Disclosure Framework CPMI
IOSCO 2019
Self-assessment Euroclear Belgium, Euroclear Nederland
& Euroclear France • December 2019
Responding institution: Euroclear Belgium, Euroclear France and Euroclear Nederland

Jurisdiction(s) Belgium, France and the Netherlands

Authorities regulating, supervising or overseeing the Financial Market Infrastructures (FMI)

- Euroclear Belgium: National Bank of Belgium and Financial Services & Market Authorities
- Euroclear France: Banque de France and Autorité des Marchés Financiers
- Euroclear Nederland: De Nederlandsche Bank and Autoriteit Financiële Markten

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This disclosure can also be found at www.euroclear.com

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INTRODUCTION

This document contains the disclosures relating to the CPMI-IOSCO self-assessment of Euroclear Belgium, Euroclear France and Euroclear Nederland, altogether herein referred to as ‘the ESES CSDs’. It has been performed in 2019.

This document is split in 3 parts:

- the context and the methodology used to perform the self-assessment as well as the level of compliance of the ESES CSDs for each CPMI-IOSCO Principle
- a description of the role of the ESES CSDs as FMIs in the markets they serve
- a disclosure document by Principle

As explained in the executive summary, the self-assessment is the result of a full review of all aspects of the ESES CSDs impacted by the CPMI-IOSCO Principles (Principles for Financial Market Infrastructures - PFMI’s). It will be followed by regular reviews in order to update it to take into account any relevant development in the environment or in the products/services offered by the ESES CSDs.
EXEcutive summary

Context

The publication of the European regulation (EU) N°909/2014 on improving securities settlement in the European Union and on central securities depositories (...), referred to as CSDR and related delegated legislative acts triggered a full review of the ESES CSDs processes and organisation. As the recitals of CSDR explicitly mention that the regulation should follow the CPMI-IOSCO Principles, the ESES CSDs took the opportunity of CSDR to perform a full review of its compliance with CPMI-IOSCO Principles and related disclosure.

Summary of self-assessment

The ESES CSDs assessment by Principle is outlined below. The disclosure for each Principle is given afterwards, Principle by Principle.

<table>
<thead>
<tr>
<th>Assessment Category</th>
<th>Principle</th>
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<tbody>
<tr>
<td>Observed</td>
<td>1, 2, 3, 4, 7, 8, 9, 10, 11, 12, 13, 15, 16, 18, 20, 21, 22, 23</td>
</tr>
<tr>
<td>Broadly Observed</td>
<td>17, 19</td>
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<tr>
<td>Partly Observed</td>
<td></td>
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<tr>
<td>Not Observed</td>
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<tr>
<td>Not Applicable</td>
<td>5, 6, 14, 24</td>
</tr>
</tbody>
</table>

The remainder of this document provides a comprehensive description of the ESES CSDs, including the Euroclear Group dimension where relevant and a detailed outline for each of the 20 applicable Principles.
ROLE OF ESES CSDs AS AN FMI

1. General description of the FMI and the markets it serves

Euroclear Belgium, Euroclear France and Euroclear Nederland, operating through a single system called the ESES (Euroclear Settlement of Euronext-zone Securities) platform, provide settlement and custody services for domestic and foreign securities for a broad number of domestic and international Clients and issuers. In addition to its core settlement and custody services, the ESES CSDs offer related services such as new issues distribution to the markets they serve and collateral management services.

2. ESES CSDs in the Euroclear Group

This section provides an overview of the main entities composing the Euroclear group, the ownership structure, the activities Euroclear pursues and the organisational structure. Further details in this respect can be found in the annual report.

2.1 Structure of the group

The group includes the following Central Securities Depositaries (CSDs): Euroclear Bank, Euroclear Belgium, Euroclear Finland, Euroclear France, Euroclear Nederland, Euroclear Sweden and Euroclear UK & Ireland. Euroclear Bank is the sole CSD in the group which is also authorised as a credit institution. These CSDs are referred hereafter as the operating entities of the group.

Euroclear Holding SA/NV the ultimate parent entity of the group, which indirectly owns, through Euroclear Investments SA, the CSDs of the group. Euroclear SA/NV is a financial holding company and an institution assimilated to a settlement institution established under the laws of Belgium. It is the direct parent entity of the CSDs of the group and provides system development and support services to the CSDs and other companies of the group.

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Euroclear Holding SA/NV

Euroclear Holding SA/NV is a société anonyme incorporated under the laws of Belgium. It owns indirectly the entire issued ordinary share capital of the Euroclear CSDs.

The Euroclear Holding SA/NV Board is responsible for all shareholders matters, determination of the group’s main strategic objectives and monitoring of the performance of the group as a whole.

Euroclear Holding SA/NV is the ultimate parent financial holding company in accordance with Article 4(30) of Regulation (EU) 575/2013.

Euroclear Investments SA

Euroclear Investments SA is a Luxembourg-based holding company through which Euroclear Holding SA/NV holds its investments in the various group operating entities and which provides various management and administrative services, such as engaging group insurance policies and providing real estate management, for the benefit of the group.

Euroclear SA/NV

Euroclear SA/NV is a financial holding company and is the parent company of the group CSDs. It is headquartered in Brussels and operates three branches in London, Paris and Amsterdam. Euroclear SA/NV delivers a range of services (system development and support services) to the group’s CSDs and other group entities.

The group has centralised a number of support and/or control functions within Euroclear SA/NV in order to ensure consistency across the group in delivering its objectives and create more organisational efficiency.
As such, Euroclear SA/NV acts as the group service company and has contractually undertaken to provide non-operational services through outsourcing arrangements between itself and its subsidiaries. In view of the fact that Euroclear SA/NV offers services to FMIs (where business continuity is a key factor), it is subject to a specific regulatory status, i.e. that of an institution assimilated to a settlement institution, under the laws of Belgium.

**Euroclear Bank SA/NV**

Euroclear Bank is a Financial Market Infrastructure (FMI), a central securities depository established under the laws of Belgium. It is authorised under CSDR, and it operates a securities settlement system also governed by Belgian law and provides a range of CSD services to its participants. Euroclear Bank is also authorised as a credit institution (with a limited purpose license) to provide limited banking services that support its CSD services.

Euroclear Bank currently has opened several branches (Hong Kong, Krakow, Tokyo) and representative offices (Beijing, Dubai, Frankfurt, New-York, Singapore) which provide operational and client relationship support to Euroclear Bank headquarters in Brussels. The Euroclear Bank branches and representative offices do not have clients and do not open separate accounts.

**Euroclear Belgium**

Euroclear Belgium is a central securities depository established under the laws of Belgium. Is authorised under CSDR, and is the operator of the system which has been recognised as a securities settlement system in the meaning of Settlement Finality Directive (SFD).

**Euroclear France**

Euroclear France is a central securities depository established under the laws of France. Is authorised under CSDR, and is the operator of the ESES France system which has been recognised as a securities settlement system in the meaning of SFD.

**Euroclear Nederland**

Euroclear Nederland has been appointed as central institution for the purpose of the Securities Giro Act (SGA), which is the basis for the Dutch book-entry and asset protection system. Is authorised under CSDR, and is the operator of the ESES The Netherlands system which has been recognised as a securities settlement system within the meaning of the SFD.

**Other CSDs**

In addition to Euroclear Bank and the ESES CSDs, three other Euroclear CSDs are established in UK & Ireland, Sweden and Finland.
3. ESES CSDs business model and risk profile

The ESES CSDs are continuously working to make post-trade easier, aiming at simplifying the experience for participants of doing business and provide a safe, efficient and cost-effective operational environment within the markets they serve.

In recent years, the ESES CSDs have continued their focus on their core mission as central securities depositories adapting their relevant governance and framework to CSDR and supporting Target 2 Securities (T2S) releases and migration waves. The ESES CSDs continue to actively contribute to the T2S governance both at steering and operational levels to ensure that the services meet participant’s expectation and delivers adequate service quality.

Additionally, the single CSD access strategy is being rolled out as a new service in the post T2S landscape. Single CSD access combines the strengths of issuer and investor CSD in Europe allowing cross-CSD settlement on T2S, Delivery versus Payment (DvP) central bank money settlement in EUR and value added services in terms of access to liquidity, collateral management, asset servicing and safekeeping services.

Operational risk is the most important risk category inherent in ESES CSDs.

Outsourcing of settlement services to T2S

The ESES CSDs outsource settlement services to the T2S platform and continue to offer other services via the ESES platform. ESES Clients can connect directly to the T2S platform for settlement services only, or use their connection with the ESES platform as a single entry point for settlement and other services.

Whether they connect directly to the T2S platform (Directly Connected Parties) or indirectly to the T2S platform (Indirectly Connected Parties), ESES Clients maintain their business, legal and operational relationships exclusively with the ESES CSDs. While settlement processing is performed on the T2S platform, Clients continue to hold their securities accounts with the respective ESES CSD.

4. ESES CSDs main activities

The following sub-sections provide a more in-depth description of the services offered by ESES CSDs which qualify under CSDR as core services and non-banking type ancillary services. ESES CSDs do not offer banking type ancillary services of any kind.

Core CSD activities

Securities settlement services

ESES CSDs provide DvP book-entry and free of payment (FoP) settlement services that follow, where relevant, the below principles:

- Central bank money settlement: in Euro;
- integrated model by which securities accounts and cash positions in central bank money are held within the same settlement platform;
- auto-collateralisation mechanism;
- overnight batch settlement and daytime real-time settlement.
The management of the cash accounts and of liquidity movements are handled by the Central banks. Please refer to ESES-T2S DSD ESES interaction with payment systems for additional information.

**Notary services**

Notary services are defined as the initial admission and/or establishment of certificated or dematerialised securities in book entry form. The definition refers to the initial representation and subsequent maintenance of securities in book-entry form through initial credit and subsequent credits or debits to securities accounts.

To be admitted, the securities must comply with several criteria and in particular, they must be validly issued, suitable for book entry, freely transferable within the CSD system and fungible with all other securities of the same issue.

Once admitted, the securities are booked in the Issuance account opened in the books of the relevant CSD.

More information is available in DSD – ESES securities eligibility and admission rules.

Euroclear Belgium also offers a dematerialisation service developed for issuers of securities issued under, and governed by, Belgian law.

**Central maintenance**

Central maintenance services consist in providing and maintaining securities accounts at the top-tier level, including for example the processing of corporate actions such as dividend and interest payments or voting rights in the case of shares. This activity is also referred to as Issuer CSD activity (it is typically the case when another type of entity, e.g. a registrar, ensures the notary function).

ESES CSDs allow their participants to segregate their holdings in several securities accounts or sub-securities accounts, sub-positions, and other specific components in the ESES account structure. The ESES accounting systems guarantees, for each issue, that the number of securities held by its Clients is always equal to the total of the issuing account or equivalent.

**Ancillary services**

**New issues**

In relation to the initial recording of securities in the book-entry system, the ESES CSDs also offer services to issuers and their agents. These services include the initial recording of the issue in the book-entry system, the allocation of an identification code for the security (except for Euroclear Belgium who does not act as National Numbering Agent), creation of securities data and and the processes to facilitate the distribution of the new issues. These services support the notary and central maintenance services provided by the institution.

**Asset servicing**

The ESES CSDs offer a large number of custody services facilitating the exercise of securities holder’s rights and corporate actions, including voting services, information on corporate events, processing of interests, dividends and redemptions payments, market claims, subscription rights and certain tax services.
Pre-settlement process

ESES CSDs offer their clients the following pre-settlement services:

- Stock exchange, MTF and CCPs transactions: whenever a CSD Client is also member of a trading venue, the CSDs allow for settlement in the ESES system of transactions that are negotiated by such participant on such trading venues.

- Trade confirmation via the SBI\(^2\) which is a pre-settlement STP solution for processing stock exchange and over the counter trades, from execution through to settlement. A settlement instruction will be automatically generated by the SBI platform.

Other safekeeping and settlement services

ESES CSDs offer other types of safekeeping and settlement services such as:

- Safekeeping and settlement as investor CSD. For securities the CSDs hold in their capacity as investor CSD, the CSD ensures the safekeeping and settlement of related instructions.

- Stripping and reconstitution services offered by Euroclear France and Euroclear Nederland in their respective jurisdictions, whereby primary dealers can transform eligible (French and Dutch) government securities into fungible strips or reconstitute the original security.

- Belgium Registered securities – BRS service: Euroclear Belgium provides support to the issuers of listed registered shares for the management of their share register. The service includes the processing of both on-exchange transactions traded on the Euronext Brussels market and out of the stock exchange transactions.

- Bordereaux de Référence Nominative – BRN service: issuers of registered securities in France have the possibility to receive information on any change in ownership on a continuous basis.

Collateral management services

The ESES Triparty Collateral management service, offered by Euroclear France and Euroclear Nederland, is a comprehensive solution that allows parties to process their collateral operations on a Straight through processing (STP) basis, for the following operations:

- monetary policy with the National Central Bank (NCB)
- bilateral financing
- operations with CCPs (for CCP cleared operations fed by MTFs)

The Interoperability service launched in 2013 allows Euroclear France and Euroclear Nederland clients to operate with counterparties in Euroclear Bank on an extended scope of foreign collateral. The service is available in principle but not offered by Euroclear Belgium due to the absence of debt securities in the list of eligible securities in Euroclear Belgium.

All transactions that are generated by the Collateral Management System take the form of single, or multiple, standard FoP or DvP instructions that are sent to Euroclear France or Euroclear Nederland for settlement and follow the standard settlement life cycle.

The participants, depending on their underlying contract, subscribe to the Triparty Collateral Service Agreement or to the Triparty Repurchase Service Agreement. Both agreements are provided by the ESES CSDs and both corresponding services are identical (except minor operational variations).

\(^2\) Sociét\'e de Bourse Interméd\'iaire: is a trade confirmation platform used by brokers and their clients.
The collateral management services are duly documented in related Terms and conditions and Service Agreement Operating Procedures.

**Fund order routing**

Euroclear France allows its participants to manage on the funds order routing platform the subscription and the redemption orders for funds. On this platform, the fund distributors (or their custodian(s)) can send orders to the transfer agent of the fund. The funds order platform may generate settlement instructions that follow the standard settlement life cycle, upon subscription to the service by the participant.
**Principle 1: Legal basis**

*An FMI should have a well-founded, clear, transparent, and enforceable legal basis for each material aspect of its activities in all relevant jurisdictions.*

<table>
<thead>
<tr>
<th>Key consideration (KC) 1: The legal basis should provide a high degree of certainty for each material aspect of an FMI’s activities in all relevant jurisdictions.</th>
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**Euroclear Belgium**


Euroclear Belgium is subject to Royal Decree n°62 on the deposit of fungible financial instruments and the settlement of transactions involving such instruments.

Euroclear Belgium is subject to prudential supervision by the National Bank of Belgium (NBB) under the Law of 22 February 1998 establishing the organic status of the NBB (the “Organic Law”), which acts as competent authority under CSDR. Other relevant authorities under CSDR include the Eurosystem, represented by the NBB.

The System operated by Euroclear Belgium has been recognised as a securities settlement system within the meaning of the Law of 28 April 1999 on Settlement Finality implementing the EU Settlement Finality Directive 98/26 (SFD). The System operated by Euroclear Belgium is overseen by the NBB in accordance with Article 8 of its Organic Law.

Insofar as Euroclear Belgium conducts activities which fall in scope of article 45 of the Law of 2 August 2002, Euroclear Belgium is subject to the supervision of the Financial Services and Markets Authority (FSMA) for matters which fall within the competences of the FSMA. However this is currently not the case.

**Euroclear Nederland**

Euroclear Nederland is authorised under CSDR.

For purposes of the Securities Giro Act (SGA), which is the basis of the Dutch book-entry and asset protection system, Euroclear Nederland qualifies as a central institution and the system it operates has been designated as a securities settlement system within the meaning of the SFD.

Euroclear Nederland is the operator of the ESES Netherlands System. Euroclear Nederland has been appointed as system operator by the Dutch Minister of Finance (MoF) and is legally responsible for the functioning of the system.

Euroclear Nederland is subject to supervision by the Autoriteit Financiële Markten (The Netherlands Authority for the Financial Markets) (AFM) and by the De Nederlandsche Bank (the Dutch Central Bank) (DNB), acting both as competent authorities under CSDR. Other relevant authorities under CSDR include the Eurosystem represented by the DNB.
Euroclear France

Euroclear France is authorised under CSDR.

Euroclear France is a French central securities depository as defined under Article L.441-1 of the Monetary and Financial Code.

The ESES France System has been recognised as a securities settlement system within the meaning of the French Financial and Monetary Code (FMFC) implementing the SFD.

Euroclear France is regulated by the Autorité des Marchés Financiers (AMF) and the ESES France System is subject to the oversight of the Banque de France (BdF), acting both as competent authorities of Euroclear France under CSDR. Other relevant authorities under CSDR include the Eurosystem represented by the BdF.

The **material aspects** for each ESES CSD’s activities that require a high degree of legal certainty are:

- Asset protection – the protection of the holdings in financial instruments of the participants in the books of each ESES CSD as well as in the books of each foreign central securities depository;  
- Dematerialisation and immobilisation – legal basis for dematerialisation or immobilisation of securities;  
- Finality – the settlement finality of securities;  
- Default procedures – the rules concerning default situations.

The **relevant jurisdictions** for each ESES CSD’s activities are primarily:

- **Euroclear Belgium**: the jurisdiction of incorporation of Euroclear Belgium and the System it operates is Belgium.  
- **Euroclear Nederland**: the jurisdiction of incorporation of Euroclear Nederland and ESES Netherlands System is The Netherlands.  
- **Euroclear France**: the jurisdiction of incorporation of Euroclear France and the ESES France System is France.

In addition, the following **jurisdictions** may also be relevant with respect to each ESES CSD’s activities:

- the jurisdictions of establishment of CSDs with which each ESES CSD maintains a link;  
- the place of incorporation or establishment of participants of each ESES CSD (where such place of establishment or incorporation is not in the EU) in case of insolvency or resolution proceedings affecting those participants;  
- jurisdictions which the ESES CSDs elect as governing law in contracts;  
- for securities admitted in each ESES CSD as issuer CSD and falling in the scope of Article 23 of CSDR, the EU Member States to which Article 49.1 of CSDR refers.

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3 For purposes of Principle 1 a foreign central securities depository means a foreign central securities depository with whom an ESES CSD holds securities.
Asset protection

With respect to each ESES CSD

Euroclear Belgium

- The Belgian legislation provides for a clear and sound basis for admission and book-entry transfers of immobilised, dematerialised or registered securities, regardless of whether or not those are governed by Belgian law.
- Securities are held and transferred in the System operated by Euroclear Belgium via book-entry, under a regime of fungibility, (Royal Decree 62 on the Deposit of Fungible Financial Instruments and the Settlement of Transactions involving such Instruments).
- The Royal Decree 62 provides for a two-tier structure of asset protection, benefiting to the participants of the System operated by Euroclear Belgium and their underlying clients. The financial instruments held with Euroclear Belgium are protected against both the insolvency of Euroclear Belgium and of its participants.
- By virtue of the above legislation, the securities deposited with Euroclear Belgium never become part of the estate of Euroclear Belgium and cannot be claimed by its creditors: the participants of Euroclear Belgium are given by law a co-ownership right of an intangible nature in a pool of book-entry securities of the same category held by Euroclear Belgium on behalf of all its participants holding securities of that category. The participants holding securities in the System operated by Euroclear Belgium retain ownership on such securities, which implies that they retain (i) ‘in rem’ rights on the securities, i.e. a right of recovery of the relevant quantity of securities deposited in case of an insolvency event or bankruptcy affecting Euroclear Belgium, and (ii) voting rights.
- Similarly, the clients of the participants hold co-ownership right in a pool of book-entry securities of the same category, deposited in the securities accounts maintained by Euroclear Belgium participants. Euroclear Belgium enables the participants, on demand to segregate their own assets from those of their own clients. The clients of the participants can exercise their co-ownership rights collectively against Euroclear Belgium when the participants that are holding their securities would face an insolvency proceeding (i.e. bankruptcy, insolvency, winding-up or other situation of concurrence between creditors as meant under the relevant provisions of Belgian law).
- Besides, securities held with Euroclear Belgium are by virtue of law immune from attachment by creditors of account holders and any third party. Moreover, no attachment of securities deposited by Euroclear Belgium with any foreign central securities depository with whom an Euroclear Belgium holds securities is permissible.

Euroclear Nederland

- The Dutch legislation provides for a clear and sound basis for admission and book-entry transfers of immobilised, dematerialised or registered securities, regardless of whether or not those are governed by Dutch law. Securities are held and transferred in the ESES Netherlands System via book-entry.
- The SGA provides for a two-tier structure of asset protection, benefiting the participants in Euroclear Nederland and their underlying clients. The financial instruments held with Euroclear Nederland are protected against both the insolvency of Euroclear Nederland and of its participants.
• By virtue of law the securities deposited with Euroclear Nederland never become part of the estate of Euroclear Nederland and cannot be claimed by its creditors. Euroclear Nederland holds securities in a girodeposit on behalf of the Admitted Institutions (within the meaning of SGA) which are participants in Euroclear Nederland.

• The participants in Euroclear Nederland are given by law (pro-rata to the quantity of securities which such participants have delivered for inclusion in the giro deposit) co-ownership rights of an intangible nature, in a pool of book-entry securities in the same category held by Euroclear Nederland on behalf of its participants (and their underlying clients). Similarly the Admitted Institutions, participants in Euroclear Nederland hold securities of this category for their clients in a collective deposit (‘verzameldepot’). The clients of the Admitted Institutions have jointly co-ownership rights in the securities of the same category which they delivered to the Admitted Institutions for inclusion in the collective depot. The clients of the Admitted Institutions are then co-owners of the relevant giro deposit as well, because they are co-owners of a collective deposit of the Admitted Institution where they hold their securities and of the giro deposit via the securities account of such Admitted Institution with Euroclear Nederland.

• Pursuant to the SGA, clients of participants can only exercise their (co-)ownership rights indirectly, via their participant, against Euroclear Nederland. When the participants that are holding their securities would face insolvency proceedings, the insolvency administrator would be authorised to manage the client’s entitlements with regard to the securities vis-a-vis Euroclear Nederland.

• Besides, securities held with Euroclear Nederland are by operation of law immune from attachment by creditors of account holders and any third party. Moreover, no attachment of securities deposited by Euroclear Nederland with any foreign central securities depository with whom Euroclear Nederland holds securities is permissible.

**Euroclear France**

• French law provides for a clear and sound basis for admission and book-entry transfers of dematerialised securities. Under French law all securities issued in whatever form in France and subject to French law are required to be registered by way of book-entry in securities accounts. (Please refer to ‘dematerialisation and immobilisation below’). The distinction between “registered” or “bearer” form securities refers to the mode of holding of the securities and not to the form of the representation of the securities (book-entry or physical form). The securities are admitted in Euroclear France and circulate within the ESES France System via book-entry.

• Under the French holding system, only the holder of a securities account opened in the books of the authorised financial intermediary at the end of the chain is the owner of the securities held with that authorised financial intermediary, provided the account holder is acting for its own account.

• The other securities accounts in the chain of upper tier authorised financial intermediaries are only mirrors of such a securities account down at the lower level of the chain. The book entries recorded in the books of Euroclear France do not reflect the ownership rights over the relevant securities. The legal nature of securities, of the rights and the effect of the rights attached to the securities vis-à-vis third parties and the issuers (in rem rights) are not created by entries on the books of Euroclear France. As a result, when securities are credited to the account held with Euroclear France ownership rights over said securities remain determined by reference to individual account opened in the books of the entity acting as an authorised account keeper. Therefore, under French law the asset protection regime is ensured at the level of the authorised account keeper or the issuer (depending on the form of the securities).

• Consequently, Euroclear France does not hold title to the securities recorded in the accounts opened in its books in its participants’ names.
• In a situation where the securities account of a participant in Euroclear France is held outside France, the ownership rights on those securities will be determined by the law of the place where such securities account is located, as referenced by French Law (y in accordance with the lex rei sitae principle).

• Consequently if Euroclear France becomes subject to insolvency proceedings, the securities deposited in Euroclear France’s books cannot be claimed by Euroclear France creditors as Euroclear France does not hold any ownership rights in those securities. In the same vein, if Euroclear France’s participants become subject to insolvency proceedings, the securities deposited in Euroclear France books (including in the name of their underlying clients) cannot be claimed by the creditors of Euroclear France participants because Euroclear France participants do not hold title to the securities recorded in the accounts opened on Euroclear France books.

• Besides, securities held with Euroclear France are by virtue of law immune from attachment by Euroclear France’s creditors and participants’ creditors or any third party. Moreover, no attachment of securities deposited by Euroclear France with any foreign central securities depository with whom Euroclear France holds securities is permissible.

More details concerning the asset protection of each ESES CSD are available in Rights of Clients to securities deposited in the ESES CSDs which is published on www.euroclear.com.

Links of each ESES CSD with foreign central securities depository

• Before opening links with other foreign central securities depository, each ESES CSD performs an initial verification of the local legislation to ensure that securities held with such foreign central securities depository benefit from a level of asset protection comparable to the level of asset protection in their own jurisdiction. This assessment is performed for all links, beyond the strict obligation established for links with central securities depositories outside of the European Union. A review of the local legislation is performed periodically.

• The legal opinions notably address the following legal aspects:
  - the entitlement to the securities (law applicable to proprietary aspects, nature of the rights on the securities, permissibility of an attachment or freeze of the securities)
  - the impact of insolvency proceedings and of crisis measures (e.g. any resolution tool which can be applied in line with laws implementing Directive 2014/59/EU of the European Parliament and of the Council of the 15 May 2014 establishing the framework for the recovery or resolution of credit institutions and investment firms or any comparable legislation in the country of the central securities depository) affecting the local foreign central securities depository (segregation aspects, settlement finality, procedures and deadlines to claim the securities).

• During the review of the legal opinions the ESES CSDs also obtain confirmation of the absence of conflict of laws resulting from the maintenance of the link.

