Self-Assessment

of CCP Austria's compliance with CPSS-IOSCO Principles for FMIs and disclosure framework associated to the Principles for FMIs

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Self-Assessment of CCP Austria's compliance with CPSS-IOSCO Principles for FMIs and disclosure framework associated to the PFMIs	Public Document

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Change Log[1]

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V 1.0	30.12.2016	Initial version
V 1.1	06.08.2019	Review and update of publication
V 1.2	21.04.2021	Review and update of publication
V 2.0	31.12.2022	Inclusion of the clearing service for the Electricity Spot Market Review and update of publication

[1] This Change Log is only used for valid versions; CCP.A-internal consultations in the preparation or change process are not shown.

Content

I. Executive Summary

The Principles for Financial Market Infrastructures (hereinafter PFMI) were established in April 2012 by the Committee on Payment and Settlement Systems (CPSS) alongside the Technical Committee of the International Organisation of Securities Commissions (IOSCO) in order to harmonise and, where appropriate, strengthen the existing international standards for financial market infrastructures, which includes central counterparties (CCPs). In addition, a Disclosure Framework for FMIs and an Assessment Methodology for the PFMIs were published, which aim to promote the necessary observance.

CCP Austria (hereinafter CCP.A) performed a self-assessment of its compliance with the CPSS-IOSCO PFMIs in accordance with the CPSS-IOSCO Assessment Methodology. Based on the results of this assessment, CCP.A is convinced that all CPSS-IOSCO PFMIs, which are applicable to its business, are sufficiently observed.

The purpose of this self-assessment is to provide meaningful information for clearing members about CCP.A's obligations and main procedures, as well as to inform relevant authorities and the broader public. This enables clearing members to have a more profound understanding of the risks and costs they incur by participating in CCP.A's clearing services, while also facilitating them in the due diligence processes of FMI by disclosing qualitative information in a standardised way.

II. General Background on CCP.A

CCP.A clears all those transactions that were concluded by trading with CCP-eligible securities at the Wiener Börse AG, the Vienna Stock Exchange facility, as well as all transactions that were concluded by trading on the Electricity Spot Market operated by EXAA Abwicklungsstelle für Energieprodukte AG. As a counterparty to each contract, CCP.A is located between buyer and seller, assuming the fulfilment for all trades.

Securities Market:

CCP-eligible securities cover more than 12,000 instruments, which trade in all market segments of the Wiener Börse AG: equity market, bond market, structured products and other securities. By defining securities categories, a distinction is drawn between home and foreign stocks, share certificates, profit-sharing rights, subscription rights, bond issues, certificates and equity warrants. Merely very few securities are excluded from CCP-clearing due to technical and risk issues.

CCP.A is responsible for the clearing and risk management of all CCP-eligible transactions concluded at Wiener Börse AG as well as for assuming default risk and managing the settlement for all these trades. Thus, we contribute to the financial market stability.

Stock exchange members, who act as clearing members in the clearing process, deposit margins defining CCP.A as beneficiary. The margin requirements are calculated on the basis of the balance of open trades and take various risk factors into account. Automatic monitoring ensures that the value of the margin deposited corresponds to the calculated clearing risk. Thus, the complete coverage of the current clearing risk is guaranteed without tying up liquidity unnecessarily.

On 14 Aug 2014 CCP.A has been granted authorisation to offer CCP services and activities in accordance with Reg. (EU) No 648/2012 on OTC derivatives, central counterparties and trade repositories (hereinafter EMIR).

Electricity Spot Market:

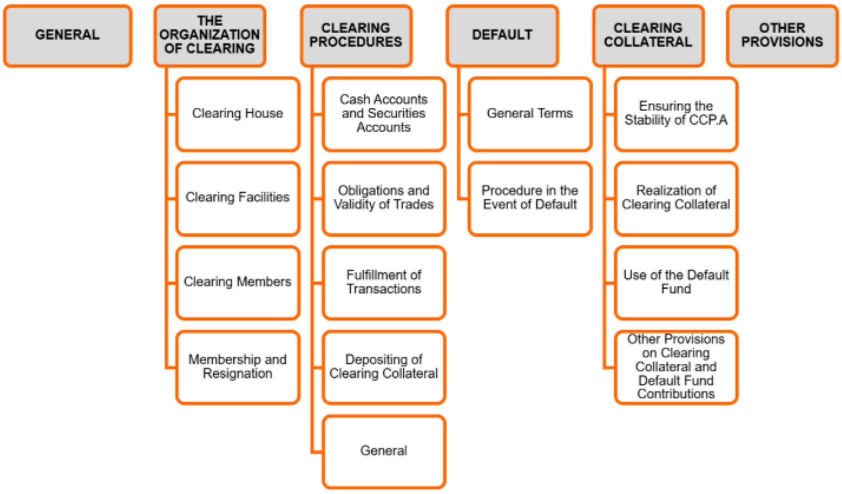
Electricity Exchange Transactions executed via the trading system are solely concluded between CCP.A and the respective clearing member, if applicable considering the Market Coupling Counterparty within the scope of the uniform Day-Ahead-Market-Coupling.

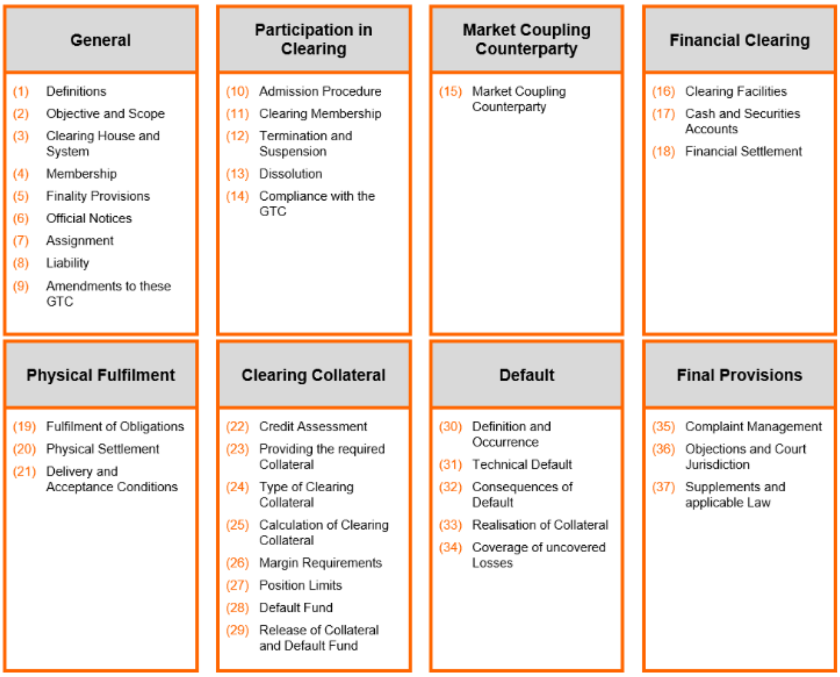
Electricity exchange members, who act as clearing members in the clearing process, deposit margins with CCP.A. Since electricity cannot be liquidated, the open positions of the clearing members must be fully collateralised at all times. Therefore, position limits are implemented which prevent the members from entering uncovered positions during the auctions. The margin requirements are calculated by CCP.A for each clearing member after each auction that took place on the Trade Day in accordance with the "Margin Calculation Methodology Electricity Spot Market". Automatic monitoring as well as the position limits ensure that the value of the margin deposited corresponds to the calculated clearing risk.

III. Principle-by-Principle Summary narrative Disclosure

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.	
Key consideration 1 *The legal basis should provide a high degree of certainty for each material aspect of an FMI's activities in all relevant jurisdictions.*	
Summary narrative	CCP.A has a legal basis, which provides a high degree of certainty for each aspect of its activities. CCP.A is a central counterparty pursuant to Regulation (EU) No 648/2012 of the European Parliament and of the Council of 4 July 2012 on OTC derivatives, central counterparties and trade repositories (European Market Infrastructure Regulation, "EMIR"), approved by the Austrian Competent Authority Finanzmarktaufsicht (FMA) on 14 August 2014. Furthermore, CCP.A is cited in ESMA's register of central counterparties authorised to offer services and activities in the European Union in accordance with EMIR (http://www.esma.europa.eu/page/Central-Counterparties). Since CCP.A is only active in the Austrian capital and electricity spot market, the legal basis for CCP.A is Austrian law as well as all relevant European laws. Austrian law provides a robust basis for the relevant legal matters. It is in line with the European legislation after the implementation in Austrian law regarding European directives such as the Settlement Finality Directive and the Collateral Directive. CCP.A serves clearing members from countries in the European Union as well as Switzerland. The EU regulations are directly relevant for participants from the EU territory. Switzerland has mainly adopted a similar regime as the EU. To ensure legal enforceability of all its provisions, CCP.A has commissioned an independent legal opinion from a Swiss law firm to prove effectiveness of CCP.A's clearing agreements and GTC. CCP.A sets out and publishes General Terms and Conditions for both markets ("Allgemeine Geschäftsbedingungen"; GTC), which clearly

	define and specify the offered scope of services and the underlying conditions. CCP.A's General Terms and Conditions for the securities market comprise the following:  The GTC for the securities market can be downloaded from CCP.A's website (https://www.ccpa.at/en/rules-regulations/rules-regulations-securities-clearing/legal-framework/). As regards the GTC of CCP.A, an independent legal opinion of a renowned law firm in Austria has been commissioned to give evidence about the actual effectiveness and enforceability on hand. Apart from that, CCP.A has also commissioned further legal opinions on various topics. CCP.A's General Terms and Conditions for the electricity spot market comprise the following:



The GTC for the electricity spot market can be downloaded from CCP.A's website (https://www.ccpa.at/en/rules-regulations/rules-regulations-electricity-clearing/legal-framework/).Clearing agreements entered into by CCP.A and its clearing members govern CCP.A's specific operational activity with participants. The templates for these Agreements are also publicly disclosed (https://www.ccpa.at/en/rules-regulations/rules-regulations-securities-clearing/clearing-agreement/; https://www.ccpa.at/en/rules-regulations/rules-regulations-electricity-clearing/clearing-agreement/). The GTC form an integral part of all clearing agreements and are therefore enforceable against all clearing participants by virtue of contractual relationship. Regarding the clearing services used, all clearing members have to submit themselves to Austrian law once they sign the clearing agreement.

Key consideration 2

An FMI should have rules, procedures, and contracts that are clear, understandable, and consistent with relevant laws and regulations.

