

WFC Single Disclosure Report 2022

AGC answers

Date submitted

03/11/2022 11:31:53

AGC: 0a

Please indicate the full name of the responding institution:

Clearstream Banking A.G.

AGC: 0c

Registered address:

Mergenthalerallee 61

65760 Eschborn

AGC: 0d

Country of registered address:

Germany

AGC: 1

Rule 17f-7, by reference to Rule 17f-4, requires that, for a CSD to be eligible to hold securities of U.S. registered investment companies (such depositories hereinafter referred to as “Eligible Securities Depositories”), the CSD must be a “system for the central handling of securities where all securities of any particular class or series of any issuer deposited within the system are treated as fungible and may be transferred or pledged by bookkeeping entry without physical delivery of the securities.”

Are all securities of a particular class or series of any issuer that are deposited in your institution treated as fungible, and can they be transferred or pledged by bookkeeping entry without physical delivery of the securities?

Yes

No

AGC: 1a

Please explain

AGC: 2

Rule 17f-7 also requires that an Eligible Securities CSD “acts as or operates a system for the central handling of securities or equivalent book-entries in the country where it is incorporated,” or “acts as or operates a transnational system for the central handling of securities or equivalent book-entries.” Does your institution:

Act as or operate a system for the central handling of securities or equivalent book-entries in the country where it is incorporated?

Act as or operate a transnational system for the central handling of securities or equivalent book-entries?

Act in another capacity with respect to the handling of securities or equivalent book-entries?

Not applicable

OTHER:

AGC: 2a.

Please explain:

AGC: 2b.

Please specify the types of securities for which you act as or operate a system for the central handling of securities or equivalent book-entries:

Clearstream Banking AG (CBF) carries out the role of a Central Securities Depository in Germany. CBF is a custodian for securities accepted in Germany and issued by German and international issuers in the form of collective or individual certificates, or registration rights. German law in relation to securities deposits distinguishes between three different types of custody:

- 1) Collective Safe Custody (Girosammelverwahrung, GS/CSC): CSC is governed by the German Safe Custody Act (Depotgesetz, DepotG). Clearstream is today the only national CSD for the German market providing CSC.

According to § 5 clause 1 DepotG, securities to which numerous rights are attached, whereby the rights may be collectively vested in global certificates (§ 9a DepotG), may be deposited with a CSD for safe keeping purposes unless the depositor requests the separate safe-custody of the global certificate in accordance with § 2 clause 1 DepotG. Also certificates with a specific serial number (fungible physical certificates) which comprise the same investor rights may be deposited with a CSD.

Collective safe custody refers to the custodial arrangement whereby securities are issued under German law and are safekept in the vaults of Clearstream. Holders of securities held in collective safe custody would have a proprietary right to those securities (a 'right in rem') being a pro rata co-ownership right in a fungible pool of securities represented by a global note or a similar number of physical securities held by Clearstream in its vaults or through a cross border CSD-Link with a foreign CSD based on an account relationship qualified under § 5 clause 4 DepotG.

Furthermore, there are certain kinds of securities which can be represented in a dematerialised form via an entry in a central register (electronic securities in accordance with the eWpG) as well as bond issues of the German Federal State (Bundesanleihen) and of the German States (Länderanleihen) held by entry in the respective debt registers of the Federal Republic or State. For German Federal bonds, the Bundesschuldenwesengesetz (BSchWG) states that German Federal bonds are issued by entry in the Federal Debt Register led by the German Finance Agency (Deutsche Finanzagentur) and registration of a central securities depository ("Wertpapiersammelbank") pursuant to Section 1 paragraph 3 Securities Deposit Act to create a collective registered claim (Sammelschuldbuchforderung).

Clearstream books its customers a collective safe custody balance (GS-Gutschrift). This system enables the transfer of rights inherent to the securities by book entry. This is known as a securities transfer by book entry.

2. 2) Individual Safe-Custody (Streifbandverwahrung): Jacket custody of non-fungible certificates, where each customer is entitled to have the individual certificates with a particular serial number at their disposal.

3. 3) Non-collective safe custody: For fungible securities kept abroad that are not settled via the T2S platform, Clearstream keeps the positions in the form of book-entry credits on a fiduciary basis, using the technical infrastructure of its sister company Clearstream Banking S.A., Luxembourg, which uses custodians in various countries for purposes of custody. The investors, as the account holders and beneficial owners, merely have a bilateral claim to the surrender of this legal title vis-à-vis their depository, under the law of obligations, and the rights of a beneficial owner to issue instructions to the trustee.

Depositories are under an obligation to obtain what is known as a "Three-Point Declaration" from the (first) custodian outside Germany. In this Three-Point Declaration the non-German custodian confirms that the securities positions delivered into safe custody by the depository are kept as customer positions of the depository, that these can be separated from the custodian's assets in the event of its insolvency and that, as a matter of principle, it will not assert any rights of lien or rights of retention in relation to these securities. Furthermore, the custodian promises that it will not outsource the custody of the securities positions underlying the Three-Point Declaration to a third party without the consent of CBF. The German depositories back up these declarations with legal opinions regarding the countries of custody in question. It is the predominant opinion that in the event of insolvency on the part of CBF or the depository, the intermediate custodian's or the beneficial owner's rights to the surrender of these securities are eligible for separation from the debtor's assets. CBF has also introduced the special NCSC-T custody type, which enables non-collective safe custody securities to be admitted to T2S.

There are a number of safeguards that have been built into the clearing and settlement system to mitigate the impact on the market of the bankruptcy of one of its members. These notably include settlement in central bank money at the level of the CSD.

Please refer further to the General Terms and Conditions (GTCs), available at:
<https://www.clearstream.com/clearstream-en/keydocuments-1-/csd-1-/general-terms-and-conditions>

AGC: 3

What type of legal entity is the institution?

- Public Company
- Stock Exchange (or part thereof)
- Central Bank (or part thereof)
- Private Company
- OTHER:

AGC: 4

Is the institution operated as a "for profit" or a "not for profit" organization?"

- For profit
- Not for profit

AGC: 5

Please provide the names of the owners and their ownership interest percentages.

Clearstream Banking AG is wholly owned by Clearstream Holding AG who itself is a wholly owned subsidiary of Deutsche Börse Group. A diagram of this shareholding structure is available at <https://www.clearstream.com/clearstream-en/about-clearstream/company-governance/shareholding-structure>.

AGC: 6a

What is the date of establishment of the CSD?

Please enter the answer in DD/MM/YYYY format.

If you are filling the survey for more than one organization, please enter the name of each organization in different lines and in front of each one the corresponding date.

1949-12-05 00:00:00

AGC: 6b

What is the date that the CSD's operations began?

Please enter the answer in DD/MM/YYYY format.

If you are filling the survey for more than one organization, please enter the name of each organization in different lines and in front of each one the corresponding date.

1949-12-05 00:00:00

AGC: 7

Under what regulation or statute is the CSD established and governed?

069 9566-3512

www.bundesbank.de

Please note that apart from being subject to the national regulators in Germany and complying to their requirements, Clearstream also respects international guidelines such as CPMI/IOSCO for PFMI.

AGC: 7a

Is the regulation or statute electronically available?

Yes

No

AGC: 7b

If regulation or statute is electronically available, please supply web address(es) here or upload document(s).

[https://portal.mvp.bafin.de/database/InstInfo/institutDetails.do?](https://portal.mvp.bafin.de/database/InstInfo/institutDetails.do?cmd=loadInstitutAction&institutId=105564)

[cmd=loadInstitutAction&institutId=105564](https://portal.mvp.bafin.de/database/InstInfo/institutDetails.do?cmd=loadInstitutAction&institutId=105564)

[http://www.gesetze-im-](http://www.gesetze-im-internet.de/wpapg/index.html)

[internet.de/wpapg/index.html](http://www.gesetze-im-internet.de/wpapg/index.html)

[http://www.gesetze-im-](http://www.gesetze-im-internet.de/aktg/)

[internet.de/aktg/](http://www.gesetze-im-internet.de/aktg/)

<https://www.gesetze-im-internet.de/kredwg/BJNR008810961.html>

AGC: 7c

filecount - Please supply document(s) here:

0

AGC: 7d

What are the roles and responsibilities of the CSD's board of directors (or equivalent), and are they clearly specified? Please provide details of the structure and composition of your Board together with their industry experience and responsibilities in governing the CSD. What are the qualifications to become a board member?

The Executive Board manages and represents the Company. Its task and responsibilities are:

(1) The Executive Board shall design and establish the Company's business strategy, the risk strategy, the strategy regarding capital adequacy and liquidity as well as the guiding principles governing:

- a) the organisational and operational structure including IT (technology) and internal communications processes,
- b) the internal control, compliance and risk management mechanisms,
- c) the professional conduct and corporate values, including escalation procedures,
- d) the central administration, including administrative, accounting and IT organisation,
- e) outsourcing,
- f) the management of continuing activities and crisis events, and
- g) the appointment and replacement of persons holding key functions.

(2) The Executive Board shall critically assess and approve, at least once a year, the internal governance arrangements of the Company and its implementation and shall inform the Supervisory Board, at least once a year, of the implementation, adequacy, effectiveness and compliance with such internal governance arrangements. (3) The Executive Board shall prepare, as required by law, the financial statements of the Company, a management report and a proposal for appropriation of any net profits. The draft of the financial statements as well as the management report shall be delivered to the Supervisory Board as well as the external auditor within the timeframe set forth by the law.

The composition of the Executive and Supervisory Board members should reflect the knowledge, skills and experience necessary to fulfil its responsibilities. This includes that the

Board collectively has an appropriate understanding of those areas for which the members are collectively accountable, and the skills to effectively manage and oversee the institution.

Further details are available in the "Rules of Procedure for the Executive Board Clearstream Banking AG (CBF)" document published in compliance with CSDR at: <https://www.clearstream.com/clearstream-en/about-clearstream/company-governance>

AGC: 7e

What are the election procedures?

The members of the Supervisory Board are appointed by the general meeting of shareholder which is preceded by an internal assessment and by an assessment of the BaFin which confirms the suitability of the candidate to become a member of the Supervisory Board. The Supervisory Board is responsible for the selection and (re-)appointment of Executive Board members and for election proposals to the Annual General Meeting regarding the election of Supervisory Board members. It therefore identifies candidates for the appointment, taking into account the suitability criteria set out in this Side letter and the underlying Policy, and drafts a job description with a candidate profile. Furthermore, BaFin needs to confirm the suitability of a candidate for an Executive Board membership prior to the appointment.

AGC: 7f

What is the maximum length of time a board member can serve?

Members of the Supervisory Board shall be elected for a term of office ending at the closing of the General Shareholders' Meeting which votes on the approval for the fourth fiscal year after the commencement of the term of office, not including such fiscal year in which the term of office has commenced. A successor for a member resigning before his/her term of office shall be elected for the remaining term of office of the resigning member. The Supervisory Board appoints the members of the Executive Board for a term not exceeding five years and may appoint one of the members as chairman of the Executive Board. Every member is eligible for re-election.

AGC: 7g

How are the voting powers distributed amongst the board members (i.e. does each board member have one vote or do certain members have additional voting power)?

Unless otherwise provided by law or the Articles of Incorporation, resolutions will be adopted by simple majority of the votes cast. The foregoing shall also apply to elections. The method of voting shall be determined by the chairman. In the event of a tie, the chairman's vote shall be decisive. The Executive Board passes a resolution, barring an alternative arrangement, with a simple majority of votes of the members participating in passing of the resolution. Neither the chairman of the Executive Board nor his deputy have a tie-breaking vote.

AGC: 7h

What are the procedures established to review the performance of the board as a whole and the performance of the individual board members? Who is responsible for regulating the board members?

The jurisdiction for CBF is Germany and therefore the relationship with the Supervisory Board is subject to local German law and European law.

AGC: 8

Rule 17f-7 requires that an Eligible Securities Depository regulated by a foreign financial regulatory authority as defined under section 2(a)(50) of the Act, with section 2(a)(50) establishing that a 'foreign financial regulatory authority' means any (A) foreign securities authority, (B) other governmental body or foreign equivalent of a self-regulatory organization empowered by a foreign government to administer or enforce its laws relating to the regulation of fiduciaries, trusts, commercial lending, insurance, trading in contracts of sale of a commodity for future delivery, or other instruments traded on or subject to the rules of a contract market, board of trade or foreign equivalent, or other financial activities, or (C) membership organization a function of which is to regulate the participation of its members in activities listed above." Who regulates the activities of the CSD?

A membership organization which regulates the participation of its members in securities matters or other financial activities.

A governmental body or regulatory organization empowered to administer or enforce laws related to securities matters.

A governmental body or self-regulatory organization empowered to administer or enforce laws related to other financial activities.

OTHER:

AGC: 8a.

Please explain:

AGC: 9

Please provide the name of regulatory authority(ies) identified in question 8:

Federal Financial Supervisory Authority (Bundesanstalt für Finanzdienstleistungsaufsicht or BaFin) - German Central Bank ("Deutsche Bundesbank") and its regional offices - Ministry of Economics, Transport, Energy, Urban and Regional Development ("Ministerium für Wirtschaft, Energie, Verkehr und Landesentwicklung") of the State of Hessen.

AGC: 10

Rule 17f-7 requires that an Eligible Securities Depository is subject to periodic examination by regulatory authorities or independent accountants. Is the CSD subject to periodic examination by:

Regulatory authorities?

Independent accountants?

OTHER:

AGC: 10a
Please explain:

AGC: 11
Name of Authority #1 (please answer 11a):

Federal Financial Supervisory Authority ("BaFin") in co-operation with the German Central Bank ("Deutsche Bundesbank") according to the German Banking Act ("Kreditwesengesetz")

AGC: 11a.
What enforcement actions are available to regulatory authority #1 for breach of applicable statute or regulatory requirements?

- Fines
- Restrictions on CSD activities.
- Suspension of CSD activities.
- Termination of CSD activities.
- OTHER:

AGC: 11b.
Please explain:

AGC: 11c.
What enforcement actions are available to regulatory authority #2 for breach of applicable statute or regulatory requirements?

- Suspension of CSD activities.
- Restrictions on CSD activities.
- Termination of CSD activities.
- Fines
- OTHER: See 11d

AGC: 11d.
Please explain:

The Ministry of Economics, Transport, Energy, Urban and Regional Development can remove CBF's status as "Wertpapiersammelbank", which would result in the termination of the depository activities for German securities kept in collective safe custody ("Girosammelverwahrung").