Dematerialisation and immobilisation

Euroclear Belgium

In Belgium, the immobilisation of securities is governed by Royal Decree 62 which provides for the possibility to hold securities with Euroclear Belgium on a fungible basis and for a circulation of those securities via book-entry with a related asset protection regime (see above).
The dematerialisation of securities governed by Belgian law is implemented through the law of 14 December 2005 and the Royal Decree of 12 January 2006 on dematerialised securities of companies and article 468 of the Companies Code. The law prohibits physical deliveries on the Belgian territory, except when made between professionals and for immobilisation purposes.

The following securities may be deposited with Euroclear Belgium:

- securities which are not governed by Belgian law; and
- securities not issued in Belgium.

**Euroclear Nederland**

In the Netherlands, the immobilisation of securities is governed by the SGA which provides for the possibility to hold securities with Euroclear Nederland on a fungible basis and for the transfer of those securities via book-entry with a related asset protection regime (see above).

In 2011 the Dutch SGA was amended to reach dematerialisation. Since 2011, physical bearer securities are ineligible for the giro deposit system unless they are in the form of a global note which represents the entire issue. Upon depositing the global note with Euroclear Nederland, the bearer securities that it represents will be eligible for book-entry circulation.

The following securities may be deposited with Euroclear Nederland:

- securities which are not governed by Dutch law; and
- securities not issued in the Netherlands.

**Euroclear France**

Under French law, pursuant to Law n°81-1160 dated December 30, 1981 as codified in Article L.211-3 of the FMFC which entered into force on November 3, 1984 and French Decree n°83-359 of 2 May 1983 (the "1983 Decree") as codified in Article R.211-1 of the M&F Code, all securities issued in whatever form in France and subject to French law are no longer represented by instruments printed on paper but are required to be registered by way of book-entry in an account held by the issuer of the securities or by one of the intermediaries listed in paragraphs 2 to 7 of Article L.542-1 of the FMFC.

The French legislation governing dematerialised securities only applies to dematerialised securities governed by French law and issued in France and not to securities governed by a national law other than French law and issued by a foreign issuer or a French issuer.

Provided that under the law of the issuer’s home country the issuer may validly entrust to Euroclear France the provision of services with respect to dematerialised securities Euroclear France may admit in its operations dematerialised securities:

- which are not governed by French law; and
- not issued in France.

**Finality**

After the migration of the ESES CSDs to the T2S platform the validation of the various moments of finality described below are performed on the T2S platform.
**Euroclear Belgium**

Settlement finality is governed by the SFD which is implemented into the Belgian Settlement Finality law of 28 April 1999. This legislation effectively ensures irrevocability and finality of transfer orders executed in a securities settlement system (‘System’). The System operated by Euroclear Belgium, is designated as a ‘System’ under Belgian law.

In case of insolvency proceedings affecting a participant to the System, the law refers to the rules of the System to determine the moment of (i) entry of transfer orders in such System, (ii) irrevocability of transfer orders (if any such moment is determined) and (iii) finality of transfer orders executed by the System. The finality rules of System operated by Euroclear Belgium are set out in the ESES Terms and Conditions (Book I), which detail the three moments mentioned here above. The typology of participants and the access criteria to the System operated by Euroclear Belgium are set out in the ESES Terms and Conditions Book I and Book II.

**Euroclear Nederland**

Settlement finality is governed by the SFD which is implemented in the Dutch Bankruptcy Act (Faillissementswet). This legislation effectively ensures irrevocability and finality of transfer orders executed in a securities settlement system (‘System’). The ESES Netherlands System, operated by Euroclear Nederland, is designated as a ‘System’ under Dutch law.

In case of insolvency proceedings affecting a participant to the System, the law refers to the rules of the System to determine the moment of (i) entry of transfer orders in such System, (ii) irrevocability of transfer orders (if any such moment is determined) and (iii) finality of transfer orders executed by the System. The finality rules of the ESES Netherlands System are set out in the ESES Terms and Conditions (Book I), which detail the three moments mentioned here above. The typology of participants and the access criteria to the ESES Nederland System are set out in the ESES Terms and Conditions Book I and Book II.

**Euroclear France**

Settlement finality is governed by the SFD which is implemented into Article L.330-1 et seq. of the FMFC. This legislation effectively ensures irrevocability and finality of transfer orders executed in a securities settlement system (‘System’). The ESES France System, operated by Euroclear France, is designated as a ‘System’ under French law.

In case of insolvency proceedings affecting a participant to the System, the law refers to the rules of the System to determine the moment of (i) entry of transfer orders in such System, (ii) irrevocability of transfer orders (if any such moment is determined) and (iii) finality of transfer orders executed by the System. The finality rules of ESES France System are set out in the ESES France Operating Rules approved by the AMF and in the Terms and Conditions (Book I), which detail the three moments mentioned here above. The typology of participants and the access criteria to the ESES France System are set out in the ESES France Operating Rules and in the ESES Terms and Conditions Book I and Book II.

**Cross CSD settlement inside and outside T2S**

As a general rule, for securities held through links with other central securities depositories (directly or through an intermediary), the transfer of securities between the relevant ESES CSDs Client and a participant of the receiving CSD are governed by the rules of the receiving CSD, including the finality rules.
More specifically:

- For links with other T2S CSDs, the collective agreement between the European Central Bank (ECB), the national central banks operating TARGET2 and the central securities depositories which have migrated to T2S, provides a definition of common moment of entry of the transfer orders into a system and of common moment of irrevocability of such transfer orders. These moments are determined by reference to procedures on the T2S platform.
- For links with CSDs outside of T2S, each ESES CSD will credit the securities account of a participant only after the moment when the settlement of such transaction has been declared final in the books of the other central securities depository and the securities account of the relevant ESES CSD with such central securities depository has been credited accordingly.

**Default procedures**

Please refer to Principle 13 – Participant default rules and procedures.

The ESES CSDs have put in place detailed recovery and resolution plans for themselves. For more details please refer to Principle 3 – Framework for the comprehensive management of risks.

**Key consideration (KC) 2: An FMI should have rules, procedures, and contracts that are clear, understandable, and consistent with relevant laws and regulations.**

All rules and conditions of each ESES CSD, when relevant to its participants, are embedded in the contractual documentation of each ESES CSD.

The main contractual documentation of each ESES CSD consists of:

- ESES Terms and Conditions (Book I and Book II)
- Annex to the ESES Terms and Conditions
- ESES Operating Manual (Part I and Part II)
- ESES Detailed Services Descriptions (“DSDs”)
- Newsletters
- For Euroclear France only, in accordance with French law, the Operating rules of Euroclear France Central Depository⁴. The Operating Rules prevail over the contractual documentation listed above.

Together referred to as “Euroclear Contractual Documentation”.

The Euroclear Contractual Documentation is governed by the law of the country in which each ESES CSD has its registered office.

The amendments to the ESES Terms and Conditions are communicated to the participants via Newsletters and via www.euroclear.com.

Additionally, the Triparty Collateral Management services offered respectively by Euroclear France and Euroclear Nederland are documented via the following specific contractual agreements which form part of the Collateral Management Service Documentation:

- ESES Triparty Collateral Service Agreement;
- Interoperability Collateral Service Agreement;
- ESES Repurchase Service Agreement;
- Triparty Interoperability Repurchase Service Agreement;

⁴ The Operating Rules of Euroclear France Central Depository and any changes thereto are subject to the approval of the AMF.
• Triparty Interoperability – Collateral Service Agreement – Operating Procedures;
• Triparty Interoperability – Repurchase Service Agreement – Operating Procedures;
• ESES Collateral Service Agreement – Operating Procedures;
• ESES Repurchase Service Agreement – Operating Procedures;
• ANNEX A to Collateral Service Agreement Terms AND Conditions.

The Collateral Management Service Documentation is governed by English law.

The consistency of the contractual framework with applicable law is ensured by scrutiny exercised by in-house lawyers and by legal opinions obtained on specific aspects, on ad hoc basis.

The ESES CSDs ensure that the contractual documentation is clear and understandable by:

• designing a clear contractual structure where the hierarchy and purposes of each document is unambiguous;
• documenting legal and operational information in different and clearly distinguished parts of the documentation allowing to keep the documents clear for the targeted audience;
• drafting legal aspects of the documentation according to professional legal drafting standards, such as Euroclear’s ‘Tone-of-Voice’ principles;
• incorporating feedback from external and internal stakeholders as much as possible to enhance the clarity of such documents;

The Euroclear Contractual Documentation of the ESES CSDs and the Collateral Management Service Documentation of Euroclear Nederland and Euroclear France are subject to standard internal governance and approved by the ESES Management Committee and/or Board as the case may be.

**Key consideration (KC) 3: An FMI should be able to articulate the legal basis for its activities to relevant authorities, clients, and, where relevant, client’s customers, in a clear and understandable way.**

The legal basis for the activity of each ESES CSDs is the authorisation under CSDR and the laws and regulations concerning the ESES CSD in its local jurisdiction. The services provided by the ESES CSDs and the level of their liability are detailed in the following documents:

• the Euroclear Contractual Documentation (please refer to KC 2);
• the Collateral Management Service Documentation (please refer to KC 2);
• The Rights of Clients to securities deposited in the ESES CSDs;
• The Disclosure Framework - Observance by ESES CSDs of the CPMI-IOSCO Principles for Financial Market Infrastructures.

All these documents (as well as other relevant documents) are publicly available on www.euroclear.com.

Concerning the fact that the legal basis is disclosed in a clear and understandable way, please refer to KC 2.
Key consideration (KC) 4: An FMI should have rules, procedures, and contracts that are enforceable in all relevant jurisdictions. There should be a high degree of certainty that actions taken by the FMI under such rules and procedures will not be voided, reversed, or subject to stays.

Most aspects have already been covered in KC 1 and KC2.

The ESES CSDs assess the validity and enforceability of the Euroclear Contractual Documentation, where relevant, through legal opinions. Additionally, ESES CSDs have well defined rules and procedures to ensure that contracts remain enforceable in all relevant jurisdictions via a regulatory watch and the legal analysis processes.

Each ESES CSD operates a recognised securities settlement system within the meaning of the SFD. For each ESES CSD resolution proceedings do not affect the rights and obligations linked to participation in securities settlement system. The ESES CSDs assess the risks resulting from insolvency proceedings affecting a participant in each ESES system, an ESES CSD or a foreign central securities depository with whom an ESES CSD holds securities.

In addition, the Euroclear Contractual Documentation provides that to the extent required by applicable law pursuant to Directive 2014/59/EU of the European Parliament and of the Council of 15 May 2014 establishing a framework for the recovery and resolution of credit institutions and investment (BRRD), each ESES CSD may admit an applicant as a client to participate in its securities settlement system even if such applicant does not meet all relevant admission criteria of such ESES CSD, provided that such admission is requested in relation with resolution proceedings affecting another client and a resolution tool triggered by the relevant resolution authority. This provision provides legal certainty to participants and competent authorities in the context of a resolution proceeding because it allows the admission of a bridge entity or a transferee of the assets of a participant in resolution by the ESES CSDs.

Key consideration (KC) 5: An FMI conducting business in multiple jurisdictions should identify and mitigate the risks arising from any potential conflict of laws across jurisdictions.

Each ESES CSD carries out its activities in the jurisdiction where such ESES CSD is located, consequently, the rights and obligations of each ESES CSD are governed by the law of the place where each ESES CSD is located.

However, following cases are specially assessed to avoid conflict of laws:

- when each ESES CSD holds securities via links with central securities depositories in other jurisdictions: it then obtains legal opinion on specific aspects (please refer to KC 1 under Asset Protection above);
- when each ESES CSD accepts foreign securities as issuer CSD, each ESES CSD performs an assessment of measures under Article 23 of CSDR to complement ESES’s eligibility review of new securities issuances.
Principle 2: Governance

An FMI should have governance arrangements that are clear and transparent, promote the safety and efficiency of the FMI, and support the stability of the broader financial system, other relevant public interest considerations, and the objectives of relevant stakeholders.

Key consideration (KC) 1: An FMI should have objectives that place a high priority on the safety and efficiency of the FMI and explicitly support financial stability and other relevant public interest considerations.

ESES CSDs operate under CSDR, which requires a CSD to clearly define its goals and objectives covering at least the areas of minimum service levels, risk-management expectations and business priorities.

ESES CSDs objectives are set by the Board of Directors\(^5\) on an annual basis (referred to as the ‘ESES Balanced Scorecard’). For 2019, the objectives focused on five areas: strategy, license to operate, clients, people and financial. The ESES Senior Management\(^6\) ensures that the objectives are met and that the performance is reviewed regularly during the year and at year-end by the Board.

The ESES objectives are cascaded down to all relevant divisions and include detailed operational performance objectives, which ESES Senior Management regularly reviews.

ESES CSDs outsource a number of services to their parent company, Euroclear SA/NV, which acts as the group service provider, and to Euroclear Bank, a sister company. The arrangements for the provision of shared services by Euroclear SA/NV and Euroclear Bank are documented in the Shared Services Agreement (SSA) and Inter-company description and execution agreements respectively. Services centralised in Euroclear SA/NV include technology services, admissions of clients, risk management, internal audit and compliance and ethics (please see Principle 17 – Operational risk for more details).

ESES CSDs set qualitative and quantitative targets and specific Key Performance Indicators (KPIs) for the provision of the above services in a Service Delivery Plan. On an annual basis, targets for the availability and performance of ESES operational systems are agreed with the ESA IT divisions as part of the SSA as well.

The KPIs are reviewed and endorsed by ESES Senior Management annually. They are assessed on a regular basis in service dialogue meetings and discussed by/reporting to ESES Senior Management.

In line with our corporate strategy of being a systemically important resilient and robust infrastructure at the heart of the financial industry’s ecosystem, the objectives include safety and efficiency elements such as system up time, reducing cyber risks and high professional quality standards as well as enhancement of the operational processes. More information on Euroclear’s long-term focus on fraud, money laundering and corruption, data protection, and cyber security is provided within the Euroclear’s sustainability report, published on www.euroclear.com. The objectives also include elements on

\(^5\) The Board of Directors (or Board) refers to the Board of Directors of each of Euroclear Belgium, Euroclear France and Euroclear Nederland taken separately.

\(^6\) ESES Senior Management refers to
- Euroclear Belgium Management Committee
- Euroclear France Chief Executive Officer (“Directeur Général”)
- Euroclear Nederland Management Committee
financial resilience and sustainable business model thereby ensuring compliance with capital and liquidity requirements imposed on the CSDs and the continuity and the development of the CSD activities to the benefit of the markets.

Key consideration (KC) 2: An FMI should have documented governance arrangements that provide clear and direct lines of responsibility and accountability. These arrangements should be disclosed to owners, relevant authorities, clients, and, at a more general level, the public.

ESES CSDs governance requirements are set out in relevant local (Belgian, French or Dutch) and European Union legal and regulatory requirements and recommendations and other related matters. Euroclear Belgium, Euroclear France and Euroclear Nederland are limited liability companies and subsidiaries of Euroclear SA/NV. Each of the ESES CSDs are privately owned entities subject to detailed governance requirements as set in CSDR and local law and regulation. Each ESES CSD is accountable to its shareholders and to its supervisory authorities. Each CSD has established Articles of Association, which details, among other things, the functioning and responsibilities of the Board.

Each ESES CSD has a Board of Directors which is the ultimate decision-making body of the Company and has the power to carry out all acts that are useful or serve to achieve the purpose of the Company, other than those explicitly reserved by law or the Articles of Association to the general meeting of shareholders (or for Euroclear France to the CEO). The Board has established a number of advisory committees which provide guidance and advice on specific matters, as listed in the terms of reference of each Board committee (i.e. Audit and Compliance, Risk, Remuneration and Nominations & Governance committees). The ESES Senior Management has been entrusted with the operational management of the Company with the exception of: i) the determination of the strategy and general policy of the Company; and ii) the powers reserved to the Board by law or the Articles of Association. The Boards/Senior Management shall exercise their powers in accordance with the Euroclear group strategy, governance and risk management frameworks and financial policy objectives as defined by Euroclear SA/NV and amended from time to time and with due respect for all applicable laws and regulations.

The governance arrangements of the ESES CSDs are documented through the following documents:

- **Articles of Association**: the articles of Association describe the Object, Capital, Administration & Supervision, the General Meeting, Annual Accounts and Winding-up procedures of the ESES CSDs.

- **Board Terms of References**: these Terms of References describe the composition, the functioning and the responsibilities and powers of the Board of directors.

- **Audit and Compliance-, Risk-, Nomination and Governance and Remuneration Committees Terms of References**: the Terms of References of each Board advisory committee describe the composition, the functioning and the responsibilities of such committee.

- **Management Committee Terms of References**: these Terms of References describe the composition, the functioning, the responsibilities and the mandate of the MC.

- **The Role of the EF CEO** describes the responsibilities of the EF CEO.

Each ESES CSD has established a User Committee (cf. Key consideration 7 for more details). Specific Term of Reference and detailed arrangement for the identification and management of Conflicts of

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7 The Company refers each of Euroclear Belgium, Euroclear France and Euroclear Nederland taken separately
Interest (where the interests of all stakeholders are duly taken into consideration) have been established for the User Committee.

**Disclosure of governance arrangements**
ESES CSDs make public relevant information to their stakeholders via different channels (see Principle 23 for more details).

In addition to all publications in the relevant State Gazette/Register pursuant to law requirements, ESES CSDs make the following data available to the owners, participants and the public:

- Information on Euroclear activities and services, operating rules for each entity including the ESES CSDs, governance arrangements, as well as business developments, press releases and Group annual reports is available in the Euroclear website.
- The CPMI-IOSCO Disclosure framework and the ESES ISAE 3402 are also posted on the website.
- Governance Charters: those Charters are posted on the website and describe the governance arrangements of each ESES CSD. The Euroclear website further provide information including but not limited to media releases, corporate brochures, and other documents made available to participants and other financial market players and the broader public.
- The ESES financial statements are publicly available from the relevant central balance sheet office.

**Key consideration (KC) 3: The roles and responsibilities of an FMI’s board of directors (or equivalent) should be clearly specified, and there should be documented procedures for its functioning, including procedures to identify, address, and manage member conflicts of interest. The board should review both its overall performance and the performance of its individual board members regularly.**

**Roles and responsibilities**

The Board of each ESES CSD has the powers to carry out all acts that are useful to achieve the objectives of the relevant entity as defined in the Articles of Association, except those that are explicitly reserved by law or the Articles to the shareholders or for Euroclear France the CEO. In carrying out this role, each Board member acts in good faith in the way s/he considers would be most likely to promote the success of each ESES CSD as a whole, while having due regard to its regulatory constraints and to the interests of other stakeholders (e.g. customers, employees and suppliers). The Board of each ESES CSD also has regard to the interests of the Group to which the CSD belongs, ensuring that a proper balance is struck between the interests at stake, in compliance with applicable law related requirements.

The primary responsibilities of the Board are to define and oversee the implementation of the strategy and objectives of the Company, its risk framework (including risk appetite and policies) and to supervise the Company's management. The Board exercises its powers in accordance with the Euroclear group strategy, governance and risk management frameworks and financial policy objectives as adapted from time to time and with due respect for all applicable laws and regulations.

In defining the strategy of the Company, the Board handles any individual strategic matters as and when they arise.

The ESES Senior Management reports to the Board on the implementation of the agreed strategy, risk

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8 The information is available in the Kamer van Koophandel, National Bank of Belgium website/Central Balance sheet office and Infogreffe/comptes annuels for Euroclear Nederland, Euroclear Belgium and Euroclear France respectively.
profile and financial position of the Company and all other matters delegated from the Board to the ESES Senior Management.

The level of control over the ESES Senior Management is assessed regularly by the Board as a whole as part of the Board self-assessment process which covers specifically management’s relationship with the Board.

Procedures for the Board’s functioning and Conflicts of Interest

Each ESES Board meet regularly (at least five times a year, as required by the terms of reference). Each Board is composed of suitable members of sufficiently good repute with an appropriate mix of skills, experience and knowledge of the Company and of the market. Additional information on the functioning of the Board is included in the terms of reference, which are reviewed annually.

ESES CSDs adopted comprehensive policies that Board members, the ESES Senior Management and staff (including contractors), must follow in order to identify, notify, assess, properly manage and control potential and actual Conflicts of Interest (CoI) including:

- Board Policy on Conflicts of interest for Board Members
- Euroclear Group Policy Handbook on Conflicts of Interest and External Mandates
- Guidelines for categorisation, assessment and determination of management measures and controls for Conflict of Interest in Euroclear

Those Group policies cover both personal and corporate conflicts, with due consideration of potential intra-group conflicts resulting from the group structure and its operating model entailing outsourcing arrangements. CoI Policy documents require all board, management and staff members not only to consider and disclose the conflicts of interest they may have both personally (including via persons directly or indirectly linked to them) and when they act upon a mandate, but also to take reasonable steps to avoid engagement in activities which could create a perception of impropriety or jeopardise Euroclear’s integrity or reputation.

The Guidelines detail how to:

- categorise and assess the materiality of conflicts of interest identified or disclosed under the CoI Board Policy or the CoI Handbook
- assess the effectiveness of available management measures and controls in respect of any conflicts of interest
- implement effective management measures and controls for identified and disclosed CoI

ESES entities seeks to limit the occurrence of material CoI situations. Euroclear Board (Committees) composition rules form integral part of this objective.

In case of an actual permanent conflict of interest\(^9\), the Company will automatically apply the measures foreseen in relevant regulation (i.e. involved individuals will be excluded from the decision-making

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\(^9\) A specific situation where certain decisions by a person would systematically be impaired by conflicting interests, due to an existing and lasting (as opposed to punctual or transitory) - either personal, family or business relationship or a specific combination of functions within an entity or with another entity.
process and from the receipt of any relevant information concerning the matters affected by the permanent Conflict of Interest).

All potential or actual conflicts identified or disclosed in line with the CoI Board Policy and the CoI Handbook must be recorded either in the Conflicts of Interest Inventory or Register along with the outcome of the categorisation and materiality and manageability assessments which are required by the Guidelines. Conflicts of Interest, whether at the level of the Board of Directors or the Senior Management, are also reported annually to Board of Directors and notified to ESES statutory auditors.

**Board Committees**

In order to perform its responsibilities more efficiently and in line with legal and regulatory requirements, each ESES Board has established the following committees exclusively composed of non-executive directors: the Audit and Compliance Committee, the Risk Committee, the Nominations and Governance Committee and the Remuneration Committee. The composition of such committees is available on Euroclear’s website.

The **Audit and Compliance Committee** is an advisory committee of the Board, established to assist the Board in fulfilling its responsibilities relating to the oversight of the quality and integrity of the accounting, auditing and reporting practices of the relevant ESES CSD, the effectiveness of internal control systems and risk management systems, the adequacy and performance of the entity’s Internal Audit function and Compliance function, the independence, accountability and effectiveness of the External Auditor and such other duties as directed by the Board.

The **Risk Committee** assists the Board in fulfilling its oversight of ESES risk management governance structure, risk tolerance, and strategy, management of key risks as well as the process for monitoring and mitigating such risks (including contingency planning, cyber security, recovery plans, board policies); and such other duties as directed by the Board.

The **Nominations and Governance Committee (NGC)** reviews and makes recommendations to the Board in respect of nominations of the executive and non-executive directors of the Company, the composition of the Board and Board committees and corporate governance matters. It also sets a target for representation of the underrepresented gender on the Board and defines guidelines describing appropriate actions to reach this target.

The **Remuneration Committee** makes recommendations to the Board with respect to the total amount of remuneration and other benefits (other than those applicable to employees of the Company generally) paid by the Company to its executive Directors and responsible for control functions. It further reviews recommendations and approves the amount of annual individual remuneration of each executive director (including incentive compensation, and changes to base salary, retirement and other benefits), subject to approval by the Board of the overall amount of executive director remuneration referred to above. The ESES CSDs being part of the same group as a Belgian credit institution, the remuneration-related requirements applicable to this credit institution must be complied with at the consolidated and sub-consolidated levels.

The ESES **Senior Management** has been established by the Board and has been entrusted with the operational management of the company, if applicable as specifically delegated by the Board, with the exception of:

- the determination of the strategy and general policy of the Company
• the powers reserved to the Board by law or the Articles of Association

The ESES Senior Management acts in accordance with applicable laws and regulations and the rules set out in the Articles and under the supervision of the Board.

The ESES Senior Management reports directly to the Board and, on matters which fall within the remit of the Board Committees, to the Board’s specific Committees which in turn report their analysis on the same to the Board.

Review of performance

The Board carries out a self-assessment and effectiveness review of the Board as a whole, the Board Chairman and the individual members. The Board assessment process covers the individual performance of each non-executive Director including the Chairman. This review aims at ensuring that the Board has the necessary framework in place within which to make decisions. It focuses on the optimum mix of skills and knowledge amongst the directors, clarity of goals and processes, a culture of frankness that encourages constructive evaluation, full disclosure of procedures and an effective relationship with the ESES Senior Management. This annual review is carried out by completion of a questionnaire or by conducting interviews with Board members, as decided by the Board, depending on the specific needs of the Board in the year assessed.

The following elements are reviewed as part of the assessment process:

• the composition of the Board and the Board Committees, including gender diversity and independence as defined above
• the functioning of the Board (including the training of the Directors and the relationships of the Board with the Board Committees and with the Senior Management)
• the role of the Board (including the way the strategic matters are treated by the Board and the control exercised by the Board over the Senior Management); as well as the Directors’ involvement and attendance at meetings

The consolidated results of the assessment are reviewed by the NGC, and the results are reported to the Board for discussion. Concerns raised are followed up appropriately. The outcomes of the NGC and Board discussions, as well as any agreed follow-up actions, are recorded in minutes.

The NGC, while reviewing the Board composition as well as the list of candidates proposed for re-election at the Annual General Meeting, uses the results of the assessment as a basis for its analysis. The Chairman takes steps to ensure that any areas of weak performance in the assessment are taken up with the relevant individual Director as necessary.

On a periodic basis, the evaluation of the Board is externally facilitated.

The performance of the Board of Directors as a whole is also assessed by the shareholders during the Annual General Meeting, through the review of the company’s annual accounts.