Summary narrative	CCP.A's GTC are written in a clear and comprehensible way. The intention of the structure and sequence of provisions was to make it as easy to understand as possible. The GTC unambiguously outline CCP.A's participants' rights and obligations, since on the one hand they show the respective roles and on the other hand they describe the

	procedures that will be followed in routine operations and non-routine events. The GTC and all other documents (policies, frameworks, procedures, etc.) are strictly compliant to EMIR[2] as well as to all other obligatory requirements of other (national or international) applicable law and best practice guidelines. Certain documents, applicable to all parties, like the GTC are publicly available via CCP.A's website. The National Competent Authority has access to all documents on request.
Key consideration 3 *An FMI should be able to articulate the legal basis for its activities to relevant authorities, participants, and, where relevant, participants' customers, in a clear and understandable way.*	
Summary narrative	The GTC and all other documentation of CCP.A are written in a clear and comprehensible way. The intention of the structure was to make it as easy to understand as possible, depending on the content. If required by law, the documents are publicly disclosed on the website of CCP.A (www.ccpa.at). The National Competent Authority has access to all documents.
Key consideration 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.*	
Summary narrative	As regards the GTC of CCP.A, independent legal opinions of renowned law firms in Austria have been commissioned to give evidence about the actual effectiveness and enforceability on hand. Apart from that, CCP.A may have also commissioned further legal opinions on various topics. In addition, CCP.A has defined guidelines and objectives in order to ensure a clear organisational structure and direct reporting lines in the *Governance Regulations*, which are publicly disclosed as well. Therein the responsibilities as well as the relevant risk management units and their range of duties of CCP.A are defined. Furthermore, the composition of the relevant corporate bodies, their tasks as well as their authority to

[2] On the Electricity Spot Market the EMIR requirements have been implemented as far as applicable and reasonable.

	decide are described. It is also referred to internal control system, measurements of keeping confidentiality and safety. Lastly, the accomplishment of independent assessments, the disclosure duties as well as the records within the placing of operative orders of CCP.A to third parties are illustrated. In September 2013, an independent legal opinion concerning these Governance Regulations was developed. Generally, CCP.A merely offers its clearing services in case of a positive outcome of these legal opinions.
Key consideration 5 *An FMI conducting business in multiple jurisdictions should identify and mitigate the risks arising from any potential conflict of laws across jurisdictions.*	
Summary narrative	Not applicable, since CCP.A merely conducts business in the Austrian capital and electricity spot market.
Assessment of Principle 1: **Observed.**	

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 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.*	
Summary narrative	As Financial Market Infrastructure, CCP.A is managed as a streamlined and cost-efficient company. The association has positioned itself as the company for clearing and risk management in Austria and, together with the other market infrastructures Wiener Börse AG, EXAA Abwicklungsstelle für Energieprodukte AG and OeKB CSD GmbH, supports the ongoing internationalisation of the Austrian capital and electricity spot market. Utilising a modern clearing system, CCP.A contributes to a strong and internationally competitive domestic Capital Market. The implementation of the securities settlement system of Eurosystem, T2S (TARGET2-Securities), in February 2017 further improves the efficiency of the international clearing and settlement

	environment. For the electricity spot market CCP.A utilizes EXAA's integrated trading and clearing system. CCP.A's strategic objectives include the effective protection of customer positions and deposited collateral through reductions in counterparty risk and offering cost-efficient risk and trade management. This is achieved via ongoing improvement of services, functionalities and the integrated, comprehensive product range for clearing members and their customers.
Key consideration 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, participants, and, at a more general level, the public.*	
Summary narrative	In accordance with Art 26 EMIR, CCP.A has defined guidelines and objectives in order to ensure a clear organisational structure and direct reporting lines in the Governance Regulations, which are publicly disclosed on CCP.A's website (https://www.ccpa.at/en/about-ccpa/company-structure/). Therein the responsibilities as well as the relevant risk management units and their range of duties of CCP.A are defined. Furthermore, the composition of the fundamental corporate bodies of the company, such as the Managing Board, the Supervisory Board along with its committees and the General Assembly, are described in detail. This is also referred to in internal control mechanisms, measurements of keeping confidentiality and safety. Lastly, the accomplishment of independent assessments, the disclosure duties as well as the records within the placing of operative orders of CCP.A to third parties are illustrated. In September 2013, an independent legal opinion concerning these Governance Regulations was developed. Furthermore, CCP.A has a short and easily understandable overview of the company structure disclosed:

Key consideration 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.

Summary narrative

CCP.A's Management Board consists of two Managing Directors, who represent the company jointly or together with an Authorised Signatory. They conduct the business of the company according to the relevant legislation, particularly the federal act on Limited Liability Companies (GmbHG), EMIR, its delegated Regulations ("RTS") and other delegated regulations, the company agreement as well as the internal business rules for the Managing Directors. The Managing Directors are obliged to observe the restrictions, which arise from the company agreement or the internal business rules for the Managing Directors or any resolution of the General Assembly or the Supervisory Board. Thereby they always have to apply the duties of care of a prudent businessperson.

Pursuant to the schedule of responsibilities of the internal business rules for the Managing Directors the area of responsibilities includes the implementation of national and international regulations and standards, particularly EMIR, its RTS and all other regulatory and supervisory requirements that are applicable to CCP.A, so that the Managing Directors always act jointly in context with the present *Governance Regulations*.

The Management Board of CCP.A bears the final responsibility for the management of all kind of risks to which the company is exposed. It reports on the current risk situation to the Supervisory Board. The Management Board defines the risk tolerance level of the company and establishes the Risk Management Framework, including Policies and

	Procedures in consistency with the risk tolerance and risk bearing capacity. In that regard, it also establishes procedures for the event of Default of clearing members. Furthermore, The Management Board compiles and establishes procedures regarding compliance and internal assessments to support the objectives of CCP.A, whereby it affirms that these procedures are assessed through regular tests and inspections. While doing so, it has to be ensured, that sufficient resources for risk- and compliance management are provided.
Key consideration 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).*	
Summary narrative	CCP.A's Management Board members both have long-standing experience in the sector of Austria's financial industry. CCP.A has a Supervisory Board, consisting of six members. Art 27 EMIR requires that at least one third and not fewer than two members of the Supervisory Board are independent, whereby independent means that a member has no business, family or other relationship that raises a conflict of interests regarding the CCP.A concerned or its controlling shareholders, its management or its clearing members, and that a member has had no such relationship during the five years preceding his membership of the board (Art 2 Z 28 EMIR). In accordance with Art 27 EMIR and ESMA's guidelines on CCP conflict of interest management, two independent members have been elected to the Supervisory Board of CCP.A with resolution of the General Assembly. Concerning the other four members of the Supervisory Board, each of the two shareholders made use of their right, granted by the company agreement as well as in accordance with § 30c GmbH, to nominate and send two people to the Supervisory Board.
Key consideration 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.*	
Summary narrative	To ensure that the staffing of CCP.A is sufficient to fulfil all of its obligations that CCP.A is accountable for the exercise of its activities and that a competent contact person is available for the competent authorities, CCP.A has a Chief Risk Officer (CRO), a Chief Compliance Officer (CCO) and a Chief Technology Officer (CTO). In accordance with Art 3 para. 3 RTS 153/2013 these functions are carried out by different individuals, who are entrusted with the exclusive responsibility of performing these functions.

	The CTO reports directly to the Management Board of CCP.A. The CRO is member of the Management Board and reports directly to the Supervisory Board. Furthermore, the CRO reports all risk-related issues directly to the Risk Committee. The CCO reports directly to the Supervisory Board. In this regard, the CCO creates a comprehensive, written compliance report at least once a year and presents it to the Supervisory Board. Additionally, the CCO regularly reports to the Management Board regarding compliance relevant issues within CCP.A and advises CCP.A staff accordingly.
Key consideration 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.*	
Summary narrative	CCP.A's Management Board is ultimately responsible for the Risk Strategy. The Management Board ensures that the Risk Strategy is integrated into the business operations, and that adequate measures and procedures are in place to implement all relevant risk management provisions. As a central counterparty authorised under EMIR, CCP.A established a sound *Risk Management Framework* for the comprehensive management of all material risks. In this context, CCP.A sets up policies, procedures and systems to identify, monitor and manage potential risks. The *Risk Management Framework* is based on CCP.A's business activities and governs the assumed risks within the various business operations. The *Risk Management Framework* determines the conditions for risk management and control procedures. CCP.A pays particular attention to risk handling measures (controls) and ensures that appropriate measures are taken to avoid, mitigate and transfer or intentionally accept risk. It is ensured that the appropriateness of the risk management and internal control system is reviewed and adapted continuously. The CRO is responsible for CCP.A's risk management and for the implementation and management of the *Risk Management Framework*. The Risk Management Framework includes the policies and procedures established by the Management Board. The CRO

	also ensures that the framework is revised annually or on occasion, if any material is necessary. Furthermore, CCP.A established a Compliance Function that is permanent, in force and not involved in CCP.A operations. It is assured that the CCO has competences, resources and the necessary expertise as well as direct access to all relevant information. With establishing this Compliance Function, CCP.A takes account of type, amount and complexity of their business dealings and nature as well as the spectrum of the services and acts generated in the course of these dealings. CCP.A's Internal Audit is a properly staffed independent and outsourced function, free of influence by any element in the organisation, including matters of audit area, scope, procedure, frequency, timing or report content. In order to ensure independence, where applicable, the internal audit function reports directly to the Management Board. Moreover, the Internal Audit also reports to the Audit Committee of the Supervisory Board as well as the Supervisory Board itself at least once a year.
Key consideration 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 participants and other relevant stakeholders. Major decisions should be clearly disclosed to relevant stakeholders and, where there is a broad market impact, the public.*	
Summary narrative	CCP.A was founded by Oesterreichische Kontrollbank AG and Wiener Börse AG on 2 August 2004 and launched operations on 31 January 2005. Both owners hold a stake of 50% each of the company. CCP.A is managed as a streamlined and cost-efficient company. The association has positioned itself as the company for clearing and risk management in Austria and, together with the other Financial Market Infrastructures Wiener Börse AG and OeKB CSD GmbH, supports the ongoing internationalisation of the Austrian Capital Market. As Financial Market Infrastructure, CCP.A guarantees a proper and transparent handling of transactions concluded at Wiener Börse AG. Utilising a modern clearing system, CCP.A contributes to a strong and internationally competitive domestic capital market. In addition, for the provision of clearing and risk management services for electricity spot transactions executed on the trading platform operated by EXAA Abwicklungsstelle für Energieprodukte AG, CCP.A applies the same high standards as

	on the securities market and thus contributes to the stability and the effectiveness of the Austrian electricity spot market trading. Stakeholders receive important information through regular CCP.A circulars. Additionally, news updates are published on CCP.A's website (public and/or in closed user group for members only). In the regular meetings of the Supervisory Board and its Committees, the Management Board performs extensive reporting, ensuring that the Board Members are well-informed. Also, in order to adequately handle complaints, CCP.A established a complaints procedure, giving the possibility to any person or stakeholder to complain or give feedback on the performance of CCP.A's obligations as defined in the General Terms and Conditions and/or on the performance, or failure to perform, as regards any regulatory requirements that need to be fulfilled by CCP.A.
Assessment of Principle 2: **Observed.**	