AGC: 12
Has there been any use of such enforcement actions in the last three years?

- No
- Yes
- OTHER:

AGC: 12a.
If yes, please explain:

AGC: 13
Capital. Are annual financial statements publicly disclosed?

- Yes
- No

AGC: 13a.
If yes, the AGC requests a copy of the institution's annual report. Is the annual report available electronically?

- Yes
- No

AGC: 13b.
filecount - If yes, please upload the document(s) here or insert web link(s) in question 13d:

CBF 2022 Scanned version.pdf (9708KB)

CBF
2021
Annual
Accounts
report

1

AGC: 13c.

filecount - If more than one document for 13b, please upload the additional document here:

0

AGC: 13d.

Please insert web link(s) for 13b here:

DBAG's annual Financial Report as well as CBF's annual accounts are available at the following link: <https://www.clearstream.com/clearstream-en/about-clearstream/reports-and-ratings/annual-reports>

AGC: 13e.

If no, and annual report and/or financial statements are not disclosed, please state your share capital, reserves, and retained earnings (or equivalents as determined under local accounting standards). Share Capital (then please answer 13f):

AGC: 13f.

Reserves (then please answer 13g):

AGC: 13g.

Retained Earnings:

AGC: 14

Internal Audit. Is an internal audit undertaken in your CSD?

Yes

No

AGC: 14a.

If yes, what areas does the audit cover (financials, operations, etc.) and which department in your CSD handles it?

The role of CBF's internal audit department encompasses the examination and evaluation of the adequacy and effectiveness of the system of internal control and the quality of performance. The Chief Auditor and audit staff remain independent from any other group activities in order to allow them to carry out their work freely and objectively and render impartial and unbiased judgments. In order to ensure independence of the Internal Audit functions, the Head of Internal Audit (Chief Internal Auditor) reports to the Executive Board, to the Audit Committee and the Supervisory Board with an administrative reporting line to the CEO and a functional reporting line to the Head of Internal Audit DBAG. Internal Audit is authorised to have unrestricted access to all records, personnel and physical properties. The professional standards of the department are primarily based on those set out by the Institute of Internal Auditors, the Information Systems Audit and Control Association and the Basel Committee for Banking Supervision as well as by the German Institute for Internal Auditing. An Audit Universe of all auditable units, processes and IT systems has been set up by Internal Audit and is reviewed annually. A three-year rotational plan is prepared, based on a risk analysis of the audit universe, from which the detailed plan for the coming year is determined. The three-year rolling plan and detailed annual plan are both approved by the Executive Board, the Supervisory Board and the Audit Committee.

AGC: 14b.

Please list the date of your last internal audit and the period that the audit covered:

End date: 31/12/2022
Start date: 01/01/2022
Audit date: 31/12/2022

AGC: 14c.

How frequently does the internal audit occur?

- Two or more times a year
- Annually
- Less than annually

AGC: 14d.

If less than annually, please explain:

AGC: 14e.

Are the results of the internal audit publicly available?

Yes

No

AGC: 14f.

Please select the statement that most accurately characterizes the results of the last internal audit:

No material exceptions found.

Minor exceptions found.

Material exceptions found.

AGC: 14g.

If minor or material exceptions were found, what actions were taken? Please describe:

Any minor item that has been brought to our attention will be dealt with in a timely and thorough manner.

AGC: 15

Is a financial audit performed by an Audit Firm, Regulatory Authority, or other external party?

Yes

No

AGC: 15a.

If yes, please state the name(s) of the entity(ies) who perform the financial audit.

CBF's external auditor is PwC Audit, Frankfurt.

AGC: 15b.

Please list the date of your last financial audit performed by an Audit Firm, Regulatory Authority, or other external party:

31/12/2021

AGC: 15c.

Please list the period that the audit covered:

Start date: 01/01/2021

End date: 31/12/2021

AGC: 15d.

How frequently does the financial audit occur?

- Two or more times a year
- Annually
- Less than annually

AGC: 15e.

If less than annually, please explain:

AGC: 15f

Are the results of the financial audit publicly available?

- Yes
- No

AGC: 15g.

Please select the statement that most accurately characterizes the results of the last financial audit:

- No material exceptions found.
- Minor exceptions found.
- Material exceptions found.

AGC: 15h.

If minor or material exceptions were found, what actions were taken? Please describe:

Any minor item that has been brought to our attention will be dealt with in a timely and thorough manner.

AGC: 16

Is an operational audit performed by an Audit Firm, Regulatory Authority, or other external party?

Yes

No

AGC: 16a.

If yes, please state the name(s) of the entity(ies) who perform the operational audit.

CBF's external auditor is PwC Audit, Frankfurt.

AGC: 16b.

Please list the date of your last operational audit performed by an Audit Firm, Regulatory Authority, or other external party:

30/10/2022

AGC: 16c.

Please list the period that the audit covered:

Start date: 01/01/2022

End date: 31/12/2022

AGC: 16d.

How frequently does the operational audit occur?

Two or more times a year

Annually

Less than annually

AGC: 16e.

If less than annually, please explain:

AGC: 16f

Are the results of the operational audit publicly available?

- Yes
- No

AGC: 16g.

Please select the statement that most accurately characterizes the results of the last operational audit:

- No material exceptions found.
- Minor exceptions found.
- Material exceptions found.

AGC: 16h.

If minor or material exceptions were found, what actions were taken? Please describe:

Any minor item that has been brought to our attention will be dealt with in a timely and thorough manner.

AGC: 17, 17q

PARTICIPANTS AND PARTICIPATION. The purpose of this section is to understand issues relating to participation in the CSD, including eligibility requirements, conditions of participation, and supervision of participants. What types of entities are eligible to become participants and how many of each type are there currently?

Foreign Institutions

Brokers

Individuals

Not applicable

Banks

OTHER:

AGC: 17a.

How many Bank participants are there currently? (then please answer 17b)

CBF maintains relationships with around 400 German and remote international banks. Clearstream's core franchise is composed of banks, including local, regional and global custodians, central banks and universal banks. A list of CBF customers is available to logged in premium users of the Clearstream website at <https://www.clearstream.com/clearstream-en/keydocuments-1-/csd-1-/referencedata/customer-listings>

AGC: 17b, 17d

Please select the features included in the eligibility requirements for Banks.

Regulatory Oversight

Market Experience

Financial Thresholds

OTHER:

AGC: 17c.

Where can a description of the specific eligibility requirements for Bank participants be found?

Please refer to the "Becoming a Clearstream customer" page of our website <https://www.clearstream.com/clearstream-en/about-clearstream/becoming-a-clearstreamcustomer>

AGC: 17d.

Please explain:

Please refer to the "Becoming a Clearstream customer" page of our website <https://www.clearstream.com/clearstream-en/about-clearstream/becoming-a-clearstreamcustomer>

AGC: 17e.

How many Broker participants are there currently? (then please answer 17f)

CBF maintains relationships with around 400 German and remote international banks. Clearstream's core franchise is composed of banks, including local, regional and global custodians, central banks and universal banks. A list of CBF customers is available to logged in premium users of the Clearstream website at <https://www.clearstream.com/clearstream-en/keydocuments-1-/csd-1-/referencedata/customer-listings>

AGC: 17f, 17h

Please select the features included in the eligibility requirements for Brokers.

- Financial Thresholds
- Market Experience
- Regulatory Oversight
- OTHER:

AGC: 17g.

Where can a description of the specific eligibility requirements for Broker participants be found?

Please refer to the "Becoming a Clearstream customer" page of our website <https://www.clearstream.com/clearstream-en/about-clearstream/becoming-a-clearstreamcustomer>

AGC: 17i.

How many Individual participants are there currently? (then please answer 17j)

AGC: 17j.

Please select the features included in the eligibility requirements for Individual participants.

- Market Experience
- Regulatory Oversight
- Financial Thresholds
- OTHER:

AGC: 17k.

Where can a description of the specific eligibility requirements for Individual participants be found?

Please refer to the "Becoming a Clearstream customer" page of our website <https://www.clearstream.com/clearstream-en/about-clearstream/becoming-a-clearstreamcustomer>

AGC: 17m.

How many Foreign Institution participants are there currently?

CBF maintains relationships with around 400 German and remote international banks. Clearstream's core franchise is composed of banks, including local, regional and global custodians, central banks and universal banks. A list of CBF customers is available to logged in premium users of the Clearstream website at <https://www.clearstream.com/clearstream-en/keydocuments-1-/csd-1-/referencedata/customer-listings>

AGC: 17n, 17p.

Please select the features included in the eligibility requirements for Foreign Institution participants.

- Financial Thresholds
- Regulatory Oversight
- Market Experience
- OTHER:

AGC: 17o.

Where can a description of the specific eligibility requirements for Foreign Institution participants be found?

Please refer to the "Becoming a Clearstream customer" page of our website <https://www.clearstream.com/clearstream-en/about-clearstream/becoming-a-clearstreamcustomer>

AGC: 17q.

If you have selected "Other entities" above, please explain:

CBF will accept corporates, subject to limitations.

AGC: 17r.

Indicate how many "Other entities" are currently participants?

CBF maintains relationships with around 400 German and remote international banks. Clearstream's core franchise is composed of banks, including local, regional and global custodians, central banks and universal banks. A list of CBF customers is available to logged in premium users of the Clearstream website at <https://www.clearstream.com/clearstream-en/keydocuments-1-/csd-1-/referencedata/customer-listings>

AGC: 17s, 17u

Please select the features included in the eligibility requirements for the participants referred to above as "Other entities".

- Financial Thresholds
- Regulatory Oversight
- Market Experience
- OTHER:

AGC: 17t.

Where can a description of the specific eligibility requirements for participants described above as "Other entities" be found?

Please refer to the "Becoming a Clearstream customer" page of our website <https://www.clearstream.com/clearstream-en/about-clearstream/becoming-a-clearstreamcustomer>

AGC: 18

Are participants required to contribute capital to the CSD that would result in ownership of the CSD?

- Yes
- No
- Not applicable

AGC: 18a.

If yes, what fixed amount is required or what formula is used to determine the appropriate contribution level?

AGC: 19

Are prospective participants subject to an initial review and approval process regarding compliance with eligibility requirements?

- Yes
- No
- Not applicable

AGC: 20

What governs the relationship between the CSD and the participants?

- Rules of the CSD
- Relevant law and regulation
- Not applicable
- By-laws of the CSD
- Standard participation contract
- Established terms and conditions of participation
- OTHER:

AGC: 20a

Please explain:

AGC: 21

Rule 17f-7 requires that an Eligible Securities Depository holds assets for the custodian that participates in the system on behalf of the Fund under safekeeping conditions no less favorable than the conditions that apply to other participants. Please confirm that assets of foreign investors held by custodians as participants in the CSD are held under safekeeping conditions no less favorable than the conditions that apply to other participants.

- Yes
- No
- Not applicable

AGC: 21a.

If no, other or not applicable, please explain:

AGC: 21b, 21c.

Please confirm the basis for the arrangements you have in place to ensure that the assets you hold for custodians receive the same level of safekeeping protection as the assets held for other categories of participants.

- Standard participation contract
- Rules of the CSD
- Relevant Law and Regulation
- By-laws of the CSD
- Established terms and conditions of participation
- OTHER:

AGC: 21d

For each item in Question 21b that you checked, please briefly supply references or citations to the law(s), regulation(s), or CSD rule(s), participation condition(s), or participant contract provision (s), as applicable.

For the relevant law and regulation - please refer to our answer to question 7) above. The established terms and conditions on www.clearstream.com equals our CBF General Terms and Conditions, while the CBF Customer Handbook would be equal to the rules of the depository. The standard participation contract are the customer and account application forms. In addition, in line with CSDDR, CBF has published its Customer Access and Acceptance Policy. Please refer to the following link:
<https://www.clearstream.com/clearstream-en/about-clearstream/becoming-a-clearstream-customer>

AGC: 22

How does the CSD notify participants of material changes to the conditions of participation?

- Not applicable
- By e-mail
- By telephone
- By public announcement
- By press release
- OTHER: See 22a

AGC: 22a.

Please explain:

CBF reserves the right to modify and amend the Conditions at any time. Modifications and amendments of the Conditions shall be disclosed to the client (i) via the electronic communication channel and (ii) be published on the website of CBF (www.clearstream.com). If not provided otherwise in the Conditions, modifications and amendments of the Conditions shall be communicated at least six weeks prior to the effective date indicated in the respective notification. Please note, that it is also provided for a shorter communication period of three weeks applicable in specific circumstances. The modifications and amendments of the Conditions shall be deemed to be approved unless the customer submits a written objection to CBF via notification or via the email address: conditions@clearstream.com within the respective provision for notice. CBF shall expressly draw the client's attention to such consequence in the announcement of the amendment. Please note that an amended version of the Conditions is effective February 2022. Please find the document at the following link [General Terms and Conditions \(clearstream.com\)](http://www.clearstream.com)

AGC: 23

Who enforces compliance with the CSD's conditions of participation?

- The exchange
- Not applicable
- The CSD's regulator
- The CSD
- OTHER:

AGC: 23a
Please explain:

Customers are subject to the CBF General Terms and Conditions. Please find the document at the following link [General Terms and Conditions \(clearstream.com\)](http://clearstream.com)

AGC: 24
What enforcement actions are available to the enforcement authority?

- Termination of participation
- Fines
- Not applicable
- Restrictions on participation
- Suspension of participation
- OTHER:

AGC: 24a
Please explain:

AGC: 25
Has there been any such enforcement actions in the last three years?

- Yes
- No

AGC: 25a.
If yes, please explain, including information relative to any suspensions of CSD participants:

AGC: 26

CSD FUNCTIONALITY AND SERVICES, USE OF AGENTS. Certain functionalities and services reduce risk to an investor if provided in an efficient manner. The purpose of this section is to identify those functionalities that may potentially be offered by depositories and clearing systems around the world, and ascertain whether they are offered by your institution. For which of the following security types do you serve as a CSD or clearing system?

Corporate money market

Not applicable

Corporate bonds

Equities

Government securities

OTHER:

AGC: 26a.

Please name the other security types:

The following securities are currently and unchanged after migration to T2S admitted to collective safe custody:

- Debt instruments, such as Government bonds (Bunds), mortgage bonds, money market instruments (CP), municipality bonds, corporate bonds, international bonds and convertible bonds;
- Equities, such as bearer shares and registered shares;
- Warrants and certificates;
- Other securities, for example units in collective investment undertakings, and international securities held in collective safe custody, for example German Global Bearer Certificates representing international securities.