**Key consideration (KC) 4: The board should contain suitable members with the appropriate skills and incentives to fulfil its multiple roles. This typically requires the inclusion of non-executive board member(s).**
The Board of Directors is composed of some members of the Senior Management and non-executive directors, which are all subject to prior regulatory assessment on their fit & proper character for the role. The Terms of Reference of the Board of Directors also foresee that at least one third of the Board directors are independent, in line with legal and regulatory requirements. Independence is defined in accordance with the provisions of the applicable local law and taking into account the considerations of ESMA and EBA Guidelines on the assessment of the suitability of members of the management body and key function holders under Directive 2013/36/EU and Directive 2014/65/EU and of ESMA Q&A on CSDR. The names of the Board members, including independent ones, are disclosed in the annual report and on the Euroclear website.

To adequately fulfil its role and responsibilities, the Board as a whole should possess the necessary balance of skills and experience to set each ESES CSD general policy and strategy and to properly supervise management in the implementation of such policy and strategy. The skills that should necessarily be represented on the Board are both generic (finance, accounting, management and organisation) and specific to the ESES CSDs business (operations, securities settlement, capital markets, IT).

In accordance with applicable legal and regulatory requirements, Board members are appointed by the shareholders, subject to approval/non-objection by the supervisory authorities. The Board submits its proposals to the shareholders regarding appointment and renewal or non-renewal of Board members. These proposals are supported by a recommendation of the NGC which assesses the applicant director against relevant selection criteria and his/her availability to perform the role. All nominations are made against merit and on the basis of the applicant director’s potential contribution in terms of knowledge, experience and skills, with a view to ensuring a balanced Board which, as a whole, has the optimum mix of skills and experience to ensure the proper fulfilment of the tasks of the Board that are appropriate for the requirements of ESES CSDs business.

The overall membership of Board and Board Committee is reviewed by the NGC with a view to ensuring the Board remains appropriately composed. The review is performed at each new board appointment, in addition to an annual overall review. The main responsibilities and operating procedures of the NGC have been defined in the Committee Terms of Reference available on the Euroclear website.

Non-executive directors, who are not members of the group management, receive remuneration for their mandate, taking into account their level of responsibility and time required of them in fulfilment of their Board role. It comprises an annual gross fee, an additional fee (fixed amount) for additional meetings attended and a reduction (fixed amount) for scheduled meetings not attended. Non-executive directors do not receive incentive compensation (short or long-term) or stock options or employment benefits (other than reimbursement of expenses). Their remuneration is not linked to the performance of the entity they have a mandate in which incentivises the non-executive directors to focus on the long-term achievement of ESES CSDs objectives.

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10 The supplementing Regulation (EU) No 909/2014 of the European Parliament and of the Council with regard to regulatory technical standards on certain prudential requirements for central securities depositories and designated credit institutions offering banking-type ancillary services apply to the ESES CSDs to the extent that Euroclear group qualifies as a banking group due to the presence of a credit institution in the group, i.e. Euroclear Bank.

11 Requirements applied within the Group to the extent that Euroclear group qualifies as a banking group due to the presence of a credit institution in the group.
Key consideration (KC) 5: The roles and responsibilities of management should be clearly specified. An FMI’s management should have the appropriate experience, a mix of skills, and the integrity necessary to discharge their responsibilities for the operation and risk management of the FMI.

Roles and responsibilities
The ESES Senior Management is established by the Board, subject to the relevant suitability assessments and approval/non-objection by the supervisory authorities, in accordance with the relevant laws and regulation and has been entrusted with the general management of each ESES CSD with the exception of (i) the determination of the strategy and general policy of ESES and (ii) the powers reserved to the Board by law or the Articles. The ESES Senior Management acts in accordance with applicable law and the rules set out in the Articles and its Terms of Reference and under the supervision of the Board.

Each role and profile of the ESES Senior Management is reviewed and recommended by the NGC. The objectives of the CEO are reviewed and recommended by the Remuneration Committee and set by the Board. The CEO then sets the objectives of the ESES Senior Management (other than the CEO) and informs the Board. Performance against those objectives is evaluated during the remuneration review process (within the scope of the Articles of Association and terms of reference) in line with internal policies defined at entity level.

Experience, skills and integrity
All Senior Management nominations are reviewed by the NGC with a view to ensuring management has the appropriate skills and expertise to fulfil its tasks. An annual review process is in place and shared with the NGC. The nominations are made against merit and on the basis of the knowledge, experience and skills of the candidate, regardless of gender or ethnic background. With respect to future potential Senior Management members other than the CEO, the CEO and the Chairman of the Board jointly propose to the Board the names of the candidates to be appointed as Senior Management members.

The recruitment process includes a series of interviews of the candidate, an assessment of the candidate’s profile carried by reputable external consultants, where appropriate, as well as a check of the candidate’s professional references.

In addition, the Senior Management as a whole possess the necessary balance of skills and experience to fulfil its role and responsibilities. Senior Management members receive induction training, where relevant and can request training, as needed.

Appointment and Removal of Management
The appointment and dismissal of Senior Management members is under the responsibility of the Board of Directors, and is subject to regulatory approval.

Key consideration (KC) 6: The board should establish a clear, documented risk-management framework that includes the FMI’s risk-tolerance policy, assigns responsibilities and accountability for risk decisions, and addresses decision making in crises and emergencies. Governance arrangements should ensure that the risk-management and internal control functions have sufficient authority, independence, resources, and access to the board.
Risk Management Framework

The ESES CSDs operate a robust and consistent framework for the identification, measurement, monitoring, management and reporting of all types of risks relevant for ESES CSDs.

ESES risk management framework has been enhanced in line with new regulatory requirements (CSDR – see also Principle 3 KC 1).

The Board is committed to maintaining an overall low risk profile in line with the role of ESES CSDs as financial market infrastructures with a closely guarded reputation for safety and resilience. Reflecting this, the Board has defined a clear Corporate Risk Management and Operational Risk Management Board policies including a Board risk appetite statement (risk tolerance) and supporting risk strategy. These are implemented through ESES Enterprise Risk Management (ERM) and associated risk appetite frameworks which preserve ESES long-term strength and ensure the trust of its key stakeholders.

The ESES ERM framework ensures the systematic and disciplined identification, evaluation, management, monitoring and reporting of all types of risk across all aspects of our business. Business continuity management and strong crisis procedures are also in place allowing quick escalation at ESES or group level depending on the nature and the severity of the crisis. Those procedures are regularly tested.

ESES ERM framework is documented in the ERM Framework Policy Handbook and is applicable to all risk types. The ERM Framework Policy Handbook acts as an umbrella reference document for all other risk specific frameworks operated by ESES, including operational risk and business continuity risk frameworks. Other policy handbooks contain topic specific information and cross-reference the ERM Framework Policy Handbook as necessary.

ESES ERM framework has been developed by Risk Management and endorsed by the ESES Senior Management. The ESES Senior Management is responsible for implementing and operating the ERM framework.

ESES’s risk appetite framework (RAF) has been designed by Risk Management working in close co-operation with the Management Committee and the Board. The Board has approved a set of risk appetite metrics and associated limits based on risk reward analysis and related to our strategic objectives. The Senior Management and Risk Management report to the Board on the ESES CSDs current risk position by reference to those risk appetite metrics allowing the Board to determine what actions are needed to maintain our risk profile at the desired level.

The Board has put in place a robust risk governance framework in which roles and responsibilities for managing risk are clearly defined. The ESES CSDs operate under a three lines of defence model which facilitates the effective operation of the ERM framework. Each line plays a distinct role providing the Senior Management and the Board with confidence that ESES CSDs are likely to achieve their key goals through the effective management of risks. For a description of the three lines of defence, refer to Principle 3, KC 1.

Authority and independence of Risk Management and Internal Audit functions

Risk Management and Internal Audit divisions are independent control functions, each with a board-approved Charter. Their independence is guaranteed through the Chief Risk Officer (CRO) and Head of Internal Audit (HoIA) each having a direct reporting line to the Chairman of the relevant ESES Board Risk/Audit and Compliance committee.
Decisions on appointment and removal of the CRO and HoIA are made by the Board with input from the relevant Board Risk/Audit and Compliance committee, CEO and Group CRO/HoIA as appropriate.

The CRO and HoIA each regularly attend closed sessions of the relevant Board Risk/Audit and Compliance committee (i.e. without executive directors present). Additionally, they each have immediate access to the Chairman of the ESES Board, the Board itself and members of the relevant ESES Board Risk/Audit and Compliance committee.

In addition to local resources, the CRO and HoIA each have access to well-resourced Risk Management / Internal Audit Centres of Excellence equipped with field experts that provide high quality support, advice and guidance on a range of specific subjects. A shared service agreement is in place between Euroclear SA/NV and ESES CSDs governing the provision of these services.

Key consideration (KC) 7: The board should ensure that the FMI’s design, rules, overall strategy and major decisions reflect appropriately the legitimate interests of its direct and indirect clients and other relevant stakeholders. Major decisions should be clearly disclosed to relevant stakeholders and, where there is a broad market impact, the public.

The ESES CSDs and the Euroclear Group ensure that the interests of clients and other stakeholders are taken into account in the CSDs’ design, rules, overall strategy and major decisions.

The ESES CSDs each established a User Committee in accordance with the applicable legal and regulatory requirements. The User Committee is composed of representatives of participants and issuers in the securities settlement system. Each User Committee may provide independent advice to the Board on key arrangements which impact ESES CSDs users and acts as a primary source of feedback and interaction between the user community and Euroclear management. The User Committee is independent from any direct influence from the Board or Senior Management in line with regulatory requirements.

The ESES CSDs further implement additional specific consultation/working groups with participants/clients on specific topics as needed.

ESES CSDs also reply to market consultations that are relevant for their services and users, whether initiated by regulatory bodies or law makers and participate in industry forums to ensure they remain informed of markets needs and can adapt their services as FMIs accordingly. Additionally, the ESES CSDs perform client satisfaction surveys on a regular basis.

Disclosure

Major decisions are communicated to owners (Euroclear SA/NV up to Euroclear Holding shareholders) for information or endorsement as the case may be in line with legal requirements or agreed matters subject to referral to Euroclear SA/NV.

Communications are made to users via the channels contractually defined and commercial account officers as well as through various publications (e.g. Newsletters).
Principle 3: Framework for the comprehensive management of risks

An FMI should have a sound risk-management framework for comprehensively managing legal, credit, liquidity, operational, and other risks.

Key consideration (KC) 1: An FMI should have risk-management policies, procedures, and systems that enable it to identify, measure, monitor, and manage the range of risks that arise in or are borne by the FMI. Risk-management frameworks should be subject to periodic review.

ESES describes the risk categories used to facilitate risk identification and analysis in the ERM Framework Policy Handbook. For each risk category, ESES defines a risk strategy that outlines its broad approach to managing and mitigating those risks.

The key sources of risk (whether direct or indirect) are:

- **Conduct & Culture risk**, arising from ESES’s corporate and risk culture, governance arrangements, conduct and dealings with stakeholders, and ESES’s corporate responsibility as an international financial organisation. Stakeholders include participants, shareholders, suppliers, regulators, competitors and other users including other FMIs.
- **Operational risk** (see Principle 17 for additional details) including also custody risk (see Principle 16 for additional details), Model Risk, Fraud and Cyber, Business disruption and system failures.
- **Legal & Compliance risk**, arising from applicable or upcoming laws, regulations, market rules and prescribed practices in all relevant jurisdictions, enforceability of contracts, conflicts of laws between jurisdictions.
- **Credit risk** (see Principle 4 for additional details), arising from the default or failure of a participant or counterparty to meet their financial obligations to Euroclear.
- **Liquidity risk** (see Principle 7 for additional details), arising from being unable to settle a cash or securities obligation when due resulting from inappropriate and/or insufficient liquidity sources.
- **Market risk**, the uncertainty on the value of assets and liabilities (on- or off-balance sheet) and on the future earnings (linked to foreign exchange or interest rate movements). Market risk arises from possible changes in foreign exchange rates, interest rates, equity or commodity prices.
- **Strategic & Business risk** (see Principle 15 for additional details) are the uncertainties and untapped opportunities embedded in the strategic intent and how well they are executed.
- **Change risk**, including considerations on programme and project management capabilities, adaptability to industry and market change.
- **Systemic risk**: the risk of disruption to financial services organisations that have the potential to have serious consequences for the financial system and/or the real economy. Systemic risk events can originate in, propagate through, or remain outside of ESES/group.

Risk management policies, procedures, controls

Euroclear’s risk management framework is supported by a suite of Board policies, policy handbooks and procedures.
The Corporate Risk Management Board Policy describes the risk arrangements established by the Board and articulates an agreed risk appetite statement and expectations on risk culture.

The principles laid down in this policy are further elaborated in the ERM Framework Policy Handbook through which the ESES MCs articulate the way they expect management and staff to implement these principles.


The ESES Board, supported by Senior Management, defined a robust RAF to support appropriate risk governance oversight and achievement of Euroclear’s strategic objectives. The ESES Board and Senior Management regularly assess their level of confidence in achieving the strategic objectives based on an assessment of the risks associated with each objective and across objectives. The ESES Board has set its RAF including risk appetite statements and limits, in line with the Corporate Risk Board Policy. The ESES Board regularly reviews the RAF including the risk appetite statements and corresponding risk appetite limits, setting Euroclear’s risk profile and forming part of the business strategy development and implementation.

The ERM Framework Policy Handbook also describes the practical application of Euroclear’s risk policies and guidance, represented by the four-step risk cycle (known as ‘Risks in execution’), representing how ESES CSDs go about identifying, assessing, mitigating and reporting on its risks.

The three lines of defence model operating by ESES CSDs facilitates the effective operation of the ERM framework. Each line plays a distinct role providing the ESES MC and the ESES Board with confidence that ESES is likely to achieve its key goals through the effective management of risks.

Several processes support Senior Management and board-level governance oversight, enabling the effectiveness of ESES’s ERM framework to be considered as appropriate. Examples include the Positive Assurance Report (PAR) process, the Risk & control self-assessment (RCSA) process, Stress tests and scenario analysis.

The PAR ensures that the key risks and associated controls are identified in all divisions, and effectively monitored to allow timely management of risks and adjustment of the system when necessary.

The RCSA process is a yearly management assessment of the adequacy and effectiveness of Euroclear’s risk & control framework facilitated by the Risk Management division. The RCSA process also seeks to identify any new or emerging risks that need to be addressed.

The output of these exercises is used as input for the bi-yearly Internal Controls Systems (ICS) report, where the key risks and the high impact control weaknesses are identified and reported, along with remedial actions, for the Boards’ review and the regulators’ reference.

**Risk management systems**

For the purpose of risk and control issues tracking and operational incident management, ESES relies on two different databases: the operational incidents database and the issues tracking database, working with one another and subject to regular internal audits. There are links between logged operational incidents and issues, such as control gaps and deficiencies.

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12 See further in the caption “Effectiveness of the risk management policies, procedures and systems” the description of the three lines of defence
The issues tracking database is ESES’s dedicated risk and issue tracking tool, which allows for effective assessment and follow-up of risks, control gaps and weaknesses that have been identified by the 1st, 2nd or 3rd line of defence. ESES promotes and encourages the pro-active identification and logging of risk issues. Each issue is populated with detailed action plans that set out the specific steps needed to be taken in order to mitigate or reduce the risks faced if such risk is unacceptable as such.

The operational incidents database is the dedicated incident repository for logging operational incidents across ESES. All operational incidents must be recorded in the tool, which supports a standardised workflow for the different steps of the process covered by the ‘Incident Escalation and Loss Data Collection Procedure’. All ESES Divisions and Departments as well as ESA Divisions and Departments (for outsourced services) are required to use the database to capture operational risk incidents. The singular corporate Incident Repository centralises all operational incident information which serves as the operational loss database.

As part of its management of business risk, and specifically the risks related to its P&L, ESES uses tools for collaborative planning, budgeting and forecasting as well as for reporting and analysis purposes.

We further elaborate on supporting systems in the KC 3 further down in this principle.

Aggregation

The enhanced PAR/ICS processes facilitate building a holistic view of key risks and the high impact control weaknesses. A quarterly Corporate Risk Report is submitted to the ESES Board outlining ESES CSDs’ key risks and current risk profiles respectively.

Effectiveness of the risk management policies, procedures and systems

The effectiveness of ESES’s ERM framework, constituting ESES’s risk management policies, procedures and systems, is regularly assessed by each of the three lines of defence. Each line plays a distinct role providing Senior Management and the Board with assurance on the risk and control environment and thus on likelihood of achievement of the business objectives.

- **1st line of defence – Business Management:** ensures that the right risk culture is embedded in the different business units. It owns the risks linked to the activities it undertakes. It identifies, measures, and manages these risks. It also designs and operates a control system to ensure that Euroclear reaches its business objectives within its risk appetite. Business management is the primary source of assurance on the adequacy and effectiveness of the control environment to Senior Management and the Board. Additionally, ESES CSDs operate a first line control unit reporting to management and tasked with routine oversight and testing of key internal controls within the entity.

- **2nd line of defence – Risk Management and Compliance & Ethics:**
  
  **Risk Management:** the Board ensures that the Risk Management function provides robust, independent oversight of business activities. The Risk Management function aims to deliver and maintain an effective ERM framework; provides the Board and Senior Management with high quality, independent advice and guidance and helps to foster a healthy risk culture throughout the organisation.

  **Compliance & Ethics:** provides the group-wide ethical and compliance risk management framework to adequately identify, monitor, test and report to management on controls relating to laws and regulations falling within its remit and advises on remedial actions (e.g. fraud, market abuse, and money laundering). In addition, a specific focus is devoted to assessing our controls linked to economic sanctions decided by authorities. Compliance & Ethics also supports the organisation to increase awareness of compliance risks and ethical issues.
• **3rd line of defence – Internal Audit**: Internal Audit provides comprehensive assurance based on the highest levels of independence within the organisation, to support the Board and Senior Management in reaching their objectives. Internal Audit's scope is unrestricted, and provides assurance on the adequacy and effectiveness of Euroclear’s governance, risk management and internal controls.

**Review of risk management policies, procedures and systems**

The policy owners (for some owner being Risk Management) in consultation with the Risk Management division review policies at regular intervals, or as needed (i.e. due to changes in Regulation, market practices).

**Key consideration (KC) 2: An FMI should provide incentives to clients and, where relevant, their customers to manage and contain the risks they pose to the FMI.**

The ESES CSDs:
- encourage their respective Clients to use the ESES CSDs’ system in the best way;
- provide extensive information regarding the use of the system and the services available

ESES CSDs have an articulated contractual framework allowing Clients to manage their risks and the risks they pose to the CSD. Please refer more especially to the Terms and Conditions Book I (sections Duties of the parties, Representations and warranties, Liability of the CSD and Liability of the client). The ESES CSDs have no contractual relationship with Clients’ customers. The contractual relationship remains exclusively between the ESES CSDs and their respective participants.

ESES CSDs continuously invest to encourage Clients to manage and contain the risks they pose to ESES, by keeping them informed about new developments, regulations, operational changes etc. through user documentation, extensive operational reporting and training, relationship (via user committee or client facing relationship) and by applying other types of measures. In particular: client admission process, client training, documentation and information, and operational reporting.

Besides the contractual framework, Clients have access to a test platform allowing them to test their readiness before becoming an ESES client or whenever a change needs to be tested. Clients are also integrated in the business continuity procedures testing (see principle 17 for more details).

For their day to day operations, Clients receive real time information on their transactions recorded in the settlement platform. ESES CSDs also send alerts in case an incident impacting Clients occurs on the T2S or ESES platform.

**Client admission process**

Access to the CSDs is subject to admission criteria driven by risk considerations. ESES CSDs have implemented a dedicated process consisting of an initial Know-Your-Client (KYC) exercise to ensure that each Client meets the admission criteria at the time of its admission and on an ongoing basis, via regular reviews. We elaborate on this process in Principle 18 (Sponsorship process).

**Documentation and Information**

ESES CSDs encourage their Clients to use the system in the best way, by providing extensive information on their use and on the products and services available. This helps them to better manage their risks when dealing with ESES, and therefore minimise the risk they pose to ESES CSDs. Beside the information
available on Euroclear’s website (Terms and Conditions, rules, newsletters), specific trainings are organised for Clients.

The Euroclear Commercial Division (Relationship and Account Managers) keeps ESES’s Clients informed of changes and evolution.

ESES CSDs makes available a Due Diligence Pack to enable Clients to conduct due diligence on ESES and assess how to best work with ESES CSDs.

Additionally, Euroclear’s annual Pillar 3 disclosure outlines Euroclear Group’s risk management strategy, governance and policies and summarises the risks run by the group’s entities, including ESES CSDs.

Finally, the ESES User Committee meets at least twice a year to exchange information with Clients.

**Operational reporting**

ESES CSDs provide operational reporting designed to enable Clients to monitor, manage and reduce the risk they face when using ESES’s services.

ESES CSDs require all Clients to reconcile their positions daily.

**Incentives**

ESES Clients are incentivised to settle their transactions in due time and therefore to limit the risk they pose to other clients and to the effective operation system.

Euroclear France applies settlement penalties for transactions that are not settled in due time.

Euroclear Belgium, Euroclear Nederland and their respective Competent Authorities are performing a close monitoring of the settlement performance. The two CSDs, their Clients and the Authorities have agreed that in case the settlement performance would decline below a threshold, a penalty regime would be implemented.

A reporting on transactions that are not settled on the agreed settlement date is shared with the ESES User Committee and the Competent authorities.

ESES CSD will all implement the new CSDR settlement discipline regime when it will become mandatory. Development with T2S are ongoing and the implementation is foreseen in Q4 2020.

**Key consideration (KC) 3: An FMI should regularly review the material risks it bears from and poses to other entities (such as other FMIs, settlement banks, liquidity providers, and service providers) as a result of interdependencies and develop appropriate risk-management tools to address these risks.**

**Material risks**

ESES CSDs have a risk framework that has been used for years to manage the risks that it is exposed to, whether material or not.

The ERM framework includes the risks that Euroclear poses to other entities. This is done through the integration of systemic considerations in the framework, which aims to cover both the risks posed to ESES CSDs by the financial system (e.g. other actors in the financial system, such as market participants, FMIs, service providers) and the risks ESES CSDs might cause to such financial system.

Existing risk management processes and tools such as stress-testing, risk assessments, the risk library are being reviewed to explicitly include systemic considerations. New processes and tools are being
developed to further grow the systemic risk management capabilities (e.g. through interdependency maps).

The second line of defence uses specific methods and tools, such as the horizon scanning process and regular contacts with other actors on the market, to further enhance the systemic risk framework and to challenge the first line’s views on the potential systemic impacts their activities/processes might generate.

ESES’s Recovery Plan provides an overview of the key intra-group and external operational and financial interdependencies that may be relevant for RRW (Recovery, Resolution and Wind Down) planning purposes. The objective of mapping interdependencies (for instance with Critical Service Providers) is to identify the key interactions and the risks that those interactions could pose to the ESES CSDs, as well as spill over risks that the ESES CSDs could pose to interdependent entities.

**Risk management tools**

Systemic risk often crystallises in the market in the wake of a credit, a liquidity, a market, or an operational incident but the nature of the risk can change as it propagates. As a consequence, systemic risk considerations are part of the day to day risk management activities (i.e. identification, assessment, response, monitoring, and reporting).

Beside existing tools and processes used for other risk types, two new processes have been introduced specifically for systemic risk analysis: interdependency maps and horizon scanning. These processes will be further integrated in existing processes and relevant stakeholders will be further involved.

These tools follow the same review approach than the generic framework.

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**Key consideration (KC) 4:** An FMI should identify scenarios that may potentially prevent it from being able to provide its critical operations and services as a going concern and assess the effectiveness of a full range of options for recovery or orderly wind-down. An FMI should prepare appropriate plans for its recovery or orderly wind-down based on the results of that assessment. Where applicable, an FMI should also provide relevant authorities with the information needed for purposes of resolution planning.

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As FMIs, the ESES CSDs provide critical services to the financial markets.

To identify service criticality, ESES CSDs consider the extent to which a disruption could have adverse real economy or financial stability implications. Euroclear takes into account a range of factors including the nature of the service, its size or the ESES CSDs’ business share, substitutability, interconnectedness and complexity.

Business continuity plans have been developed to cover a number of defined scenarios, including the loss of an office, loss of staff and loss of infrastructure (i.e. an IT disaster recovery incident, including cyber scenario). In accordance with legal requirements, the ESES CSDs’ Business Continuity Management (BCM) framework describes also objectives supporting the business targets for the timely resumption of critical operations. More detailed information on the Business continuity plan framework is included in Principle 17, KC 6.

Scenario analysis is also used for instance for the ESES CSDs’ RRW plan, whereby ESES examines a range of extreme but plausible (EBP) scenarios that could threaten the ESES CSDs’ viability and prevent them from being able to deliver their critical functions as a going concern. The central aim of the scenario analysis is to validate the adequacy of the ESES CSDs’ recovery and restructuring capacity to deal with such threats.
Besides RRW planning, scenario analysis is used in a number of risk management activities— for instance, to size and assess the adequacy of capital resources. It is also an important input to systemic risk analysis and decisions around the calibration of risk appetite, as well as investment decisions in controls and other risk mitigations. Beyond risk management, scenario analysis also feeds strategic analysis and medium-term capital planning.

**Recovery or orderly wind-down plans**

In accordance with regulatory rules and guidelines, ESES CSDs prepares RRW plans, as well as ESA and the other CSDs in the group.

Building on a broader risk framework, the ESES CSDs’ RRW plan aims to assist the ESES Board and MCs in taking timely and appropriate actions should the ESES CSD face a situation that threatens their financial viability as a going concern and their continued provision of critical services to the market.