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 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.*	
Summary narrative	CCP.A, as an EMIR certified central counterparty, is responsible for the clearing and risk management of all CCP-eligible transactions on Wiener Börse AG and all day-ahead electricity spot market transactions executed on the energy exchange platform of EXAA Abwicklungsstelle für Energieprodukte AG.CCP.A assumes and manages settlement and default risk for all trades for all securities and electricity exchange transactions and thus contributes to the stability of the cleared markets.. A failure to perform services may have an adverse effect on the liquidity and stability of the financial market. Hence, CCP.A has implemented a solid risk management system, which is a key element in its business

	activity and corresponds to the complexity of the business processes and the cleared products. According to its *Risk Management Framework,* CCP.A has implemented organisational and procedural measures to identify, assess, control, manage, monitor and report the risks, to which the company is exposed. These safety measures and procedures ensure the highest possible degree of business continuity and business contingency at all times. The *Risk Management Framework* and the related risk relevant documents and databases are reviewed every year, as well as with any significant change, disruption or incident. The review also includes the assessment of any related national and international standards (e.g. on risk management and Information Security), the results of tests and internal and external audits, as well as contributions from clearing members and other external stakeholders in order to integrate applicable recommendations.
Key consideration 2 *An FMI should provide incentives to participants and, where relevant, their customers to manage and contain the risks they pose to the FMI.*	
Summary narrative	CCP.A provides the clearing members with sufficient information regarding its risk management methodology by publishing the margin methodology and the risk parameters on its website. Moreover, according to Article 38 EMIR, CCP.A provides clearing members with a margin simulation tool for each market that enables them to determine the amount on a gross basis that CCP.A may additionally require as a margin payment when clearing a new position. CCP.A also hosts clearing and risk management training sessions for its clearing participants. In addition, the clearing members are provided with timely information on their margin requirements in the integrated clearing and risk management system, thus enabling them to properly manage and contain the risks posed to CCP.A. Margin calculations are performed three times per trade day for the securities market in order to be close to the real risk. Newly executed trades are processed and already settled positions are no longer

	considered in the margin calculation. The margin requirements are calculated twice per day after each auction in the electricity spot market. In case of excessive collateral, the surplus is released by CCP.A upon a clearing member's request.
Key consideration 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.*	
Summary narrative	In its risk assessment CCP.A also includes external risks, which are caused by disturbances or default of CSD, settlement bank or service providers, and addresses measures to mitigate and minimise impact of those risks by implementing workarounds or back-up solutions.
Key consideration 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.*	
Summary narrative	CCP.A, being an FMI in the Austrian Capital Market, is fully aware of its unique role in maintaining market stability and efficiency. In guaranteeing a contingent and straightforward business operation, CCP.A has implemented numerous safety measures and procedures, which ultimately ensure the highest possible degree of business continuity and business contingency at all times. According to Art 34 EMIR, CCP.A has established adequate procedures ensuring the timely and orderly settlement or transfer of the assets and positions of clients and clearing members in the event of a withdrawal of authorisation by FMA pursuant to Art 20 of EMIR. These procedures include a description of the trigger events, which may lead to winding down of services or restructuring activities, the implemented procedures to deal with such situations, as well as the adequate period for winding down or restructuring. They are reviewed on an annual basis.
Assessment of Principle 3:	

Observed.

Principle 4: Credit Risk

An FMI should effectively measure, monitor, and manage its credit exposure to participants and those arising from its payment, Clearing, and Settlement processes. An FMI should maintain sufficient financial resources to cover its credit exposure to each participant fully with a high degree of confidence. 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 participants 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 participant and its affiliates that would potentially cause the largest aggregate credit exposures to the CCP in extreme but plausible market conditions.	
Key consideration 1 *An FMI should establish a robust framework to manage its credit exposures to its participants and the credit risks arising from its payment, Clearing, and Settlement processes. Credit exposure may arise from current exposures, potential future exposures, or both.*	
Summary narrative	As described in Principle 3, CCP.A has established a comprehensive *Risk Management Framework,* which describes the measures to identify, manage and control all risks, which arise from the CCP activities. In order to manage the credit risk arising from the payment, clearing and settlement process as well as the credit exposures towards clearing participants, CCP.A has implemented: • A standard DvP settlement process on the securities market; • Position limits on the electricity spot market; • A solid default management procedure; • A multi-tier risk management including credit assessment of clearing members, margin calculation, Default Fund calculation and test programs for model validation according to EMIR. The *Risk Management Framework* and all other risk management policies are reviewed at least annually and on demand in case of changes in relevant processes, new products or instruments.
Key consideration 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.	
Summary narrative	CCP.A is an EMIR certified CCP, which clears cash market instruments only. On the securities market, the credit risk arises from the potential loss, which may arise to CCP.A from the close-out of open positions of a defaulting clearing member. The open positions are built over the settlement period of T+2 for all CCP-eligible instruments. In order to limit the credit exposures from its members, CCP.A calculates and collects margins three times per trade day. The parameters used for margin calculation are set to cover at least 99% of the exposure movements over a period of 1 year / 600 days. The margining model also takes the individual credit rating of each clearing member into consideration by applying an additional risk premium to the initial margin requirement. Furthermore, an anti-procyclicality buffer is included in the margin computation. All details on the margin calculation methodology of CCP.A are published on our website: https://www.ccpa.at/en/risk-management-securities-clearing/margin-calculation/. The clearing members must cover their margin requirements in cash or with eligible bonds according to CCP.A's *Collateral Policy* within two hours for intraday margin calls and until next morning for End-of-Day margin call (see also https://www.ccpa.at/en/risk-management-securities-clearing/collaterals-collateral-policy/). CCP.A reviews the model and the parameters for margin calculation by performing back tests on daily basis. The *Test Policy and Model Validation* is disclosed on the website: https://www.ccpa.at/en/downloads/downloads-securities-clearing/. On the electricity spot market, CCP.A calculates and collects margins to cover its credit exposures from its clearing members. In case of a clearing member's default on payment, CCP.A, as a central counterparty to each trade has the obligation to pay the corresponding settlement amount to the clearing member(s) delivering the respective amounts of electricity to the defaulting buyer. The margin requirements are calculated twice per day after each auction. Netting is done per delivery day across the auctions and all electricity spot

	market products. If the clearing member holds segregated clearing accounts for proprietary and client positions, the netting and the margin calculation are performed separately for proprietary and client account categories. The parameters used for margin calculation are set to cover at least 99% of the exposure movements over a period of one year. The margining model also takes the individual credit rating of each clearing member into consideration by applying an additional risk premium to the initial margin requirement. Furthermore, an anti-procyclicality buffer is included in the margin computation. All details on the margin calculation methodology of CCP.A are published on our website: https://www.ccpa.at/en/risk-management-electricity-clearing/margin-calculation/. For the coverage of margin requirements for electricity spot market transactions, CCP.A accepts cash, bank guarantees or securities according to CCP.A's *Collateral Policy* (see also https://www.ccpa.at/en/risk-management-electricity-clearing/collaterals-collateral-policy/). The provided collateral serves as position limit in the trading system, thus the members cannot enter uncovered exposures. CCP.A reviews the model and the parameters for margin calculation by performing back tests on a daily basis.

Key consideration 3

A payment system or SSS should cover its current and, where they exist, potential future exposures to each participant 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 participants 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 participants and their affiliates that would create the largest aggregate credit exposure in the system.

Not applicable for CCP.A

Key consideration 4

A CCP should cover its current and potential future exposures to each participant fully with a high degree of confidence using margin and other prefunded financial resources (see Principle 5 on collateral and Principle 6 on margin). 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 to cover a wide range of potential stress scenarios that should include, but not be limited to, the default of the two participants and their affiliates that would potentially cause the largest aggregate credit exposure for the CCP in extreme but plausible market conditions. All other CCPs 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 participant and

its affiliates that would potentially cause the largest aggregate credit exposure for the CCP in extreme but plausible market conditions. In all cases, a CCP should document its supporting rationale for, and should have appropriate governance arrangements relating to, the amount of total financial resources it maintains.	
Summary narrative	CCP.A has implemented a risk management system built on 6 lines of defence: • Credit assessment of clearing members, which includes minimum equity capital requirements, is based on financial ratios and leads to a risk premium on the margin requirements; • Calculation and collection of individual margin requirements based on the current portfolio and by using different risk parameters. The margin requirement covers 99% of the exposure movements of each clearing member and is the most important pillar of CCP.A's risk management system; • *Collateral policy that* defines which asset classes are acceptable as eligible collateral, concentration limits and haircut calculation; • CCP.A's dedicated financial resources (skin-in-the-game); • Default fund to cover losses that exceed the losses covered by the margin requirements; • Default management process. The Default Fund is retained to cover the potential loss in case of the simultaneous default of three clearing members with the largest exposures. CCP.A uses the results from stress tests, which are performed on a daily basis, and parameters, covering extreme but plausible scenarios, for the Default Fund calculation. The stress test results are analysed at least once a month. CCP.A additionally reevaluates the individual clearing member's Default Fund contributions at least once every quarter. CCP.A's Default Waterfall principle according to Art 43 EMIR includes the following measures: • Realisation of collateral provided by defaulting member; • Realisation of defaulting clearing member's contribution to CCP.A's Default Fund; • Realisation of CCP.A's own dedicated resources ("skin-in-the-game"); • Realisation of non-defaulting clearing members' contributions to CCP.A's Default Fund;

	• Obligation to replenish up to 5 times the current Default Fund contribution. The Default Fund and the skin-in-the-game are held in cash on an account with the Austrian National Bank and are immediately accessible. According to the decision of ECB negative interest rates have to be charged to central counterparties (having no banking license) as well.
Key consideration 5 *A CCP should determine the amount and regularly test the sufficiency of its total financial resources available in the event of a default or multiple defaults in extreme but plausible market conditions through rigorous stress testing. A CCP should have clear procedures to report the results of its stress tests to appropriate decision makers at the CCP and to use these results to evaluate the adequacy of the risk-management model and adjust its total financial resources. Stress tests should be performed daily using standard and predetermined parameters and assumptions. On at least a monthly basis, a CCP should perform a comprehensive and thorough analysis of stress testing scenarios, models, and underlying parameters and assumptions used to ensure they are appropriate for determining the CCP's required level of default protection in light of current and evolving market conditions. A CCP should perform this analysis of stress testing more frequently when the products cleared or markets served display high volatility, become less liquid, or when the size or concentration of positions held by a CCP's participants increases significantly. A full validation of a CCP's risk-management model should be performed at least annually.*	
Summary narrative	The Default Fund is retained to cover the potential loss in case of the simultaneous default of three clearing members with the largest exposures. CCP.A uses the results from stress tests for the Default Fund calculation. The results are analysed at least once a month and CCP.A reevaluates the contributions of clearing members at least once every quarter. The results are reported to and validated by the Risk Committee at least twice a year. CCP.A maintains two segregated Default Funds – one for the securities market and one for the electricity spot market. Both Default Funds are calibrated to cover the loss of the simultaneous default of the three clearing members with the largest exposures towards CCP.A. For the securities market, the parameters are used for the daily stress test to cover extreme but plausible scenarios; hereby historical as well as hypothetical scenarios on the price movement of cleared instruments have been taken into consideration. The "stressed" prices are applied to clearing members exposures and the margin requirements under stressed conditions

