</p>
<p>Principle 22: Communication procedures and standards (Article 19 SIPS Regulation) An FMI should use, or at a minimum accommodate, relevant internationally accepted communication procedures and standards in order to facilitate efficient payment, clearing, settlement, and recording.</p>	<p>STEP2-T uses internationally accepted communication procedures and standards, such as BIC codes to identify its participants and the ISO 20022 messaging standard.</p> <p>In accordance with its user say governance structure, and 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, such as EBA CLEARING's critical service providers.</p>
<p>Principle 23: Disclosure of rules, key procedures, and market data (Article 20 SIPS Regulation) An FMI should have clear and comprehensive rules</p>	<p>The System Documentation which is available to all users of STEP2 services enables participants to have a clear understanding of the system's impact on the risks they incur through their participation.</p> <p>In addition, the Company publishes key information via relevant updates of the publicly available pages on the website of EBA CLEARING. The Company has also made available to participants in the Customer Portal all the service documentation, including the Rules and Regulations, and responses to FAQs for compliance and due diligence purposes. The present disclosure report also complements EBA CLEARING's disclosure of rules, key</p>

Principles	Summary of compliance
<p>and procedures and should provide sufficient information to enable Participants to have an accurate understanding of the risks, fees, and other material costs they incur by participating in the FMI. All relevant rules and key procedures should be publicly disclosed.</p>	<p>procedures and market data.</p> <p>Finally, EBA CLEARING organises a Governance, Risk and Compliance Day twice per year for its users in order to cover all third party assurance and vendor management topics such as Information and Cyber Security, Business Continuity, Risk Management, Change Management, Resolution, Data Privacy and Governance, Legal and Oversight matters.</p>

V. List of publicly available resources

EBA CLEARING and STEP2-T:

- “About EBA CLEARING” section on website: <https://www.ebaclearing.eu/about-eba-clearing/at-a-glance/the-company/>
- By-laws of EBA CLEARING: <https://www.ebaclearing.eu/about-eba-clearing/at-a-glance/reference-documents/>
- EBA CLEARING Shareholders: <https://www.ebaclearing.eu/about-eba-clearing/corporate-governance/the-shareholders/>
- EBA CLEARING Board: <https://www.ebaclearing.eu/about-eba-clearing/corporate-governance/the-board/>
- EBA CLEARING Board Committees: <https://www.ebaclearing.eu/about-eba-clearing/corporate-governance/board-committees/>
- EBA CLEARING Annual Report 2021:
- <https://www.ebaclearing.eu/media/azure/production/3015/eba-clearing-annual-report-2021-interactive-pdf.pdf>
- STEP2-T section EBA CLEARING website: <https://www.ebaclearing.eu/services/step2-t-system/overview/>
- STEP2-T Statistics:
 - SCT: <https://www.ebaclearing.eu/services/step2-sct/statistics/>
 - SDD Core: <https://www.ebaclearing.eu/services/step2-sdd-core/statistics/>
 - SDD B2B: <https://www.ebaclearing.eu/services/step2-sdd-b2b/statistics/>