In particular, the RRW plan presents the ESES Board’s conclusions on:

- capabilities and options:
  - alternative approaches to deal with the crystallised impact of a stress situation and their demonstrated capacity to do so effectively
  - operational plans and preparatory measures to enhance the effectiveness of the identified options

- sources of residual risk and recovery scenarios:
  - the sources of risks which, in the extreme, could threaten the ESES CSDs’ viability and hence their ability to continue providing critical services
  - how, using scenario analysis as a tool, residual risk might crystallise and undermine ESES’s financial position, necessitating activation of the plan

- governance and implementation:
  - the appropriate governance of decision-making in a recovery scenario arrangements for systematic review and testing of ESES’s RRW plan and ongoing refinement of the plan

The preparation of such RRW plans is coordinated by Risk Management, based on input from other divisions. The plan owner is the CEO, whose responsibility is to liaise with the different stakeholders to ensure the plan is valid, complete, properly reviewed, updated and tested.

The RRW plan is reviewed annually or when a significant change occurs that would impact the feasibility or materiality of a recovery option. As required by relevant regulations, those plans are shared with the authorities.
Principle 4: Credit Risk

An FMI should effectively measure, monitor, and manage its credit exposure to clients and those arising from its payment, clearing, and settlement processes. An FMI should maintain sufficient financial resources to cover its credit exposure to each client fully with a high degree of confidence. In addition, a CCP that is involved in activities with a more-complex risk profile or that is systemically important in multiple jurisdictions should maintain additional financial resources sufficient to cover a wide range of potential stress scenarios that should include, but not be limited to, the default of the two largest clients and their affiliates that would potentially cause the largest aggregate credit exposures to the CCP in extreme but plausible market conditions. All other CCPs should maintain, at a minimum, total financial resources sufficient to cover the default of the one client and its affiliates that would potentially cause the largest aggregate credit exposures to the CCP in extreme but plausible market conditions.

Key consideration (KC) 1: An FMI should establish a robust framework to manage its credit exposures to its clients and the credit risks arising from its payment, clearing and settlement processes. Credit exposure may arise from current exposures, potential future exposures, or both.

The ESES CSDs risk management framework includes relevant elements for the management of credit risks to which the CSDs may be confronted to. Since the ESES CSDs do not provide any credit facilities to participants, they have no financial exposure with participants.

Key consideration (KC) 2: An FMI should identify sources of credit risk, routinely measure and monitor credit exposures, and use appropriate risk management tools to control these risks.

This key consideration is not applicable to the ESES CSDs since they do not provide any credit facility to their participants.

Key consideration (KC) 3: A payment system or SSS should cover its current and, where they exist, potential future exposures to each client fully with a high degree of confidence using collateral and other equivalent financial resources (see Principle 5 on collateral). In the case of a DNS payment system or DNS SSS in which there is no settlement guarantee but where its clients face credit exposures arising from its payment, clearing, and settlement processes, such an FMI should maintain, at a minimum, sufficient resources to cover the exposures of the two clients and their affiliates that would create the largest aggregate credit exposure in the system.

This key consideration is not applicable to the ESES CSDs since they do not provide any credit facility to their participants.
Key consideration (KC) 4, 5 and 6 are not applicable to the ESES CSDs.

Key consideration (KC) 7: An FMI should establish explicit rules and procedures that address fully any credit losses it may face as a result of any individual or combined default among its clients with respect to any of their obligations to the FMI. These rules and procedures should address how potentially uncovered credit losses would be allocated, including the repayment of any funds an FMI may borrow from liquidity providers. These rules and procedures should also indicate the FMI’s process to replenish any financial resources that the FMI may employ during a stress event, so that the FMI can continue to operate in a safe and sound manner.

No allocation of credit loss to participants is foreseen as no credit is provided by the ESES CSDs to its participants.
Principle 7: Liquidity risk

An FMI should effectively measure, monitor, and manage its liquidity risk. An FMI should maintain sufficient liquid resources in all relevant currencies to effect same-day and, where appropriate, intraday and multiday settlement of payment obligations with a high degree of confidence under a wide range of potential stress scenarios that should include, but not be limited to, the default of the client and its affiliates that would generate the largest aggregate liquidity obligation for the FMI in extreme but plausible market conditions.

Key consideration (KC) 1: An FMI should have a robust framework to manage its liquidity risks from its clients, settlement banks, nostro agents, custodian banks, liquidity providers and other entities.

The ESES CSDs are authorised under CSDR as CSDs that do not offer banking type services as outlined in CSDR. They each operate a securities settlement system (SSS) that settles in central bank money in T2S. They do not act as settlement agent of the SSS they each operate which means they do not open cash accounts to their participants or provide credit facilities. Therefore, they have no financial exposure towards their participants (except for the payment of invoices). Participants of each ESES CSD must have access (directly or indirectly) to a national central bank participating to T2S for the purpose of DvP settlement in T2S. This is also applicable for links between T2S CSDs due to the interoperability of the T2S platform: cross-border DvP settlement also takes place in central bank money.

Links maintained by the ESES CSDs with non T2S CSDs as receiving CSDs are FoP links, i.e. no settlement takes place on a DvP basis thereby avoiding CSDs taking principal risk.

Key consideration (KC) 2: An FMI should have effective operational and analytical tools to identify, measure, and monitor its settlement and funding flows on an ongoing and timely basis, including its use of intraday liquidity.

This Key consideration is not applicable to the ESES CSDs. Please refer to KC1.

Key consideration (KC) 3: A payment system or SSS, including one employing a DNS mechanism, should maintain sufficient liquid resources in all relevant currencies to effect same-day settlement, and where appropriate intraday or multiday settlement, of payment obligations with a high degree of confidence under a wide range of potential stress scenarios that should include, but not be limited to, the default of the client and its affiliates that would generate the largest aggregate payment obligation in extreme but plausible market conditions.

This Key consideration is not applicable to the ESES CSDs. Please refer to KC1.
Key consideration (KC) 4: A CCP should maintain sufficient liquid resources in all relevant currencies to settle securities-related payments, make required variation margin payments, and meet other payment obligations on time with a high degree of confidence under a wide range of potential stress scenarios that should include, but not be limited to, the default of the client and its affiliates that would generate the largest aggregate payment obligation to the CCP in extreme but plausible market conditions. In addition, a CCP that is involved in activities with a more complex risk profile or that is systemically important in multiple jurisdictions should consider maintaining additional liquidity resources sufficient to cover a wider range of potential stress scenarios that should include, but not be limited to, the default of the two clients and their affiliates that would generate the largest aggregate payment obligation to the CCP in extreme but plausible market conditions.

This Key consideration is not applicable to the ESES CSDs (CCP).

Key consideration (KC) 5: For the purpose of meeting its minimum liquid resource requirement, an FMI’s qualifying liquid resources in each currency include cash at the central bank of issue and at credit-worthy commercial banks, committed lines of credit, committed foreign exchange swaps, and committed repos, as well as highly marketable collateral held in custody and investments that are readily available and convertible into cash with prearranged and highly reliable funding arrangements, even in extreme but plausible market conditions. If an FMI has access to routine credit at the central bank of issue, the FMI may count such access as part of the minimum requirement to the extent it has collateral that is eligible for pledging to (or for conducting other appropriate forms of transactions with) the relevant central bank. All such resources should be available when needed.

This Key consideration is not applicable to the ESES CSDs. Please refer to KC1.

Key consideration (KC) 6: An FMI may supplement its qualifying liquid resources with other forms of liquid resources. If the FMI does so, then these liquid resources should be in the form of assets that are likely to be saleable or acceptable as collateral for lines of credit, swaps, or repos on an ad hoc basis following a default, even if this cannot be reliably prearranged or guaranteed in extreme market conditions. Even if an FMI does not have access to routine central bank credit, it should still take account of what collateral is typically accepted by the relevant central bank, as such assets may be more likely to be liquid in stressed circumstances. An FMI should not assume the availability of emergency central bank credit as a part of its liquidity plan.

The ESES CSDs are not exposed to the default of their participants (except to the extent of any unpaid outstanding invoices) and therefore this KC6 is not relevant to the ESES CSDs. Please refer to KC1.
Key consideration (KC) 7: An FMI should obtain a high degree of confidence, through rigorous due diligence, that each provider of its minimum required qualifying liquid resources, whether a client of the FMI or an external party, has sufficient information to understand and to manage its associated liquidity risks, and that it has the capacity to perform as required under its commitment. Where relevant to assessing a liquidity provider’s performance reliability with respect to a particular currency, a liquidity provider’s potential access to credit from the central bank of issue may be taken into account. An FMI should regularly test its procedures for accessing its liquid resources at a liquidity provider.

This Key consideration is not applicable to the ESES CSDs. Please refer to KC1.

Key consideration (KC) 8: An FMI with access to central bank accounts, payment services, or securities services should use these services, where practical, to enhance its management of liquidity risk.

This Key consideration is not applicable to the ESES CSDs. Please refer to KC1.

Key consideration (KC) 9: An FMI should determine the amount and regularly test the sufficiency of its liquid resources through rigorous stress testing. An FMI should have clear procedures to report the results of its stress tests to appropriate decision makers at the FMI and to use these results to evaluate the adequacy of and adjust its liquidity risk-management framework. In conducting stress testing, an FMI should consider a wide range of relevant scenarios. Scenarios should include relevant peak historic price volatilities, shifts in other market factors such as price determinants and yield curves, multiple defaults over various time horizons, simultaneous pressures in funding and asset markets, and a spectrum of forward-looking stress scenarios in a variety of extreme but plausible market conditions. Scenarios should also take into account the design and operation of the FMI, include all entities that might pose material liquidity risks to the FMI (such as settlement banks, nostro agents, custodian banks, liquidity providers, and linked FMIs), and where appropriate, cover a multiday period. In all cases, an FMI should document its supporting rationale for, and should have appropriate governance arrangements relating to, the amount and form of total liquid resources it maintains.

ESES CSDs are not authorised to provide banking type services in the meaning of CSDR. They are inherently exposed to limited liquidity risks. Capital retention policies, capital level and structure of the FMI as well as conservative treasury investment policies are defined to cover liquidity stress scenarios designed for the FMI, in line with applicable regulatory requirements.

The ESES CSDs RRW (described in Principle 3 – KC4) includes different scenarios which aim at assessing and sizing the adequacy of the liquid resources the CSDs maintain.
Key consideration (KC) 10: An FMI should establish explicit rules and procedures that enable the FMI to effect same day and, where appropriate, intraday and multiday settlement of payment obligations on time following any individual or combined default among its clients. These rules and procedures should address unforeseen and potentially uncovered liquidity shortfalls and should aim to avoid unwinding, revoking, or delaying the same-day settlement of payment obligations. These rules and procedures should also indicate the FMI’s process to replenish any liquidity resources it may employ during a stress event, so that it can continue to operate in a safe and sound manner.

This is not applicable to ESES CSDs, as there are no settlement or payment obligation following individual or combined default of a participant.
Principle 8: Settlement finality

An FMI should provide clear and certain final settlement, at a minimum by the end of the value date. Where necessary or preferable, an FMI should provide final settlement intraday or in real time.

Key consideration (KC) 1: An FMI’s rules and procedures should clearly define the point at which settlement is final.

The ESES CSDs each operate a SSS in the meaning of the SFD. Such SSSs are designated as such on the website of ESMA.

The ESES CSDs settle securities transactions in central bank money. For more details, please refer to Principle 9. In line with regulatory requirements set out in CSDR for CSDs which use a common settlement infrastructure, the T2S CSDs and Central banks connected to T2S (each of those NCBs act as possible settlement agents of the SSSs operated by the T2S CSDs) have established in their rules identical moments of entry, irrevocability and finality of transfers.

The ESES CSDs have documented the finality rules of the SSSs they operate in their contractual documentation (ESES Terms and Conditions Book I and DSD Matching and Settlement Services, both publicly available on their website www.euroclear.com). The relevant provisions of the contractual documentation of the ESES CSDs and in particular the finality rules, follow a governance process that encompass legal analyses and confirmation of enforceability in the relevant jurisdiction.

The ESES CSDs settle securities transactions on T2S and have adapted their finality rules accordingly at the time of their migration to T2S in 2016. T2S provides FoP and DvP book-entry settlement services that follow the following principles: Real-time settlement with immediate finality and the result of posting is the finality of the settlement. The ESES Terms and Conditions detail the rules regarding the moment of entry of instruction in the CSD System, the point at which Clients can no longer unilaterally cancel instructions (irrevocability at matching), and the point at which a transaction is settled (finality).

The ESES CSDs have documented in their Terms and Conditions the relevant rules in case of insolvency proceedings affecting a Client that is participant in any of the three SSSs they respectively operate. Each ESES CSD operates in compliance with the local legislation implementing the SFD. Insolvency proceedings affecting a Client that is a participant in the SSS operated by the CSD is managed in accordance with the crisis management process implemented at the level of T2S pursuant to the T2S Framework Agreement and internally in accordance with the risk management framework of the CSD, detailed in principle 3.

ESES CSDs Terms and Conditions & The Operating Manual details the process to be undertaken by the CSD upon Insolvency Event (Blocking of new instructions and Handling of pending instructions).

For the purposes of the Settlement Finality Law and other applicable asset protection Law, if any, the CSD System, the holding of securities with the CSD and the transfer of securities and related cash transfers within the CSD System shall be governed solely by the laws of the CSD.
Finality in the case of links with T2S CSDs (Euroclear France only) and with non T2S CSDs:

For securities held through links with other CSDs (referred to as Receiving CSD), settlement of securities transactions in the Receiving CSD is governed by the rules of the SSS operated by that CSD.

For links with T2S CSDs, finality rules of the Receiving T2S CSDs are similar to those of the ESES CSDs, in line with CSDR requirements for interoperable links, and the actual settlement of instructions also implies the successful settlement of the realignment instruction. T2S is an integrated settlement platform and cross-border settlement takes place on an “all or nothing” basis, i.e. the securities accounts in both the Receiving T2S CSD and Euroclear France are debited/credited simultaneously.

For links with non T2S CSDs, the ESES CSDs will credit the Securities Account of a Client only after the moment when the settlement of such transaction has been declared final in the books of the Receiving CSD and the securities account of the CSD has been credited accordingly (no provisional settlement).

Key consideration (KC) 2: An FMI should complete final settlement no later than the end of the value date, and preferably intraday or in real time, to reduce settlement risk. An LVPS or SSS should consider adopting RTGS or multiple-batch processing during the settlement day.

The ESES CSDs have joined the T2S platform and provide FoP and DvP book-entry settlement services with immediate finality in real time or at the end of the two overnight batch settlement.

The T2S operational day is sequenced as follows:

- a night-time sequence, with overnight batch settlement (from 20:00 to 03:00 CET).
- a maintenance window is taking place between 03:00 and 05:00 CET.
- a real-time settlement (from 05:00 to 16:00 CET). Real time settlement could start before 03:00 if the night-time sequence is finished before 03:00.)

Clients are informed of the final settlement via Swift messages sent either by T2S platform or by ESES CSDs, as soon as settlement takes place (or at the end of the sequence for the night-time processing). Each settlement instruction, if unsettled, is recycled into next settlement cycle (be it a batch or real time). These instructions are pending, until they are finally settled or cancelled. There is no recycling limits in T2S platform.

Settlement finality in T2S is reached when the posting process is finalized. The posting process is triggered on the intended settlement date, as mentioned in the DSD Matching & Settlement which details the process that is taking place on T2S side. The posting process updates the securities balances, the cash balances and the limit headrooms (limits remaining for the auto-collateralisation process). In order to ensure settlement on the intended settlement date, several tools are available, such as technical netting, partial settlement, auto-collateral. A penalties mechanism will be added to existing tools, as per CSDR Settlement discipline requirements.
ESES Clients cannot unilaterally cancel instructions as from the moment such instruction is reported “matched” in T2S platform. There is no revocation deadline set in T2S platform. When an instruction is matched, it is recycled until a final status is reached (either settled or bilaterally cancelled).

Matched settlement instructions can only be bilaterally cancelled by the ESES CSDs Clients, or by the CSD, under specific circumstances. The cancellation is only possible if:

- both counterparties send their cancellation instructions, to cancel each leg (both parties would have to make the request on their own leg); or
- a single cancellation instruction is sent with the information of both legs, by an authorised party (e.g. on the basis of PoA); or
- bilateral cancellation the transaction of a participant requested by the ESES CSDs. This may happen for specific instructions generated for administrative purposes (such as securities corrections) or defined by the rules of the local CSD (e.g. Euroclear Belgium and Euroclear Nederland will cancel any instructions that would be pending at the end of day upon occurrence of an Insolvency Event).

If a participant sends a cancellation instruction, and its counterparty does not, the T2S platform sends a cancellation allegation to notify the counterparty that a cancellation instruction is requested from its side.

For CSD links outside of the T2S platform, the rules of the receiving CSD apply to the irrevocability of settlement instructions and the cancellation options.

All information relating to the irrevocability of securities instructions are set in ESES Terms and Conditions and in the DSD Matching & Settlement. Both can be found, by ESES CSDs Client, on the Euroclear website.

For the cash transfers, the moment of irrevocability in the relevant Central Bank, is defined in the Central Bank Rules of that Central Bank. For more details on the settlement against payment flow in central bank money, please refer to principle 9.
Principle 9: Money settlement

An FMI should conduct its money settlements in central bank money where practical and available. If central bank money is not used, an FMI should minimise and strictly control the credit and liquidity risk arising from the use of commercial bank money.

Key consideration (KC) 1: An FMI should conduct its money settlements in central bank money, where practical and available, to avoid credit and liquidity risks.

ESES CSDs offer DvP settlement in central bank money in euro only.

For this purpose, each of the Central Banks that are connected to the T2S platform may act as settlement agent (in the meaning of the SFD) of the CSD System via Dedicated Cash Accounts (DCA) they open for Payment Banks. Payment Banks may but must not be a Client of a CSD. These Dedicated Cash Accounts are maintained by the Central Banks on the T2S platform and governed by the contractual documentation of such Central Banks (they each operate a payment system in the meaning of the SFD).

Each participant of an ESES CSD must designate at least one DCA (be it its own DCA or the one of a third party) and link it to its Securities Accounts.

For the CSD links inside / outside T2S platform:

- Cross-border settlement through links with other T2S CSDs takes place in central bank money in euro (Euroclear France only).
- Cross-border settlement through links with non T2S CSDs only takes place FoP (all ESES CSDs). This is explained by the fact that the ESES CSDs do not have a banking license and have not implemented pre-funding mechanisms. Additionally, no request for DvP settlement through existing links with non T2S CSDs has been made by the ESES CSDs Clients.

Key consideration (KC) 2: If central bank money is not used, an FMI should conduct its money settlements using a settlement asset with little or no credit or liquidity risk.

This key consideration is not applicable, as ESES CSDs only offer central bank money settlement.

Key consideration (KC) 3: If an FMI settles in commercial bank money, it should monitor, manage, and limit its credit and liquidity risks arising from the commercial settlement banks. In particular, an FMI should establish and monitor adherence to strict criteria for its settlement banks that take account of, among other things, their regulation and supervision, creditworthiness, capitalisation, access to liquidity, and operational reliability. An FMI should also monitor and manage the concentration of credit and liquidity exposures to its commercial settlement banks.
This key consideration is not applicable, as ESES CSDs do not offer settlement in Commercial Bank money.

**Key consideration (KC) 4:** If an FMI conducts money settlements on its own books, it should minimise and strictly control its credit and liquidity risks.

This key consideration is not applicable, as ESES CSDs do not conduct money settlement in their own books. (see KC 1 for more details).

**Key consideration (KC) 5:** An FMI’s legal agreements with any settlement banks should state clearly when transfers on the books of individual settlement banks are expected to occur, that transfers are to be final when effected, and that funds received should be transferable as soon as possible, at a minimum by the end of the day and ideally intraday, in order to enable the FMI and its participants to manage credit and liquidity risks.

Clients of the ESES CSDs can settle their transactions using central bank money by opening/using a DCA with a Central Bank connected to the T2S platform. ESES CSDs offer real-time settlement during the day. Finality of transactions is reached upon booking of transfers and proceeds are transferable upon such booking (for more details, please refer to Principle 8).

ESES CSDs are not responsible for the operation of the Dedicated Cash Accounts of their Clients, whether acting as Payment Banks or Payment Bank clients. This relationship is under the remit of the Central Banks.

On the T2S platform, roles and responsibilities are split as follows:

- CSDs are responsible for the Securities Accounts ➔ the CSDs rules apply.
- NCBs are responsible for the Dedicated Cash Accounts ➔ the NCBs rules apply.

Both CSDs and NCBs have to follow the T2S platform rules, as regards to settlement finality please refer to Principle 8. In the T2S platform, the settlement instructions are managed in real time during the day, and in 2 overnight batch settlement cycles during the Night-time settlement process. Settled instructions are reported to the client, and the positions are updated accordingly (securities & cash), so that they can be re-used for other instructions or transferred. At the end of the settlement day, the T2S platform automatically transfers all the liquidity held in the T2S DCA to the related RTGS account opened in Target 2 platform.
Principle 10: Physical deliveries

An FMI should clearly state its obligations with respect to the delivery of physical instruments or commodities and should identify, monitor, and manage the risks associated with such physical deliveries.

Key consideration (KC) 1: An FMI’s rules should clearly state its obligations with respect to the delivery of physical instruments or commodities.

ESES CSDs do not offer settlement services relating to commodities. Securities settlement services are based on immobilisation and dematerialisation of securities. Please refer to Principle 1 for more details.

The Euroclear Contractual Documentation, via the ESES DSD Physical securities handling in ESES, for Euroclear Belgium and Euroclear France, indicates the asset class eligible for physical delivery, and states the specific rules in relation to the deposit and withdrawal of physical instruments, including the liabilities incurred by the Client.

Since January 2011, no bearer securities (unless represented by a global note) can be deposited with Euroclear Nederland, and as from January 2013, no bearer securities (unless represented by a global note) can form part of a collective or girodeposit. Bearer securities embodied in a global note are immobilised, under the law of the Netherlands. There are no longer any individual physical securities in Euroclear Nederland.

Further to the dematerialisation of securities in Belgium and France, the amount of physical securities still maintained by the ESES CSDs is negligible.

Key consideration (KC) 2: An FMI should identify, monitor, and manage the risks and costs associated with the storage and delivery of physical instruments or commodities.

Euroclear Belgium: The remaining physical securities after the Belgium dematerialisation process are held in vaults of Euroclear Belgium. The access of the vaults is highly secured with a highly restricted access policy.

- Euroclear Belgium has implemented policies that provide for strict security measures, including those that cover the risk of fraud, theft, loss or deterioration of physical securities. Additionally, insurance policies include coverage for losses of physical securities.
- Regular inventory checks are performed to ensure that securities stocks and book-entry records actually match.
- At least once a year, the securities accounts and the contents of the vaults are audited by internal audit.
- The Euroclear Belgium computer systems that support the book-entry records of clients comply with the highest standards to ensure consistency.
**Euroclear Nederland:** Euroclear Nederland only accepts bearer securities embodied in a global note. Euroclear Nederland ensures the safekeeping of global notes in a vault located in Amsterdam.

- Euroclear Nederland has implemented policies that provide for strict security measures for the management of global notes.
- Regular inventory checks on global notes are performed to ensure that securities stocks and book-entry records actually match.
- At least once a year, the securities accounts and the contents of the vaults are audited by an independent registered accountant.
- The Euroclear Nederland computer systems that support the book-entry records of clients comply with the highest standards to ensure consistency.

**Euroclear France:** after the French dematerialisation process in 1984, a few French issuing Companies had requested Sicovam (next Euroclear France) to create some bearer certificates only for circulating outside of France. These few certificates are held in the ESES vaults and can be withdrawn by Euroclear France participants via a specific instruction. Euroclear France may entrust the safekeeping to other regulated entities with a dedicated contractual framework setting out operational and strict security requirements.

- Euroclear Belgium performs the safekeeping services for all physical securities on behalf of Euroclear France, in compliance with the same standards mentioned above.
- Regular inventory checks are performed to ensure securities stocks and records actually match.
Principle 11: Central Securities Depositories (CSDs)

A CSD should have appropriate rules and procedures to help ensure the integrity of securities issues and minimise and manage the risks associated with the safekeeping and transfer of securities. A CSD should maintain securities in an immobilised or dematerialised form for their transfer by book entry.

Key consideration (KC) 1: A CSD should have appropriate rules, procedures, and controls, including robust accounting practices, to safeguard the rights of securities issuers and holders, prevent the unauthorised creation or deletion of securities, and conduct periodic and at least daily reconciliation of securities issues it maintains.

The ESES CSDs have appropriate rules, procedures and controls to safeguard the rights of securities issuers and holders.

All securities admitted in ESES CSDs are recorded in book entry form and can only be transferred between ESES CSDs client by book entry transfers. The legislation applicable to each CSD in ESES set clear and sound basis for admission and book-entry transfers of immobilised or dematerialised securities. For more details on the legal basis for immobilisation/dematerialisation of securities, please refer to Principle 1.

The ESES CSDs each operate based on a robust double accounting system allowing the circulation of securities via book-entry and ensuring integrity of the securities issues, monitored on a daily basis in accordance with applicable regulatory requirements. Where securities are immobilised, the ESES CSDs take appropriate measures to ensure safekeeping of the certificates in accordance with regulatory requirements, including usage of vaults whose design and location ensure a high level of protection against floods, earthquakes, fire and other disasters.

All details related to primarily deposited securities in the ESES CSD are described in the ESES-T2S DSD Securities Eligibility and admission rules available on www.euroclear.com.

ESES CSDs open securities accounts to the ESES Clients that participate in the CSD Systems, ensuring a clear segregation of the holdings for each of their Clients. At any moment in time it is known which securities are held on behalf of which Client.

ESES CSDs do not hold any proprietary securities in their CSD System.

To address the operational risks related to settlement, safekeeping and custody activities, the ESES CSDs have put forward the following control objectives:

- securities matching and settlement instructions are processed accurately, completely and in a timely manner through T2S (straight-through processing or STP);
- adequate management information is produced and used to monitor processing integrity;
- specific controls and procedures are in place to verify that the securities balances post-settlement reconcile with overall securities holdings.
The ESES CSDs apply accounting principles (double entry) ensuring that securities admitted in the CSD System and credited to Clients accounts equal the sum of securities primarily deposited with/issued through them, as Issuer CSDs, or held by them through links, i.e. as Investor CSDs. The T2S settlement platform’s architecture embeds the principle that the closing balance per security of a given day is the result of the previous end-of-day balance plus all settlement activity of that day.