	are compared to the real margin requirements on the test day. Thus, a maximum potential loss per portfolio and day is created, which is used for calculation of the Default Fund value. In case of extraordinary turnover increase, additional “stress margin calls” are executed at CCP.A’s discretion. In the electricity spot market, in order to determine its exposure caused by uncovered payment obligations under extreme but plausible conditions, CCP.A also uses historic and hypothetical scenarios. Since electricity cannot be liquidated in case of default, in the stress testing the payment obligation is modelled instead of the electricity price. The setting of scenarios and parameters for stress testing and their amendments are proposed by the CRO and must be approved by the Risk Committee and the Management Board. The CRO reviews the risk management model annually. The outcome of the review is validated by the Risk Committee. Furthermore, the Internal Audit, as well as the National Competent Authority, perform regular audits on CCP.A’s risk management system according to EMIR.
Key consideration 6 *In conducting stress testing, a CCP should consider the effect of a wide range of relevant stress scenarios in terms of both defaulters’ positions and possible price changes in liquidation periods. 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.*	
Summary narrative	As described in Key Consideration 5, CCP.A uses parameters for the daily stress testing to cover extreme but plausible scenarios. The historical scenarios use the most severe variation observed during a look-back period, or a predefined confidence level, based on normal distribution. In the hypothetical scenarios, pre-defined shifts on prices of the cleared instruments are applied. The stress test parameters (e.g. look-back period, N-worst observation, confidence level, price shift in %, holding period etc.) and their potential adjustments must be approved by the Risk Committee and the Management Board.

Key consideration 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 participants 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.

Summary narrative	CCP.A has implemented a comprehensive Default Management Process to handle the default of one or more clearing members (GCM or DCM) in its GTC. This process ensures a timely fulfilment of both payment and settlement obligations towards non-defaulting clearing members in order to limit the credit exposure of the defaulting member(s) towards CCP.A, while also minimising the loss incurring due to default as much as possible. The Default Management Process includes the immediate declaration of default, the suspension from the trading and clearing process, measures for client asset protection, close-out of open positions, coverage of open liabilities, realisation of collateral and Default Fund (if needed), communication towards the Exchange, National Competent Authority, CSD, settlement bank and market participants. Eventually, the remaining assets are released to the insolvency administrator. During the cancellation of unfulfilled balances, CCP.A may need to use the overdraft facilities and credit lines made available by external liquidity providers. In the securities market, the securities retained from the defaulting member will be sold-out at market prices. CCP.A will perform buy-ins at market prices for the delivery obligations. The Exchange Members may place binding offers for the securities being offered in writing by fax or by e-mail (auction process). To cover the loss occurring from a negative price movement, CCP.A will realise the collateral provided by the defaulting member. If the collateral provided by a clearing member is realised by CCP.A, then this clearing member must replenish its clearing collateral at the latest until 10:00 AM on the next clearing day. If the collateral is not sufficient, the Default Fund contribution of the defaulting member will be used. If there is a remaining uncovered loss, CCP.A will use the skin-in-the-game calculated pursuant to Art 45 EMIR. Only when all these resources according to the Default Waterfall have been exhausted, the

	Default Fund contributions of non-defaulting members will be realised proportionally. Each member has the obligation to replenish his Default Fund contribution up to fivefold (5x) the amount within ten banking days. When the close-out procedure and the collateral has been utilised according to the policy *Default Waterfall*, CCP.A will repay the funds borrowed from liquidity providers. In the electricity spot market CCP.A retains the credit-side cash balances of the affected clearing member as additional collateral as of that time and then starts the realisation of collateral assets in order to cover the financial loss resulting from the clearing member default. The documents *Procedure in the Event of Member Default* and *Default Waterfall* contain detailed information regarding the handling of default by CCP.A: https://www.ccpa.at/en/risk-management-securities-clearing/default-management/ https://www.ccpa.at/en/risk-management-electricity-clearing/default-management/
Assessment of Principle 4: **Observed.**	

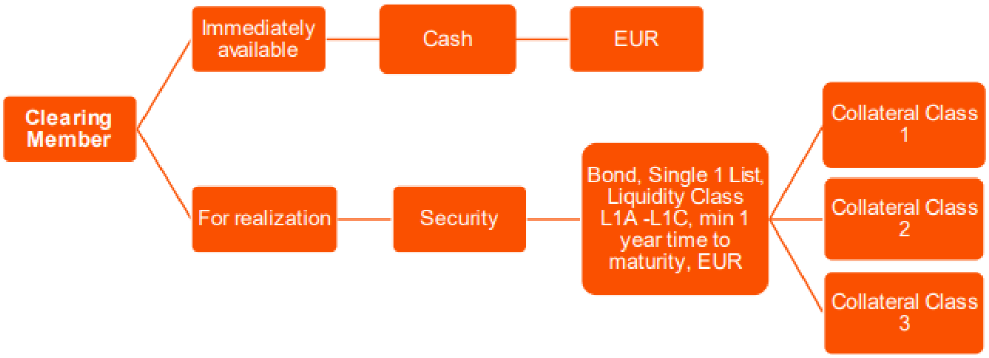
Principle 5: Collateral

An FMI that requires collateral to manage its or its participants' credit exposure should accept collateral with low credit, liquidity, and market risks. An FMI should also set and enforce appropriately conservative haircuts and concentration limits.	
Key consideration 1 *An FMI should generally limit the assets it (routinely) accepts as collateral to those with low credit, liquidity, and market risks.*	
Summary narrative	CCP.A has taken a conservative approach to the admission of certain assets as collateral and to their evaluation. The *Collateral Policy* for the securities market (https://www.ccpa.at/en/risk-management-securities-clearing/collaterals-collateral-policy/) describes the

procedures for selecting the instruments accepted as collateral as well as the valuation guidelines. This includes the definition of adequate haircuts for each of the instruments and the establishment of concentration limits (collateral limits).

For the coverage of margin requirements for electricity spot market transactions, CCP.A accepts cash collateral, bank guarantees and securities. These must fulfil certain predefined criteria described in the CCP.A's *Collateral Policy*.

In the securities market, according to the *Collateral Policy,* the clearing members can cover their margin requirements either with cash (in the single settlement currency EUR) or with eligible bonds pledged on a collateral account with the collateral custodian banks OeKB AG or OeKB CSD GmbH:



Eligible securities are bonds with low credit and market risk, which are freely transferable and tradable on regulated markets and for which price data is regularly published.

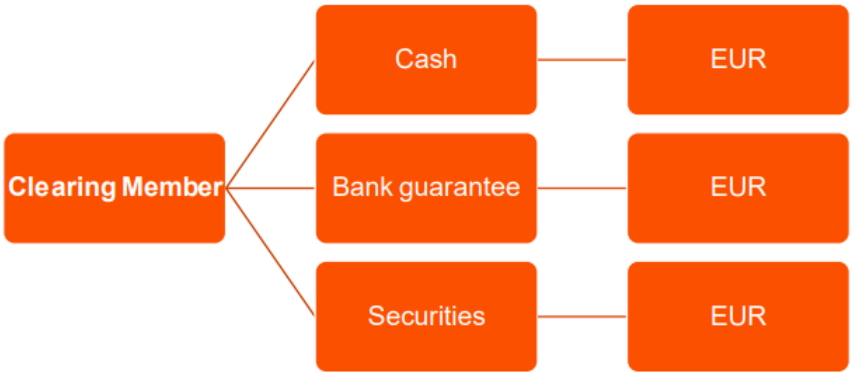
The following securities are therefore accepted as collateral by CCP.A for the securities market:

Collateral Class 1-3:

- Debt instruments specified on the Single List of the ECB (https://www.ecb.europa.eu/paym/html/midEA.en.html);
- Listed in EUR;
- Assignable to the liquidity classes 1-3;
- Remaining time to maturity of at least one year;
- Listed on a regulated market in the EU.

In order to avoid wrong-way risk the issuer may not be

- The clearing member or an affiliated company;

	• CCP.A or a company belonging to the same group, i.e., WBAG or OeKB an entity that provides services critical for functions of CCP.A unless the entity is an EEA central bank. The following company is currently defined as such an entity: OeKB as the settlement bank. For securities in Collateral Class 1-3 in the single list, the max haircut is 10% (i.e. haircut <= 10%). CCP.A retains the right to delete securities with 'Issuer Residence' in specific countries from the list of accepted collateral. CCP.A does not accept bank guarantees, gold and other securities as well as cash in other currency as the settlement currency EUR. No collateral is accepted on an exceptional basis. CCP.A retains the right to restrict the list of accepted collateral at any time, also for specific members, at its own discretion. Clearing members can cover their contributions to CCP.A's Default Fund in cash (EUR) only by transferring the required amount on CCP.A's account with the Austrian National Bank (OeNB). The collateral policy for the electricity spot market (https://www.ccpa.at/en/risk-management-electricity-clearing/collaterals-collateral-policy/) specifies the different assets admitted as collateral, requirements on the issuers, procedures for collateral valuation as well as application of conservative haircuts. In addition, strategies for avoiding liquidity, concentration as well as wrong-way-risk are explained. In the electricity spot market, the clearing members can cover their margin requirements either with cash (in the single settlement currency EUR), with bank guarantees or eligible securities. 

	For the contribution to the default fund in the electricity spot market only cash collateral in EUR is permitted. The amount may optionally be transferred to a special default fund account of CCP.A or pledged to a collateral account with OeKB AG as collateral custodian.
Key consideration 2 *An FMI should establish prudent valuation practices and develop haircuts that are regularly tested and take into account stressed market conditions.*	
Summary narrative	The collateral valuation in the clearing system is performed automatically with current market prices on a daily basis. Every cash collateral account and securities collateral account is assessed separately to determine the value of the collateral deposited by each clearing member and added up in accordance with the selected account structure. EUR-Cash collateral is valuated without applying haircuts; securities are valued at the last available price, with haircuts being applied. The size of the haircut of a security is determined per Collateral Class, applying the following methods: CCP.A computes the historic volatility per security based on daily closing prices. The calculation is carried out monthly applying the following parameters for both markets: • Lookback period: 600 days, 1 year; • Holding period: 3 days; • Confidence level: 99%. The volatility calculated in this manner is compared to the haircut published by the ECB for this security. The higher value of the calculated, historical volatility and the haircut considered adequate by the ECB is assigned to the security (individual haircut). The haircut of a Collateral Class is taken from the average haircut of all securities of a Collateral Class, with a minimum and a maximum level being defined for the haircut.