CBF is establishing account links to all T2S markets. It can be assumed that nearly all T2S eligible securities of the T2S markets will be accepted for collective safe custody. This adaptation takes place in a separate launch.

AGC: 27a. (i)

Please list the instrument types for which it is not compulsory by law to: (i) settle in your CSD

AGC: 27a. (ii)

(ii) safekeep in your CSD:

AGC: 27b. (i)

Please list the instrument types for which it is not compulsory by market practice to: (i) settle in your CSD

AGC: 27b. (ii)

(ii) safekeep in your CSD:

AGC: 27, 27c

Is the use of the CSD in your market compulsory by law or compulsory by market practice for the settlement or safekeeping of all instrument types in your market (e.g. equities, government securities, corporate bonds, money market instruments, warrants, derivatives etc).

- Yes by market practice for safekeeping, but not for all instrument types
- Neither
- Yes by law for safekeeping, but not for all instrument type
- Yes by market practice for settlement, but not for all instrument types
- Yes by law for settlement, but not for all instrument types
- Yes by market practice for safekeeping of all instrument types
- Yes by market practice for settlement of all instrument types
- Yes by law for settlement of all instrument types
- Yes by law for safekeeping of all instrument types
- OTHER: For German Federal bonds, which are traditionally dematerialised, the Bundesschuldenwesengesetz (BSchWG) states that German Federal bonds are issued by entry in the Federal Debt Register led by the German Finance Agency (Deutsche Finanzagentur) and registration of a central securities depository ("Wertpapiersammelbank") pursuant to Section 1 paragraph 3 Securities Deposit Act to create a collective registered claim (Sammelschuldbuchforderung). This collective registered claim is deemed by law as a collective holding of single bonds. However, the requirement to register a central securities depository as fiduciary holder of the Federal Bonds does not hinder – opposed to other jurisdictions - cross-border or internal settlement in settlement systems other than CBF as, currently, the only German central securities depository. The Securities Deposit Act imposes on any person undertaking the purchase of securities in its own name and for the commission of others (commission agent) the strict obligation to procure for the principal ownership of individual securities or a respective fractional co-ownership right to a collective holding in a central securities depository except for securities transaction executed abroad. The Exchange Regulation of the main German equity exchange (Frankfurter Wertpapierbörse) requires for the admission of enterprises to the trading at the exchange that the orderly settlement of securities traded is made via a licensed central securities depository in the meaning of Section 1 (3) Securities Deposit Act. Further, Section 9 a (1) of the Securities Deposit Act requires that all securities, including equities, issued in form of global certificates to which numerous rights are attached, which might be issued in interchangeable securities of the same kind (global certificate), shall be delivered to a central securities depository in the meaning of Section 1 (3) of the Securities Deposit Act. CBF is currently the only central securities depository in the meaning of the Securities Deposit Act. As a consequence of the aforesaid, there exists the current market practice that all Stock Exchange transactions are settled within CBF. The figures for the OTC activity are not available. Please also note that a significant part of equities issued in single certificates are held outside CBF.

AGC: 28 28a

Settlement and Safekeeping Percentages 28a Please list by instrument type the percentage of the total market in your jurisdiction (either volume or value) settled within your institution, exclusive of your links with third parties.

CBF cannot provide any figures as the volume of the whole market is not disclosed. Clearstream Banking Frankfurt is the largest participant in T2S, accounting for approximately nearly 40% of all T2S volume in the euro zone.

AGC: 28b.

Please list by instrument type the percentage of the total market in your jurisdiction (either volume or value) held in safekeeping within your institution.

CBF cannot provide any figures as the volume of the whole market is not disclosed.

AGC: 29, 29i

Are there any activities performed by a third party on behalf of the CSD for the CSD participants (e.g., vaulting of physical securities, registration, entitlement processing, etc.)?

- Yes
- No
- Not applicable
- OTHER:

AGC: 29a.

If third parties are employed, please indicate which services they supply:

CBF has outsourced some operational functions to its sister companies Clearstream Banking S.A., Clearstream Operations Prague sro and Clearstream Global Securities Services Ltd. IT development and maintenance for Clearstream's systems are being handled by Clearstream Services S.A. and the IT department of Deutsche Börse AG in Frankfurt. Additionally, we offer proxy voting services in co-operation with ISS. This brings a number of additional benefits to our customers throughout the life cycle of a proxy voting event. ISS is headquartered in the United States.

Also, the securities settlement in central bank money of transactions in German in collective safe custody (CSC) has been outsourced to the T2S platform provided by the Eurosystem. In this context, EUR cash settlement against central bank money takes place via the T2S Dedicated Cash Account (DCA) and foreign currencies via correspondent banks. Agents used by CBF are depositories abroad to which CBF has opened a mutual account relationship in the meaning of Section 5 paragraph 4 Securities Deposit Act. CBF will gradually establish CSD links to all markets participating in T2S. CBF has outsourced the IT processing for transactions regarding its international securities held in non-collective safe custody (NCSC securities, so called Wertpapierrechnung) to Clearstream Services S.A., Luxembourg. In this framework settlement and custody transactions for these securities on the so called 6-series accounts is technically executed via the Creation platform, based on a service level agreement between CBF and Clearstream Services S.A., Luxembourg. However, the execution of such services and securities transfers happens under German law.

AGC: 29b.

If third parties are employed, does the CSD assume liability for losses incurred by participants as a result of the actions/inactions of the third parties?

- Yes
- No

AGC: 29c, 29e.

If you acknowledge responsibility, please indicate whether your responsibility is assumed

- if the loss was caused by the willful default or other willful conduct on the part of the agent
- if such loss was caused by the agent's action or inaction and such action or inaction was deemed to be gross negligence on the part of the agent
- if such loss was caused by the agent's action or inaction and such action or inaction was deemed to be negligence on the part of the agent
- regardless of whether such loss was caused by any action or inaction of the agent
- OTHER: Please refer to Article VII of our General Terms and Conditions for details concerning CBF's liability. CBF GTCs are published on our website at <https://www.clearstream.com/clearstream-en/keydocuments-1-/csd-1-/general-terms-and-conditions>. Special conditions may apply for certain kind of services.

AGC: 29f.

Please specify limit:

AGC: 29g.

Please specify limit:

AGC: 29d, 29h.

If you acknowledge responsibility for agents, your responsibility is assumed for losses

- without limit
- which are not consequential losses
- subject to a monetary limit not based on insurance limits
- subject to a monetary limit based on insurance limits
- OTHER: Please refer to Article VII of our General Terms and Conditions for details concerning CBF's liability. Our GTCs are published on our website at <https://www.clearstream.com/clearstream-en/keydocuments-1-/csd-1-/general-terms-and-conditions>

AGC: 30, 30m

Has any participant suffered any losses in the past three years due to the CSD's performance?

- Yes
- No
- Not applicable

AGC: 30a, 30j

If yes, please select all of the following in which loss has occurred. You will be prompted to enter the number of instances and total loss in USD thereafter.

- System Outage
- Corporate Action
- Settlement Process - Securities
- Settlement Process - Cash
- OTHER:

AGC: 30b.

Corporate Action. Please specify number of instances:

AGC: 30c.

Corporate Action. Please specify total loss in USD:

AGC: 30d.

Settlement Process - Securities. Please specify number of instances:

AGC: 30e.

Settlement Process - Securities. Please specify total loss in USD:

AGC: 30f.

Settlement Process - Cash. Please specify number of instances:

AGC: 30g.

Settlement Process - Cash. Please specify total loss in USD:

AGC: 30h.

System Outage. Please specify number of instances:

AGC: 30i.

System Outage. Please specify total loss in USD:

AGC: 30k.

For Other, please specify number of instances:

AGC: 30l.

For Other, please specify total loss in USD:

AGC: 31

Who accepts cash deposits (or makes payment credit accommodations) for CSD transactions?

- Not applicable
- Banks appointed by CSD
- Central Bank
- Neither or others (e.g. credit lines used)
- CSD
- OTHER:

AGC: 31a

Please indicate the name of the banks appointed by the CSD

Payments in relation to securities transactions, income administration, fees and charges settle outside the CASCADE platform. For cash settlement, CBF uses the central banks, correspondent banks (cash agents) and payment and settlement systems where CBF's customers keep the corresponding cash accounts.

- All EUR payments resulting from the settlement of transactions with CSC securities, interest and redemption payments for German government bonds as well as cross-border market and reverse claims for FCSC securities are settled via T2S.

- All payments resulting from other Corporate Actions with CSC securities and from the settlement of fees and charges in CASCADE are settled in EUR via TARGET2.

- Cash settlement in non-EUR currency resulting from transactions and income administration in relation to CSC and NCSC securities takes place through the Creation platform of CBF's sister company, CBL. Furthermore payments in EUR resulting from transactions and income administration in relation to NCSC securities classes are also settled through Creation.

- A special case is the settlement of payments in CHF through the Swiss National Bank. This link is only used for cash settlement of cross-border transactions in relation to Swiss CSC securities against CHF. Payments in CHF that do not result from transactions in Swiss CSC securities classes and security transactions in Swiss CSC securities between two CBF participants are settled as payments in non-EUR currency via the Creation platform.

The updated list of cash correspondent banks in the Clearstream network (Creation) is always available on our website at <https://www.clearstream.com/clearstream-en/products-and-services/asset-types/cash/cash-timings-matrix-1290324>

AGC: 32

Who processes cash clearing (or draws on credit lines, if applicable) for CSD transactions?

- Central Bank
- Neither or others (e.g. credit lines used)
- Not applicable
- CSD
- Banks appointed by the CSD
- OTHER:

AGC: 32a

Please name banks appointed by the CSD

Please refer to our answer to question 31a.

AGC: 33a

Please name banks appointed by the CSD

Please refer to our answer to question 31a.

AGC: 33, 33b

Who controls the movement of cash for cash deposits (or draws on credit lines, if applicable)?

- Not applicable
- Neither or others (e.g. credit lines used)
- Banks appointed by CSD
- Central Bank
- CSD
- OTHER:

AGC: 34

Who controls the movement of cash for cash clearing (or for draws on credit lines, if applicable)?

- CSD
- Central Bank
- Banks appointed by CSD
- Neither or others (e.g. credit lines used)
- Not applicable
- OTHER:

AGC: 34a

Please name banks appointed by CSD

Please refer to our answer to question 31a.

AGC: 35

Please indicate services you provide.

- Information on distribution of new issues (IPO, Privatization).
- Same day turnaround settlements.
- Own list or: AGC: Information in advance on corporate (annual or special) meetings in order that owners can vote.
- Not applicable
- Tax assistance where foreign holders may be entitled to tax relief at source or through a claim.
- In order to avoid fails, an automatic securities lending facility - if requested - is provided for.
- Collateral handling in support of activities including securities lending, overdraft coverage, cash management, repurchase agreements, etc.
- OTHER: See 35d

AGC: 35a

Automatic securities lending facility is provided for:

Other financial institutions

Banks

Brokers

OTHER:

AGC: 35c

Summary narrative for PFMI Principle 5. Please provide a summary narrative disclosure with sufficient detail and context, as well as any other appropriate supplementary information, to enable readers to understand the CSD's approach to or method for observing the principle. Please use the following questions as guidance for the points of focus and level of detail it is expected to convey in the disclosure. Cross references to publicly available documents should be included, where relevant, to supplement the discussion.)

n/a

AGC: 35c

If collateral handling, please provide details

XEMAC is a collateral management platform that supports market participants to make the most efficient use of their collateral, reducing the amount of administrative monitoring by automating most of the processes involved. Transactions in the following areas can be secured via Xemac:

- Credit facilities with Deutsche Bundesbank;
- Open market transactions of the European Central Bank;
- Collateralisation of Deutsche Bundesbank trades on ones' own behalf;
- Trading of GC Pooling transactions through the Eurex Repo trading platform in EUR and foreign currencies;
- Efficient provision and management of collateral on the basis of the risk-based margining for the benefit of Eurex Clearing AG as a clearing house and a CCP;
- Securities lending in the context of the various programs offered by CBF;
- Credit lines with CBF and Clearstream Banking S.A., Luxembourg;
- Bilateral provision of collateral between Xemac participants;
- Collateralised instruments that are issued via CBF and collateralised in Xemac. CBF acts here as the security trustee.

By linking Xemac to Clearstream Banking S.A.'s Collateral Management System, CmaX, Xemac participants can also use the securities they hold in Creation for the provision of collateral.

Xemac fulfils the requirements made of a modern system configuration and has been designed as a client/server system and may be installed on a PC or a workstation within the workplace.

AGC: 35d

Other, please explain:

GC Pooling® is a cash-driven general collateral market of Eurex Repo® and offers a unique combination of collateralised money market trading with the efficiency and security of Eurex Clearing AG's central counterparty. It is easy to trade extremely large tickets and deals can be seamlessly completed and then processed automatically without any issues over credit or security allocation.

The compelling advantage of GC Pooling® is the re-use possibility of received collateral for further money market transactions and refinancing within the framework of Bundesbank open market operations. The OneWeek Tender term with flexible value dates for term legs enables participants to utilize surplus liquidity resulting from the European Central Bank tender in an efficient manner.

AGC: 36

What procedures are in place for the processing of corporate action entitlements?

- Credited to the securities account on the day indicated below regardless of whether actually collected by the CSD on the scheduled date.
- Not applicable
- Corporate action entitlements are handled by an entity separate from the CSD.
- Credited to the securities account upon actual receipt by the CSD.
- OTHER:

AGC: 36a

Credited to the securities account:

- On pay date +1.
- On pay date.
- On pay date +2.
- OTHER:

AGC: 36c

Name of entity:

AGC: 37a

Credited to the cash account:

On pay date +1.

On pay date.

On pay date +2.

OTHER: Cash settlement takes normally place on payment date. The crediting of funds can only be effected once CBF has received the funds from the Issuer CSD or agent and once they have been fully reconciled. The amount paid out, less tax if applicable, is debited to the paying agent and credited to customers with entitled positions.

AGC: 37c

Name of entity:

AGC: 37, 37d.

What procedures are in place for the processing of interest and dividends?

Income and dividend collection is handled by an entity separate from the CSD.

Not applicable

Credited to the cash account on the day indicated below regardless of whether actually collected by the CSD on the scheduled date.

Credited to the cash account upon actual receipt by the CSD.