Changes to the balances of Clients accounts are resulting from:

(i) Transfers of securities within the CSD system from one Client to another. These Securities transfers are carried out by book-entry instructions and settlement movements processed in T2S (STP).

(ii) Transfer between ESES CSD clients (when the ESES CSD is the investor CSD) and a client of the receiving CSD (upon instruction from the Client delivering or receiving the securities)

Securities transfers only take place under strict (system) controls and procedures. This aims at safeguarding the rights of issuers and holders and to prevent unauthorised transfers or undue creation/deletion of securities.

In terms of reconciliation, the following processes are in place:

- when an ESES CSD acts as issuer CSD, the accounting principles mentioned above also ensure that the amount of securities credited to Clients corresponds to the total of the Issuance Account managed by ESES as Issuer CSD;
- when an ESES CSD act as investor CSD, a process is in place at the ESES CSDs to perform a daily balance reconciliation based on the closing balances of the non T2S CSDs or T2S CSDs with whom the relevant ESES CSD maintains a link.

As per the ESES Terms and Conditions Book 1 section 9.2, all Clients must perform daily reconciliations. For this purpose, the Clients of the ESES CSDs are provided with all the means that enable them to reconcile their records on a daily basis.

ESES processes and operations, including admission of securities, safekeeping methods and reconciliation are subject to regular audits, by Internal Audit and by the External Auditors (ISAE 3402). This is a recurrent point on the audit plan. The User Committees are informed by the ESES CSDs and act as appropriate on relevant audit findings relating to the topics covered in their mandate.

Additional relevant information on this matter is available on the “Rights of Clients to Securities Deposited in the ESES CSDs” available in euroclear.com

| Key consideration (KC) 2: A CSD should prohibit overdrafts and debit balances in securities accounts. |

The ESES CSDs prohibit overdraft and debit balances in securities account as per their ESES Terms and Conditions.

The settlement of transactions can only take place if a sufficient amount of securities is available to the delivering Client account.
The T2S platform is designed to avoid any such overdrafts (positioning process embedded in the architecture of the system).

For all the securities eligible in ESES CSDs, and whatever the role of the ESES CSD (Investor or Issuer CSD), a squared balances process is performed every day for controlling the consistency between the securities Issuance accounts (when the ESES CSD is the issuer CSD) or the position held with the receiving CSD (when the ESES CSD is the investor CSD) and the sum of ESES CSD Clients’ positions. Reconciliations are performed every day in line with the CSDR requirements.

**Key consideration (KC) 3: A CSD should maintain securities in an immobilised or dematerialised form for their transfer by book entry. Where appropriate, a CSD should provide incentives to immobilise or dematerialise securities.**

ESES CSDs only accept securities that can circulate in book-entry form, i.e. that can be either immobilised or dematerialised. For more details on the legislation that allows each of the CSD to operate a book-entry system in its own jurisdiction, please see Principle 1.

Further to the dematerialisation of securities in France, Belgium and The Netherlands, the amount of physical securities still maintained by the ESES CSDs is negligible.

The ESES CSDs have the capacity to maintain physical securities in immobilized form and manage the transfer of securities under book-entry. See principle 1 and 10 for more details.

**Key consideration (KC) 4: A CSD should protect assets against custody risk through appropriate rules and procedures consistent with its legal framework.**

ESES Clients’ assets are legally protected against the CSDs’ creditors, including in case of bankruptcy of any of the ESES CSDs.

For securities held over CSD links, the ESES CSDs ensure that the asset protection regime applicable to the securities held via the link is at minimum comparable to the asset protection regime applicable to the relevant CSD in ESES (Belgian law for Euroclear Belgium, French law for Euroclear France, and Dutch law for Euroclear Nederland).

To ensure that each ESES CSD continues to have a well-founded, clear, transparent, and enforceable legal basis for each material aspect of its activities in all relevant jurisdictions and to support their obligations under Article 43 of CSDR, the CSDs:

- monitor laws and regulations in all relevant jurisdictions, and
- embed identified changes to relevant laws and regulations into the rules, procedures, contracts and processes within the relevant ESES CSD.

The ESES CSDs also carry out a regular legal watch to ensure that no adverse legal or regulatory developments would put into question the enforceability of the ESES Terms and Conditions or other relevant contracts.

Protection of Clients’ assets from loss due to ESES is achieved through:
• strong accounting practices and internal controls. These are audited on regular basis by internal audit and yearly by External Auditor. The result of the external audit is disclosed on yearly basis in the ISAE 3402.

• daily securities reconciliation designed to identify errors and avoid undue creation or deletion of securities.

In case an error occurs and results in the liability of an ESES CSD in accordance with the ESES Terms and Conditions, such ESES CSD benefits from an appropriate insurance coverage and such potential liability is taken into account in the determination of the capital requirements of each ESES CSD.

Key consideration (KC) 5: A CSD should employ a robust system that ensures segregation between the CSD’s own assets and the securities of its clients and segregation among the securities of clients. Where supported by the legal framework, the CSD should also support operationally the segregation of securities belonging to a client’s customers on the client’s books and facilitate the transfer of customer holdings.

The ESES CSDs do not hold proprietary securities in the ESES CSD Systems.

The ESES CSDs are subject to segregation requirements set out in CSDR, they can distinguish at any moment in time the securities held for each of their Clients.

They allow their Clients to segregate their proprietary securities from the securities they hold on behalf of their underlying clients (omnibus or individual client segregation). This is confirmed by the contractual documentation of the ESES CSDs and through technical measures (opening of sub account or institution codes).

The ESES CSDs only have a contractual relationship with their Clients, and not with the clients of their participants. Subject to specific rules in case of insolvency proceedings, only such Clients are entitled to instruct the ESES CSDs to transfer of securities they hold on behalf of their underlying customers.

Key consideration (KC) 6: A CSD should identify, measure, monitor, and manage its risks from other activities that it may perform; additional tools may be necessary in order to address these risks.

The ESES CSDs offer notary services (initial recording of securities in a book-entry system) and central maintenance services (providing and maintaining securities at the top tier level). Each CSD in ESES operates a SSS and offers settlement as issuer CSD. To support these services, the ESES CSDs offer non-banking type ancillary services (in the meaning of CSDR) related to Custody and Asset Servicing.

For all services, the ESES CSDs identify, measure, monitor and manage the associated risks in line with the ERM framework. New services and activities follow a specific governance outlined in the policy framework of the ESES CSDs (including regulatory notification or approval as the case may be) before their actual implementation. Such governance involves the approval of the relevant ESES Management Committee upon recommendation from the Risk and Operating Committee after the risk assessments have been performed (see Principle 3 for further explanation).
Principle 12: Exchange-of-value settlement systems

*If an FMI settles transactions that involve the settlement of two linked obligations (for example, securities or foreign exchange transactions), it should eliminate principal risk by conditioning the final settlement of one obligation upon the final settlement of the other.*

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**Key consideration (KC) 1:** An FMI that is an exchange-of-value settlement system should eliminate principal risk by ensuring that the final settlement of one obligation occurs if and only if the final settlement of the linked obligation also occurs, regardless of whether the FMI settles on a gross or net basis and when finality occurs.

The ESES CSDs each operate a SSS that is designated under the SFD and operate under a legal and contractual framework providing a sound protection for (transfers of) securities held with them by their Clients (for more details, please refer to Principle 1).

Since 2016, the ESES CSDs have joined the T2S platform, together with other CSDs and Central Banks and are bound by a single contractual framework setting out common technical, risk management and finality principles for the settlement processes, reflected in the internal procedures and contractual documentation of each of the T2S CSDs and Central Banks.

The ESES CSDs offer FoP and DvP book-entry settlement services along the following principles:

- DvP settlement in central bank money
- Real-time gross settlement with immediate finality
- Integrated model by which securities accounts and cash positions in central bank money are held within the same IT environment
- Overnight batch settlement and daytime real-time settlement
- Real-time exchanges with payment systems operated by the Central Banks connected to T2S.

ESES CSDs offer DvP model 1 settlement in central bank money i.e. there is a simultaneous exchange of securities against cash on the settlement platform.

The ESES CSDs offer gross settlement services (on a trade by trade basis). The settlement finality is reached and is simultaneous for both components. For more information on the settlement finality, please refer to Principle 8.

- Cross-border settlement through links between T2S CSDs (referred to as Cross-CSD settlement) follow the same principles. Currently, only Euroclear France maintains links with other T2S CSDs.

Cross-border settlement through links with non T2S CSDs takes place on a FoP basis (please refer to principle 9 for more details). For these cases, the ESES CSDs will credit the Client’s account only after the moment of such transaction has been declared final in the books of the receiving CSD and the ESES CSD account has been credited accordingly.
For cross border settlement with CSDs within or outside T2S, settlement process and finality are detailed in the ESES contractual documentation, in the form of the DSD Matching & Settlement services.
Principle 13: Participant-default rules and procedures

An FMI should have effective and clearly defined rules and procedures to manage participant default. These rules and procedures should be designed to ensure that the FMI can take timely action to contain losses and liquidity pressures and continue to meet its obligations.

Key consideration (KC) 1: An FMI should have default rules and procedures that enable the FMI to continue to meet its obligations in the event of a client default and that address the replenishment of resources following a default.

As stated in Principle 1, ESES CSDs each operate a securities settlement system, within the meaning of SFD.

ESES CSDs have a clear legal and contractual framework to manage the insolvency proceedings affecting a participant as the actions to be taken by CSDs are driven by legal requirements.

The ESES CSDs contractual frameworks (the ESES terms and Conditions) also encompass provisions enabling the CSDs to deal with an operational default of a Client. This is primarily a contractual construction and not driven by specific legal requirements.

The different types of default explained below are related only to ESES Clients (as participants within the meaning of the SFD) to the different SSS operated by ESES CSDs and are not related to other type of Clients.

Default of an ESES Client (other than insolvency proceedings)

Clients to the ESES CSDs are subject to access rules which are documented in the ESES Terms and Conditions which encompass the Detailed Service Descriptions. The access rules encompass, amongst others, the operational capability of the Client, which is checked at admission and as part of the ongoing monitoring process for existing Clients. For more details on Access, please refer to Principle 18.

ESES CSDs, have effective and clearly defined rules and procedures to manage the default of one or more of its Clients. The default rules and procedures are embedded in the ESES Terms and Conditions.

The inability to fulfil the obligations imposed to Clients under Euroclear’s contractual documentation, i.e. a contractual default, includes inter alia the inability to pay fees, inability to comply with the ESES Terms and Conditions and/or to respect the admission criteria, including operational and technological capability aiming to ensure business continuity. Compliance with admission criteria is monitored, amongst other, via the sponsorship process (described in Principle
Non-compliance with the admission criteria can result in suspension or termination of access, if required according to the circumstances, and subject to the application of the procedure related to the transfer of positions laid down in the ESES Terms and Conditions.

The actions taken by the ESES CSDs in case of contractual default are determined on a case by case basis and are based on risk considerations, aiming at limiting the impacts and ensuring continuity of services.

**Insolvency proceedings opened against an ESES Client**

If a Client is subject to Insolvency proceedings (see the relevant provisions of ESES Terms and Conditions), the ESES CSDs apply rules and procedures that follow the principles laid down in the SFD and as implemented under French law, Dutch law and Belgian law respectively.

The actions taken by ESES CSDs in case of insolvency proceedings affecting a Client (ESES Terms and Conditions) are:

(i) blocking the communication means available to the Client and its agents (to prevent new instructions coming in), and/or
(ii) withdrawing the Client technical privileges, and/or
(iii) blocking and withdrawing the powers of attorney granted by the insolvent Client to other Clients and/or
(iv) any other measure that the CSD would consider relevant to prevent new instructions from unduly entering the CSD System.

Hereafter the “Blocking”.

**Handling of pending instructions in case of insolvency proceedings affecting a Client**

Instructions that qualify as securities transfer orders as meant under ESES Terms and Conditions, within the meaning of the SFD, and that were entered into the CSD System prior to Blocking, will be further processed in accordance with the usual processing rules of the CSD System if, at the time of Blocking, these instructions were irrevocable and otherwise removed from the CSD System. However, to the extent these instructions were entered into the CSD system after the moment the Insolvency Proceedings were opened and before Euroclear was informed of such insolvency. Proceedings, such instructions will be further processed in accordance with the usual processing rules of the CSD system only on the day the Insolvency Proceedings were opened and, if not settled at the end of that day, removed from the CSD System. The instructions that embed a cash transfer order, as meant under ESES Terms and Conditions may or may not be further processed in accordance with the Central Bank Rules of the relevant Central Bank.

ESES CSDs have implemented internal procedures related to the management of insolvency proceedings affecting a Client. The objective of default management rules and procedures is to respect the legal framework implementing the SFD and to define the transfer orders already entered and declared irrevocable in the securities settlement, the refusal of incoming instructions and the processing of pending instructions where applicable (for both proprietary and customer transactions, which are treated the same way) and thereby limit disruptions to the functioning of the system.
Notwithstanding the above, the CSD will accept new instructions after the occurrence of an insolvency proceedings event when submitted on behalf of the affected Client by the officially appointed receiver, administrator, trustee or similar person for the purpose of liquidating the portfolio of securities held by the insolvent Client. These instructions will be processed in accordance with the usual processing rules of the CSD System, i.e. the processing rules that would have applied had the Insolvency Event not occurred.

T2S and Insolvency Proceedings

The ESES CSDs operate on T2S and the cash leg of transactions in the SSS operated by each of the ESES CSDs can be executed through any of the Central Banks connected to T2S, depending on the choice made by the Client (the latter can act as Payment Bank in T2S and have an account with a Central Bank or appoint a Payment Bank). Given the interoperability of the T2S platform and that Central Banks operate payment systems in the meaning of the SFD, all Central Banks and CSDs connected to T2S have entered into a so called Collective Agreement aiming at harmonizing the definition of the moment of entry and irrevocability of transfer orders in all the SSS and payment systems operated on T2S. Additionally, specific T2S processes have been documented in the T2S Manual of Operations to allow CSD to manage participant default in cooperation with National Central Banks.

Suspension/Termination of an ESES Client subject to Insolvency proceedings

If a Client is subject to Insolvency proceedings (see the relevant provisions of ESES Terms and Conditions), the ESES CSDs could suspend, or terminate, the contractual relationship with the defaulting Client once all the required actions are performed (i.e. transfer of all the positions out of the system further to liquidator/insolvency proceedings administrator request).

Management of default and insolvency proceedings of an ESES Client

ESES CSDs have established ESES Insolvency Guidelines which provide legal detailed guidance on the actions to take.

Once default or insolvency proceedings of a Client is identified and confirmed, the ESES (Silver) Crisis Management Process (described in Principle 17), is activated to coordinate the default management responses. The objective of the Silver team in the management of a Client insolvency situation is to closely monitor the application of the standard procedure by the relevant department of the CSD when a Client is declared insolvent.

For the specific case of insolvency proceedings affecting a Client of ESES, the ESES CSDs have implemented the ESES Insolvency Monitoring & Crisis management Standard Operating Procedure (SOP) to manage Insolvency events affecting Clients. The procedure is covering both the insolvency of an Indirect Connected Participant and or a Directly Connected Participant and applies to Insolvency Proceedings opened against a Client and against the Payment Bank of any Client.

The SOP aims to guide the ESES (Silver) Crisis Management response to financial crises. It includes four types of actions and phases: Monitoring, Crisis management, Blocking process and further actions linked to the administrator’s decisions before closing the procedure. For each phase, the SOP details processes/actions to be taken and roles and responsibilities of the teams involved in
the management of a default. It is aligned with the ESES Insolvency Guidelines. The procedure is tested, reviewed and updated annually.

Use of financial resources

ESES CSDs do not offer any banking services and have no financial exposure towards their Clients (beyond the payment of any outstanding invoices). They each operate a SSS that settles transactions in central bank money, meaning that the Clients have a direct or indirect contractual relationship with a National Central Bank connected to T2S for the purpose of DvP settlement. The CSDs are not privy to that relationship. The ESES CSDs do not use any financial resource of the defaulting Client and non-defaulting Client further to a default.

Key consideration (KC) 2: An FMI should be well prepared to implement its default rules and procedures, including any appropriate discretionary procedures provided for in its rules.

The ESES Insolvency Guidelines detail the specific steps to be taken by ESES CSDs in compliance with applicable legislation and contractual arrangements to manage the consequences of insolvency proceedings affecting a Client of the ESES CSDs.

ESES Insolvency Guidelines and procedures delineate roles and responsibilities and define the communication paths in relation to Client insolvency to all relevant internal and external stakeholders, including the authorities. All insolvency proceedings management processes and procedures are reviewed and tested regularly in order to ensure their adequacy and effectiveness.

The management of default procedures, other than insolvency proceedings, are determined on a case by case basis and are based on risk considerations, as described in the ESES contractual documentation. See KC 1 for more details.

Key consideration (KC) 3: An FMI should publicly disclose key aspects of its default rules and procedures.

The ESES Terms and Conditions are publicly available on our website.

The ESES Terms and Conditions describe:

- CSD default rules and procedures detailing all aspects that are relevant for Client in case of default; and
- The circumstances that may lead to the suspension or termination of the contract with a defaulting Client are described in the ESES Terms and Conditions.

All the actions that could be taken by the ESES CSDS in case of a default are described above in KC1 and will be taken in accordance with the applicable legislation and with the ESES Terms and Conditions.
The ESES CSDs organise annual test of their Insolvency Monitoring & Crisis management Standard Operating Procedure with Clients, other relevant FMIs, NCBs and stakeholders.

The main objectives of the annual test are the following:

- demonstrate the ESES CSDs’ capacity to adequately manage an Insolvency Event,
- ensure transparency in the rules and procedures applied for Clients as counterparts of an insolvent Client,
- provide the opportunity for Clients to analyse impact on their organisation.

The annual test also provides the opportunity to evaluate the internal readiness of ESES CSDs Insolvency procedure and adapt it if necessary.

The results of the test are shared internally with the Risk & Operating Committee and ESES MCs and externally with Clients (via the ESES User Committees) and with ESES CSDs’ competent authorities.

When ESES CSDs participate to the tests organised by the Eurosystem/Central Banks as part of the T2S incident escalation management, they also test following procedures:

- The ESES- T2S insolvency of a CSD/Central Bank participant operational procedure
- The ESES- T2S Cross-CSD payment bank insolvency procedure

The ESES CSDs provide T2S with a summary of the testing and results of testing are shared with the T2S community. When improvements areas are identified the procedure is amended and identified gaps are included in the next testing.

**Default scenarios and procedures**

ESES CSDs default testing cover all the tools that could be used in case of a Client insolvency declaration, for example to block instructions, to activate the internal crisis cells and to communicate with all key stakeholders.

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**Key consideration (KC) 4: An FMI should involve its clients and other stakeholders in the testing and review of the FMI’s default procedures, including any close-out procedures. Such testing and review should be conducted at least annually or following material changes to the rules and procedures to ensure that they are practical and effective.**
Principle 15: General business risk

An FMI should identify, monitor, and manage its general business risk and hold sufficient liquid net assets funded by equity to cover potential general business losses so that it can continue operations and services as a going concern if those losses materialise. Further, liquid net assets should at all times be sufficient to ensure a recovery or orderly wind-down of critical operations and services.

Key consideration 1: An FMI should have robust management and control systems to identify, monitor, and manage general business risks, including losses from poor execution of business strategy, negative cash flows, or unexpected and excessively large operating expenses.

Euroclear defines General business risk as Strategic & Business risk, included in the Group risk library and ERM framework.

Business risk is defined as short term risks (<2 years) to ESES CSDs’ financial results and solvency arising, for instance, from:

- business decisions
- product and client portfolios
- human capital and other resources
- underfunded defined benefit pension obligations

Strategic risk is defined as medium to long term risks (>2 years) to ESES CSDs’ existence and ability to deliver on their strategy, arising, for instance, from:

- strategy & business model
- strategic decisions
- implementation of strategy
- technology, IT infrastructure and software

Risk Identification, measurement, monitoring and management

Strategy is set by the ESES CSDs’ Board in alignment with the overall strategy of the Euroclear Group. It is implemented by the ESES Senior Management, supported by the Group Strategy & Product Expansion division.

The responsibility to establish and operate an effective risk management framework for business risk remains with ESES Board and Management.

The first Line of defence (in their area of business) uses the ERM framework to identify, assess, monitor and manage risks that might impact the achievement of ESES’s key objectives. The Group

13 Please refer to Principle 3 (Framework for the comprehensive management of risks) for further details on ESES’s ERM framework and how it helps management to identify, measure, monitor and manage risks.

14 The three lines of defence model operated by Euroclear facilitates the effective operation of the ERM framework. Each line plays a distinct role providing Senior Management and the Board with confidence that ESES is likely to achieve its key goals through the effective management of risks. For details see Principle 3, KC 1, (« Effectiveness of the risk management policies, procedures and systems »)
Strategy & Product Expansion division, among others, is required to identify, assess, monitor, manage and report on the risks resulting from poor execution of the strategy.

The Finance division coordinates a yearly forecast exercise, on revenues and costs, receiving input from all key internal stakeholders and taking into account external market evolution and potential risks. Market intelligence, regulatory changes and external sources of market statistics are used to evaluate internal revenue outcome and projections (i.e. a combination of qualitative and quantitative elements are taken into consideration in the forecasting exercise, market benchmarks are considered together with qualitative elements like policy changes on the market, etc.). Forecasts of volumes and revenues are formally re-evaluated on a quarterly basis. Monthly analysis (for revenues and costs) is reviewed by the relevant divisions and ESES senior management. The identification and assessment process is enforced by strategic workshops at senior level and interactions with the Board.

There are several mechanisms where client needs are captured, evaluated, reviewed, notably via User Committee or relationship via the Commercial Division.

The ESES CSDs have a number of means to facilitate the identification, assessment and monitoring of Strategic & Business risks. Key among them are the PAR and RCSA processes which facilitate identification of key Strategic & Business risks (amongst others) that might undermine the achievement of business objectives, along with identification and assessment of relevant key controls. Further information is provided on ESES’s RCSA and PAR processes under Principle 3 (Framework for the comprehensive management of risks)

At group level, transversal business lines Management Teams, acting as advisory bodies, have been established to ensure focus and ownership of the business plans for each of the products, including their strategy, (new) developments, sales, service delivery, and bottom-line P&L. Although they are not formal governance bodies as such, they facilitate the cross-divisional and entities coordination to ensure consistency and alignment with the overall group strategy.

Monitoring of the overall financial drivers risk is done by the Financial Division and actively followed-up by the ESES Senior Management. The financial results are compared to the financial plan on a monthly basis. The Finance division monitors the cost side (yearly performance review of suppliers and monthly reviews on implementation sourcing strategies and savings). In addition, the Finance Division performs a capital and cash flow projection and planning for the next 5 years. The input for this analysis is provided by the Group Strategy & Product Expansion division for the revenue side and each operational division for the cost side. The key controls around revenues/costs are described in the Financial Internal Control Accountability (FICA) control framework 15.

The ESES Senior Management and Board (and its Risk Committee) monitors and regularly discusses ESES’s financial performance and capital adequacy.

Risk Management is responsible for facilitating and challenging the first line on the identification, assessment, monitoring and management of Strategic & Business risks. It does this through a combination of continuous risk monitoring and analysis combined with a rolling programme of independent risk assessments. Key Risk Management concerns are highlighted to the Management Committee and the Board Risk Committee through the quarterly CRO Officer Report.

15 FICA is a process aimed at evidencing execution control activities in relation to financial processes
The ICS report is prepared yearly to report to the Board on the effectiveness of the ESES internal control system.\(^{16}\)

**Key consideration (KC) 2: An FMI should hold liquid net assets funded by equity (such as common stock, disclosed reserves, or other retained earnings) so that it can continue operations and services as a going concern if it incurs general business losses. The amount of liquid net assets funded by equity an FMI should hold should be determined by its general business risk profile and the length of time required to achieve a recovery or orderly wind-down, as appropriate, of its critical operations and services if such action is taken.**

The ESES CSDs hold high quality assets to cover their general business risk, in line with CSDR requirements.

A capital charge for business risk is estimated with an approach essentially scenario-based aligned with CSDR\(^{17}\). This charge is then considered in the yearly exercise for the Group capital adequacy. By making use of scenario analysis, the length of time required to achieve a recovery or orderly wind-down following a significant business loss is estimated by ESES CSDs in their RRW plan. The plan assesses the time and associated operating costs of achieving a recovery or orderly wind-down against a set of parameters (speed and timing, financial aspects, preparation criteria, etc).

**Key consideration (KC) 3: An FMI should maintain a viable recovery or orderly wind-down plan and should hold sufficient liquid net assets funded by equity to implement this plan. At a minimum, an FMI should hold liquid net assets funded by equity equal to at least six months of current operating expenses. These assets are in addition to resources held to cover client defaults or other risks covered under the financial resources principles. However, equity held under international risk-based capital standards can be included where relevant and appropriate to avoid duplicate capital requirements.**

In accordance with regulatory rules and guidelines, ESES CSDs have a RRW plan, reviewed and approved on a yearly basis.\(^{18}\) The ESES CSDs' RRW plan includes a range of options which comprises various cost reduction, downsizing or business/asset disposal options, carrying several execution timeframes - in some cases up to one year. The ESES CSDs' plan considers as well options for orderly wind-down, to deal with situations that cannot be addressed through recovery or restructuring options.

**Resources**

Internal assessment concluded that a wind-down would be possible within six months, in line with CSD-Regulation. To aid the implementation of these orderly wind-down options the ESES CSDs have therefore set capital aside equal to six months of operating expenses.

The six months of current operating expenses are added on top of the capital adequacy requirements to ensure that the capital assigned to fund an orderly wind-down is clearly

\(^{16}\) See also Principle 3, KC 1
\(^{17}\) Article 4 of Regulation (EU) 390/2017
\(^{18}\) See also Principle 3 Key consideration 4
conceptually separated from capital to cover other risks contemplated in sizing capital adequacy requirements.