Collateral Class	Minimum	Maximum
1	8%	20%
2	10%	20%
3	12%	n.a. (100%)

	CCP.A conducts regular back tests on the appropriateness of the applied haircuts. Therefore, the daily price variation of instruments pledged as collateral is compared to the applied haircut. This is done monthly by taking the close prices of this instrument in the past month into account.
Key consideration 3 *In order to reduce the need for procyclical adjustments, an FMI should establish stable and conservative haircuts that are calibrated to include periods of stressed market conditions, to the extent practicable and prudent.*	
Summary narrative	CCP.A's haircut calculation considers the individual volatility of each instrument. It uses a conservative holding period of t+3 and different look-back periods in order to reflect current and past developments. Furthermore, very conservative minimum haircuts ensure sufficient coverage even in stressed market conditions.
Key consideration 4 *An FMI should avoid concentrated holdings of certain assets where this would significantly impair the ability to liquidate such assets quickly without significant adverse price effects.*	
Summary narrative	In order to avoid concentrated holdings of certain assets CCP.A has defined concentration limits per Collateral Class, individual issuer and groups of issuers are also applied. The concentration limits on the clearing members' portfolios are monitored on a daily basis. The valuation of CCP.A's collateral portfolio composition is carried out on a monthly basis. The Risk Committee reviews the *Collateral Policy* at least once a year.
Key consideration 5: An FMI that accepts cross-border collateral should mitigate the risks associated with its use and ensure that the collateral can be used in a timely manner.	
Summary narrative	Not applicable for CCP.A serving only the Austrian market
Key consideration 6: An FMI should use a collateral management system that is well-designed and operationally flexible.	
Summary narrative	In the securities market, the clearing collateral (used to cover the margin requirements) is not transferred into CCP.A's ownership but is pledged on clearing members'

	accounts with the Collateral Custodian Banks. Therefore, it cannot be used except in case of default. In the electricity spot market, there are two options for the provision of cash collateral: • Deposit on clearing member's pledged collateral account held at Oesterreichische Kontrollbank AG (OeKB AG) • Transfer of required collateral amount to a dedicated collateral cash account of CCP.A. CCP.A's clearing system offers an integrated risk management and collateral management solution including: • Margin computation • Margin call generation • Collateral accounting (record keeping) • Haircut calculation • Collateral valuation (with current prices and haircuts) • Monitoring of concentration limits • Default Fund management • Reporting The highly automated processing ensures the efficient and reliant collateral management of CCP.A.

Assessment of Principle 5:

Observed.

Principle 6: Margin

A CCP should cover its credit exposures to its participants for all products through an effective margin system that is risk-based and regularly reviewed.	
Key consideration 1 *A CCP should have a margin system that establishes margin levels commensurate with the risks and particular attributes of each product, portfolio, and market it serves.*	
Summary narrative	According to market standards, CCP.A calculates initial margins to cover the counterparty credit risk from its members' credit exposure and the market risk arising from market movements.

	The parameters used for margin calculation are set to cover at least 99% of the exposure movements over a period of 1 year / 600 days. The margining model also takes the individual credit rating of each clearing member into consideration by applying an additional risk premium on the margin requirement. Furthermore, an anti-procyclicality buffer is included in the margin computation. All details on the Margin Calculation Methodology for the securities market are published on our website: https://www.ccpa.at/en/risk-management/margin-calculation/. CCP.A clears cash market instruments only. The credit risk arises from the potential loss, which may arise to CCP.A from the close-out of open positions of a defaulting clearing member. The open positions are built over the settlement period of T+2 for all CCP-eligible instruments, which is reflected in the holding period of three days for risk calculation. CCP.A calculates and collects margins three times per day. The clearing members must cover their margin requirements in cash or with eligible bonds according to CCP.A's collateral policy within two hours for intraday margin calls and until next morning for End-of-Day margin calls (see also https://www.ccpa.at/en/risk-management-securities-clearing/collaterals-collateral-policy/). DvP settlement, a sound default management procedure and early detection are key components of CCP.A's risk mitigation. A delay/default on payment or provision of collateral leads to immediate activation of a default status. On the electricity spot market CCP.A calculates and collects margins to cover its credit exposures from its clearing members. In case of a clearing member's default on payment, CCP.A, as a central counterparty to each trade has the obligation to pay the corresponding settlement amount to the clearing member(s) delivering the respective amounts of electricity to the defaulting buyer. The margin requirements are calculated twice per day after each auction. Netting is done per delivery day across the auctions and all electricity spot market products. If the clearing member holds segregated clearing accounts for proprietary and client positions, the netting and the margin calculation are performed separately for

	proprietary and client account categories. The margin calculation is based on net payment obligation mean value and trading volume fluctuation. The margin is the minimum collateral a clearing member must provide. Furthermore, the provided collateral serves as a position limit in the trading system which prevents the member from entering uncovered positions during each auction. All details on the Margin Calculation Methodology for the electricity spot market are published on our website: https://www.ccpa.at/en/risk-management-electricity-clearing/margin-calculation/
Key consideration 2 *A CCP should have a reliable source of timely price data for its margin system. A CCP should also have procedures and sound valuation models for addressing circumstances in which pricing data are not readily available or reliable.*	
Summary narrative	The clearing system receives current price data from the Vienna Stock Exchange via file transfer, which is used for intraday mark-to-market valuation. CCP.A imports the daily closing price for each instrument into its risk management system and creates a price history for the risk factor calculation. In case that no actual closing price is available on a given clearing day the last available price is used. For instrument categories with poor-quality price data, for which a dynamic risk factor computation based on price variations of the single instrument will not deliver reliable results, CCP.A applies a conservative bulk risk factor per category. Analysis purposes, price volatility data of all instruments in a given category is consolidated and evaluated.
Key consideration 3 *A CCP should adopt initial margin models and parameters that are risk-based and generate margin requirements sufficient to cover its potential future exposure to participants in the interval between the last margin collection and the close out of positions following a participant default. Initial margin should meet an established single-tailed confidence level of at least 99 percent with respect to the estimated distribution of future exposure. For a CCP that calculates margin at the portfolio level, this requirement applies to each portfolio's distribution of future exposure. For a CCP that calculates margin at more-granular levels, such as at the subportfolio level or by product, the requirement must be met for the corresponding distributions of future exposure. The model should (a) use a conservative estimate of the time horizons for the effective hedging or close out of the particular types of products cleared by the CCP (including in stressed market conditions), (b) have an*	

appropriate method for measuring credit exposure that accounts for relevant product risk factors and portfolio effects across products, and (c) to the extent practicable and prudent, limit the need for destabilising, procyclical changes.	
Summary narrative	Being a cash market CCP, CCP.A calculates the margin requirement of a clearing member on margin account level for net positions held therein, distinguishing each instrument. Netting is done on ISIN level for all open (i.e. not yet settled) positions. The settlement period for all instruments cleared is *t+2*, in order to be on the safe side, the parameter holding period was set to three days. The risk model parameters are determined in accordance with the EMIR requirements and have been approved by the Risk Committee and the Management Board. CCP.A calculates risk factors for each instrument based on historical volatility with a confidence level of 99%. In addition, an anti-procyclicality buffer of 25%, as well as a credit risk factor (10-30% depending on the credit rating) are applied on a clearing member's portfolio. CCP.A does not consider correlations between instruments. The margin requirement on instrument level is always equal or greater than zero. Thus, there is no positive offset for margin requirements (no portfolio margining). For the electricity spot market, the margin requirements are calculated twice per day after each auction. Netting is done per delivery day across the auctions and all electricity spot market products. If the clearing member holds segregated clearing accounts for proprietary and client positions, the netting and the margin calculation are performed separately for proprietary and client account categories.
Key consideration 4 *A CCP should mark participant positions to market and collect variation margin at least daily to limit the build-up of current exposures. A CCP should have the authority and operational capacity to make intraday margin calls and payments, both scheduled and unscheduled, to participants.*	
Summary narrative	For the securities market, CCP.A calculates margins based on open positions three times per day: • EoD margin calculation • Two intraday margin calculations

	During these margin runs the current open positions are marked to market, new trades are considered and already settled positions are excluded. CCP.A has the authority to execute additional margin calculations and to collect additional margin at its own discretion ("stress margin calls"). For the electricity spot market, CCP.A computes the margin requirements upon each change in open positions leading to change in clearing members' exposures in order to stay close to the real risk. Thus, the margin requirements are calculated immediately after each auction, currently twice per day. Netting is done per delivery day across the auctions and all electricity spot market products. If the clearing member holds segregated clearing accounts for proprietary and client positions, the netting and the margin calculation are performed separately for proprietary and client account categories.
Key consideration 5: *In calculating margin requirements, a CCP may allow offsets or reductions in required margin across products that it clears or between products that it and another CCP clear, if the risk of one product is significantly and reliably correlated with the risk of the other product. Where two or more CCPs are authorised to offer cross-margining, they must have appropriate safeguards and harmonised overall risk-management systems.*	
Summary narrative	Not applicable as CCP.A does not allow offsets – no portfolio margining
Key consideration 6: *A CCP should analyse and monitor its model performance and overall margin coverage by conducting rigorous daily back testing – and at least monthly, and more-frequent where appropriate, sensitivity analysis. A CCP should regularly conduct an assessment of the theoretical and empirical properties of its margin model for all products it clears. In conducting sensitivity analysis of the model's coverage, a CCP should take into account a wide range of parameters and assumptions that reflect possible market conditions, including the most-volatile periods that have been experienced by the markets it serves and extreme changes in the correlations between prices.*	
Summary narrative	In order to validate the adequacy of the margin calculation CCP.A performs back testing on 2 functional levels in the securities market: • Level 1: Back test of margin requirement • Level 2: Back test of margin parameters In daily Level 1 back testing the margin requirement for a portfolio on a margin account on a given past day *t* is being compared with the close

	out value of that portfolio on *t+2*, thus measuring whether the initial margin requirement computed at *t* would have been sufficient to cover for losses incurred after two days. A net loss exceeding the margin requirement is defined as "uncovered loss". The allowed number of breaches is defined by the CRO and is consistent with the applied confidence level of 99%. The model is said to be adequate, if the observed number of breaches is equal or lower than the expected breaches given for the specified confidence interval. A higher number of breaches gives an indication of an underestimation of the potential close out cost. In this case, the parameters of the margin model shall be adjusted. In addition, CCP.A conducts regularly tests on the appropriateness of the r-factors (Level 2). Therefore, the daily price variation (from *t* to *t+2*) of all traded instruments is compared to the r-factor applied on *t*. Number of breaches are count and statistically tested against the null hypothesis with a significance level of 5% for type I error. Since August 2017, sensitivity tests are performed in CCP.A's risk management system on a daily basis in order to assess the margin coverage under various market conditions using historic data from stress tests. Thereby, the scenario "Simultaneous default of clearing member and issuer" is taken into consideration by creating a list of securities issued by the "defaulting" clearing member with different parameters. The sensitivity test procedure is based on the execution of several margin computation iterations. The result of the iteration is a new set of r-factors and prices. CCP.A performs its sensitivity tests concerning: • Changes in confidence interval • Delta % variation of the price for n securities issued by clearing members under the assumption of simultaneously default • Delta % variation of the price of the remaining securities For each financial instrument the price and the r-factor, which have been generated during the sensitivity test are loaded into the risk management system and a sensitivity test dedicated margin run is triggered. The margin portfolios are valuated with the new prices and risk factors and compared to the normal margin calculation, thereby a potential uncovered loss is calculated. At the end, the potential uncovered loss of the three