OTHER:

AGC: 38

Please list all depositories or settlement systems to which you have an electronic link.

For foreign securities eligible for collective safe custody pursuant to the German Securities Deposit Act, CBF maintains links into central securities depositories to serve foreign securities markets, so called CSD links. In this context, EUR cash settlement against central bank money takes place via the T2S Dedicated Cash Account (DCA) and foreign currencies via correspondent banks. CBF will gradually establish CSD links to all markets participating in T2S. For securities that are not settled via the T2S platform, CBF keeps the positions in the form of bookentry credits on a fiduciary basis, using the technical infrastructure of its sister company CBL, which uses custodians in various countries for purposes of custody.

AGC: 39

Are procedures and controls (firewalls) in place to avoid systemic collapse or contamination if one of the linked entities should experience business interruptions for whatever reason?

No

Yes

Not applicable

AGC: 39a

Please explain

Existing Relationships are reviewed on an ongoing basis, based on Clearstream's continuous oversight of market developments in the areas of procedures, practices, regulations or other infrastructure related developments. Due diligence reviews and on-site visits (currently performed remotely due to the pandemic) are performed at least annually in line with CSDR requirements or ad hoc when deemed necessary.

All sub-custodians are monitored for any incidents that result in contingency measures being conducted; all key risk indicators, incidents and any issues or anomalies arising out of the questionnaire information-gathering exercise are logged in a central database managed by our Risk Management area.

An updated BCP is requested on an annual basis.

In principle, we do not maintain live contingency securities accounts with identified alternative providers. The aim to reduce risk vis-a-vis the network of Clearstream suppliers is achieved by opening direct links to local CSDs whenever possible, or, where not possible, by choosing the best supplier in the market. Clearstream assures itself of the continuous provision of critical supplier services by a number of means, such as regular due diligence, review of suppliers' BCM arrangements, and the establishment of minimum service levels required in case of supplier contingency.

Clearstream also maintains Crisis Management Committee (CCM) with a set of business duty managers. We have proven in the past that we were capable of replacing a provider that had difficulties by a new one relatively quickly and smoothly. As with Iceland and Argentina, the outage of a sub-custodian or other agent would constitute a crisis that would trigger the initiation of this ad hoc committee.

Clearstream not only monitors its suppliers, but also proactively monitors the economical and political scene in order to react timely and in an appropriate manner.

On the cash side we have alternative providers for the USD, CNY, GBP and EUR currencies. In case necessary and where possible, our sub-depositories would back-up the Cash Correspondent function.

AGC: 40

Has a business interruption recovery plan been developed in the event the linkages should become inoperable for any reason?

- Yes
- No
- Not applicable
- Other

AGC: 40a.
If no or other, please explain

AGC: 41
Are participants permitted to maintain more than one account at the CSD?

- Yes
- No
- Not applicable

AGC: 41a, 41c
If yes, please indicate number:

- An unlimited number of accounts
- More than one account
- OTHER:

AGC: 41b
If more than one account what is the maximum?

AGC: 42
Are participants required/permitted to segregate assets held for their own benefit from those they hold for their clients?

Yes

No

Not applicable

OTHER:

AGC: 42a

If yes, is segregation required or simply permitted?

Required

Permitted

AGC: 42b, 42c

How does segregation occur?

By sub-accounts within a single participant account.

By separately designated participant accounts.

By separately designated beneficial owner accounts.

OTHER:

AGC: 43, 43b

Does the CSD permit its participants to open accounts in the participant's own nominee name(s)?

Yes

No

Not applicable

AGC: 43a

If yes, do laws exist, which define as well as protect the rights of beneficial owners with respect to securities registered in nominee name?

- Yes
- No

AGC: 44a

In the event a participant's single or main account is blocked for any reason (e.g., insolvency, penalties, violations, liens), would securities held in any account or accounts on behalf of the participant's clients be accessible: By the participant's clients?

- Yes
- No
- Not applicable

AGC: 44b

If yes, please describe briefly how clients of participants would access their securities and whether there would be any delay in their ability to do so:

AGC: 44d.

By the intervening authorities controlling insolvency or other proceedings?

Yes

No

Not applicable

Other: Pursuant to No XXXII of CBFs General Terms and Conditions, if a public authority issues a decree pursuant to sections 45 et seq. KWG [German Banking Act] or pursuant to corresponding foreign legal regulations, if the client's registered offices are situated abroad, against the client, CBF may freeze that client's securities accounts and cash accounts. This may apply to all client accounts (including accounts holding non-proprietary assets). Whereas it is likely that in case of an insolvency any access to the assets so frozen would have to be exercised through the relevant insolvency administrator, it would need to be assessed on a case by case basis if and under which conditions such access can be granted. Should the blocking occur due to other reasons, such as violation of laws, penalties or other, it would need to be analysed if the reasons for such blocking applies equally to proprietary and non-proprietary accounts and under what circumstances access can be granted.

AGC: 44e.

If yes, please describe briefly under what conditions access would be granted to the intervening authorities:

AGC: 44h

If yes, please describe briefly under what conditions access would be granted to the participant's creditors:

AGC: 44g, 44i

By the participant's creditors?

Yes

No

Not applicable

AGC: 44j.

By the CSD's creditors?

- Yes
- No
- Not applicable

AGC: 44k.

If yes, please describe briefly under what conditions access would be granted to the CSD's creditors:

AGC: 45

In what form does the CSD maintain records identifying the assets of each participant?

- Computer tape
- Computer file
- Hard copy
- Microfiche
- OTHER:

AGC: 45b

In which format is the source data maintained?

The information is available through the following resources: - CASCADE/CARAD/LIMA (online + batch). - Digital Number Ledger (current + historical). - Archive data-base (DVD + microfilm + microfiche).

AGC: 46

Rule 17f-7 requires that an Eligible Securities Depository provides periodic reports to its participants with respect to its safekeeping of assets, including notices of transfers to or from any participant's account. Does the CSD make available periodic safekeeping reports to participants, including notices of transfers to or from the participant's account?

Yes

No

AGC: 46a.

If no or other, please explain

AGC: 46b, 46c.

If yes, please indicate the scheduled frequency:

Annually

Quarterly

Monthly

Weekly

Daily

Upon request

OTHER: In order to enable customers to comply with their obligations of reconciliation of their records on a daily basis under the article 64 (3) of the Commission Delegated Regulation EU No 2017/392 (ESMA RTS), customers are provided daily with necessary following information specified for each customer account and each securities issue: • The aggregate balance of each securities account at the beginning of a respective business day; • The individual securities transfers in or from a securities account during the respective business day; and • The aggregate balance of a securities account at the end of the respective business day. Through the CASCADE communication channels, CBF offers its customers a broad selection of reports on collective safe custody. For securities transactions with NCSC securities CBF provides its customers with comprehensive reports via Creation's various communication channels. Further information is provided in chapter 9 of the CBF Customer Handbook: <https://www.clearstream.com/clearstream-en/keydocuments-1-/csd-1-/customer-handbook>

AGC: 47, 47a

What is your document and record retention policy for documents and records described above in this section?

- 6 months or less
- 1 year
- 3 years
- 5 years
- 7 years
- Other: The German law establishes a 6 years retention period for commercial letters and 10 years for company reports, booking documentation and balance sheets. This is being adhered to by CBF.

AGC: 48

The Committee on Payment and Settlement Systems of the Bank for International Settlements (BIS) has identified three common structural approaches or models for linking delivery and payment in a securities settlement system. Please indicate which model your procedures most closely resemble.

- Not applicable
- Model3
- Model2
- Model1
- OTHER:

AGC: 48a

Please briefly describe your settlement process, including how do your settlement procedures vary from the model chosen above?

CBF has outsourced the securities settlement in central bank money of transactions in German and international securities to the T2S platform provided by the Eurosystem. Within the securities settlement, T2S takes over the entry and the processing of instructions, the validation, the matching and the settlement of the transmitted instructions, the administration of positions as well as the reporting of transactions and of positions for the securities accounts on the T2S platform (SAC - Security Accounts). Thereby, the settlement, that is, the regulation of the security and cash side, takes place directly on the T2S platform. For the cash side there are dedicated cash accounts (DCA) available. The instructions that are transmitted to T2S for settlement are delivery instructions resulting from OTC and stock exchange trading (Xetra, floor trading), clearing through Eurex Clearing AG (CCP) for trading at the Frankfurt Stock Exchange (Xetra) and Eurex Repo and the Eurex derivatives market (exercises and assignments, resp. notifications and allocations) as well as from CCP service for securities lending, and deposit transfers. The CBF CASCADE system covers the administration of positions in collective safe custody and the related services as for example corporate actions, dividend payments or services related to general meetings. In addition, a reconciliation of the T2S positions takes place. Instructions transmitted to T2S are processed in different settlement cycles in T2S. For cash and securities settlement, T2S offers a sequential night-time processing (night-time settlement - NTS) with two cycles and up to two real-time processing cycles (real-time settlement - RTS). Cash entries which result from securities settlement or from interest and redemption payments for German government bonds as well as cross-border market and reverse claims for FCSC securities are booked on the DCA. Other cash bookings are processed separately in two processing cycles, Direct Debit 1 (DD1) and Direct Debit 2 (DD2). In addition, manually entered payments and automatically generated bookings of the subscription price for subscription rights can be carried out in Direct Debit 3 (DD3). In the settlement of securities transactions, a distinction must be made between (a) the finality of instructions to transfer securities and/or cash amounts in a clearing and settlement system in the meaning of European Directive 98/26/EC (EC Directive on Settlement Finality) and (b) the lawful settlement of securities and/or cash delivery obligations. For the finality on the T2S platform the rules determined in the General Terms and Conditions of CBF apply. From a legal point of view, the settlement of instructions takes place when the counterparties to a securities transaction have performed their entire obligations (such as the transfer of rights to a security or effecting a cash payment) so that all reciprocal claims arising from the transaction have been satisfied in full and are consequently extinguished. The instruction is settled with the binding booking in T2S, related with the associated re-registering has taken place in the custody ledger (Section 14 of the German Securities Deposit Act). Cash settlement for payments made in EUR takes place through the T2S DCA of the participant. Cash settlement for payments made in currencies other than EUR take place through Creation, the custody and settlement platform of CBF's sister company, CBL. Further information is provided in chapter 1.4 of the CBF Customer Handbook: <https://www.clearstream.com/clearstream-en/keydocuments-1/-/csd-1-/customer-handbook>

AGC: 49

Are the cash and security movements simultaneous?

Yes

No

Not applicable

AGC: 49a

If cash and security movements are not simultaneous, please indicate the duration of the timing gap

1 hour

2 hours

3 hours

4 hours

5 hours

Overnight

2 days

AGC: 50, 50a

How are CSD eligible securities held by the CSD?

In dematerialized form

In certificated form

OTHER: Securities can be held in custody with Clearstream under any of the following types: Collective Safe Custody (Girosammelverwahrung, GS/CSC): Holders of securities admitted to collective safe custody have a proprietary right to those securities (a 'right in rem') being a pro rata co-ownership right in a fungible pool of securities represented by a global note or a similar number of physical securities held by Clearstream in its vaults or through a cross border CSD- Link with a foreign CSD based on an account relationship qualified under § 5 clause 4 DepotG. Individual Safe Custody (Streifbandverwahrung): Jacket custody of non-fungible certificates, where each customer is entitled to have the individual certificates with a particular serial number at his disposal. Non-collective safe custody: For securities that are not settled via the T2S platform, Clearstream keeps the positions in the form of book-entry credits on a fiduciary basis, using the technical infrastructure of its sister company CBL, which uses custodians in various countries for purposes of custody. In case of insolvency/bankruptcy, the depositor- as holder of a personal right in rem due to its co-fractional ownership in the securities certificate (CSC)– has a right to segregate (Aussonderungsrecht) in relation to its assets pursuant to section 47 of the German Insolvency Code, i.e. the depositor of securities may ask for the securities to be separated from the debtor's assets. Under section 4 of the German Securities Deposit Act, custodians have to provide for a segregation of investor assets from their own assets in relation to securities held in collective safe custody (in order to protect the investors in case of an insolvency/bankruptcy of the custodian). In case of securities deposited by a depository as intermediate custodian with Clearstream, Clearstream must assume that the securities are not owned by the depository (Fremdvermutung) unless expressly notified otherwise. Clearstream is a member of a deposit guarantee fund – Einlagensicherungsfonds - organised by the Banking Association of Private Banks. In the case of a bankruptcy procedure against a Clearstream participant, the guarantee fund meets the obligations arising from pending settlements. Please also refer to the final provisions listed in section C of Clearstream's CSD GTCs, available at <https://www.clearstream.com/clearstream-en/keydocuments-1-/csd-1-/general-terms-and-conditions>

AGC: 51

If CSD eligible securities are certificated, can CSD eligible securities be held outside of the CSD?

- All eligible securities must be held in the CSD
- Securities may move freely into and out of the CSD
- Once entered into the CSD, eligible securities must remain in the CSD
- Certain designated securities may be held outside the CSD
- Not applicable

AGC: 51a

If certain designated securities are held outside the CSD, please indicate under which conditions these securities would be held outside the CSD:

AGC: 51b

If CSD eligible securities are required to be centrally immobilized at the CSD, where and with whom are the certificates safekept? (then please answer 51c)

AGC: 51c

Are these certificates:

Bearer

Registered

OTHER: General remarks: • The German securities holding regime based on ownership rights (rights in rem) is different from the common law based or Anglo-American securities holding schemes. The latter are characterised by a split between legal ownership (i.e. verified by registration mostly of nominees in the share register) and beneficial ownership (usually with investor). • CASCADE-RS is an expanded function for keeping positions of registered shares in CASCADE, and enhanced settlement processes to take account of the particular requirements regarding the reporting of the shareholders for registration in the share ledger, with electronic interfaces to the issuer and the share ledger manager.

AGC: 51d

If registered, how are the CSD eligible securities registered?

- In the name of the CSD
- In the name of the depositing participant or its nominee
- In the name of a separate nominee of the CSD
- OTHER:

AGC: 51f

If in the name of a separate nominee, please identify by name the nominee used:

AGC: 51h

If CSD eligible securities may be held either in or out of the CSD, are these certificates:

- Bearer
- Registered
- Other: The following list of actions are undertaken when receiving physical securities: - check-up to ensure completeness (receipt vs. securities), particularly security code number, denomination, number of certificates, security serial number, control signature. - verification of deliverability (i.e. ability of collective safe custody, terms and conditions of validity, intactness and authenticity of securities, 'Opposition' = list of stopped securities). - observance of target dates (e.g. capital repayment, var. payments, increase in capital, accuracy of coupons etc.). The check-up process is completed on the next working day following the delivery.