**Key consideration (KC) 4:** Assets held to cover general business risk should be of high quality and sufficiently liquid in order to allow the FMI to meet its current and projected operating expenses under a range of scenarios, including in adverse market conditions.

ESES entities invest their regulatory capital including business risk requirement either in cash on current account or in highly liquid securities.

Cash is invested with highly rated and diversified counterparts to mitigate the investment risk. Cash is available at any time as on current account.

For securities, the regulatory requirement is invested in a direct investment mandate composed of high quality liquid asset, plain vanilla debt securities issued or guaranteed by a government or a central bank. Liquidation of the security can be asked on a daily basis.

The capital planning exercise is performed on a yearly basis at group level. During the exercise each element of the capital requirement, including business risk charges is reviewed based on latest available figures. See also KC 2

**Key consideration (KC) 5:** An FMI should maintain a viable plan for raising additional equity should its equity fall close to or below the amount needed. This plan should be approved by the board of directors and updated regularly.

The capital planning exercise assesses on a yearly basis the capital adequacy and so the need of additional capital for each entity for the 5 following years. Minor shortage by entity are normally anticipated and can, in most of the case, be covered by profit retention. If this is not sufficient the company can ask the shareholder (i.e. Euroclear SA/NV) to inject capital to cover the shortage.

Extreme but plausible scenarios are covered in the recovery plan which includes options to raise capital. Please refer to KC 3 for more details on the recovery planning.

The capital plan and recovery plan are reviewed and approved on a yearly basis by the ESES Board.
Principle 16: Custody and Investment risks

An FMI should safeguard its own and its clients’ assets and minimise the risk of loss on and delay in access to these assets. An FMI’s investments should be in instruments with minimal credit, market, and liquidity risks.

**Key consideration (KC) 1:** An FMI should hold its own and its clients’ assets at supervised and regulated entities that have robust accounting practices, safekeeping procedures, and internal controls that fully protect these assets.

Securities are held by the participant with each ESES CSD depending on the eligibility rules in ESES (concept of “CSD of Reference” whereby one security can only be held with one ESES CSD). The ESES CSDs can each either act as issuer CSD (where securities are primarily issued with it) or as investor CSD (where the CSD holds the securities with another CSD.)

When the ESES CSDs act as issuer CSD the securities are either in dematerialized or in immobilised form allowing book entry transfer of securities. The immobilisation of physical securities is guaranteed by the ESES CSDs themselves in the vaults of Euroclear Belgium and Euroclear Nederland as further explained under Principle 10. Relevant provisions of the asset protection available to securities deposited with the ESES CSDs are described in Principle 1 Legal basis KC1.

When the ESES CSDs act as investor CSD, adequate measures are in place in order to protect participants assets. These measures include the receipt of external legal opinions (as described in Principle 1 KC1) and the controls performed in the market and the counterpart used by the ESES CSDs against criteria detailed in Principle 20 FMI links – KC1. Please notice that currently ESES CSDs only maintain direct links with other CSDs without intermediation of a custodian.

For elements related ESES CSDs own assets, please see KC 2 and 4 below.

**Key consideration (KC) 2:** An FMI should have prompt access to its assets and the assets provided by clients, when required.

The default of a participant does not trigger immediate liquidity or credit risk for the ESES CSDs, as there is no liquidity risk taken on clients directly and the credit risk is limited to the payment of invoices, therefore the accessibility to the CSDs assets does not immediately apply in such case.

**Participant securities**

Part of ESES CSDs’ requirements for the establishment and maintenance of a link is asset accessibility, meaning that the ESES CSDs get prompt access to the assets when required (in business as usual and contingency/ insolvency situation).

In the normal course of business, ESES CSDs ensures prompt access to securities through relevant account structure for each link allowing access to securities without undue delay allowing the ESES CSDs to settle transactions and get access to the relevant reporting promptly.
In case of insolvency of a counterpart used on a given link, the contractual framework and external legal opinions (covering asset protection/insolvency proceedings) for each link stipulates the proceedings to claim securities from the receiver and avoid undue delays in accessing the securities.

ESES CSD links are mostly within the same time zone, which enables prompt asset accessibility.

**ESES CSDs own proprietary assets**

Pursuant to applicable regulatory requirements set out in CSDR, the ESES CSDs have established policies to ensure their capital is invested appropriately and in line with the detailed requirements of the EU Commission Delegated Regulation 390/2017\(^{19}\).

ESES CSDs invest their own regulatory capital as per the Investment policy approved by the Board. In practice, entities invest either in cash on current account or in government debt securities.

When invested in cash, the assets of the ESES CSDs are held with credit institutions (with high credit rating) with a maximum of 25% of core equity in one counterpart for diversification purposes. The criteria are lay down in the Investment policy. Cash is available at any time as on current account.

When invested in securities, it is put in a direct investment mandate composed of high quality liquid asset, as explained in KC 4 below. The company can ask the redemption of the security on a daily basis with cash payment following normal settlement cycle after 2 business days.

<table>
<thead>
<tr>
<th>Key consideration (KC) 3: An FMI should evaluate and understand its exposures to its custodian banks, taking into account the full scope of its relationships with each.</th>
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<tbody>
<tr>
<td>When ESES CSDs use custodian banks, mainly for the placement of cash on proprietary capital requirements, adequate monitoring is in place to assess all exposures to the relevant entity as well as diversification of the money placement as explained in KC 2 and KC 4.</td>
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<tr>
<th>Key consideration (KC) 4: An FMI’s investment strategy should be consistent with its overall risk management strategy and fully disclosed to its clients, and investments should be secured by, or be claims on, high-quality obligors. These investments should allow for quick liquidation with little, if any, adverse price effect.</th>
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<tr>
<td>The Investment policy of each ESES CSDs is approved by the Audit Committees and the respective Boards. Investment policy principles are reviewed on an ad-hoc basis in view of applicable and expected market conditions, regulatory constraints and risk appetite of the entity. The Investment policy principles are driven by (and were designed in view of) the requirements determined under CSDR, applicable to the ESES CSDs, while aiming simultaneously at minimising capital erosion risks in view of current market conditions. Compliance review with all investment</td>
</tr>
</tbody>
</table>

\(^{19}\) The supplementing Regulation (EU) No 909/2014 of the European Parliament and of the Council with regard to regulatory technical standards on certain prudential requirements for central securities depositories and designated credit institutions offering banking-type ancillary services apply to the ESES CSDs to the extent that Euroclear group qualifies as a banking group due to the presence of a credit institution in the group, i.e. Euroclear Bank.
policy principles (i.e. CSDR provisions) is reported quarterly to ESES CSDs’ Management, Audit Committee and Board.

ESES CSDs own funds can either be invested in securities or in cash (see KC2).

For investment in securities, the treasury investment activity is outsourced to a professional asset manager who reports compliance with the investment principles to the Chief Financial Officer (CFO) on a monthly basis. Both Risk and Finance departments are involved in the compliance monitoring process. Quarterly reporting is also performed to the Audit Committees and Boards of the ESES CSDs.

As per the Investment policy, the ESES CSDs are only allowed to Invest their own funds (regulatory and excess above regulatory constraints) in High-Quality Liquid Assets (HQLA)- level 1- type plain vanilla debt securities issued or guaranteed by:

(i) a government;
(ii) a central bank;
(iv) the European Financial Stability Facility or the European Stability Mechanism.

No derivative instruments are allowed nor fixed income securities instruments with implied derivative features. Additionally, investments can only be made in EUR denominated securities.

Furthermore, the ESES CSDs are not allowed to invest participant assets but only their own funds/capital.

All investments are subject to rating on country, issuer, instrument type and maturity constraints to comply with CSDR provisions.

Interdependencies between counterparts are taken into consideration since the ESES CSDs apply a family limit concept (25% of regulatory own funds at Euroclear group level) for all treasury investments (i.e. regulatory own funds and excess funds). Family limits also apply for investment at the level of each ESES CSD.

The type of instruments invested into, the high diversification of investments, the limited maturity/duration of the investment portfolio and the high credit ratings (A rating on average) are contributing to the very high liquidity profile of the portfolio.

In addition all instruments invested into should have an ISIN with daily access to pricing information. Debt instruments invested into should all be freely transferable without regulatory constraints.

The investment procedures ensure the ESES CSDs have same day capacity to instruct a sale of assets. Sale of assets followed by liquidation should follow standard settlement cycle (T+2).

Immediate access to assets is guaranteed contractually and is described in the asset redemption procedures with the asset manager of the ESES CSDs. However, the default of a participant does not trigger the need to immediately access the CSDs own assets.
Principle 17: Operational risk

*An FMI should identify the plausible sources of operational risk, both internal and external, and mitigate their impact through the use of appropriate systems, policies, procedures, and controls. Systems should be designed to ensure a high degree of security and operational reliability and should have adequate, scalable capacity. Business continuity management should aim for timely recovery of operations and fulfilment of the FMI’s obligations, including in the event of a wide-scale or major disruption.*

Key consideration (KC) 1: An FMI should establish a robust operational risk-management framework with appropriate systems, policies, procedures, and controls to identify, monitor, and manage operational risks.

Euroclear defines Operational Risk as the risk of loss resulting from inadequate or failed internal processes, people and systems, or stemming from external events. The key types of operational risks ESES CSDs consider (based mostly on the Basel Committee’s recommendations) are:

- Employment practices & workplace safety
- Clients, products & business practices
- Execution, delivery & process management
- Internal fraud
- External fraud & cyber
- Business disruption & systems failure
- Damage to or loss of physical assets
- Custody risk
- Model risk

Policies

The Group Operational Risk Board Policy (ORBP) defines the key principles for operational risk and is developed and maintained in accordance with market practices and regulatory guidelines for risk management.

Those principles are then detailed in the Operational Risk Management Policy Handbook and in other board-approved policies for specific types of operational risks. The Operational Risk Policy

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20 Other policy documents related to operational risk management include:
- ESES’s Information Technology Framework Board Policy which defines the principles sustaining the ESES’s IT effectiveness and defines the standards which operational risk management tools (including monitoring tools) have to comply with
- the Critical Service Providers Board Policy Handbook
Handbook details how Euroclear identifies, measures, monitors, reports on and mitigates its operational risk. It also oversees what is considered as “operational risk”, the sources to which they are related, and the different categories where they belong.

Policy handbooks are further expanded by the first line of defence into practical Implementing and operating procedures.

All staff is involved in awareness campaigns and relevant trainings depending on the nature of the risks to be covered. These include elements such as Compliance (e.g. Speak up, Anti-Money Laundering (AML) or fraud prevention), Physical and cyber security or general risk matters. All staff must on a regular basis follow awareness sessions and complete tests.

Identification

Risk Identification for all risk types is described under Principle 3, KC 1. Specifically for Operational Risk, the “ESES Operational Risk Management Policy Handbook” provides a number of standard identification tools and techniques that the business (first line) uses to identify risks, including:

- monitoring performance and risk indicators in the business (e.g. settlement volumes, settlement failures, service availability, number of operational incidents, etc.);
- performing systematic risk assessments of new products or services;
- identification of single points of failures, defined as part of a system people, processes, technology, including critical utilities and critical service providers, with no alternative or redundancy in place that, if it fails, would result in a critical operation or services being stopped;
- recording of incidents, caused, for instance, by inadequate or failed processes, people and systems, or by external factors.

Management and monitoring

Once risks have been ranked, the first line assesses how best respond to and control the identified risk. This is done through selecting and implementing an appropriate risk response strategy (or strategies) and through introducing appropriate controls. The residual risks, resulting from the implementation of mitigating actions and controls, are then reported to and presented for acceptance to the relevant bodies as per the applicable governance.

The first line takes full responsibility for monitoring (e.g. via Key Risk Indicators (KRI) such as system uptime) and reporting its risks (e.g. via the PAR process), which enables first line management to provide the ESES Senior management and Board with direct assurance on the effectiveness of ESES’s risk management and internal control arrangements.

Controls are essential for risk mitigation, and specific key responsibilities are linked to the control framework. The effectiveness of the ESES CSDs’ internal controls systems is self-assessed by the first line, supported by their review and tests and then further assessed by the second and third lines of defence as follows:

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*The Change, Project and Programme Management Policy Handbook*
• Risk Management (second line of defence) supports the Board in defining the framework and provides independent assessments which may confirm, nuance or disagree with first line management’s views.

• Compliance (second line of defence): monitors, tests and reports to management on controls relating to compliance with laws and regulations and advises on remedial actions.

• Internal Audit (third line of defence) independently reviews and tests the controls. It also reports to management about the adequacy and effectiveness of the control environment.

ESES’s key controls are identified, monitored and regularly assessed. Several processes support senior management and board-level governance oversight, examples include the PAR process and the RCSA process, described in Principle 3.

The three lines of defence effectively assess and follow up operational incidents (IT and non IT) and risks via dedicated databases. The tools dedicated to operational incident management, support a standardised workflow for the different steps of the process covered by the ‘Incident Escalation and Loss Data Collection Procedure’. For more details please see Principle 3 KC1.

The effectiveness of the ESES CSD’s IT Tools (and thus of Operational Risk Management tools), controls and procedures at mitigating the impact of operational risks is also assessed and evidenced in the ESES CSDs’ annual ISAE 3402 report.

**HR related policies, processes and controls**

ESES CSDs have several procedures in place to employ, train and retain qualified personnel, as well as mitigate the effects of personnel turnover or overreliance on key personnel.

For each location ESES recruits candidates that match the qualifications, skills, experience and expertise relevant for the vacant position. For each type of profile an adequate sourcing strategy is developed. A series of competency-based interviews, both by business persons and Human Resources division, ensure a rigorous selection process.

All applicants for employment are subject to pre-employment screening prior to employment by Euroclear. The level or type of screening varies, depending on applicable laws and the degree of access that the successful applicant will have to sensitive information. Personnel security measures reduce the risks of theft, fraud or misuse of facilities by ensuring that potential employees are suitable for their prospective roles.

**Fraud related policies, processes and controls**

Regarding fraud prevention, Euroclear has implemented a Code of conduct, an Ethical Conduct policy for accepting gifts and a whistle blowing programme at group level.

All staff have been informed on how to report any evidence or suspicion of fraudulent activities. Staff must, on a regular basis, follow awareness sessions and complete a compliance tests including questions related to fraud prevention.

The ESES CSDs have also implemented specific fraud risk related controls, such as physical segregation and security on high risk areas and access badge, controls centred on Information
Security—like password protection, segregation of duties, access management, clean desk policy and, endpoint security.

Projects, programmes and change management

As part of its operational risk management framework, Euroclear has defined guidelines—outlined in the ESES CSD’s Project, Program and Change Policy Handbook—for project, programme and change management. These guidelines aim to mitigate the risks arising from modifications to operations, policies, procedures and controls, enabling a successful business change. These projects, programmes and changes can be IT and non-IT related.

Euroclear takes into account market practices and recognised industry standards such as PRINCE2 and MSP. To enable further maturity increase, this policy handbook is complemented with additional procedures, providing more details on the different steps of these methodologies.

Urgent production fixes in the SSS are managed through the incident management process, for which dedicated policies and procedures exist.

Changes to operational applications and their supporting systems and networks are planned, developed and implemented in a controlled manner as defined in the ESES CSDs’ Project, Program and Change Policy Handbook. The system development methodology takes into account the resilience of the infrastructure and applications which need to be respected for all critical infrastructure components and applications.

Quality assurance teams evaluate compliance to these principles and guidelines for projects and changes, when required, as part of the production acceptance criteria.

IT teams test changes within specific environments, depending on the nature of the changes and in line with our software development life cycle. IT prepares, reviews and signs-off launch scenarios for any planned change. These tests also include, when relevant, penetration tests to minimise cyber risks.

Key consideration (KC) 2: An FMI’s board of directors should clearly define the roles and responsibilities for addressing operational risk and should endorse the FMI’s operational risk management framework. Systems, operational policies, procedures, and controls should be reviewed, audited, and tested periodically and after significant changes.

Roles, responsibilities and framework

The primary responsibilities of the Board are to define and oversee the implementation of the strategy and objectives of the Company, its risk framework (including risk appetite and policies) and to supervise the Company's management. This encompasses the framework for identification, management and monitoring of Operational Risk for which the ESES Board has established a dedicated policy, further implemented by the ESES Senior management in other policy documents. For more details on the risk management framework and its review, refer to Principle 3 KC1.

The business objectives of ESES, as endorsed by its Board, encompass systems safety, efficiency and reliability.
The ESES Senior management is accountable to the ESES Board for the management of operational risk and has set up a specific committee, the ESES Risk and Operating Committee (ROC), to ensure day to day follow up.

The main role of the ROC is to ensure, for the ESES CSDs

(i) the follow-up and the monitoring of operational activity,

(ii) the monitoring of the risks exposure,

(iii) the follow up on the operational performance indicators of the ESES Performance Assessment and Group Balanced Scorecard and

(iv) the follow-up of the unpaid client invoices.

The ROC is chaired by the ESES Chief Operating Officer and consists of representatives of ESES Operations and ESA divisions as well as an observer from internal audit.

For New Product and Services Approval, the ESES Risk Assessment Committee (RAC) assesses the risks linked to the launch of a new initiative which could potentially modify the risk profile of one or more ESES entity.

The ESES RAC has an advisory role and a reporting duty vis-à-vis the ESES Senior management. The RAC Chairman represents the RAC in the MCs to present its recommendations, answer questions and support ESES Senior management decisions.

Finally, the three lines of defence model, designed by the Board and managed by ESES Senior management, facilitates the effective operation of ESES’s operational risk. Each line plays a distinct role in the effective management of risks. More information regarding the ESES CSDs’ three lines of defence model and Risk Management Framework is provided in Principle 3.

**Review, audit and testing**

There are various mechanisms in place to ensure regular review and testing of risk policies and procedures, and control systems at large.

First of all, policies, handbooks and implementing procedures are reviewed as per the frequency indicated in the Policy Frameworks and Handbooks, or as needed (due, for instance, to changes triggered by regulation, market practices or business evolution). Any review findings are reported to line management up to the ESES MCs, as the case may be, and recommend amendments or additions to the ESES Senior management or Board for approval, as appropriate.

Updated policies and procedures are reviewed by adequate governance, followed by roll-out and implementation.

Regular business control and monitoring processes are in place, supporting the adequate and effective risk and control environment, in line with policies. Their outcome is reported and discussed in management performance meetings at different levels in the organisation (from first line shop floor meetings and processes monitoring to reviews by the ROC and ESES MCs).

First line testing covers a broad range of topics (for instance business continuity as part of the BCPs tests - see KC 6, IT testing – see KC 1, and KC 4, etc.).
Testing of control design and effectiveness is performed by first line control units applying a risk based approach to derive the nature and frequency of control testing. The results are reported to the ROC.

Moreover, the annual ICS process, combined with ESES’s issues tracking review, ensures a quality review for operational procedures.

The risk management framework, including the operational risk management framework, is subject to both internal and external audits. The Internal Audit division provides independent assurance on the adequacy and effectiveness of the ESES CSDs’ system of internal controls. Control testing is performed by Internal Audit as part of their annual audit plan and by external auditors, both as part of the ISAE 3402 review and in the context of the semi-annual review of the Financial statement.

Key consideration (KC) 3: An FMI should have clearly defined operational reliability objectives and should have policies in place that are designed to achieve those objectives.

Operational reliability objectives

The ESES CSDs are maintaining appropriate IT tools, ensuring high standards of operational reliability and security, adequate capacity and integrity and confidentiality of the information. This is defined in the ESES CSDs Information Technology Framework Board Policy.

In terms of quantitative objectives, the ESES CSDs aim for 99.5% system uptime for Core services and at system recovery time in less than two hours in case of major outage. From a quality point of view, performance assessment are done on regular basis, review the major events and seek for continuous improvement.

Quantitative and qualitative objectives are also stated in the Operational Risk Management Policy Handbook and in implementing procedures and published on the intranet for employees. Further quality statements can be found in the sets of control objectives used and within the departments’ own internal process and standards documentation. A quarterly Operational Risk Dashboard summarises ESES Management’s view on the main operational risks through the use of quantitative and qualitative risk indicators.

ESES technology services are supported by Euroclear SA/NV under an outsourcing arrangement and a related service delivery plan, which include above mentioned objectives. The service delivery plan is reviewed on a yearly basis by the ESES Chief Technology Officer (CTO) and submitted to ESES Senior management for approval.

Besides daily reports on incidents, the performance of Euroclear SA/NV is assessed and monitored regularly by the ESES CTO and on a quarterly basis by the ESES MCs through the use of qualitative and quantitative KPIs which are defined in the service delivery plan and are aligned with the ESES Risk Appetite. Euroclear SA/NV and ESES collaborate closely in all the supporting processes like ITIL practices (incident management, problem management) and crisis management.

Services that are outsourced to T2S are monitored formally on a monthly basis in line with the T2S framework agreement and on the basis of quantitative and qualitative reporting provided by T2S.

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21 « Information Technology Infrastructure Library », an international standard for IT service management
Capacity Management

Euroclear SA/NV operates a capacity management process, resulting in a capacity plan and a capacity risk matrix for critical IT services.

Capacity management is in place to ensure that IT capacity meets current and future business requirements. There is a continuous monitoring of defined infrastructure services (regular review and dashboards) to identify potential issues ahead of time. On the basis of alerting systems, actions are taken to increase capacity (or re-balance workload) as thresholds are approaching.

In a project phase, performance testing is done and based on project needs to ensure an IT application is meeting the non-functional requirements (volume, response time, throughput etc.) before being launched in production. This testing is also used to size the infrastructure correctly and foresee the required capacity. Once launched, a post launch analysis is made to confirm or adapt the sizing.

A capacity risk matrix for critical IT services is provided twice a year to the ESES ROC for review and acceptance.

Capacity monitoring and management are part of the applied ITIL framework and are included in the risk-based internal audit universe.

Capacity management within project lifecycle

Capacity management is in place within the project lifecycle to define capacity needs for new infrastructures and support performance testing within projects. The Project Life Cycle methodology, developed and adopted by the Group business and Technology Services Division, is designed to ensure that both functional and non-functional requirements of ESES (including resilience, stress testing, capacity, expected service-levels etc.) are taken into account in the design and implementation of IT systems, and that the necessary testing is performed in accordance with the project’s test and launch strategy. At the launch of a new technology, a test summary report is produced.

Physical security

Euroclear adopted a Group Physical Policy Handbook, in line with the ERM Framework. The main objective of physical security is to:

- provide a safe and secure environment in which Euroclear can conduct its business activities;
• protect Euroclear offices, data centres, equipment, information, people and other assets from natural and man-made threats;
• prevent, detect and delay unauthorised physical access or damage to Euroclear buildings; unauthorised access or damage to the critical systems and information; loss, theft or compromise of valuable assets; and disruption to Euroclear operations by ensuring its support equipment is properly managed and maintained;
• prevent and limit impact of malicious acts against people.

The policy details the strategic physical security measures that are applied in Euroclear premises and, where appropriate, the responsibilities and accountabilities in relation to those measures. Detailed minimum standards are outlined in the Physical Security Implementing Procedure which are to be applied at all times.

Euroclear policies and procedures accord with National rules, legislation and best practices.

Information security

As a processor of high-volume and high-value transactions and as a guardian of client and market sensitive information, the ESES CSDs ensure that their Information Security Management System (ISMS) is holistic and addresses threats to confidentiality, integrity and availability in line with its low risk appetite for operational risks.

Information security is defined within Euroclear group-wide Operational Risk Board Policy as the protection of critical assets, by preserving their:

• confidentiality: ensuring that information is accessible only to those authorised to have access and is not misused
• integrity: safeguarding the accuracy and completeness of information
• availability: ensuring that authorised users have access to information when they need it
• compliance: ensuring that relevant legal and regulatory requirements in relation to the protection of information are adhered to

The ESES ISMS Policy handbook provides the principles of how the ESES CSDs maintain the required level of information security, safeguard their information assets, the interest of their key stakeholders, reputation, brand and value-creating activities system.

The ISMS policy includes a comprehensive framework for information security to manage the risks that it faces from intentional threats (e.g. hacking, intrusions) or accidental events (e.g. natural disasters) and covers the four main aspects of information security:

• People: employees, contractors and others who may in the course of business handle information.
• Process: information in all forms, computing and communication services.
• Technology: application and system software, development tools and utilities.
• Facilities: computer (hardware) and communication equipment and other media required to support the processing of information.
The ESES CSDs Information Security Management System is based on market best practices and recognised industry standards, such as ISO27001:2013, COBIT and ITIL. It is designed to address information security’s legal requirements for financial market infrastructures.

The ISMS Policy Handbook contains also a specific section related to Cyber security. Euroclear monitors and manages the cyber threat landscape, regularly reviews and actively mitigates cyber risks.

Together with ESES management, the Chief Information Security Officer (CISO) oversees and coordinates information security efforts across ESES CSDs and supports the development of information security policies that are consistent with business objectives, risk appetite and the ERM framework. The ESES MCs retain responsibility for monitoring and overseeing policies, issues and exceptions that are relevant to ESES and reports any relevant issues to the Business Resilience and Information Security team.

Key consideration (KC) 6: An FMI should have a business continuity plan that addresses events posing a significant risk of disrupting operations, including events that could cause a wide-scale or major disruption. The plan should incorporate the use of a secondary site and should be designed to ensure that critical information technology (IT) systems can resume operations within two hours following disruptive events. The plan should be designed to enable the FMI to complete settlement by the end of the day of the disruption, even in case of extreme circumstances. The FMI should regularly test these arrangements.

Objectives of Business Continuity Management framework

The Business Continuity Management framework comprises 3 main documents:

- ESES CSDs Business Continuity Strategy Board Policy: this Policy includes a description of the IT infrastructure and disaster recovery strategies of ESES CSDs IT systems provided by Euroclear SA. These strategies support the resumption of critical services within the set Recovery Time Objective (RTO) of two hours and the completion of the settlement day on the scheduled date. It also describes the ESA data centre infrastructure, with a second and a third data centre, providing an additional level of resilience.