	largest clearing members is compared to the available Default Waterfall resources. The results of regular back and sensitivity testing are reported to the Risk Committee. Furthermore, the aggregated back test results are published on CCP.A's website under the section CPMI-IOSCO Public Quantitative Disclosure: https://www.ccpa.at/cpmi-iosco/ In order to validate the adequacy of the margin calculation CCP.A performs back testing on two functional levels for the electricity spot market: • Level 1: Back test on clearing member level • Level 2: Back test on price risk buffer level Since electricity cannot be stored and subsequently be used as collateral, CCP.A bears the full credit risk of the defaulting clearing member. Therefore, the credit exposure of the clearing members shall be covered with collateral at all times. CCP.A collects margins in advance based on the historical fluctuation of net payment positions and their average values. The provided collateral is set as position limit in the trading system. During the auctions the cumulated open payment obligation is calculated based on indicative prices during the 10:15 am auction and estimated prices during the 12:00 pm market coupling auction. In case the position limit is exhausted, EXAA deletes the orders entered into the trading system until the portfolio value falls below the position limit. For the level 1 back test the provided collateral on a given day t-1 is being compared with the cumulated open payment obligations on t. For the level 2 back test the actual daily price variation (between 10:15 am and 12:00 pm) of all traded products is compared to the risk buffer applied on t. This is done monthly taking the price variations in the past 365 days into account.
Key consideration 7	

A CCP should regularly review and validate its margin system.	
Summary narrative	CCP.A's models and methodology for the measurement and management of credit exposures and the calculation of margin requirements have been in place for the securities market since 2005. CCP.A has implemented an independent, internal audit to continuously assess CCP.A's risk management procedures. Since CCP.A's EMIR authorisation in 2014, the internal audit team, which is outsourced, conducts at least four assessments per year in accordance with the annual assessment plan and creates an annual assessment report. The Risk Committee meets at least twice per year according to the business rules of the Risk Committee. In these meetings, amendments to the risk management policies, the annual review and all risk management related topics are discussed, acknowledged and approved. Furthermore, in 2015 a professor of finance at the Vienna University of Economics and Business Administration performed an independent validation of CCP.A's Risk Models, testing programs as well as methodology to calculate margin requirements, Default Fund contributions and collateral requirements. In the electricity spot market, in order to assess the reliability and the coverage of its margin model and parameters, CCP.A performs an ex-post comparison of observed outcomes with expected outcomes derived from the use of the margin model. For this purpose, regular back tests are performed according to the *Test Policy and Model Validation Electricity Spot Market*: • Back tests of calculated margins and position limits vs. open payment positions per clearing account on daily basis • Back tests of estimated prices for portfolio valuation during auctions and usage of position limits
Assessment of Principle 6: **<u>Observed.</u>**	

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 participant and its affiliates that would generate the largest aggregate liquidity obligation for the FMI in extreme but plausible market conditions.	
Key consideration 1 *An FMI should have a robust framework to manage its liquidity risks from its participants, Settlement banks, nostro agents, custodian banks, liquidity providers, and other entities.*	
Summary narrative	CCP.A's risk policies contain steps to measure and control the liquidity risk on an ongoing basis. The highest liquidity risk for CCP.A arises when one or more clearing members are unable to meet their payment obligations within the scope of the clearing procedures. CCP.A, as the central counterparty, is under the obligation to meet its payment obligations towards other clearing members at any time (intraday). In order to limit the liquidity risk, CCP.A has implemented: • Netting of buy and sell positions per ISIN • Standard DvP settlement • Sound default management procedures • Overdraft facility with settlement bank • Credit lines with liquidity providers • Daily liquidity stress testing In accordance with EMIR, CCP.A performs daily liquidity stress tests taking the extreme scenario of 100% payment default for the clearing members with the two largest payment obligations into consideration. During the stress testing procedures, the results of company groups are aggregated. Since the implementation of clearing services for the electricity spot market, the electricity market cash flows have also been integrated in CCP.A's liquidity management and stress testing.
Key consideration 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.	
Summary narrative	CCP.A has implemented a fully automated DvP settlement process for the securities market. SWIFT settlement replies from OeKB CSD are processed by the clearing system and settlement reports are generated. In case of lack of money, an immediate notification is generated for the operations team. Also on the electricity market, the clearing system provides a report on the open payments between CCP.A and its contractual counterparties. CCP.A's account balances are continuously monitored by the Backoffice team via internet applications and provides them with sufficient liquidity on daily basis.
Key consideration 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 participant and its affiliates that would generate the largest aggregate payment obligation in extreme but plausible market conditions.*	
Summary narrative	Not applicable
Key consideration 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 participant 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 participants and their affiliates that would generate the largest aggregate payment obligation to the CCP in extreme but plausible market conditions.*	
Summary narrative	CCP.A provides clearing services for transactions in cash market instruments as well as electricity spot market transactions on behalf of the Vienna Stock Exchange. The only settlement currency is EUR. In accordance with EMIR, CCP.A performs daily liquidity stress test taking into consideration the extreme scenario 100% payment default of the

	clearing members with the 2 largest payment obligations. The results of the stress testing are compared with the available liquid resources in order to validate if the available liquid resources are sufficient.
Key consideration 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 creditworthy 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.*	
Summary narrative	Following liquid resources are immediately available and are composed of: • CCP.A's own funds held in cash at the Austrian National Bank (OeNB); • Overdraft facilities; • Credit lines. If the available resources are not sufficient the Management Board and the CRO may introduce following measures to reduce liquidity risk: • Execute additional margin calls when current exposure breaches a certain level; • Request a higher cash collateral ratio from the clearing member(s); • Request increase of overdraft facilities with existing liquidity providers; • Conclude new credit line agreements.
Key consideration 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.*	

Summary narrative	There are no supplemental liquid resources in CCP.A's liquidity plan apart from the above mentioned because the available liquid resources cover more than 100% of CCP.A's liquidity needs under stressed conditions. As regards the *Collateral Policies*: CCP.A only accepts bonds, which are included in ECB's single list as eligible collateral. The eligible bonds are with very low market and liquidity risk (mostly government bonds from Austria and Germany) and likely to be saleable or acceptable as collateral for lines of credit with central or commercial banks.
Key consideration 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 participant 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.*	
Summary narrative	CCP.A has obtained an overdraft facility and credit lines with several, well rated commercial banks. CCP.A performs annual due diligences and credit assessments of its liquidity providers. The credit facilities are tested on a regular basis to ensure their availability.
Key consideration 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.*	
Summary narrative	All payments related to transactions in CCP-eligible securities are conducted in central bank money on the T2S platform. Furthermore, CCP.A has a cash account with the Austrian National Bank (OeNB) where the liquid funds (own capital and Default Fund for the securities market) are held.
Key consideration 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.	
Summary narrative	Led by its liquidity risk management, CCP.A conducts daily stress tests with very extreme and conservative scenarios. The liquidity stress tests consider CCP.A's settlement period, netting algorithm and daily settlement routine. The stress testing results are reported to the Management Board and to the Risk Committee. For all liquidity stress test scenarios, the liquidity requirements are compared to available liquid resources. In case of breaches, the CRO and the Management Board are informed immediately, thus a timely reaction and adjustment is ensured. CCP.A's minimum liquidity needs are calculated for the scenario simultaneous payment default of the two clearing members with the highest liquidity risk exposure. To determine these two clearing members, CCP.A calculates the cumulated payment obligations across all cleared markets.
Key consideration 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 participants. 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.*	
Summary narrative	As described above, CCP.A's liquid resources are retained to cover the liquidity risk arising from (multiple) clearing member's default at all times. This means that CCP.A's liquidity provisions and Default Management process ensure that all payments are settled on the settlement day.
Assessment of Principle 7: **Observed.**	

Principle 8: Settlement Finality

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 1 *An FMI's rules and procedures should clearly define the point at which Settlement is final.*	
Summary narrative	The systems operated by CCP.A for the clearing of securities trades were designated by the Austrian National Bank (OeNB) as systems under the Finality Act. This means that each settlement transaction performed on behalf of CCP.A is final and irrevocable at the moment of its execution. Thus, the settlement risk is reduced to a minimum.
Key consideration 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.*	
Summary narrative	The settlement period for all instruments traded on the Vienna Stock Exchange is the period of two trading days between the day of the business transaction (T) and the settlement day (S). During the day, the settlement instructions are processed in real-time. Partial settlement is mandatorily enabled and performed in case of partial coverage. Depending on the various asset classes, late settlements can take place according to two different clearing cycles (S+4 and S+7) before a buy-in procedure is initiated. As described above, settlement is final as soon as it has been processed.
Key consideration 3 *An FMI should clearly define the point after which unsettled payments, transfer instructions, or other obligations may not be revoked by a participant.*	
Summary narrative	CCP.A has implemented a standard DvP settlement process, where the CCP instructs both legs of the transaction to the CSD: its own

	leg and the clearing member's leg via a Power of Attorney (PoA). Thus, it is not possible for a member to revoke unsettled instructions. No exceptions are allowed.
Assessment of Principle 8: **<u>Observed.</u>**	

Principle 9: Money Settlements

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 1 *An FMI should conduct its money Settlements in central bank money, where practical and available, to avoid credit and liquidity risks.*	
Summary narrative	Before the T2S implementation, CCP.A used the private settlement agent model for money settlements. With the T2S implementation, all payments related to transactions in CCP-eligible securities are conducted in central bank money.
Key consideration 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.*	
Summary narrative	Not applicable for CCP.A – see Key Consideration 1
Key consideration 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.*	
Summary narrative	Not applicable for CCP.A – see Key Consideration 1
Key consideration 4	

If an FMI conducts money Settlements on its own books, it should minimise and strictly control its credit and liquidity risks.	
Summary narrative	Not applicable as CCP.A does not conduct money settlements on its own books.
Key consideration 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.*	
Summary narrative	CCP.A's only settlement currency is EUR in central bank money. For all settlements, the settlement finality applies.
Assessment of Principle 9: **Observed.**	