AGC: 51i

What are the control features for receipt of certificates to the CSD (e.g., authentication procedures, re-registration)? Please describe:

AGC: 52

If securities are dematerialized: May dematerialized security positions be re-certificated and held outside the CSD?

- Yes
- No
- Not applicable

AGC: 52a, 52k

Are the securities held:

- Through book-entry at the CSD
- Through book-entry at a registrar or issuer
- OTHER:

AGC: 52b

Please identify which types of entities may act as registrars:

- Issuers
- Separate companies that perform registrar functions
- CSD
- OTHER:

AGC: 52d

If the securities held by the CSD are recorded by book entry at the registrar, are the securities registered only to the CSD, with the CSD providing the function of recording ownership on a centralized basis for the market?

- Yes
- No

AGC: 52e

If yes, how are securities held at the registrar for the account of the CSD?

- In the name of the CSD
- In the name of a separate nominee of the CSD

AGC: 52f
Please describe:

AGC: 52g
If the securities held with the CSD are recorded by book-entry at the registrar but are not registered exclusively to the CSD, may they be registered to:

- The beneficial owner
- A nominee

AGC: 52h
Please describe:

AGC: 52i
If the securities held with the CSD are recorded by book-entry at the registrar, what are the control features at the registrar for transfer of registrar positions to and from the CSD (e.g., authentication procedures, reconciliation, confirmation of position at registrar)? Please describe:

Matching book entry and confirmation is executed online via interface between CBF settlement system CASCADE and the system of the German Finance Agency (Deutsche Finanzagentur) or in the register of the issuer for registered shares.

AGC: 53
Does the CSD maintain records that identify the assets of each participant and segregate the system's own assets from the assets of participants?

- No
- Yes
- Not applicable
- OTHER:

AGC: 53a

If answer to question 'G23Q031' is other or not applicable, please explain

AGC: 54

Does the law protect participant assets from claims and liabilities of the CSD?

- Yes
- No
- Not applicable

AGC: 55

Can the CSD assess a lien on participant accounts? (A lien would entitle the CSD to take and hold or sell the securities of the participant in payment of a debt.)

- Yes
- No
- Not applicable

AGC: 55a

If yes, for what reasons are liens or similar claims imposed?

To secure payment for purchased securities

Collateralization of overdrafts

Fees and expenses

OTHER:

AGC: 55b

Please describe:

AGC: 55c

Please indicate the limits of this lien as indicated below:

- The lien is limited to securities in the participant's proprietary account
- The lien is limited to securities in the course of purchase and sale transactio
- The lien may extend to settled client positions

AGC: 55d

Please explain:

According to Section 5 (3) in connection with Section 3 (1) 1 Securities Deposit Act, a participant may hold his proprietary assets and non-proprietary assets in one single account at CBF. However, pursuant to Section 4 (1) Securities Deposit Act, there is a statutory presumption that all securities deposited with CBF by a participant are non-proprietary assets unless the participant has notified CBF otherwise. As a consequence, CBF cannot acquire any lien on securities except for a statutory lien of CBF under Section 4 (1) 2 German Securities Act as security for outstanding fees (e.g. custody) incurred with respect to these particular securities

AGC: 55e

If a lien is placed on a participant's account which has been designated for its clients, will the CSD select certain securities to be subject to the lien?

- Yes
- No
- Other: Please see below.

AGC: 55f

If yes, please indicate whether:

- The lien is placed on the most liquid securities in the account
- The lien is placed on the securities with the greatest value in the account

AGC: 55g

Please explain:

In line with the answer given to question 55d, for outstanding fees occurring from settlement activities, CBF does not select certain securities but it is bound by law to take the securities underlying the settlement transaction. For fees resulting from custody business, CBF may select pledged securities to cover outstandings.

AGC: 55h

If no, please indicate whether the entire account will be subject to the lien.

- Yes
- No

AGC: 55j

For accounts designated as client accounts, do procedures exist to restrict the placement of liens only to obligations arising from safe custody and administration of those accounts?

- Yes
- No

AGC: 55k

If yes, are the restrictions accomplished by:

- Contract between the CSD and the participant

AGC: 55l

Please explain:

Pursuant to Section 4 (1) 2 German Securities Deposit Act, the lien is restricted by law, not by a contract between the depository and the participant.

AGC: 56, 56e

Transfer of Legal Ownership. Does the CSD have legal authority to transfer title to securities?

- Yes
- No
- Not applicable

AGC: 56a

When does title or entitlement to CSD securities pass between participants?

- At the end of the business day on which the transfer occurs
- When corresponding money or other consideration is transferred
- When the transaction is processed on an intra-day basis

AGC: 56b

Please describe:

AGC: 56c

Where does title or entitlement to CSD securities pass between participants?

- On the CSD books
- On the registrars books

AGC: 56d

Please describe:

AGC: 57, 57a

How are eligible securities lodged in the CSD system?

- A registered certificate in the name of the CSD is delivered to the CSD.
- A participant delivers the security with a valid transfer deed or stock power or other transfer document to the CSD which then effects registration.
- A registrar re-registers the security in the name of the CSD.
- Not applicable
- OTHER: Usually, all securities are lodged either as global note or individual certificate.

AGC: 58, 58a

When are securities lodged into the CSD reflected in a participant's CSD account?

- Securities are re-registered prior to being reflected in the participant CSD account.
- Not applicable
- Securities are reflected in the participant's CSD account immediately upon delivery to the CSD.
- OTHER: Bearer securities are immediately reflected in the participant's depository account after having gone through an intense checking procedure. Registered securities have already been registered prior to being lodged with CBF. Therefore, they are reflected in the participants account immediately after thorough checking procedure.

AGC: 59a
Please specify

AGC: 59, 59b
How long does it usually take to lodge securities with the CSD?

- 1 to 2 days
- 3 days to 1 week
- 2 to 4 weeks
- More than 4 weeks
- Not applicable

AGC: 60
During the process of lodging securities into the CSD, can the securities be traded?

- Yes
- No
- Not applicable
- Other: Clearstream acts as settlement agent and therefore the trading of securities is outside its purview.

AGC: 60a
During the process of lodging securities into the CSD, can the securities be settled?

- Yes
- No
- Not applicable

AGC: 60b

During the process of lodging securities into the CSD, can the securities have ownership transferred?

- Yes
- No
- Not applicable

AGC: 60c

If they cannot be traded, or if you answered other, please explain

AGC: 60d

If they cannot be settled, or if you answered other, please explain

Securities are not available until confirmation has been received from CBF's agent.

AGC: 60e

If ownership cannot be transferred, or if you answered other, please explain

Ownership can only be transferred once the process of lodging the securities has been completed.

AGC: 61a

If no: Securities are unavailable for

- 1 to 2 days
- 3 days to 1 week
- 2 to 4 weeks
- More than 4 weeks
- Not applicable

AGC: 61b

If more than 4 weeks, please specify

AGC: 61c

If not applicable, please explain

AGC: 61, 61d

Are securities immediately available for delivery upon transfer to the CSD?

- Yes
- No
- Not applicable

AGC: 62

Please describe briefly the arrangements / procedures / facilities you maintain to ensure that eligible securities held at the CSD are handled at least as efficiently as compared to securities held outside the CSD, particularly in relation to income, corporate actions and proxy services.

CBF is the CSD for Germany and accordingly the services offered in relation to income, corporate actions and proxy services for German CSC securities ("Girosammelverwahrung") are the best available. Thanks to partnerships with local agents, Clearstream delivers best-in-class asset servicing for the T2S markets covered in the Investor CSD offering. Clearstream's Investor CSD roll-out continues on a market-by-market basis with further T2S connected markets being added over time. CBF offers its customers custody services for NCSC securities, using the technical and functional services offered by its sister company, CBL

AGC: 63, 63a

What transfer process steps are involved when eligible securities are withdrawn from the CSD for safekeeping?

- Securities are re-registered into the name of the beneficial owner or a nominee.
- Securities are re-certificated and re-registered into the name of the beneficia
- Securities are re-certificated and delivered as bearer instruments.
- Securities are transferred as is any physical delivery in the market.
- Not applicable
- Other: Securities can be transferred by book entry to another account outside the depository. Securities can be delivered physically depending on the terms of issue and if requested by a customer.

AGC: 64a

If more than 4 weeks, please specify

AGC: 64, 64b

How long does it usually take to remove securities from the CSD?

- 1 to 2 days
- 3 days to 1 week
- 2 to 4 weeks
- More than 4 weeks
- Not applicable

AGC: 65a

While the securities are being removed from the CSD, can they be traded? (Choose one)

- No
- Not applicable
- Yes
- Other: Clearstream acts as settlement agent and therefore the trading of securities is outside its purview.

AGC: 65b
If they cannot be traded please explain

AGC: 65c
While the securities are being removed from the CSD, can they be settled? (Choose one)

- No
- Not applicable
- Yes

AGC: 65d
If they cannot be settled, please explain

Securities have either to be available in physical form or book-entry in order to be used for settlement.

AGC: 65e
While the securities are being removed from the CSD, can they have ownership transferred?
(Choose one)

- No
- Not applicable
- Yes

AGC: 65f

If ownership cannot be transferred, please explain

AGC: 66, 66a, 66d

Does the CSD accept liability (independent of any insurance coverage) for the following:
Reconciliation errors with the registrar and/or the issuer that result in direct damages or losses to participants?

- No
- Not applicable
- Yes

AGC: 66b 66c

If yes, please check all of the following that apply:

- Financial limits are imposed on the amount of liability assumed by the CSD
- The CSD assumes liability for indirect or consequential losses
- The CSD assumes liability for direct losses
- OTHER:

AGC: 66e, 66g, 66h

Theft of securities (either physical certificate or electronically from accounts at the CSD) from the CSD that results in direct damages or losses to participants?

- No
- Yes
- Not applicable

AGC: 66f

If yes, please check all of the following that apply:

- Financial limits are imposed on the amount of liability assumed by the CSD
- The CSD assumes liability for direct losses
- The CSD assumes liability for indirect or consequential losses
- OTHER:

AGC: 66i, 66l.

Failure of the CSD's systems that result in direct damages or losses to participants because they cannot use either securities or funds?

- No
- Yes
- Not applicable

AGC: 66j, 66k

If yes, please check all of the following that apply:

- Financial limits are imposed on the amount of liability assumed by the CSD
- The CSD assumes liability for indirect or consequential losses
- The CSD assumes liability for direct losses
- OTHER:

AGC: 66m, 66p.

Any direct damages or losses to participants caused by the CSD due to its errors, omissions or fraud?

- Yes
- No
- Not applicable
- OTHER:

AGC: 66n.

If yes, please check all of the following that apply:

- Financial limits are imposed on the amount of liability assumed by the CSD
- The CSD assumes liability for direct losses
- The CSD assumes liability for indirect or consequential losses
- OTHER:

AGC: 66q.

Does the CSD accept liability (independent of any insurance coverage) for the following: Any direct damages or losses to participants caused by the CSD in its capacity as a central counterparty?

- Yes
- No
- Not applicable

AGC: 66r.

If yes, please check all of the following that apply:

- Financial limits are imposed on the amount of liability assumed by the CSD
- The CSD assumes liability for direct losses
- The CSD assumes liability for indirect or consequential losses
- OTHER:

AGC: 66u.

Does the CSD guaranty settlement?

- No
- Yes
- Not applicable

AGC: 66v.

Please explain how this is accomplished. What are the procedures and safeguards that permit the CSD to guaranty settlement?

AGC: 66x.

Any direct damages or losses to participants caused by the CSD as a result of force majeure events, acts of God, or political events, etc.?

- Yes
- No
- Not applicable
- Other: To the best of our knowledge, this is not the case.

AGC: 66y.

If yes, please check all of the following that apply:

- The CSD assumes liability for indirect or consequential losses
- The CSD assumes liability for direct losses
- Financial limits are imposed on the amount of liability assumed by the CSD
- OTHER:

AGC: 66+

In all cases where the CSD assumes responsibility for direct or indirect or consequential losses, is the CSD's liability limited by a standard of care determination?

- Yes
- No
- Not applicable

AGC: 66*

Please define the standard of care applied:

AGC: 67a, 67b.

Do the CSD's written contracts, rules, or established practices and procedures provide protection against risk of loss of participant assets by the CSD in the form of indemnification?

- Not applicable
- Yes
- No
- OTHER:

AGC: 67b.

Please explain (then please answer 67c):

In performance of its obligations and in accordance with its GTCs in its most current form, CBF shall be liable for any fault of its employees and of persons CBF uses for performing its obligations. Should the Special Conditions for certain kinds of services or other agreements specify otherwise, such special regulations shall prevail. The liability of CBF pursuant to sect. 5 paragraph 4 sentence 2 and sect. 3 paragraph 2 sentence 1 DepotG [German Securities Deposit Act] shall remain not affected. If negligence of the client leads to the occurrence of a damage or loss (e.g. by violating its cooperation duties as set forth in no. V of these Terms and Conditions), such damage/loss shall be borne by CBF and the client shall be determined according to the principle of contributory negligence. Further details are described in article VII. of CBF's GTCs. CBF shall not be liable for damage/loss caused by force majeure, uproar, war or natural disasters or by other circumstances CBF is not responsible for (for instance strike, lock-out, traffic disruptions or order of higher authority in its home country or abroad).

AGC: 67c.

Please provide details of the relevant sections of the contracts, rules or practices where this information is found

This information can be found in Section 5 paragraph (4), sentence 2 in conjunction with § 3 paragraph (2), sentence 1 of the Securities Deposit Act.

AGC: 67d.

Insurance

Yes

No

Not applicable

OTHER:

AGC: 67e.

Please explain (then please answer 67f):

CBF has concluded a "Comprehensive Crime and Professional Liability Insurance" policy against claims made by clients for financial losses that include infidelity of employees, civil liability and electronic crime. In addition, there is an "All Risks of Physical Loss or Damage of Shipment of Securities and at the Premises of DBAG" which covers all risk of physical loss or damage of securities held on our premises and during transport. There is also a "Directors' and Officers' Liability" covering all Directors and Officers of DBAG. This covers any natural person who is a past, present or future director or officer of the company, duly elected or appointed.

AGC: 67f.