- ESES CSDs Business Continuity Management Policy Handbook: this Policy Handbook details the requirement for IT and offices resilience which are implemented at ESES CSDs. It also details the incident escalation and crisis management processes.

- ESES CSDs Business Continuity and Disaster Recovery Plan outlines internal actions to promote the continuity of services during disruption and details specific ESES and ESA Division responsibilities and actions to support the appropriate emergency responses. (These documents are complemented by BIAs (described below) and specific response plans)

In accordance with legal requirements, the ESES CSD’s Business Continuity Management (BCM) framework describes roles and responsibilities, and the adopted approach. It also includes objectives supporting the business targets for the timely resumption of critical operations.

The ESES Senior management approves the business continuity objectives and plans.
Design of the business continuity plan

BCM standards are outlined in the ESES Business Continuity Strategy Board Policy including:

- key definitions and principles related to Business Continuity Management, critical business functions and key operational activities
- recovery strategy: outlines the recovery strategy to ensure the timely recovery of operations and the fulfilment of ESES’s obligations in case of disruptions

Business Continuity and Disaster Recovery Plan

The first line is responsible for the coordination of the Business Continuity and Disaster Recovery Plan (BCP) across the group. Every component of the BCP is tested once a year along the requirements set in the policy. The BCP is designed to foresee that IT systems can resume operations within two hours and includes all reasonable steps to ensure that settlement is completed by the end of the business day even in case of major disruption.

The role of Group Security and Business Resilience Division is to review, challenge and identify gaps in the Business Continuity Risk Assessments (BCRA) performed by the first line and challenge the adequacy of the documentation (BCRA, BIA, BCP and DRP), their completeness, proposed risk responses and the overall consistency.

Business Impact Analysis

The Business Impact Analysis (BIA) is the foundation of Euroclear’s BCM process.

A formal BIA is used to identify the critical activities and their recovery time objectives for each of the business processes. During the BIA, threats and risks associated with business process' interruptions are identified and assessed by determining the effect of loss, interruption or disruption to business on the function of each department and thus on the organisation as a whole. The analysis considers both the short and long-term effects of an incident, and identifies dependencies on people, information, technology and facilities. The output of the BIA is used to form the Business Continuity strategy and plans, in accordance with the Operational Risk Board Policy.

Business Continuity Plans

Business continuity plans have been developed to cover a number of defined scenarios, including the loss of an office, loss of staff and an IT disaster recovery incident. They contain the following elements:

- guidelines on how to use the plan
- the process to alert and activate the crisis management team
- responses and recovery procedures meant to return the business to normal operations following an incident or disaster
- procedures to continue to maintain critical activities following a widespread loss of staff
- communication guidance and contact list with supervisors, employees, clients, critical suppliers, shareholders, management and other stakeholders, critical contact information on continuity teams, affected staff, clients, suppliers, public authorities and media
The Corporate Business Continuity and Disaster Recovery Plan is the overarching document designed to help the organisation respond to incidents. It sets operational priorities and includes checklists and supporting information for different scenarios.

The BIA provide sufficient information for team members to respond to an incident. The actual content of each plan varies depending on the criticality of activities.

In addition to their BIA, following departments develop specific response plans:

- HR to cover all people aspects
- Facilities to cover response to building evacuation/invacuation and access control issues (e.g. demonstrations)
- IT to provide an IT recovery plan regarding IT disasters including cyber related incidents; Group Technology Services plans also include procedures to achieve data / transactions consistency
- Corporate Communication that details how Euroclear will communicate with internal and external audiences during a crisis
- Business operations to provide a response to different financial crisis scenarios

**Data centres**

Euroclear has three data centres (DC):

- two data centres (DC1 and DC2) provide real-time synchronised data mirroring and act as the primary and secondary data centre. The distance between these two data centres is sufficient to prevent that the secondary site is affected by an event affecting the primary site. The ESES CSDs’ critical services are supported by resilient/adequate:
  - IT platforms (hardware and software)
  - networks configurations
  - communication means
  - capacity to process all transactions before the end of the day even in circumstances where a major disruption occurs
- a third data centre (DC3) receives asynchronously replicated data. It allows recovery of critical services in a few hours in the event of a regional disaster affecting both other data centres (like a coordinated attack or a natural disaster).

The synchronous replication between DC1 and DC2 ensures there is no possibility of data loss. The third data centre receives asynchronously replicated data. In the extreme case that both dual data processing sites would fail, a data loss of less than one minute (dependent on system volumes at time of failure and excluding rolling disaster) could occur. The company has developed Data Loss Response plans to apply in order to minimise the impact of data loss whilst aiming to resume computerised operations in a time period which does not cause unnecessary strain on market stability.
The ESES data loss recovery process is based on the three following principles:

1. T2S records and reporting
2. T2S, Central Securities Depositories (CSDs) and the ESES CSDs' clients reconciliation
3. Potential replay of previously executed transaction by the ESES CSDs' clients

**System resilience**

The system development methodology adopted by the IT division includes principles and guidelines with regard to resilience of the infrastructure and applications which need to be respected for all critical infrastructure components and applications. Compliance with these principles and guidelines is evaluated for every project or change as part of the production acceptance criteria. The core processing systems and networks are designed to provide resilience through the use of mechanisms including mirroring (synchronous) of production data, the use of fault tolerant computers or resolving single points of failure. The provision of the communication lines is split across a number of telecommunications suppliers thereby providing additional protection against a single point of failure.

**Implementing procedures**

Procedures and checklists are maintained and made available in various ways to enable that all involved staff (including members of the ESES MCs or of the Board as the case may be) can perform effective management and control of the services at all times, also in case of emergency.

Standard introductory training for new Euroclear staff explicitly covers business continuity in general and personal responsibilities. BCP awareness updates, exercises and training are provided at a minimum on an annual basis to all Euroclear group staff, using different communication channels and tools.

**Crisis management**

In order to ensure a systematic and coordinated response to unexpected events, Euroclear established a three-tiered Bronze-Silver-Gold crisis management structure. These three levels deal with operational - tactical - strategic issues respectively.

Communication to internal and external parties during and after an incident forms an essential part of the incident response. The Crisis Management teams are required to assess the need for communication and if so, to communicate to clients, clients facing staff, other staff, and, from Silver on, also to supervisory authorities and in case of Gold to the press.

Client communication is to be initiated as soon as possible after the calling of a crisis management meeting. The Commercial Crisis Management guide also gives guidelines on the message contents.

**Office recovery**

ESES CSDs have implemented a cross-border recovery and back up site strategy for staff, with geographically-dispersed business operation sites to limit the risk that a single event will impact a main site and its back up. Business resumption is tested on a regular basis to make sure that in case one site is unavailable, all critical activities (including DC) can be operated from another site.
Review and testing

The Business Continuity Policy is reviewed annually and considers changes to Euroclear’s risk profile, business objectives, operational environment, legal and regulatory requirements and market expectations.

The main BCP scenarios tested include all scenarios listed in CSDR such as loss of office, staff, infrastructure, critical provider and financial crisis impacting the market. The different root causes that may lead to such impacts are identified in ESES’s Business Continuity Strategy Board Policy. A formal BCP test framework is maintained indicating how and when each element of the plan is tested. The test framework helps ensure that all elements of the plan are tested periodically. Reporting of the testing and its outcome is shared with management, Audit and Risk Committee and the Euroclear group.

These tests include:

- IT disaster recovery testing: Production is transferred from data centre one to data centre two at least four times per year and once per year to data centre three
- Cross-entity rebalancing of activities and office switch tests, simulating the loss of staff or the loss of a single office are conducted under an annual specific timetable of various tests for each department running any critical function
- several crisis management exercises (alerting tests or simulation exercises) are organised each year
- testing of agreed arrangements with external parties (clients, business partners, critical providers, other FMIs...)
- involvement in market-wide exercises where and when they are organised

The BCP solution and recovery plan including the switch of processing between sites is designed not to impact clients. This means that clients will not know from which of the IT centres the services are provided, or if there was a switch of the processing site. There is no action for a client to take during a BCP test.

Please refer to Principle 13 (Participant-default rules and procedures) for further elaboration on the cases of participants default which is a specific type of possible incident that could cause disruption.

Key consideration (KC) 7: An FMI should identify, monitor, and manage the risks that key clients, other FMIs, and service and utility providers might pose to its operations. In addition, an FMI should identify, monitor, and manage the risks its operations might pose to other FMIs.

The ESES CSDs continuously seek to identify and manage risks posed to its business and the effective delivery of its services. They also endeavour to limit their own contribution to systemic risk and ensure they remain within their risk tolerance. To this end, the ESES CSDs have enhanced their approach to systemic risk, both from the perspective of its own resilience to systemic risk (i.e. a systemic risk crystallising in the market and hitting any of the CSDs in ESES) and its potential contribution to systemic risk (i.e. a systemic risk coming from the ESES CSDs and impacting the market).
The Operational Risk Board Policy sets out key operational risk management principles. Specific policy handbooks, in line with the general framework, define methods for the identification, measurement, monitoring and reporting of operational risks, arising from its key participants, other FMIs, and service and utility providers. These include:

- business continuity management
- client admission & on-going monitoring
- information security management
- Information Technology
- services by Third Parties (covering Outsourcing/Critical Service Providers and Links, Market infrastructure and Agents)

Users and links
An operational failure of a large participant or another FMI (such as a CCP) will pose an indirect risk to the ESES CSDs, by impacting their counterparts and therefore the efficiency of the systems, e.g. the settlement ratio. Such risks are mitigated in several ways, for example by:

- The ESES CSDs’ operating model, including (but not limited to):
  - client admission criteria and the continued follow-up of these by regular due diligence reviews
  - continuous monitoring of system usage and incitements for clients to follow the established user rules
- The ESES CSDs’ contingency arrangements, including (but not limited to) offering clients the possibility to use different network providers.

In the framework of its market links, the ESES CSDs review operational risks aspects of the receiving CSDs with which they have links. See Principle 20 for more details.

Critical Service Providers (CSP)
Euroclear may outsource certain services and activities to third party providers inside or outside of the Euroclear group.

Euroclear has designed a robust outsourcing framework, which consists of a defined life cycle which relies on a strong governance, an internal control system and Euroclear best practices around the management of risks, including conflicts of interests.

Service delivery is reviewed on a regular basis. Services are measured and compared with targets to identify whether the objectives are met, and where applicable, what actions need to be taken to improve the service.

In line with the ESES CSDs continuity strategy, dependency with business partners that are essential to the delivery of ESES core services are identified, formalised and monitored. The services dependencies are tested at planned intervals, according to criticality of services they support, and at least once a year and when a significant change occurs or after operational incidents affecting the smooth provision of the services.

22 The ESES Network Management Policy Handbook defines the criteria for the set-up and evolution of a CSD link or counterpart.
Business continuity requirements towards third parties are translated in contracts or service level agreements between ESES CSDs and third parties and are legally binding.

**IT Services**

The IT services have been outsourced to Euroclear SA/NV, the parent company of the ESES CSDs, acting as a service provider. The relationship with the provider is defined in a formal agreement including service level agreements. Service delivery is reviewed on a regular basis through qualitative and quantitative KPIs. Corrective actions are requested when the agreed KPIs are not met. Since 12 September 2016, the ESES CSDs have outsourced the settlement to Target2securities (T2S). This outsourcing is governed by an agreement with the European Central Bank ECB.

**Risk posed to other FMIs**

The risks that ESES CSDs bears from or poses to other FMIs are identified and assessed under the principles set out in the ERM Framework Policy Handbook and in the Systemic Risk Policy Handbook. Processes under the systemic risk framework are mentioned also in Principle 3 KC 3.

In terms of business continuity, the BCP test scenarios include testing with other interdependent FMIs, as mentioned in KC 6. Additionally, the ESES CSDs participate in the market wide exercises coordinated by the French, Dutch and Belgian National Banks to ensure the ESES CSDs’ response is consistent with others in the financial sector. The objective is to test the financial stability in the market.

The ESES CSDs ensure the effectiveness of the service continuity management procedures with T2S by testing incident and crisis management processes with business partners and other counterparties. This includes the testing of client default procedures.

BCM ensures that arrangements with other CSDs or market infrastructures are robust and designed to minimise risks. The effectiveness of these tests are reported to the management and formally presented to the ESES ROC.
Principle 18: Access and Participation requirements

An FMI should have objective, risk-based, and publicly disclosed criteria for participation, which permit fair and open access.

Key consideration (KC) 1: An FMI should allow for fair and open access to its services, including by direct and, where relevant, indirect clients and other FMIs, based on reasonable risk-related participation requirements.

Access to Euroclear France, Euroclear Nederland and Euroclear Belgium is business driven, taking into consideration the regulatory framework and the risk profile the CSDs maintain as financial market infrastructures. The ESES CSDs, acting as operators of a system, are subject to constraints of local laws and policies on the jurisdictions the CSDs operating systems are established, resulting from the implementation of the SFD. The SFD lists the entities that are allowed to be a participant to the system, and it also allows EU member states to add other type of entities to be participants.

The possibility to act as Payment Bank in T2S for the purpose of settling against payment is bound by the conditions set by the Central Banks and not the CSDs (please see Principle 9 for more details).

Participation requirements

The ESES CSDs operate a fair, open and transparent access and participation process, with publicly disclosed, non-discriminatory participation requirements. The admission criteria are set out in the ESES Terms and Conditions and are publicly available on Euroclear website (my.euroclear.com).

Clients admitted in ESES include participants in the ESES CSDs System (i.e. Direct account holder and Securities only account holder, Indirect party or Fund order routing client) and other users (i.e. Issuers). The access criteria and requirements described in this principle apply to Clients other than Issuers, defined as “participants” for the purpose of Principle 18 and 19. Issuers may be admitted as Clients if their securities are eligible to be admitted in the CSDs according to the Terms and Conditions (Book I).

The ESES CSDs only have contractual relationship on their direct participants. Criteria apply to direct participants. For more details see Principle 19.

Any applicant participant must meet the following preliminary conditions:

- be established in a jurisdiction that is not subject to Sanctions or that is not subject to a call for action from the Financial Action Task Force (FATF) in the context of the fight against money laundering and terrorism financing;
- provide adequate information enabling the CSD to meet the applicable anti-money laundering and terrorism financing requirements that apply to it.
In order to be admitted as a participant, any applicant needs to belong to one of the following categories of persons:

- credit institutions within the meaning of Directive 2013/36/EC of the European Parliament and of the Council of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms, organised under the laws of a Member State of the European Economic Area;
- central securities depositaries of a Member State of the European Economic Area within the meaning of CSDR;
- national central banks participating in the European System of Central Banks;
- public institutions of a Member State of the European Economic Area;
- central counterparties (CCP) within the meaning of EMIR;
- any other category of persons listed in ESES Terms and Conditions.

The information and documentation to be provided by the Applicants is exhaustively mentioned in the Operating Manual - Part I. The generic information and documentation is common across the three ESES CSDs. Additional specific documents are required depending on local regulatory requirements.

The admission criteria

As described in the ESES Terms and Conditions, any applicant is required to meet the following admission criteria:

- **Technical and operational capability**
  An applicant must demonstrate it has both the staff and the technological infrastructure to meet the CSD’s operational and security requirements and the T2S operational requirements, if the applicant intends to interact directly with T2S. The applicant must also demonstrate an ability to maintain this capability on an ongoing basis, including in contingency situations.

- **Reputation in the market**
  An applicant must have a good name in the market. In making this determination the CSD will consider the applicant’s regulatory status, if any, reputation of management and whether the applicant is a company whose securities are admitted to trading on a regulated market. The applicant should also be located in a country with an appropriate regulatory environment.

- **Anti-money laundering program**
  The applicant must demonstrate that it has an adequate anti-money laundering programme in place which complies with applicable Law on prevention and detection of...
money laundering. In making this determination, the CSD shall consider the applicant’s location as well as its identification, control and reporting procedures.

- **Risk assessment**
  The CSD may decline to accept any applicant upon a risk-based assessment which indicates that admission of the applicant could compromise the CSD's ability to provide prompt, safe, accurate and orderly processing and settlement of transactions, or could represent a threat to the security, integrity or reputation of the CSD or the CSD System or is likely to be disruptive to other Clients. In making this assessment, the CSD will consider factors relating to the applicant’s risk control environment and will consider whether the applicant conducts regular risk assessments within its organisation in order to identify, quantify and prioritise risks against criteria relevant to its organisation.

The ESES CSDs may also impose additional conditions on applicants, for instance in order to avoid that the ESES CSDs become exposed to additional reporting, disclosure or other legal, tax or regulatory requirements. The admission of a Client cannot result in the CSD being in breach of a Law or Order not exposure the CSD to additional reporting, disclosure or other legal, tax, or regulatory requirements.

Access of other CSDs or FMI to the ESES CSDs (e.g. central counterparties, trading venues, etc.) can be granted by via standard access, customised access or an interoperable link. For all types of access the above criteria will apply. Depending on the type of links to be set up, Standard, Customised or Interoperable, the set up process may differ.

Acceptance or refusal of access requests is based on a comprehensive risk assessment, and follows the governance determined by CSDR, including for the assessments to be done for CSDs, requesting participant access, established within or outside of the EEA.

After a client has been admitted, monitoring is done to ensure the Client continues to meet the admission criteria. See KC 3 for more details. Clients are required to notify any material event or changes which may affect their ability to comply with the admission criteria.

**Testing**

To assess the applicant’s technical and operational capability, the applicant needs to successfully pass any test the CSD or, as the case maybe, the T2S operator, may reasonably request.

**Governance of the Admission Process**

The ESES Senior management is competent for granting or refusing access to any applicant, based on a documented recommendation made by a multidisciplinary internal forum.

The Senior Management of the CSDs shall notify each applicant of the acceptance or rejection of the application in writing. If an application is rejected, such written notification shall include the reasons for its rejection.
Appeal

If an applicant’s request for participation is refused, it has a right of appeal. The appeal process is set out in the ESES Contractual documentation and is publicly available on Euroclear website (www.euroclear.com).

Key consideration (KC) 2: An FMI’s participation requirements should be justified in terms of the safety and efficiency of the FMI and the markets it serves, be tailored to and commensurate with the FMI’s specific risks, and be publicly disclosed. Subject to maintaining acceptable risk control standards, an FMI should endeavour to set requirements that have the least restrictive impact on access that circumstances permit.

The ESES CSDs admission criteria mentioned above are justified in terms of safety and aim to limit either specific risks, including operational risks (technology capability criterion) and legal risks (legal capacity requirement), or risks in general (internal controls and risk management and ethical standards).

As noted above, the admission requirements are set out in the ESES Contractual documentation. All these are publicly available via Euroclear’s website.

Key consideration (KC) 3: An FMI should monitor compliance with its participation requirements on an ongoing basis and have clearly defined and publicly disclosed procedures for facilitating the suspension and orderly exit of a client that breaches, or no longer meets, the participation requirements.

Monitoring compliance

The ESES CSDs monitor clients’ compliance with the participation requirements described in KC1 and with which they must comply on a continuous basis. This monitoring is performed via the Sponsorship process.

A sponsorship consists of an initial KYC exercise upon admission, which is followed up by a regular KYC process. This process results in a review of the admission criteria with the final aim of either confirming that a participant continues to comply with the criteria or identifying non-compliance that can ultimately lead to exclusion from the CSD System. The frequency of the sponsorship review depends on the risk profile of the client. Sponsorships have to be updated and reapproved at increased frequency if the ESES CSDs have knowledge of events that have material adverse effects on their Clients (such as compliance issues made public).

The sponsorship review aims to:

- demonstrate the ongoing compliance of Clients with the ESES admission criteria;
- regularly monitor certain issues that have affected individual Clients since the last review;
- identify and assess potential risks arising from business relations with Clients and, if indicated, escalate these to the relevant governing bodies who can decide to increase due diligence on impacted Client or that may ultimately decide to suspend or terminate a Client; and
- avoid damage to Euroclear’s reputation and limit financial losses or liabilities deriving from
external events that impact the Clients.

The detailed analysis performed by various departments for each criterion triggers a score for the criteria (usually three possible values: sufficient, insufficient and watch). In case of non-compliance with one or several criteria, several actions may be undertaken, from increased monitoring of the Client, to suspension or termination of access. The Group Admission Committee and/or ESES Senior Management will be involved, as the case may be, for decision on required actions.

If there is an immediate risk for the system operated by each of the ESES CSDs, the case is escalated swiftly to the ESES Senior management for decision via the existing escalation channels.

**Clients' obligations**

Clients are required to notify any material event or changes which may affect their ability to comply with the admission criteria.

ESES Clients also agree to comply with any request, which ESES CSDs may reasonably make from time to time, for additional documentation which may evidence such continued compliance.

**Suspension, disconnection or termination of clients**

The ESES Terms and Conditions list the situations where an ESES CSD may terminate, disconnect or suspend the contractual relationship with a Client. The termination or suspension, to the extent permitted by applicable Law, can apply at any time, by written notification, with effect from such date and time as the CSD may specify. Please see Principle 13 – Participant default rules and procedures for more details.

The suspension of the access of a Client to all of the services and functionalities may be decided if such Client fails to comply to the admission criteria or under the conditions set by the Terms and Conditions.

The consequences of suspension, disconnection or termination are also described in the Terms and Conditions. These rules aim at minimising the disruption to the CSD system and its participants and the CSDs that the suspension, disconnection or termination of a client could cause. An appeal may be lodged against any decision of the CSD on an application to become a Client or a suspension or termination of a Client as set out in Book II or the Operating Manual.
Principle 19: Tiered Participation Arrangements

An FMI should identify, monitor, and manage the material risks to the FMI arising from tiered participation arrangements.

**Key consideration (KC) 1**: An FMI should ensure that its rules, procedures, and agreements allow it to gather basic information about indirect participation in order to identify, monitor, and manage any material risks to the FMI arising from such tiered participation arrangements.

The ESES CSDs do not have tiered participation arrangements. They only have a contractual relationship with their direct participants. The ESES CSDs do not have any contractual relationship with the underlying clients of their participants and do not interfere in the contractual arrangements between their participants and the underlying clients of those.

The ESES CSDs manage risks posed by their direct participants on the basis of the criteria detailed in Principle 18. The ESES CSDs believe that currently they are not exposed to material risks arising from the clients of their participants. In particular, the ESES CSDs do not run any credit risk (except the payment of invoices from their direct participants) or liquidity risk resulting from the settlement activity as they settle transactions in central bank money (as detailed in Principle 9). Besides, no material operational risks arise linked to indirect participant. Nevertheless, disruptions in the activity of a large underlying client of a participant could possibly affect the efficiency of settlement in the ESES system. Hence identifying these large underlying clients and ensuring that the concerned participant has the adequate operational setup in contingency situations is important to minimise the risks other participants could face.

In accordance with the EU Commission Delegated Regulation 2017/392 implementing CSDR, the ESES CSDs have obligations to monitor operational risks that may be posed by key participants. This requires to identify “Key Participants” (as defined in article 67(1) of the CSDR RTS) and, potentially, the underlying clients of these Key Participants. The ESES CSDs have the right, under ESES Terms and Conditions Book I, to ask key participants to provide information related to their clients responsible for a significant portion of the transactions processed by the CSDs.

The ESES CSDs gather information on underlying client’s participants via the following means:

**Key Participants**

The criteria to be considered as a Key Participant in one of the ESES CSD are based on the following dimensions (assessed at the level of each CSD):

- transaction volumes;
- level of interdependency with other participants and the SSS of the CSD as a whole in the event of an operational problem affecting the smooth provision of services by the CSD;
- material dependencies between participants and participants’ clients, where such
clients are known to the CSD, that might affect the CSD.

The ESES CDSs monitor the above by:

- identifying Key Participants on an ongoing basis;
- ensuring that Key Participants continue to meet the access criteria;
- identifying Key Participants’ underlying clients responsible for a significant proportion of transactions processed by the CSD; and
- gathering, if relevant, additional information about dependencies on any of their underlying clients.

Any identified risk is managed in line with the Corporate Risk Board Policy.

The above mentioned framework is being furthered enhanced, among other things to expand monitoring to large participants (on top of key participants) as well as on their underlying clients.

**Account setup**

All accounts opened in the books of the ESES CSDs are identified as either proprietary, client omnibus or client segregated accounts.

ESES CSDs participants have full flexibility on their account structure at the level of the CSD:

- to segregate their own assets from those of their underlying clients; and
- to segregate client assets via omnibus (possibly per business line) or individual structure.

The identification of the ESES CSDs’ participants and their clients is performed in line with both applicable AML regulations and internal risk based approach.

**Key consideration (KC) 2: An FMI should identify material dependencies between direct and indirect clients that might affect the FMI.**

The identification of material dependencies is directly linked to concentration of activity between direct and indirect participants. The analysis performed by the ESES CSDs shows that large participants do not demonstrate large concentration of activity in single underlying client accounts. They mainly operate in a client omnibus structure.

The ESES CSDs are able to identify dependencies between their direct participants and their underlying clients on the basis of the account structure set by the participants. If a clear dependency would be detected, then the ESES CSDs will reach out to the participant to discuss possible mitigating actions.

**Key consideration (KC) 3: An FMI should identify indirect clients responsible for a significant proportion of transactions processed by the FMI and indirect clients whose transaction volumes or values are large relative to the capacity of the direct clients through which they access the FMI in order to manage the risks arising from these transactions.**
The ESES CSDs review the depot and activity levels of their participants on an annual basis to identify whether there is a material concentration of activity (measured by either depot or transactions) with one or more of the direct participants. The ESES CSDs then review whether there is a material concentration of activity at a segregated client account level within any of such participants to establish whether there is potentially a significant proportion of activity processed by them that is being conducted on behalf of an underlying client of a participant. A threshold has been defined to monitor material concentration in segregated accounts.

As noted earlier, the ESES CSDs assess and monitor the capacity of their direct participants to manage the activity conducted with them at an aggregated level. Please refer to Principle 18.

**Key consideration (KC) 4: An FMI should regularly review risks arising from tiered participation arrangements and should take mitigating action when appropriate.**

As mentioned in KC 1, ESES CSDs do not recognise tiered participation arrangements and do not have a contractual relationship with the underlying clients of their participants. Based on current analysis, underlying clients of participants do not create material risks for ESES CSDs.