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 1 *An FMI's rules should clearly state its obligations with respect to the delivery of physical instruments or commodities.*	
Summary narrative	CCP.A clears cash market instruments traded on the Vienna Stock Exchange and all day-ahead electricity spot market transactions executed on the energy exchange platform of EXAA Abwicklungsstelle für Energieprodukte AG. All obligations and procedures regarding payment and deliveries of financial instruments are covered in the GTC, which are published on the website: https://www.ccpa.at/en/rules-regulations/rules-regulations-securities-clearing/legal-framework/,

	https://www.ccpa.at/en/rules-regulations/rules-regulations-electricity-clearing/legal-framework/. CCP.A has implemented a multi-level default process for both markets. In the securities market buy-in and cash settlement procedures are applied in case of late settlements. The realisation of clearing collateral and default fund to cover any damage caused by the defaulting clearing member are applicable for both markets. Due to the strict default management measures, the participants affected by late deliveries are indemnified accordingly. CCP.A's settlement efficiency has always been extremely high. CCP.A ensures that its clearing members have an understanding of their obligations and the procedures for effecting physical delivery by making all documentation and rules publicly available and by providing clearing trainings on regular basis.
Key consideration 2 *An FMI should identify, monitor, and manage the risks and costs associated with the storage and delivery of physical instruments or commodities.*	
Summary narrative	CCP.A does not store physical instruments; therefore, Key Consideration 2 is not applicable.
Assessment of Principle 10: **<u>Observed.</u>**	

Principle 11: Central Securities Depositories

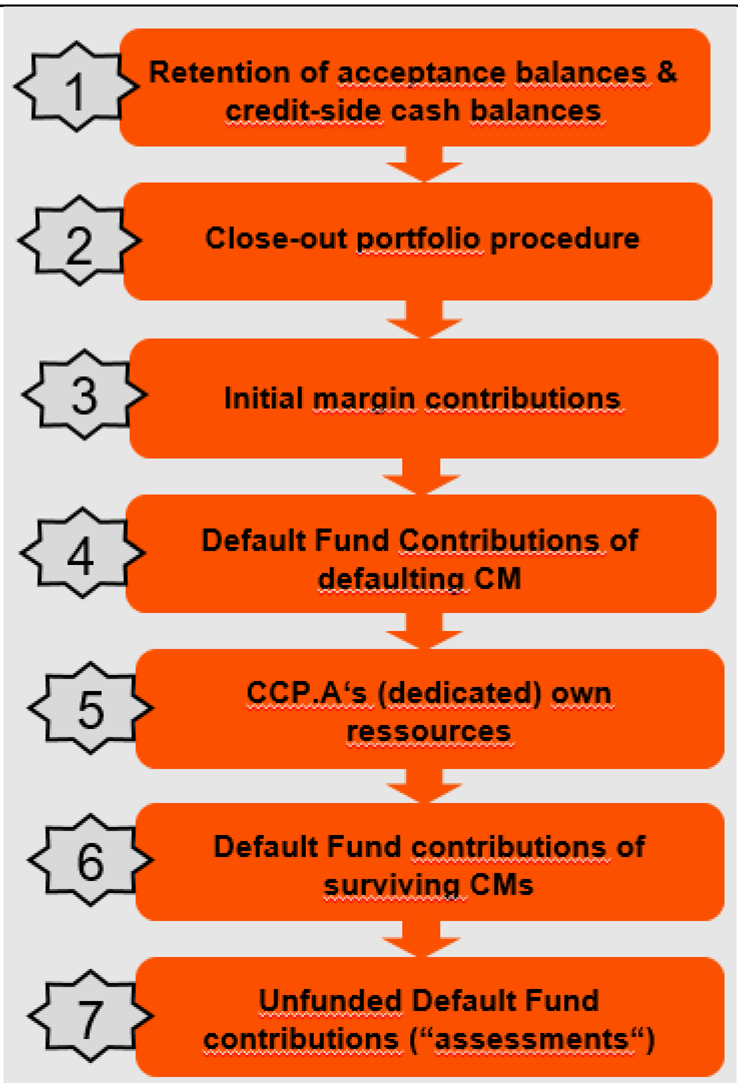
A CSD should have appropriate rules and procedures to help ensure the integrity of securities issues and minimise and manage the risks associated with the safekeeping and transfer of securities. A CSD should maintain securities in an immobilised or dematerialised form for their transfer by book entry.
Assessment of Principle 11: **<u>Not applicable.</u>**

Principle 12: Exchange-of-Value Settlement Systems

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.***
Assessment of Principle 12: **<u>Not applicable.</u>**

Principle 13: Participant-Default Rules and Procedures

An FMI should have effective and clearly defined rules and procedures to manage a participant default. These rules and procedures should be designed to ensure that the FMI can take timely action to contain losses and liquidity pressures and continue to meet its obligations.	
Key consideration 1 *An FMI should have default rules and procedures that enable the FMI to continue to meet its obligations in the event of a participant default and that address the replenishment of resources following a default.*	
Summary narrative	Pursuant to Art 48 EMIR, CCP.A has implemented a sound Default Management Process to handle the default of one or more clearing members (GCM,DCM or ECM) in order to guarantee timely fulfilment of payment and settlement obligations towards non-defaulting clearing members and to minimise the loss due to the default. The Default Management Process includes the immediate declaration of default, the suspension from the trading and clearing process, measures for client asset protection, close-out of open positions, coverage of open liabilities, realisation of collateral and Default Fund (if needed), communication towards Exchange, NCA, CSD, settlement bank and market participants. Eventually, the remaining assets are released to the insolvency administrator. The following picture describes the core processes and loss allocation in case of a default:

	 The clearing members must meet all obligations resulting from their exchange membership and their participation in the clearing system and from their transactions. As security for the resulting claims, the clearing members are obliged to deposit the clearing collateral pursuant and to make contributions to the Default Fund in a timely manner. Each clearing member is liable for the fulfilment of the obligations with the clearing collateral it deposits and its contribution to the Default Fund.
Key consideration 2 *An FMI should be well prepared to implement its default rules and procedures, including any appropriate discretionary procedures provided for in its rules.*	
Summary narrative	CCP.A has prepared internal guidelines for the handling of default - a *Screenplay for Default*. The *Screenplay for Default* contains a detailed catalogue of the required measures, as well as internal and external communication in case of default. The document is reviewed annually and after default events whereby lessons learnt are

	included. The default management process is tested annually at operational level of CCP.A.
Key consideration 3 *An FMI should publicly disclose key aspects of its default rules and procedures.*	
Summary narrative	The consequences of a failure to fulfil the obligations are described in the General Terms and Conditions of Business of CCP.A and in the *Procedure in the Event of Member's Default* as well as *Default Waterfall*: Securities clearing: https://www.ccpa.at/en/risk-management-securities-clearing/default-management/ Electricity clearing: https://www.ccpa.at/en/risk-management-electricity-clearing/default-management/
Key consideration 4 *An FMI should involve its participants 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.*	
Summary narrative	The Default Management Process is tested annually at operational level of CCP.A. The purpose of this insolvency test is to simulate the default of a participant in the securities market as well as electricity spot market in order to ensure that all processes function properly in the event of a clearing member's insolvency. CCP.A tests the entire insolvency process, which includes the default of a clearing member and the communication processes between Vienna Stock Exchange, EXAA, OeKB AG, guarantors, regulatory authorities and the defaulting clearing member itself. Additionally, different scenarios are considered for the annual test – default of clearing member with omnibus account structure vs. clearing member with individually segregated accounts. The test includes activation of default status, suspension in clearing system, transfer of clients' positions and assets and close-out of open (retained) positions. CCP.A offers the possibility to clearing members to participate in such testing. The Default Management is also part of the clearing training for clearing members.
Assessment of Principle 13: **<u>Observed.</u>**	

Principle 14: Segregation and Portability

A CCP should have rules and procedures that enable the segregation and portability of positions of a participant's customers and the collateral provided to the CCP with respect to those positions.	
Key consideration 1 *A CCP should, at a minimum, have segregation and portability arrangements that effectively protect a participant's customers' positions and related collateral from the default or insolvency of that participant. If the CCP additionally offers protection of such customer positions and collateral against the concurrent default of the participant and a fellow customer, the CCP should take steps to ensure that such protection is effective.*	
Summary narrative	For the securities market, CCP.A's clearing model allows for high flexibility in managing member's clearing positions and collateral accounts in different granularity for • position registration, • risk management, • collateral management and • settlement of transactions. All clearing accounts are held on a net position basis. Two forms of account aggregation are being used in the clearing process. Traditionally, omnibus account segregation is utilised for segregating clearing members' positions and the positions of their clients. In compliance with EMIR requirements, CCP.A supports the concept of 'Registered Clients', allowing for separated individual clearing accounts of specifically recognised individual clients. The structure and interlinkage of the account model fully reflect the various options of participation in the clearing process. General Clearing Members (GCMs), Direct Clearing Members (DCMs) and Non-Clearing Members (NCMs) as well as Registered Clients (RCs) and Clearing Agents (CAs) are supported. Following account types are possible according to the business category and segregation type: Account Types

Business Category	Segregation Type		Portability in case of Default
Proprietary	P	Omnibus	no
Agency	A	Omnibus	yes, if certain conditions are fulfilled
Registered Client	RC	Single	yes

CCP.A's clearing members are EU legal entities or Swiss companies. CCP.A has obtained two legal opinions: one for the EU member states and one covering Switzerland to validate and confirm the provisions of the GTC, among others including enforceability of customer segregation, portability of positions and assets and collateral realisation in case of a clearing member's default.

On the electricity market liquidation is not possible and therefore it is not possible to port positions from one member to another in case of a clearing member's default. For GCMs, CCP.A offers different level of segregation for the provision of collateral for its services NCMs.

Key consideration 2

A CCP should employ an account structure that enables it readily to identify positions of a participant's customers and to segregate related collateral. A CCP should maintain customer positions and collateral in individual customer accounts or in omnibus customer accounts.

Summary narrative

As mentioned under Key consideration 1, for the securities market, CCP.A's clearing model offers segregation on each level: position keeping, collateral and settlement minimum requirement:

Omnibus client segregation

The standard level of protection is set out by the systemic segregation of positions and assets between the clearing members (P) and the clients (A), allowing for a separate realisation of positions and collateral.

In the omnibus client segregation model, the net client positions (A) are built from transactions executed on behalf of different clients. Also, the collateralisation of these positions takes place together on an omnibus level.