Please provide details of the relevant sections of the contracts, rules or practices where this information is found

Copies of certificates are enclosed in this questionnaire.

AGC: 67g.

Acknowledgement of liability for losses caused by CSD's own actions.

Yes

No

Not applicable

Other: In performance of its obligations and in accordance with its GTCs in its most current form, CBF shall be liable for any fault of its employees and of persons CBF uses for performing its obligations. Should the Special Conditions for certain kinds of services or other agreements specify otherwise, such special regulations shall prevail. The liability of CBF pursuant to sect. 5 paragraph 4 sentence 2 and sect. 3 paragraph 2 sentence 1 DepotG [German Securities Deposit Act] shall remain not affected. If negligence of the client leads to the occurrence of a damage or loss (e.g. by violating its cooperation duties as set forth in no. V of these Terms and Conditions), such damage/loss shall be borne by CBF and the client shall be determined according to the principle of contributory negligence. Further details are described in article VII. of CBF's GTCs. CBF shall not be liable for damage/loss caused by force majeure, uproar, war or natural disasters or by other circumstances CBF is not responsible for (for instance strike, lock-out, traffic disruptions or order of higher authority in its home country or abroad)

AGC: 67h.

Please explain (then please answer 67i):

AGC: 67i.

Please provide details of the relevant sections of the contracts, rules or practices where this information is found.

The liability of CBF is governed by Section VII. of the General Terms and Conditions of CBF.

AGC: 67j.

Other

Yes

No

AGC: 67k.

Please explain (then please answer 67l):

AGC: 67I.

Please provide details of the relevant sections of the contracts, rules or practices where this information is found.

AGC: 68

Is the CSD immune from legal action in its own jurisdiction?

Yes

No

AGC: 69

Security Control. How do participants receive information (view actual settlement of trades, movement of securities on their accounts, etc.) and see the status of their accounts?

Not applicable

By receipt of physical account holding statements

By direct electronic link

OTHER:

AGC: 69a.

Please explain:

SWIFT, file transfer, CASCADE-Host, CASCADE-PC and MQ file transfer. Customers can choose from a wide range of reports. Reporting profiles can be tailored to meet specific client business requirements. Customers can choose to receive/retrieve reports by more than one communication media, and can select versions of reports to receive/retrieve according to the frequency with which updated information on transaction status and positions are needed. A key component in our communications strategy is a commitment to support all SWIFT and ISO message standards that are applicable to our particular business environment and to use them in industry-standard ways. To this end, we work closely with both SWIFT and ISO, making active contributions to message development, to ensure that your needs are met. For the non-collective safe custody business, the ClearstreamXact channels provided by Clearstream Banking S.A., Luxembourg, may be used by the customer. These connectivity channels are also available to those CBF customers that have chosen or will choose to use the OneClearstream service.

AGC: 70

Do participants have access to affect their holdings, including confirming and affirming trades, movement of securities on their accounts, etc.?

- Yes
- No
- Not applicable

AGC: 70a.

How is access given to participants?

- By direct electronic link
- OTHER:

AGC: 70b.

Please select type of electronic link:

- Secured, leased, dedicated telephone line
- Dial-up modem
- Internet
- Fax

AGC: 70c.

Please explain:

Please refer to the information available at: <https://www.clearstream.com/clearstream-en/products-and-services/connectivity-1->

AGC: 71 71a.

Regarding data security: Are passwords used by participants to access their accounts?

Yes

No

Not applicable

AGC: 71c.

Does each user have a unique user ID?

Yes

No

Not applicable

AGC: 71e.

Are passwords regularly changed?

Yes

No

Not applicable

AGC: 71f.

How often?

Passwords have to be changed every 90 days on CASCADE. For Xact Web Portal and Xact File Transfer, a set of passwords will be communicated to the customer upon setup. Thereafter access rights and password protocols will be defined and managed by the administrator at the customer institution.

AGC: 71h.

Is there a user lock-out after a pre-set number of unsuccessful User ID attempts?

Yes

No

Not applicable

AGC: 71i.
How many?

For CASCADE this is unlimited, although logon attempts are tracked. For the Xact Web Portal, user accounts are locked after 10 failed logon attempts. The account is suspended until a local administrator resets the user's password.

AGC: 72
Does the CSD communicate with other market entities such as stock exchanges, payment systems, clearing houses, etc., by secured linkages?

Yes

No

Not applicable

AGC: 72a
Please explain:

Communication with other market entities is done via SWIFT, secured, leased and dedicated telephone lines.

AGC: 73 73a
How does the CSD communicate with Stock Exchanges?

- Dial-up modem
- other
- Paper
- Fax
- Not applicable
- Secured, leased, dedicated telephone line
- Internet
- OTHER:

AGC: 73b
How does the CSD communicate with Payment Systems?

- Dial-up modem
- Secured, leased, dedicated telephone line
- Internet
- Fax
- Paper
- other
- Not applicable
- OTHER:

AGC: 73c
How does the CSD communicate with Clearing Houses?

- Dial-up modem
- Secured, leased, dedicated telephone line
- Internet
- Fax
- Paper
- other
- Not applicable
- OTHER:

AGC: 73d
How does the CSD communicate with Registrars?

- Dial-up modem
- Secured, leased, dedicated telephone line
- Internet
- Fax
- Paper
- other
- Not applicable
- OTHER:

AGC: 74
How is access to the physical building controlled?

- By guards
- By alarm system
- personal ID card
- By electronic keys
- OTHER: Please see 74a

AGC: 74a.
Please explain:

An access control system is in place for all premises and respective logs are kept. In addition, a CCTV system is in place and access is monitored 24 hours a day. A Security Management System (SMS) is connected to the fire central and its fire detectors. Furthermore, the SMS is connected to an intrusion alert system. A surveillance of technical installations (temperature etc.) is also installed. 6 security guards are on duty during the day and 3 during the night. Visitors are required to sign in at reception providing valid proof of identity. The building is therefore restricted to authorised personnel and accompanied visitors. All staff are issued with picture ID cards that must be used to gain entrance. Approximately 100 cameras are installed in and outside the building. Access for technicians and visitors is only granted after written authorisation from the person, responsible for his/her area. Access to the Data Center is controlled with card readers and biometric reader.

AGC: 75
What are the vault security procedures for the safekeeping of physical paper?

- Fire alarms
- Intrusion alarms
- Vault counts
- Visitor logs
- Dual access control
- Electronic keys or combinations
- Not applicable, no vault is maintained
- Guards
- OTHER: Please see 75b

AGC: 75a.

Please indicate frequency of vault counts:

A vault reconciliation is performed by Clearstream, including the following:

1) On a daily basis, the Controls Safekeeping unit, controls the receipts and delivery of securities. The controls are processed by Cascade settlement platform (system driven control). Any differences are reported to the impacted business units for further investigation and resolution.

2) On a daily basis, the Controls Safekeeping unit controls that the positions booked end of day in the CASCADE application following settlement of securities instructions are corresponding as well. By loading the balances from Cascade (book balances) and from Carad (the Vaults positions system) in an application DNL (Digital Number Ledger), sub-function RCC (Reconciliation Carad-Cascade), discrepancies will be analysed and investigated by Controls safekeeping unit and allocated to business units for follow-up and corrective actions.

3) As per the frequency defined in the Clearstream deposit control plan, Controls Safekeeping unit performs a manual, physical check of the securities deposited in the Vaults.

- Physical Securities are counted on a three year basis
- Global Notes are counted on a two year basis
- Deposits of in the insourced vaults and precious metal are counted on an annual basis.

4) Additionally there are internal and external audit checks being done on a regular basis or by unannounced spot checks. Furthermore, there are procedures for the acceptance, reconciliation and destruction of physical securities.

AGC: 75b

Please explain:

- Pre-advice by CBF Vaults staff for all visitors (other CBF units and third parties).
- ID-card check and admittance badge issuance by our security service.
- Escort of visitors by CBF vaults staff at all times.
- Camera surveillance of all visitors and all rooms where securities can be found.
- Monthly check of access admittance for all CBF vaults staff

AGC: 76, 76d

Participant Default Protections Resulting from a Participant Failure. If a participant defaults, how is the loss covered? (Choose all that apply?)

- CSD insurance covers the loss
- The CSD guaranty fund covers the loss
- Loss is shared among participants
- Not applicable
- OTHER: Please see 76d

AGC: 76a

Please explain the process:

AGC: 76b

Please explain the process of how the loss is shared:

- Equally, among participants
- Pro-rata based on participant's volume
- Limited to participants with transactions with failing counterparty

AGC: 76d

Please explain:

Please refer to the description of our default management processes which is published at the following link: <https://www.clearstream.com/clearstream-en/strategy-and-initiatives/asset-safety/clearstream-default-management/clearstream-default-management-1274008>

AGC: 77

During the past three years, has there been a situation where a participant defaulted which resulted in a significant loss?

- Yes
- No
- Not applicable

AGC: 77a

How was the situation resolved? Or if you answered "Other," then please explain:

AGC: 78

Does the CSD have a guaranty fund independent of stock exchange or other market guarantees?

- Yes
- No
- Not applicable

AGC: 78a.

If yes, please respond to the following questions: What is the size of the fund?

Please refer to the final provisions listed in section C.XXXIII of Clearstream's CSD GTCs, available at <https://www.clearstream.com/clearstream-en/keydocuments-1-/csd-1-/general-terms-and-conditions>

AGC: 78b.

How is the size of the fund determined?

- By participant volume
- By asset value
- A fixed amount
- Other: Please refer to the final provisions listed in section C.XXXIII of Clearstream's CSD GTCs, available at <https://www.clearstream.com/clearstream-en/keydocuments-1-/csd-1-/general-terms- and-conditions>

AGC: 78d.
How is the fund financed?

- Contributions from owner
- Contributions from participants
- Funding from retained earnings
- Other: Please refer to the final provisions listed in section C.XXXIII of Clearstream's CSD GTCs, available at <https://www.clearstream.com/clearstream-en/keydocuments-1-/csd-1-/general-terms- and-conditions>

AGC: 78e.
If so, what is the amount or percentage per owner?

AGC: 78f.
If so, what is the amount or percentage per participant?

AGC: 78h.
Who is covered by the fund?

- Direct CSD participants only
- The beneficial owner also
- OTHER: Please refer to the final provisions listed in section C.XXXIII of Clearstream's CSD GTCs, available at <https://www.clearstream.com/clearstream-en/keydocuments-1-/csd-1-/general-terms- and-conditions>

AGC: 78j.
When is the guaranty fund used?

- When a broker defaults
- When a direct participant defaults
- OTHER: Please refer to the final provisions listed in section C.XXXIII of Clearstream's CSD GTCs, available at <https://www.clearstream.com/clearstream-en/keydocuments-1-/csd-1-/general-terms- and-conditions>

AGC: 79
Does the CSD have forms of oversight management for assessing and monitoring of the following?

- Collateral requirements for participants
- Blocking of securities movement before receipt of payment
- Other loss or default protections the CSD maintains
- Settlement controls that minimize or eliminate the risk of default by a participant
- Participant financial strength
- Blocking payment until securities are moved
- Not applicable
- Debit caps for participants
- Participant volumes
- Participant eligibility requirements
- OTHER:

AGC: 79a

Please explain other loss or default protections:

In order to protect from losses and prepare for potential participant default, CBF has implemented a default management process. The default management of CBF includes preliminary measures (such as monitoring of defined early warning indicators in order to detect potential participant default at an early stage) and corrective measures, which are related to liquidation of pledged securities in order to cover the outstanding exposures, if any. For further details, please refer to the <https://www.clearstream.com/clearstream-en/strategy-and-initiatives/asset-safety/clearstream-default-management>

AGC: 79a

Please explain other loss or default protections:

In order to protect from losses and prepare for potential participant default, CBF has implemented a default management process. The default management of CBF includes preliminary measures (such as monitoring of defined early warning indicators in order to detect potential participant default at an early stage) and corrective measures, which are related to liquidation of pledged securities in order to cover the outstanding exposures, if any.

For further details, please refer to the <https://www.clearstream.com/clearstream-en/strategy-and-initiatives/asset-safety/clearstream-default-management>

AGC: 79b

Please explain the requirements:

CBF may grant credit limits that serve to facilitate the settlement of securities transactions as well as to support the securities financing business. Credit is primarily granted on a collateralised basis. Borrowers in Clearstream are central banks, banks and financial institutions. Furthermore, credit limits are set for the placement of funds with counterparties. The credit processing is arranged in guidelines and work instructions. Credit limits are set in accordance with the customer's financial standing, as indicated by factors such as the customer's credit rating and net worth, as well as having regard for the level of activity on the customer's accounts and the level of collateralisation. Credit lines must be collateralised to the maximum extent possible. The monitoring of recoverability of collateral is also operated by the Credit section. Further information is provided in our Pillar III report which can be found at the following link: [Pillar III Disclosure Report \(clearstream.com\)](#)

AGC: 79c

Please explain how these debit caps work:

AGC: 79d.

What type or types of settlement controls

Blocking or freezing of securities positions

Controlling DVP settlement

Simultaneous DVP

OTHER:

AGC: 79e.

Please explain:

According to its GTCs CBF may freeze a customer's securities accounts and cash accounts, if a public authority issues a decree pursuant to sections 45 et seq. KWG [German Banking Act] or pursuant to corresponding foreign legal regulations, if the customer's registered offices are situated abroad, against the customer. The performance by CBF of irrevocable orders of the client for the transfer of securities, fractions of collective holdings, claims to surrender of securities or rights shall remain unaffected.

AGC: 79f.

Please explain:

The cash settlement of securities transactions and certain Corporate Actions generally involves the following instruction types:

- Transfer of securities against payment in EUR: Delivery versus Payment (DvP), Receive versus Payment (RvP)
- Transfer of securities with payment in EUR: Delivery with Payment (DwP), Receive with Payment (RwP)
- Payment in EUR without transfer of securities: Payment Free of Delivery Debit (PFoD-DBIT), Payment Free of Delivery Credit (PFoD-CRDT)

These transactions can settle in T2S during night-time settlement (NTS) as well as during real-time settlement (RTS), until 16:00. In both cases, the cash is settled directly via a DCA

linked to the respective Securities Account (SAC). The DCA can either be stated in the instruction or be set up as a default DCA at CBF.

Customers participating in settlement of RvP, DwP or PFoD-DBIT instructions in T2S must generally ensure that there is sufficient cash or credit line available on the DCA. The liquidity is

transferred from an RTGS main account and such a liquidity transfer can be instructed – depending on the technical connectivity of the customer – either in T2S, TARGET2 or CASCADE Online.