The admission criteria, applicable to direct participants, and the admission process are documented in internal policies as well as the policy around recertification of clients in regards to their compliance with the access criteria. These policies are reviewed and signed off every two years. Ad hoc reviews can take place if required.

Concentration risk is assessed as per KC 3. Other risks (such as AML, technical or operational capacity), and their materiality, are monitored and assessed at the level of the direct Client, whether proprietary or on behalf of underlying clients. It is the duty of the first line of defence to escalate in line with ESES ERM framework (see principle 3) whenever a potential risk is identified.
Principle 20: FMI links

An FMI that establishes a link with one or more FMIs should identify, monitor and manage link-related risks.

Key consideration (KC) 1: Before entering into a link arrangement and on an ongoing basis once the link is established, an FMI should identify, monitor and manage all potential sources of risk arising from the link arrangement. Link arrangements should be designed such that each FMI is able to observe the other principles in this report.

Governance

ESES CSDs have established a framework and governance for the set up and monitoring of CSD links. The establishment of links with other CSDs, fall under the responsibility of each CSD of ESES individually.

ESES Senior Management are accountable for the opening/closing of a CSD link and the approval of receiving CSD. The relevant ESES CSD has the responsibility for the set up and maintenance of its CSD links, including the assessment of the receiving CSDs and its respective market environment.

The principles of the setup and monitoring of the links are described in the ESES Network Management Policy Handbook, which is updated and reviewed when applicable and is approved on a yearly basis by the ESES Senior Management.

Process:

Before setting up a CSD link, the relevant ESES CSD conducts a high level risk assessment of the prospective link, which is subject to the approval of ESES Senior Management. Based on the result of the risk assessment, ESES Senior Management can approve or refuse the setup of the prospective link.

Pre-clearance of prospective links

This pre-clearance high level risk assessment is made against the relevant criteria in line with PFMI and CSDR criteria. The criteria analysed is linked to: market environment (i.e. analysis of the jurisdiction where the receiving CSD is located) and assessment of the receiving CSD.

Upon approval by ESES Senior management of the high level risk assessment, the process for the setup of the link, with a full assessment of the link arrangement, is further elaborated.

Link set up

The set up of a link implies a full risk assessment, following the ERM framework described in Principle 3, which is performed both at the level of the market environment and the receiving CSD:

- **Market environment assessment** - in-depth market risk assessment is instigated, requiring a positive assurance on a wide range of criteria including amongst others:

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23 List of CSD links is available in the ESES – T2S Detailed Service Description – Matching and settlement services
good understanding of the local regulatory requirements, ownership restrictions, asset protection mechanisms with a focus on insolvency situations, tax implications, disclosure requirements, account structure, requirements around anti-money laundering and anti-terrorist financing, political stability and government effectiveness and economical and financial stability of the country.

- **Receiving CSD assessment** - Prior to setting up a link, a rigorous risk assessment is performed on the receiving CSD based on a number of criteria in line with applicable regulations. The criteria to assess the receiving CSD include requirements related to possible account structures, asset accessibility, compliance, legal basis, business continuity, and operational capacity amongst others. As per obligations set out in CSDR, when a link is set up with a Non-EU CSD, assurance is obtained through an even more elaborated Due Diligence process than a link with an EU CSD.

Based on the outcome of these assessments, a recommendation is submitted to ESES Senior Management, who is responsible for the approval/refusal of a new link.

**Monitoring of links**

Once the CSD link is set up, on-going monitoring of the CSD link and receiving CSD takes place to ensure compliance with the ESES CSDs criteria. Monitoring is done on a continuous and cyclical basis. This monitoring consists of a full review of all the elements impacting the CSD link, amongst others:

- market risk assessment (i.e. continuous monitoring of compliance and ethical risks, macro-economic situation and financial risks, market initiatives and their impacts);
- CSD links end-to-end risk assessment (including confirming market practices, setup and operational flows, reassessing the receiving CSDs, link arrangements, enforceability of contractual arrangement, business continuity processes and IT security measures).

This monitoring to identify and manage risks linked to any changes in the CSD link is done through:

- review of the contractual arrangement like the Terms and Conditions of the receiving CSD;
- annual due diligence review and where relevant ad hoc on-site visit;
- annual performance reviews to ensure that service levels are in line with the ESES CSDs’ requirements;
- continuous monitoring of financial strength and creditworthiness
- CSD link review

Should any material change be identified compared to the initial or last assessment, a formal assessment and recording of the new or changing risks is done in line with ERM framework.

Every year, all the CSD links and receiving CSDs are approved by the ESES Senior Management.

Any material change to the CSD links should be reported to the ESES Boards by ESES Senior Management.
Key consideration (KC) 2: A link should have a well-founded legal basis, in all relevant jurisdictions, that supports its design and provides adequate protection to the FMIs involved in the link.

As part of the assessment described under KC 1, the relevant ESES CSD assesses the applicable local legal framework including amongst others: standard of care and liability undertaken by each of the parties, asset protection/insolvency proceedings and attachment/lien and settlement finality, assets accessibility, securities/services review, confidentiality, data confidentiality and tax analysis. This assessment is reviewed on a regular basis to ensure changes in law are captured.

At CSD links level, the relevant ESES CSD ensures the establishment of a contractual arrangement with an unambiguous choice of law, clearly setting out the respective rights and obligations of all parties.

For all CSD links they maintain, the ESES CSDs obtain a legal opinion from an external law firm with expertise in that jurisdiction, which covers the validity and enforceability of the contracts, asset protection and security eligibility matters amongst others. Changes to receiving CSD Terms and Conditions are monitored regularly and revisions of are performed when published e.g. due to changes in local legislation or legislation applicable to the ESES CSDs, new instruments or services being added to the link or set up of the link being changed.

Key consideration (KC) 3: Linked CSDs should measure, monitor, and manage the credit and liquidity risks arising from each other. Any credit extensions between CSDs should be covered fully with high-quality collateral and be subject to limits.

No credit extension takes place by or to the linked ESES CSDs.

Credit and liquidity risks are closely monitored as part of the link assessment and any risks that are identified are appropriately assessed, in accordance to ESES standards, managed, continuously monitored and reported accordingly.

ESES CSDs clients cash accounts opened at NCBs, are used for central bank money settlement for CSD links set up with other CSDs in the T2S system. For CSD links outside the T2S system, settlement is only possible on a FoP basis. Please see Principle 9 for more details.

Key consideration (KC) 4: Provisional transfers of securities between linked CSDs should be prohibited or, at a minimum, the retransfer of provisionally transferred securities should be prohibited prior to the transfer becoming final.

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24 List of CSD links is available in the ESES – T2S Detailed Service Description – Matching and settlement services
Provisional transfers are not permitted between the linked CSDs and should a provisional transfer of securities happen between linked CSDs, retransfer of securities prior to the first transfer becoming final is prohibited.

**Key consideration (KC) 5:** An investor CSD should only establish a link with an issuer CSD if the arrangement provides a high level of protection for the rights of the investor CSD’s clients.

The initial selection process for the opening of a CSD link is primarily based on the existence of a high level of protection of participant’s assets under the local market standards and legal framework.

The ESES CSDs bilateral agreements, standard Terms and Conditions as well as the legal opinions, all cover the protection of participants’ rights assuring that receiving CSDs do not have entitlement to the securities held in the account, the liabilities and obligations in regards to the registration, transfer and custody of securities must be enforceable between the ESES CSD involved in the link and the receiving CSD.

In line with regulatory requirements, ESES CSDs also ensure control processes are in place to reconcile on a daily basis all CSD links.

**Key consideration (KC) 6:** An investor CSD that uses an intermediary to operate a link with an issuer CSD should measure, monitor, and manage the additional risks (including custody, credit, legal, and operational risks) arising from the use of the intermediary.

The ESES CSDs currently only maintain direct links with other CSDs.

In the future, should the ESES CSDs links require an intermediary, the governance in place for intermediaries will be applied so that appropriate assessment and monitoring process are in place to ensure the risks are managed.
Principle 21: Efficiency and effectiveness

An FMI should be efficient and effective in meeting the requirements of its participants and the markets it serves.

**Key consideration (KC) 1:** An FMI should be designed to meet the needs of its participants and the markets it serves, in particular, with regard to choice of a clearing and settlement arrangement; operating structure; scope of products cleared, settled, or recorded; and use of technology and procedures.

As a financial market infrastructure, the ESES CSDs mission is to provide post-trade services that support safe, resilient and efficient capital markets in Belgium, France, the Netherlands and across Europe. As a leading domestic group of issuer and investor CSDs connected to the T2S system, the ESES CSDs provide a range of cost-effective and value-added services that meet the financial markets’ evolving requirements. Together, the ESES CSDs strive to build a strong and sustainable future that benefits both clients and the capital markets they operate in.

The ESES CSDs want to maintain the high level of satisfaction of their traditional client base while enhancing the quality of their Value Added Service to satisfy new international players and facilitate their on-boarding. The ESES CSDs are monitoring clients’ satisfaction, notably via client surveys and User Committees described below, and are taking remedial actions when required. The ESES CSDs will continue to strengthen its Issuer CSD franchise. In addition, they will also pursue its investor CSD strategy to gradually position ESES as a pan-European CSD with new international clients, new European links and an improved collateral management offer.

The ESES CSDs actively monitor Clients’ settlement behaviours to promote and maintain high standards of settlement efficiency. The ESES CSDs have a very low risk appetite which leads them to ensure the highest levels of system availability, preventing that incidents may impact Clients or, when it happens, ensuring that problems are resolved rapidly with no or minimal external effects.

The ESES CSDs, thanks to close relationships with their Clients, constantly evolve to meet their participants’ (or markets’) needs. For instance, in the frame of Asset servicing, the ESES CSDs have been working on the harmonisation of Corporate Actions Standards. For Settlement services, they joined T2S platform in 2016. These projects are always closely monitored, as part of the ESES CSDs’ monitoring of goals and objectives, from a budget and control perspective.

**ESES CSDs User Committees & ESES CSDs Users Forum and their roles**

The ESES CSDs have always had users committees in place called the MAC (Market Advisory Committee). These committees have been renamed ‘Users Committees’, and form part of the internal governance of the ESES CSDs. There is one User Committee per ESES market, to specifically address local topics, and there is one ESES User Committee, transversal to the three ESES markets,
to tackle topics that impact the three CSDs. The User Committees are composed of representatives of participants and issuers in the SSS. The User Committees provide independent advice to the Board of the CSD, on key arrangements that impact the CSD’s members, i.e.:

- criteria for accepting issuers and participants;
- service level, including relevant significant developments needed to adapt to legal, regulatory, tax or other market changes impacting the way participants and/or issuers interact with the CSD;
- review and/or testing of the default procedures of the CSD (excluding any banking related aspects).

Additionally, the User Committees play an important role on following topics:

- are informed by the CSD and acts as appropriate on audit findings relating to the topics covered in its mandate;
- are regularly informed of the performance of the CSD’s SSS;
- may submit a non-binding opinion to the ESES Board containing detailed reasons regarding the pricing structures of the CSD.

The Terms of Reference of ESES CSDs User Committees are made public on Euroclear website.

The ESES Users Forum is a cross-border consultative group set up by Euroclear within ESES domestic markets. It is a forum of discussion and recommendations that reports to the ESES CSDs User Committees. The ESES Users Forum shall be called on a quarterly basis, preferably one month before the ESES User Committees meetings, to be in a position to report detailed recommendations, if any. It is a group composed of markets’ representatives whose objectives are:

- providing guidance on conflicting priorities for functionalities improvements and core products evolutions serviced by the ESES platform;
- advising on and coordinating consultations with local market groups (AFTI, DACSI, MEC) or local authorities, when required;
- providing guidance on issues requiring operational or market practices harmonisation in the scope of ESES. Such issues include, without limitation: the settlement, asset servicing and issuer services offer on ESES, developments required by legal, tax, regulatory or crisis reasons; it encompasses the efficiency of each CSD as a market infrastructure.

As a conclusion, the ESES Users Forum should reflect the views and needs for domestic services of the users active on the ESES platform.

**ESES CSDs and T2S platform**

The ESES CSDs joined the T2S platform in 2016 and form part of its governance. The T2S platform is owned by the Eurosystem, and some groups support the Eurosystem in running T2S as part of the governance framework. ESES CSDs have an active role in several working groups such as AMI-SeCo and several market and technical groups.

Being an active member in these groups allows the ESES CSDs to voice their Client and market requests and concerns.
**ESES CSDs and the market associations**

The ESES CSDs are also part of the market associations on Securities services of the three ESES markets:

- in France: in the AFTI (Association Française des professionnels des Titres)
- in Belgium: in Febelfin
- in the Netherlands: in the DACSI (Dutch Advisory Committee Securities Industry)

Being part of these associations allows the ESES CSDs to have direct interactions with their participants and to be close to the markets’ needs.

ESES CSDs are also a member of the ECSDA (European CSDs Association), where they chair various working groups (Compliance, Harmonisation standards...)

**ESES Clients survey**

On a yearly basis, the ESES CSDs conduct a survey with their Clients. It allows the CSDs to collect and evaluate their clients’ feedback. This survey enables the ESES CSDs to assess the level of satisfaction and Clients’ needs for the existing services offered by them. Based on this feedback, the ESES CSDs assess the market’s needs for further key service enhancements that may be introduced over the following months and years. This survey comes in addition to client visits that allow the assessment of Clients’ needs on a bilateral basis.

**Other initiatives**

To understand the needs of Clients and their evolution, ESES CSDs perform regular competition analysis, and follow up market developments and product/service evolution through the review of press articles and specialised publications, their presence in various conferences and round tables and ad-hoc consultation with participants and market players. These actions are key triggers to support the conception and the development of ESES CSDs business strategy.

The ESES CSDs are also members of a series of advisory groups in the financial and post-trade industry. It enables them to adapt to the market evolution and to the needs of their Clients. The ESES CSDs answer consultations on regulatory evolutions that can impact them and the services they offer to their participants.

**Key consideration (KC) 2: An FMI should have clearly defined goals and objectives that are measurable and achievable, such as in the areas of minimum service levels, risk-management expectations, and business priorities.**

The Board defines each year the ESES Balanced Score Card (BSC) objectives against strategic priorities. It includes financial, business, operational, risk and other objectives. The Board has defined among other objectives related to the settlement efficiency, system availability, the control environment, the cyber resilience and risk appetite. It receives regular status updates and reviews the performance of the CSDs against the BSC objectives each year.

Based on the objectives set by the Board, the MCs define detailed objectives for each support divisions (e.g. IT departments monitor system performance, availability and deadline indicators,
Finance monitors invoice processes, Legal monitors their capability to provide timely legal advice. The MC has defined for instance the following KPIs concerning system availability: system uptime, respect the SLA with T2S, number of incidents. The ESES CSDs goals and objectives are translated into KPIs with measurable targets. The setting of these KPIs are discussed and agreed on by the Management Committee and the support divisions responsible for the achievement of the KPI.

The ESES CSDs have defined over 30 KPIs related to the effectiveness of their operations.

Among other, ESES CSDs are measuring:

- the system availability (system uptime, respect of SLA with T2S, Incidents)
- settlement efficiency
- the Internal Control System (solving weaknesses timely, recording incident post mortem, timely, delivery of the Positive Assurance Report and Operational Dash Board, claims, etc.)
- the control environment of Business Continuity (keep the BIA up-to-date, timely completeness of the BCP)
- operational readiness before all business project launches.

**Key consideration (KC) 3: An FMI should have established mechanisms for the regular review of its efficiency and effectiveness.**

The adequacy of the objectives linked to the efficiency and effectiveness of the systems operated by the ESES CSDs, are re-assessed at the time of objective setting in the ESES BSC, and on ad hoc basis if required.

The ESES CSDs CEO and her direct reports review the progress of the agreed KPIs on a regular basis depending on the service. A full assessment of all KPIs is performed each year.

The outcome of the achievement of the goals and objectives is presented to the ESES CSD Boards twice a year.
Principle 22: Communication procedures and standards

An FMI should use, or at a minimum accommodate, relevant internationally-accepted communication procedures and standards in order to facilitate efficient payment, clearing, settlement, and recording.

**Key consideration (KC) 1: An FMI should use, or at a minimum accommodate, internationally accepted communication procedures and standards.**

**Communication procedures & standards**

The ESES CSDs offer a range of connectivity solutions and communication procedures to their participants and other market infrastructures they interface with. Such solutions leverage existing internationally agreed standards i.e. mostly ISO 15022 or 20022.

Interaction between ESES entities and their clients is either application-to-application (i.e. STP communication solutions via EuroclearConnect for STP) over different networks (SWIFT, BT and Public Internet) or user-to-application (i.e. screens via EuroclearConnect for screens or dedicated browsers). Key services are available to ESES participants via both communication means.

In recent years, the ESES CSDs have continuously invested in ISO standards, suppressing non-standard protocols where possible. The ESES CSDs have also made important investments in ISO for funds (ISO 20022) and collateral management (ISO 15022), thus allowing its market participants and other infrastructures to benefit from the advantages of ISO, making it easier for them to connect to these Euroclear services.

Over the years to come, ESES entities will continue to apply this approach to their different connectivity solutions.
Principle 23: Disclosure of rules, key procedures, and market data

An FMI should have clear and comprehensive rules and procedures and should provide sufficient information to enable clients to have an accurate understanding of the risks, fees, and other material costs they incur by participating in the FMI. All relevant rules and key procedures should be publicly disclosed.

Key consideration (KC) 1: An FMI should adopt clear and comprehensive rules and procedures that are fully disclosed to clients. Relevant rules and key procedures should also be publicly disclosed.

The rules of the systems operated by Euroclear France, Euroclear Nederland and Euroclear Belgium are documented in the Euroclear Contractual Documentation described in Principle 1 KC2.

The Euroclear Contractual Documentation contains the description of the key rights, responsibilities and obligations of the ESES CSDs and the Clients and the description of the services offered by ESES CSDs to Clients.

All those documents are available on Euroclear’s website (login and passwords are provided upon request) and detail on:

- the rules for amending the contractual documentation;
The amendments to the ESES Terms and Conditions are communicated to the participants via Newsletters and via www.euroclear.com.

Additionally, the Triparty Collateral Management services issued respectively by Euroclear France and Euroclear Nederland are documented in specific contractual agreements which form part of the Collateral Management Service Documentation.

The readability of the Euroclear Contractual Documentation and Collateral Management Service Documentation is ensured through the use of plain language.

The ESES CSDs ensure that the contractual documentation is clear and understandable by:

- designing a clear contractual structure where the hierarchy and purposes of each document is unambiguous;
- documenting legal and operational information in different and clearly distinguished parts of the documentation allowing to keep the documents clear for the targeted audience;
- drafting legal aspects of the documentation according to professional legal drafting standards, such as Euroclear’s ‘Tone-of-Voice’ principles;
- incorporating feedback from external and internal stakeholders as much as possible to enhance the clarity of such documents.

The ESES CSDs also publish on the website a set of documents to provide further information on its services and potential risks borne by the Clients including e.g.:

- the ISAE 3402 report
- The Rights of Clients to Securities Deposited in the ESES CSDs
- CPMI-IOSCO Disclosure Framework
- Due diligence pack which elaborate replies to industry standardised questionnaires

Amendments to ESES contractual documentation are consulted with ESES Clients whenever the changes, in the ESES CSDs reasonable opinion, have a material adverse effect on clients, or when required by law, prior to the relevant changes becoming effective. Participants are consulted through the User Committees.

**Key consideration (KC) 2:** An FMI should disclose clear descriptions of the system’s design and operations, as well as the FMI’s and clients’ rights and obligations, so that clients can assess the risks they would incur by participating in the FMI.
Detailed Service Descriptions are available to Clients describing the ESES CSDs system’s design and operations and detailing how the service is offered by the ESES CSDs. All DSDs are accessible via the Euroclear website.

DSDs are drafted in English and split by service. They are updated whenever needed.

The ESES CSDs have issued common DSDs for settlement, liquidity management, collateral management, custody, connectivity and subscriptions, new issues and registered securities. Additionally, there are DSDs which are specific to services offered by different CSDs in ESES. The DSDs, among other documents, complement the ESES Terms and Conditions and give the Clients a view on the design and operations of the specific services and the generic risks as well. Rights, obligations and risks of ESES CSDs participants are detailed in ESES Terms and Conditions, via the chapters covering:

- Duties of the CSD
- Business continuity
- Duties of the client

Finally the “Rights of Clients to Securities Deposited in the ESES CSDs” highlights any potential theoretical risk related to the loss of assets and the insolvency proceedings that could affect the ESES CSDs.

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**Key consideration (KC) 3**: An FMI should provide all necessary and appropriate documentation and training to facilitate clients’ understanding of the FMI’s rules and procedures and the risks they face from participating in the FMI.

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Euroclear offers various training options to help Clients get the best out of its range of products and services:

- local courses
- online training
- e-Learning
- on-site visit

This is complemented by regular Newsletters, brochures and other material published regarding specific topics to promote adequate understanding of its rules and procedures as well as the risk they may face from being a Client of ESES CSDs.

Additionally, the ESES CSDs provide training to the participants either bilaterally or collectively.

In addition, testing and training is available preceding changes or system upgrades.

The readability/clarity of the contractual documentation as a whole is ensured through the use of plain language.

In compliance with CSDR requirements, ESES CSDs have implemented a dedicated ‘complaint section’ on the public website and on my.euroclear.com, to provide Clients with a means to convey any complaints they may have about the services.
All ESES CSDs tariff information is publicly available on www.euroclear.com, under Tariff brochure. This brochure sets out the fees that are charged for the services provided by Euroclear Belgium, Euroclear France and Euroclear Nederland and contains two sections:

(i) a section with common services for the three ESES CSDs and

(ii) a section for specific services per CSD in ESES.

The brochure applies to all clients of the ESES CSDs, except issuers. The fees applicable to issuers can be found in the tariff brochures applicable to issuers for Euroclear Belgium, Euroclear France and Euroclear Nederland.

These documents provide detailed information on the applicable fees for each type of service and, where relevant, the applied volume discounts. Price examples are provided to help clients reconciling invoices with the published tariff.

In the tariff brochures, the ESES CSDs publish the applicable fee for each type of service, including for core services referred to in Section A of CSDR in relation to a securities issue and for ancillary services referred to in Section B of the same Annex. It facilitates the comparison of offers and allows clients to anticipate the price they shall have to pay for the use of services.

The ESES CSDs will update the tariff brochures before the implementation of a tariff change. In case it has an adverse impact on participants, the ESES CSDs aim, as a matter of good practice, to publish the tariff change at least 10 business days in advance. Depending on the nature, magnitude and topic of the tariff change, ESES CSDs may elect to further inform Clients and the public through Newsletters, user committees or via the media. This is a judgment call rather than a set procedure.

The ESES CSDs publish an updated CPMI-IOSCO disclosure framework on regular basis, and upon material changes. The previous disclosure framework was published in 2016.

Material information on services provided to the CSD Clients, both on common services provided by all ESES CSDs as well as CSD specific elements, is disclosed predominantly through digital channels. These updates include service developments and enhancements, market news and any relevant system changes impacting participants, as well as rights and obligations of participants. Information is released regularly and in a timely manner.

In terms of quantitative information, statistical data is published regularly on Euroclear’s website, in additional to statistical information provided to supervisors.

The ESES CSDs also release a description of the systems and associated controls done for the three CSDs via ISAE 3402 report disclosed on annual basis.
Updates are communicated via DSDs or in terms of reference, Newsletters, alerts, as well as updates on the website depending on the nature of the change. Although all Clients have access to the information, certain type of information is available following subscription from Clients.

All information mentioned in this Principle is available in English and French when relevant.
Glossary

AFTI  Association Française des professionnels des Titres
AFM  Autoriteit Financiële Markten
AMF  Autorité des Marchés Financiers
AML  Anti-Money Laundering
BCM  Business Continuity Management
BCP  Business Continuity Plan
BCRA  Business Continuity Risk Assessments
BdF  Banque De France
BIA  Business Impact Analysis
BSC  Balanced Scorecard (a strategic planning and management approach)
BRRD  Directive 2014/59/EU establishing a framework for the recovery and resolution of credit institutions and investment
CCP  Central Counterparty/Clearinghouse
CEO  Chief Executive Officer
CFO  Chief Financial Officer
CISO  Chief Information Security Officer
CoI  Conflict of Interest
CRO  Chief Risk Officer
CSDR  Central Securities Depositories Regulation (EU Regulation 909/2014)
CSP  Critical Service Provider
CTO  Chief Technology Officer
DACSI  Dutch Advisory Committee Securities Industry
DC  Data Centre
DCA  Dedicated Cash Account
DNB  De Nederlandsche Bank
DRP  Disaster Recovery Plan
DSD  Detailed Service Description
DvP  Delivery versus Payment
EBA  European Banking Authority
EBP  Extreme But Plausible
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>PAR</td>
<td>Positive Assurance Report</td>
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<tr>
<td>PoA</td>
<td>Power of Attorney</td>
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<tr>
<td>RAC</td>
<td>ESES Risk Assessment Committee</td>
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<tr>
<td>RAF</td>
<td>Risk Appetite Framework</td>
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<td>RCSA</td>
<td>Risk &amp; Control Self Assessment</td>
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<tr>
<td>ROC</td>
<td>ESES Risk, Local Security and Operating Committee</td>
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<td>RTO</td>
<td>Recovery Time Objective</td>
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<td>SGA</td>
<td>Securities Giro Act</td>
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<td>SFD</td>
<td>Settlement Finality Directive (EU Regulation 98/26/EC)</td>
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<td>SLA</td>
<td>Service Level Agreement</td>
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<td>SOP</td>
<td>Standard Operating Procedure</td>
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<td>SSA</td>
<td>Shared Services Agreement</td>
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<td>SSS</td>
<td>Securities Settlement System</td>
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<td>STP</td>
<td>Straight Through Processing</td>
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<td>T2S</td>
<td>Target 2 Securities</td>
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