AGC: 79g.

Please explain:

CBF is a Model 1 DvP system, ensuring simultaneous settlement of securities and funds transfers on a gross (trade-by-trade) basis for batch processing; only the technically netted funding requirements are reserved on a Bundesbank account.

AGC: 79h

Please identify and explain:

AGC: 79i

Please explain briefly how these work:

We monitor customers throughout our relationship with them to ensure they continue to fulfil the customer acceptance criteria. Transactions are monitored by an automated tool in order to assess account activity and in order to identify unusual and potentially suspicious activity.

AGC: 80

Does the stock exchange have default protections that extend to the CSD, such as the following?

- Margin requirements for stock exchange members
- Guaranty fund for stock exchange members
- Financial requirements for stock exchange membership
- No
- Not applicable
- OTHER:

AGC: 80a

Please explain:

AGC: 81

BUSINESS RECOVERY PLAN. This section is intended to identify key aspects of the CSD's Business Recovery Plan (BRP), including testing requirements and past results, expected recovery time periods, and the independent review and validation (if any) of the BRP. Do you have a formal business recovery plan?

- Yes
- No

AGC: 81b.

Please identify both the frequency and the last date of testing for the following third party:
CSD participants/members

Clearstream has adopted a comprehensive BCM testing approach to simulate situations as close as possible to real incidents. BCM plans are tested on a regular basis and at least annually. The comprehensive approach includes technical infrastructure testing, data centre disaster recovery testing, backup processing and customer connectivity testing, backup workspace testing, internal user training and testing. The approach includes announced as well as unannounced tests. Clearstream Risk Management initiates workspace and staff unavailability tests unannounced to the participants and issues test reports and tracks any issues or recommendations. The plans are tested against the following criteria:

- Functional effectiveness
- Execution ability
- Recovery time

The COVID-19 event has been considered as live BCM test for 2020 in line with the principles established by the BCM Policy.

BCPs were activated to mitigate the availability risks due to the COVID-19 pandemic outbreak. Solutions have proven successful with all products and services delivered to customers without any reduction in target service levels due to the COVID-19 measures implemented.

The Systems unavailability test (simulating the loss of one data centre including production processing on remaining site) was last conducted in October 2022.

AGC: 81c.

Please identify both the frequency and the last date of testing for the following third party:
Stock exchange

Contingency tests involving the trading platforms within Deutsche Börse Group are typically performed on an bi-annual basis in March and November every year.

AGC: 81d.

Please identify both the frequency and the last date of testing for the following third party:
Central bank

Test of contingency procedures with the German Central Bank are performed from time to time.

AGC: 81e.

Please identify both the frequency and the last date of testing for the following third party:
Local brokers

n/a

AGC: 81f.

Please identify both the frequency and the last date of testing for the following third party: Any other third party

Clearstream invites customers to participate in its annual systems unavailability tests, when customers can submit instructions which are processed in production and receive reports.

AGC: 81a, 81h.

Does your Business Recovery Plan include:

- Back-up of all computer files
- Back-up files stored and locked
- Off-site operations facility
- Off-site data storage
- OTHER: BCM arrangements implemented at CBF address not only cover the unavailability of systems, workspace and suppliers, but also the loss of significant numbers of staff in order to ensure the continuity of the most critical operations even in cases of catastrophe scenarios.

AGC: 82

How quickly can the main system be reactivated in the event of an outage?

- 1 - 4 hours
- 4 - 8 hours
- 8 - 24 hours
- Longer than 24 hours
- Not applicable
- Other: CBF's overall business continuity plan Recovery Time Objective (RTO) is set to two hours. Within the RTO, CBF has included decision, travel and systems/ business resumption time. However, depending on the nature of the incident, actual recovery can be achieved more quickly. However, IT production is distributed over two remote data centres that provide online and full redundancy to allow data processing and communications with clients to be sustained should any primary equipment experience a failure. The two centres are interconnected with high-speed lines to provide real-time data mirroring. This ensures the online availability and integrity of all transactions at the time of a disruption. In addition to this real-time data duplication, data is also kept offline on backup copies in a secure location.

AGC: 83

If a back-up system exists, how quickly can the back-up system be activated in the event of the main system failing?

- 1 - 4 hours
- 4 - 8 hours
- 8 - 24 hours
- Longer than 24 hours
- Not applicable

AGC: 84
Will the CSD publicly announce any system interruption?

- Yes
- No
- Not applicable

AGC: 84a.
To whom will the CSD disclose any system interruptions?

- To all direct participants
- To the CSD regulators
- To direct and indirect participants
- To the public via the internet
- In the press
- OTHER:

AGC: 84b.
If so, please list webpage address:

www.clearstream.com

AGC: 84c.

If so, please list all publications:

AGC: 84d.

Please explain:

AGC: 84e.

How will the CSD disclose any system interruptions?

- Public announcement
- By e-mail
- By telephone
- Press release
- OTHER: Please see 84e.

AGC: 84f.

Please explain:

Information on incidents/crises and related actions taken by Clearstream is made available to customers via the regular communication channels: direct contact with Client Services and the relationship management teams, website and email, as well as via the online tool. Such communication will happen as soon as the incident/crisis is known and once related actions are defined.

AGC: 85

In the past three years, has it been necessary to activate the recovery plan in a live situation?

Yes

No

Not applicable

Other: Business continuity plans were invoked to mitigate impacts by COVID-19. Business continuity plans were invoked in stages since the beginning of March 2020. A move to remote working to the maximum extent in various locations and stages was achieved in line with directives and recommendations by authorities. The transitions were always achieved in an orderly fashion with no impact to business operations. Staff working remotely do so on company owned devices via a secured VPN connection and have received specific direction on the treatment of confidential data. All services and processes were reviewed in the adjustment of the business continuity plan, to mitigate the risks and impact by COVID-19. A special focus and measures are in place for those functions that must be performed in a particular location. In most cases, adjustments and tests and the implementation of modifications enabled a full remote operation. In other cases, specific contingency plans have been deployed, aimed principally at ensuring multi-location redundancy and aggressive protection of the staff and service providers concerned. Business Continuity Plans were updated to incorporate any changes/enhancements identified and implemented.

AGC: 85a.

If yes, how much time was needed to implement the recovery plan?

Less than 1 hour

1 - 2 hours

2 - 4 hours

Longer than 4 hours

AGC: 85b.

How much time was needed to recover and restore business to normal operations?

- 1 - 4 hours
- 4 - 8 hours
- 8 - 24 hours
- Longer than 24 hours

AGC: 85c, 85d.

What was the impact to the market?

- As a result of the system failure, all fines and penalties for late settlements were waived
- All cash settlements took place more than one business day late
- All securities settlements took place more than one business day late
- All cash settlements took place one business day late with value one day late
- All securities settlements took place one business day late with value one day late
- All cash settlements took place one business day late with good value
- All securities settlements took place one business day late with good value
- Even though there was a system failure, all fines and penalties for late settlements were still assessed
- All cash settlements took place as scheduled on the same day with good value
- All securities settlements took place as scheduled on the same day with good value
- OTHER:

AGC: 86

Has there been any material loss by the CSD during the past three years?

- Yes
- No
- Not applicable

AGC: 86a.

If there has been a loss, please describe the cause, the final impact and the action taken to prevent a recurrence:

AGC: 87

Has the CSD been subject to any litigation involving a participant during the past three years?

- Yes
- No
- Not applicable

AGC: 87a.

Please explain the circumstances and resolution:

AGC: 88, 88a

Has the CSD realized revenues sufficient to cover expenses during the past three years?

- Yes for all three years
- Yes for two of the last three years
- Yes for one of the last three years
- None of the last three years
- Not applicable

AGC: 89, 89b

Does the CSD maintain a reserve for operating losses?

- Yes
- No
- Not applicable

AGC: 89a.

Please describe and indicate reserve (for operating losses) amount:

For a detailed description of the Clearstream segment within Deutsche Börse Group please refer to the Annual Financial Report of DBAG. The report as well as Clearstream's annual accounts are available at the following link: <https://www.clearstream.com/clearstream-en/about-clearstream/reports-and-ratings/annual-reports>

AGC: 90

Has the regulatory body with oversight responsibility for the CSD issued public notice that the CSD is not in current compliance with any capital, solvency, insurance or similar financial strength requirements imposed by such regulatory body?

- Yes
- No
- Not applicable

AGC: 90a.

Please describe:

AGC: 90b.

In the case of such a notice having been issued, has such notice been withdrawn, or, has the remedy of such noncompliance been publicly announced by the CSD?

Yes

No

AGC: 90c.

If yes, please describe:

AGC: 90d.

If no, why not?

AGC: 91

Does the CSD have insurance to cover losses in the event of Default on settlement commitments by the CSD or a participant?

Yes

No

Not applicable

AGC: 91a

What is the amount of the coverage?

AGC: 91b

What is the amount of the deductible?

AGC: 92

Does the CSD have Fidelity insurance (that is, insurance to cover loss of securities or money resulting, for example, from acts such as forgery, theft, fraud and/or employee dishonesty)?

Yes

No

Not applicable

AGC: 92a.

What is the amount of the coverage?

Comprehensive Crime and Professional Liability Insurance (CCPL), which is a policy that covers Clearstream against claims made by customers for financial losses that include infidelity of employees, civil liability and electronic crime. Coverage includes a comprehensive crime and professional liability limit of EUR 5 million any one loss/claim and in the aggregate.

AGC: 92b.

What is the amount of the deductible?

The amount of the deductible is EUR 5 million.

AGC: 93

Does the CSD have insurance for Operational Errors?

Yes

No

Not applicable

AGC: 93a.

What is the amount of the coverage?

Comprehensive Crime and Professional Liability Insurance (CCPL), which is a policy that covers Clearstream against claims made by customers for financial losses that include infidelity of employees, civil liability and electronic crime. Coverage includes a comprehensive crime and professional liability limit of EUR 5 million any one loss/claim and in the aggregate.

AGC: 93b.

What is the amount of the deductible?

The deductible of EUR 5 million.

AGC: 94

Does the CSD have Errors and Omissions insurance?

- Yes
- No
- Not applicable

AGC: 94a.

What is the amount of the coverage?

Comprehensive Crime and Professional Liability Insurance (CCPL), which is a policy that covers Clearstream against claims made by customers for financial losses that include infidelity of employees, civil liability and electronic crime. Coverage includes a comprehensive crime and professional liability limit of EUR 5 million any one loss/claim and in the aggregate.

AGC: 94b.

What is the amount of the deductible?

The deductible of EUR 5 million on the Professional Liability Insurance.

AGC: 95

Does the CSD have insurance for the Premises?

- Yes
- No
- Not applicable

AGC: 95a.

What is the amount of the coverage?

The amount of coverage is up to EUR 260 million

AGC: 95b.

What is the amount of the deductible?

The level of the deductible depends on category of risk.

AGC: 96a.

If so, what is it for?

CBF has a Directors and Officers' Liability insurance in place.

AGC: 96b.

What is the amount of the coverage?

We consider this information as confidential.

AGC: 96c.

What is the amount of the deductible?

We consider this information as confidential.

AGC: 96, 96d

Does the CSD have any other insurance?

- Yes
- No
- Not applicable

AGC: 97

Who is the insurance carrier? If more than one insurance carrier, please list each carrier here and provide your responses to questions 97a and 97b in corresponding order.

Comprehensive Crime and Professional Liability Insurance: The lead insurer is Zurich Insurance All Risks of Physical Loss or Damage of Shipment of Securities and at the Premises, which is an "All Risk" policy: The carrier is Liberty Directors' and Officers' Liability: The lead insurer is Zurich Insurance.

AGC: 97a.

Who is the insurance carrier's parent company, if applicable? (If inapplicable, simply type n/a.)

N/A

AGC: 97b.

What is the term of the policy?

Annual. Please refer to the insurance certificates attached to this questionnaire.

AGC: 97c, 97d

Who does the insurance cover?

- CSD
- Direct CSD participants
- Final investors
- Not applicable
- OTHER:

AGC: 98

If you feel that you would like to provide additional details on any of the given answers, feel free to provide any additional comments here (maximum of 5,000 characters) or prepare an additional document identifying the question(s) you are commenting on and upload the document under 98a:

Please note that the answers contained in the Questionnaire of the Association of Global Custodians are provided for information purposes only. Information in this document is subject to change and does not represent a commitment on the part of Clearstream Banking AG, or any other entity in the Clearstream group of companies. Clearstream Banking AG, its subsidiaries and affiliates expressly disclaim liability for errors or omissions in the information contained in this document.

AGC: 98a.

filecount - Upload document here:

Combined Insurance Certificate 2022-2023.pdf (2795KB)	DBAG combined insurance certificate 2022- 2023	
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1

AGC: 99

The WFC, the AGC, CPMI and IOSCO encourage respondents to make their disclosure reports publicly available. Do you agree to make your response publicly available?

- Yes, my full response will be publicly available. I agree that my response can be published on the website of the WFC and on the website of the regional CSD association(s) which my CSD is a member of.
- Yes, my response will be public, but only for my answers to AGC questions.
- Yes, my response will be public, but only for my answers to PFMI questions.
- No, I do not wish my response to be publicly available.

AGC: 99a
How will you be making your answers publicly available?

- Upon request
- Website
- OTHER:

AGC: 99b
This disclosure can also be found at the following web address(es):

www.clearstream.com

AGC: 99c
First and Last Name of the contact person:

Mariella Sifara

AGC: 99d
How do you prefer to be contacted?

- mail/air courier
- Fax
- Telephone
- e-mail

AGC: 99e

Telephone number (please include the international country code):

-

AGC: 99f

Fax number

-

AGC: 99g

What is the preferred street address for mailing requests?

-

AGC: 99h

Email address of the contact person:

mariella.siafara@clearstream.com

AGC: 100

AGC members from time to time receive requests from their direct investor-clients for an informational copy of a CSD's completed questionnaire. Such requests typically lead to interactions between personnel at the CSD in question and member personnel or client personnel, or both. Those interactions take time and impose costs on both members and depositories. Do you approve of AGC members delivering a copy of your completed questionnaire to the member's direct client in response to the client's request?

Yes

No

AGC: 101

Does your organization have a documented cyber security policy in place?

Yes

No

The Information Security Framework (ISF) is a foundational element of Clearstream's Cyber Resilience. It specifies the hierarchy of documents to define Information Security (IS) control requirements along the assets to be protected and their implementation as well as their surveillance to reach and maintain an adequate state of cyber resilience at Clearstream based on their risk appetite and disposition.

To implement a holistic approach, the ISF is substantiated by the following documents:

1. · Level 1: IS Charter: describes the group wide mission to achieve the objectives of the IS function, the three Lines of Defense model, the components of the IS Framework, the roles and responsibilities of the IS function.
2. · Level 2: IS Policies: define Information Security objectives in specific areas as well as major relevant roles and responsibilities within these areas (e.g. Access Control, Infrastructure Security, Acceptable Use).
3. · Level 3: IS Standards: focus on what must be achieved, by providing a set of control requirements. These requirements specify organisational, process or technical controls that must be implemented to support the information security objectives of the IS Policies and define the concrete target level of Information Security within Clearstream.
4. · Level 4: Guidelines: ensure uniform appearance and consistency in compliance with respective IS Policies and IS Standards.
5. · Supporting documents (e.g. processes, procedures, etc.).

The ISF structure ensures that each document addresses relevant user groups and IS requirements in detail. The Executive Board approves the IS Charter, IS Policies and IS Standards. Documents are reviewed at least annually.

Security measures are designed and implemented to mitigate identified cyber risks and to address relevant IS requirements including applicable regulatory requirements. Security measures address risk areas such as access control to information assets, acceptable use of these assets, applications and underlying infrastructure security, data leakage prevention, vulnerability management, secure software development, information security incident management, human resources and suppliers' security. They are based on industry-level standards (ISO 27001, NIST Cybersecurity Framework).

These measures are submitted to regular testing by various independent parties including Clearstream 2LoD Information Security function and 3LoD Internal Audit

function, as well as external auditors/assessors and supervisory authorities, in order to confirm their operating effectiveness.

The respective Boards of DBAG entities approve the information security policies and standards, which are reviewed on an annual basis. The policies are made known to internal staff via the intranet and is shared with all relevant external parties. Regular mandatory trainings are in place and completion is monitored.

Within the framework of DBAG's cyber security policy, both external and internal risks are taken into account. Clearstream considers the following three risk categories to be most serious:

1. · External Threat: Malicious software coming from links, attachments, downloads etc. compromising PCs and mobile devices. Potential impacts are: information leakage, data manipulation, unauthorised remote access and application outage to name just a few examples. In order to mitigate these risks, extensive preventive and detective measures are in place. For example, access control mechanisms, hardening and vulnerability management tools and procedures, real-time antivirus detection tools, etc.
2. · External Threat: Direct attacks on Internet facing servers. Potential impacts are that these servers are flooded and compromised, business applications become unavailable or business data is manipulated or disclosed. In order to mitigate these risks, Clearstream has a network intrusion prevention and detection system in place. Furthermore, a Computer Emergency Response Team (CERT) is performing regular vulnerability scans. A Host intrusion detection system and a security information and event management system (SIEM) is deployed to detect and alert on potential malicious activities.
3. · Internal Threats: Malicious and accidental acts which allow for the disclosure of confidential information, loss of information, phishing, identity theft and fraud, physical damage and the potential intrusion of outsiders. In order to mitigate these risks, IT administration activities are monitored, logged and monitored by the security information and event management system (SIEM), to detect and alert on control bypasses. Users' access is based on a need-to-know basis and a range of access control mechanisms is in place. USB connectivity is restricted and a data loss/leakage protection (DLP) is deployed. Data encryption is performed using mutually authenticated TLS.

Clearstream uses industry standards (e.g. ISO, NIST), consultancy and reports from major centres of expertise regarding cyber security as a point of orientation to identify best practices regarding cyber security. Clearstream also regularly participates in relevant IT and cyber security conferences, trainings and forums. Clearstream's risk analysis methodology is used to identify relevant controls, covering the specific risks of our activities, processes, applications, networks, infrastructure and operating environment.

Clearstream's cyber security policies take legal and regulatory requirements into account and are subject to peer review.

AGC: 102

Please confirm that your staff receive relevant training about this policy.

Yes

No

Security is DBAG group's our greatest assets. All DBAG staff receives mandatory information security awareness training on a regular basis. Relevant recent awareness topics include:

6. · Information Security – handling information and documents securely
7. · Acceptable Use – covers security and use of the Group's information and data
8. · Data Leakage Prevention – classifying and handling documents responsibly
9. · Cyber Security –securing information in the age of increasing cyber attacks
10. · Corporate security – physical and travel security

Human Resources constantly monitors the quality of internal and external training events and the relevant organisers.

AGC: 103

Please provide an overview of your policy for continuity of business in the event of a large data breach or cyber attack against your organization.

An Incident Management Process is established, and Incident Managers appointed as single point of contact in their respective business areas to ensure the coordinated handling of incidents and disruptions. They also ensure the proper communication and escalation up to the Executive Board and DBAG Executive Committee levels if required.

An alert system classifies incidents and crises according to colour codes relating to a respective level of business impact. The alert system ensures an adequate response to incidents and crises, including the potential activation of business continuity plans. The system also provides for the timely notification of relevant internal and external parties.

A dedicated Computer Emergency Response Team (CERT) is in place which includes security incident handling and forensics. The CERT is in charge of managing information security incidents. The Incident Management Process are involved by the CERT during the resolution of information security incidents if required.

Information on incidents and related actions taken by Clearstream is made available to customers via the regular communication channels: direct contact with Client Services and the relationship management teams, website and email, and Xact Web Portal / CreationOnline alerts. Such communication will happen as soon as the incident/crisis is known, and once related actions are defined.

AGC: 104

In the last 12 months have there been any changes to the policy?

- Yes
- No

The Information Security Framework (ISF) has been recently revamped to further align with the ISO27001 standard and define information security principles and requirements in a more comprehensive manner. Please refer to the description of the updated ISF in question 101.

AGC: 105

Please advise how often you review the policy.

Annually

Semi-annually

Other

AGC: 106

filecount - Please provide (as an attachment) a diagram showing where your cyber security function resides and who it reports to.

0

AGC: 107

How does your organization identify which business functions carry a cyber risk

Clearstream's information security risk assessment process plays a key role in ensuring that relevant cyber risks are identified, addressed and managed in all aspects of the organisation (i.e. its people, processes, technology, operations and new business initiatives). Information Owners, appointed by the Executive Board, define and take ownership of the information assets processed in their area of responsibility and classify their criticality. Based on this classification, information security risk assessments are performed to quantify inherent and residual cyber risks, ensuring proper implementation of required security controls. This helps determining adequate steps to reduce the risk level to the agreed cyber risk appetite in relation to the identified risks. An output of this process is to identify specific unmitigated risks against a standardised mandatory controls framework that reflects a formal set of security controls. Information security policies and standards inform which control requirements in the control framework apply to Clearstream environment.

AGC: 108

Do you conduct ongoing testing and monitoring processes to ensure that all internal and external connectivity and system configurations are not at risk of cybersecurity breaches?

Yes

No

DBG performs both regular vulnerability assessments and penetration tests.

DBG IS Engineering team is in charge of performing regular vulnerability scans on all IT (incl. network devices) infrastructure (e.g. daily tests on Internet-facing systems and applications). DBG IS Assurance is in charge of assessing, coordinating and following-up the implementation of the security patches by the IT administrators.

DBG CERT is in charge of coordinating regular penetration tests (e.g. min. 1/year) on Internet-facing systems and applications, on ad-hoc basis on other physical and internal IT infrastructure. These tests are performed by specialised external companies. There is a rotation in place ensuring that it is not always the same company that performs these tests.

Penetration tests are performed also on client-facing applications.

AGC: 109

What technological controls and protections are in place for your systems and networks?

Data and applications within Clearstream are protected by coherent security architecture. This architecture has been designed to meet the specific needs of Clearstream and combines a number of components in order to ensure true end-to-end security and defence in depth. The major components of this architecture are as follows:

11. · Perimeter defence components (Multi-layered Firewalls, network zoning and Network Intrusion Detection Systems (NIDS));
12. · Cryptographic protocols on exposed network segments;
13. · Cryptographically enabled applications;
14. · A Public Key Infrastructure (PKI) system, using hardware key storage, to support cryptographic services;
15. · A multitiered framework for handling viruses and malicious code;
16. · Secure mail and SPAM filtering software;
17. · Identity and Access Management Platform for the user lifecycle management;
18. · Host-based and network-based scanning software for detecting vulnerability;
19. · Privilege access management;
20. · Standard secure configurations for all major native operating systems;
21. · Extensive use of Oracle security mechanisms, such as password protected roles, to prevent access to data from unauthorised individuals or applications;
22. · Centralised Security information and event management (SIEM): collection/normalisation of event data, and correlation of impact of incidents based on criticality to business operations;
23. · Strong authentication: Two factor authentication, biometrics, network access control (NAC);
24. · Managed file transfer;
25. · Protection of Web Interfacing Systems against Cyber Threats (e.g. DDoS, Web defacement);
26. · Real-time database security and monitoring.

For its online access applications Xact Web Portal and Creation Online, Clearstream provides a security subsystem that has been designed with true end-to-end security in mind and based on sound architectural principles. This subsystem is deployed as a series of components designed to work together to deliver a number of security services, such as:

1. · Authentication
2. · Protection of confidentiality
3. · Protection of integrity (both session and data integrity)
4. · Non-repudiation
5. · Logging and audit trail.

Real-time antivirus scanning is implemented. The antivirus scanning is done for all files with the default file extensions defined by the antivirus vendors/products. In case of infection detection, the antivirus software cleans, quarantines or

deletes the responsible software. Notifications are automatically sent to a central location and to systems administrators.

New virus signatures are automatically downloaded from antivirus vendors' web sites and automatically deployed to:

4. · Email gateways.
5. · Windows servers: infrastructure, file and application servers.
6. · Workstations when the end user logs on.
7. · Laptops when the end user connects to the DBAG network or when the end user request an update from the antivirus vendor's web site

The IT Security team assesses the patches released by the vendors. Regular deployment is done on all Windows servers. There is a process in place to facilitate emergency signature updates.

The Information Security Policy (ISP) prohibits users from disabling the antivirus products. This is also technically enforced (end users do not have local administrators' rights which are required to disable the antivirus).

These procedures and measures are in line with industry standards.

AGC: 110

Does your organization use multi-factor authentication

Yes

No

For internal applications, the VPN is secured by mutual authentication using certificates at the device level. Users additionally authenticate using a multi-factor authentication.

The access to the Xact Web Portal application is based on a strong authentication mechanism.

AGC: 111

Where your organization has outsourced activities or functions to a third-party provider, is your cyber risk exposure documented?

Yes

No

Core IT functions are handled by entities of the group via outsourcing arrangements. Supplier security risks are consistently managed within the DBG Information Security Risk Management process, as defined in the Supplier Security Policy and Supplier Security Standard.

Within DBG supplier management processes, information security requirements are identified and contractually implemented through the Information Security Annex. Contracts with suppliers include relevant security requirements in accordance with the determined risk level. Fulfilment of security requirements by suppliers is continuously monitored and regularly audited by the responsible contract owner as part of overall supplier monitoring.

AGC: 112

What measures does your organization have to ensure early detection of a cyber attack?

A dedicated Computer Emergency Response Team (CERT) is in place whose tasks include security incident handling and forensics. Cyber Attacks detection mainly relies on use cases definition and alerts implementation based on multiple sources of information such as Threat Intelligence reports, Indicators of Compromise (IoCs) feeds, lessons learned from previous security incidents and best practices all mapped into a widely known and industry accepted frameworks.

Active participation to Information Sharing communities such as DAX30 CERT, FS-ISAC and TF-CSIRT also improves also our detection capabilities through shared information about Threat Actors and Techniques adopted in the wild and targeting companies and institutions in the Finance Sector.

Please refer to our answers to questions 110 and for the security architecture protecting data and applications.

AGC: 113

What is the agreed resumption time for critical operations following a cyber attack?

Clearstream's recovery time objective (RTO) is set at two hours. This includes resumption of systems and operations. Depending on the nature of the incident, recovery can be achieved quicker or may be influenced by factors not under Clearstream's control.

AGC: 114

How would you advise clients of a successful cyber attack against your organization?

Information on incidents/crises and related actions taken by Clearstream is made available to customers via the regular communication channels: direct contact with Client Services and the relationship management teams, website and email, and Xact Web Portal alerts. Such communication will happen as soon as the incident/crisis is known, and once related actions are defined.

Generally speaking, Clearstream would aim to inform customers affected by such an incident as soon as possible (within 72 hours). However, this might differ depending on the situation.

AGC: 115

In the last 12 months has your organization been subject to a cyber attack that impacted the service you provide to us? If yes, please provide details.

- Yes
- No

We regard this information as strictly confidential. In case of an impact on services to customers resulting from a cyber-attack, the information is shared as per applicable contractual obligations.

AGC: 116

Are the following elements of your cybersecurity framework tested pre and post deployment of changes?

- Vulnerability assessment
- Scenario based penetration tests
- Testing of incident response process and technical/business/operations (e.g. table-top exercise)
- OTHER: Amongst other things, vulnerability management process and vulnerability scanning tools are running covering internal and internet-facing systems. Also, regular penetration tests performed ensuring the effectiveness of the controls in place. Code review and security tests are performed during the testing phase. Regular systems unavailability tests form part of Clearstream's BCM testing cycles.

AGC: 117

For cloud technology and associated cyber security risks, do you have procedures and controls in place to protect our information from mishandling or theft?

In the comments section could you please explain how these procedures and controls tie back to your record retention policy?

Yes

No

AGC: 118

Does your organization conduct dark web searches for signs of a breach (internet protocol or customer/client personally identified information for sale)?

Yes

No

Such dark web searches for signs of a breach are conducted.

AGC: 119

Is your organization aware of SWIFT's Customer Security Program (CSP)?

Yes

No

AGC: 120

Does your organization ensure compliance with SWIFT's CSP controls?

Yes

No

Clearstream is compliant with all mandatory controls.

AGC: 121

Does your organization respond to requests for your institution's attestations?

Yes

No

The documentation requested is considered confidential. We confirm that Clearstream is compliant with all mandatory controls of the SWIFT CSP.

AGC: 122

Does your organization request the attestation details of your counterparties and incorporate the responses into ongoing relationship and risk management programs?

Yes

No

Clearstream is using the AFME questionnaire, as part of comprehensive due diligence exercises.