	The clients in this case are not known by CCP.A - this is the main difference compared to the registered client model. In case of a trigger event (e.g. default of a clearing member), CCP.A will initiate the procedure to transfer the open positions and the assets of the clients (A) to a non-defaulting clearing member designated by a joint representative of the clients and without the consent of the defaulting clearing member concerned. The transfer can be successfully performed, if a) the according accounts are furnished with sufficient collateral, b) all clients have appointed a joint representative and this joint representative request the transfer of positions and assets and c) the accepting clearing member contractually declares its consent to accept the assets and open positions of clients. After the portability procedure has been followed eventually remaining positions and assets of the clients may be transferred later on, in the course of the resolution of the default. In case of the standard collateral accounts (pooling A + P collateral) the A and P contributions (as defined in by the respective ratio of A and P margin accounts) will be used only to close out their respective obligations (A for A and P for P). Individual client segregation The negative impacts of a default on customers (assets and positions) can significantly be minimised by choosing the enhanced level in security by explicitly charging CCP.A (by means of a specific Transfer Agreement) to transfer respective positions and assets to a backup clearing member once a default has been declared. In the best case, the Transfer Agreement has to beconcluded prior to the event (involving all relevant parties and including an appointed backup clearing member). In case of a potential default, the segregated accounts will be transferred by CCP.A to a respective backup clearing member. Due to the high level of segregation, there is no netting between positions of the Registered Client

	(segregated client) and the other clients of the clearing member and no offset takes place in the margin calculation. In addition, the collateral is held on segregated accounts, which are assigned 1:1 to the corresponding margin and positions accounts. CCP.A does not rely on participant's records containing the sub-accounting for individual customers to ascertain each customer's interest; the segregation is reflected in the clearing system.
Key consideration 3 *A CCP should structure its portability arrangements in a way that makes it highly likely that the positions and collateral of a defaulting participant's customers will be transferred to one or more other participants.*	
Summary narrative	In the securities market, the rules and procedures for the Transfer Agreement as described under Key consideration 2 are stipulated in CCP.A's GTC, § 46. Transfers pursuant to Art 48 EMIR. https://www.ccpa.at/en/rules-regulations/rules-regulations-securities-clearing/legal-framework/ When assets and positions of clearing clients and other clients are kept on the segregated accounts, CCP.A will initiate the procedure, in the case of a trigger event, to transfer their assets and open positions, which the triggering clearing member maintains for the segregated client, to another clearing member, designated by the client upon request or without the consent of the clearing member. The clearing member concerned shall assign to the relevant client all rights required for the transfer of these positions and assets in advance, under the condition precedent of the occurrence of a trigger event. To this end, the clearing clients and other clients must declare to CCP.A in writing, ideally prior to the trigger event their intention stating the accepting clearing member and furnishing its statement of consent, and CCP.A must have accepted the declaration in writing. The accepting clearing member must contractually commit itself to the clearing client to accept such assets, open positions and the assignment of all the rights required for their transfer. CCP.A will transfer the client's assets and open positions to the accepting clearing member within one clearing day as of the request of the client.
Key consideration 4	

A CCP should disclose its rules, policies, and procedures relating to the segregation and portability of a participant's customers' positions and related collateral. In particular, the CCP should disclose whether customer collateral is protected on an individual or omnibus basis. In addition, a CCP should disclose any constraints, such as legal or operational constraints, that may impair its ability to segregate or port a participant's customers' positions and related collateral.

Summary narrative	As described in the Key Considerations 1 to 3, CCP.A discloses its rules, policies, and procedures relating to the segregation and portability of client positions and related collateral on its website www.ccpa.at. The GTC cover the legal framework and the legal and operational prerequisites for portability (§ 46): https://www.ccpa.at/en/rules-regulations/rules-regulations-securities-clearing/legal-framework/ The account structure for omnibus and individual client segregation as well as sub-combinations with examples are explained in the document Account structure: https://www.ccpa.at/en/downloads/downloads-securities-clearing/ The costs associated with the different level of segregation are included in CCP.A's schedule of fees: https://www.ccpa.at/en/membership-securities-clearing/fees/

Assessment of Principle 14: **Observed.**

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.*

Summary narrative	CCP.A's general business planning groups are observing all business development tasks. This ensures that CCP.A is working efficiently and effectively: doing the right business and doing business right. The strategic planning ensures that appropriate business priorities are set, which meet the requirements of CCP.A's stakeholders. The business plan ensures that resources and costs are carefully arranged. Clear processes for product development and project management ensure that new requirements are implemented in a structured way and do not endanger CCP.A's business. In its Risk Assessment CCP.A has identified the following general business risks: • Decrease/loss of revenue; • Increase of expenses; • Operational risk; • Non-compliance with or higher costs due to new law and regulations. CCP.A conducts regular risk assessments to identify and measure the general business risks and their impact on the business processes in order to take appropriate preventive actions to mitigate, avoid or minimise the risk and to plan business continuity measures. The risk assessment process is performed annually or after any significant incident or change, whereby for each of the identified risks one of the following possibilities to deal with it is chosen: • Mitigate the risk; • Avoid the risk or minimise the likelihood; • Minimise impacts and consequences; • Retain the risk by informed decision. In the course of the risk assessment, the impact of each risk is evaluated including the financial impact on CCP.A.
Key consideration 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.*	

Summary narrative	In accordance with Reg. (EU) 152/2013, CCP.A has determined a period of **6 months** to be sufficient to ensure, also in stressed market conditions, the orderly winding down or restructuring of the clearing activities, reorganising the operations, liquidating the open clearing positions or transferring the clearing activities to another CCP. The capital required to ensure an orderly winding down or restructuring of the activities has been calculated based on CCP.A's annual gross operational expenses according to Art 2 delegated Regulation (EU) 152/2013.
Key consideration 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 participant 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.*	
Summary narrative	The estimation of the time span for winding-down has been made by considering the following facts: CCP.A's business model is based on clearing of cash market instruments only, the open positions are usually closed within 2 days (settlement period is *t*+2). In addition, CCP.A has no assets, which have to be alienated in case of a winding down. Furthermore, for private limited companies the period for public notification of company's creditors is shorter (compared to public limited companies) and amounts to 3 months in case of liquidation of the company. Service providers provide some services, such as the clearing system. The service agreements can be terminated according to the included termination clauses, in case of winding down of clearing services they can be terminated with immediate effect. For these reasons, CCP.A is in position to orderly close down its clearing services and settle all open positions within a relatively short period of time. On the other hand, transferring the clearing activities to another CCP requires a longer period of time for the Vienna Stock Exchange and especially for the clearing members as numerous preparation activities must be executed prior to migration, such as:

	• New clearing agreements; • New account set-up; • New provision of collateral; • New clearing rules/GTC. Currently CCP.A's clearing system is embedded in the clearing members' technical infrastructure. Therefore, a sufficient project time for the technical migration to another CCP has to be taken into consideration. Considering all these considerations, CCP.A has determined a period of **6 months** to be sufficient for winding down or restructuring of the clearing services. CCP.A has reserved the half of its annual gross operational expenses as dedicated equity capital for winding down which is in line with the estimated time span. The financial auditors re-evaluate and confirm the capital requirement on annual basis.
Key consideration 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.*	
Summary narrative	CCP.A's entire equity capital is held in EUR on a cash account with the Austrian National Bank (OeNB).
Key consideration 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.*	
Summary narrative	CCP.A is one of the smallest CCPs in the EU, which clears on-exchange cash market instruments and day-ahead electricity spot market transactions. The calculated minimum capital requirement according to Regulation (EU) No 152/2013 based on balance sheet figures is far below the minimum capital requirement held in accordance with Art 16 EMIR, thus it is ensured that additional equity capital is available at any time.
Assessment of Principle 15: **<u>Observed.</u>**	

Principle 16: Custody and investment risks

An FMI should safeguard its own and its participants' assets and minimise the risk of loss on and delay in access to these assets. An FMI's investments should be in instruments with minimal credit, market, and liquidity risks.	
Key consideration 1 *An FMI should hold its own and its participants' assets at supervised and regulated entities that have robust accounting practices, safekeeping procedures, and internal controls that fully protect these assets.*	
Summary narrative	CCP.A holds its equity capital and the Default Fund on an own cash account. The collateral posted for the margin requirements is held on participants' accounts which are pledged in favour of CCP.A but do not belong to it. More than 95% of CCP.A's funds (equity and Default Fund) are held in cash with the Austrian National Bank.
Key consideration 2 *An FMI should have prompt access to its assets and the assets provided by participants, when required.*	
Summary narrative	More than 95% of CCP.A's assets are held in cash with the Austrian National Bank and are immediately accessible.
Key consideration 3: *An FMI should evaluate and understand its exposures to its custodian banks, taking into account the full scope of its relationships with each.*	
Summary narrative	See above - more than 95% of CCP.A's assets are held in cash with the Austrian National Bank.
Key consideration 4 *An FMI's investment strategy should be consistent with its overall risk-management strategy and fully disclosed to its participants, 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.*	
Summary narrative	CCP.A's *Investment Policy* is very conservative and compliant with the EMIR requirements. It is publicly available on CCP.A's Website: https://www.ccpa.at/en/downloads/downloads-general-information/

	Currently all company's assets are held in cash with a central bank.
Assessment of Principle 16: **<u>Observed.</u>**	

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 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.*

Summary narrative	CCP.A represents an important proportion of the financial market infrastructure and therefore it has implemented a comprehensive Risk Management Framework including measures for mitigating operational risks. The operational risk management involves the management of risks resulting from IT, external events, internal processes and human resources. CCP.A has defined measures which enable critical functions to recover within two hours, with backup systems ideally starting processing immediately after an incident. Furthermore, it is ensured with very high probability that no data will be permanently lost. To minimise the negative impact on business processes, if a risk materialises, and ensure a minimum level of critical functions a *Business Continuity Policy* (BCP), according to Art 26 and 34 of EMIR and Articles 17 to 23 of RTS 153/2013, is established, implemented, maintained and tested on regular basis. The business continuity planning aims to ensure the preservation of CCP.A's core functions, the timely recovery of operations and the fulfilment of its obligations. In order to guarantee the economic existence of the organisation even after incurring serious damage, CCP.A takes preventive measures to reduce the damage from or probability of occurrence of operational risks including minimum

	requirements on clearing systems, clearing operations, IT workplaces, information security as well as internal controls. The Operations Team responsible for the daily business to reduce the risk of human mistakes and thus uses operational Manuals and detailed operational checklists. Internal guidelines and 4-eyes control have been implemented in order to avoid any kind of fraud. Furthermore, each member of staff is obliged to sign CCP.A's *Code of Conduct*. To minimise the risk in case of system or process changes a change management process with roles and responsibilities as well as evaluation, approval and test measures is defined (*Change Process Guidance*).
Key consideration 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, CPSS-IOSCO – Disclosure framework and assessment methodology – December 2012 59 and controls should be reviewed, audited, and tested periodically and after significant changes.*	
Summary narrative	The CRO is responsible for the risk management of all risks, including operational risk. For the implementation of all required measures concerning the identification, assessment, management and monitoring of IT related operational the CTO has been put in charge. In this role the latter is furthermore responsible for the business continuity planning and acts as emergency/crisis manager. All risk policies including the BCP are reviewed on an annual basis or after significant changes. Amendments to Policies must be approved by the Risk Committee and the General Management.
Key consideration 3 *An FMI should have clearly defined operational reliability objectives and should have policies in place that are designed to achieve those objectives.*	
Summary narrative	CCP.A's conducts a business impact analysis based on the guidelines in Chapter V of RTS 153/2013 Business Continuity, Art 17 'strategy and policy' and Art 18 'Business impact analysis', to identify the business functions which are critical to ensure the services of CCP.A and to

	identify the impacts due to disruptions. The business impact analysis includes: • Identification of the processes and process steps which are critical to ensure the services of the CCP.A; • Identification of the related IT-systems and their providers; • Impact of system disruptions on clearing and risk management; • Recovery time objective (RTO = maximum acceptable time for which critical functions and systems may be unusable); • Recovery point objectives (RPO = maximum acceptable time frame data might be lost due to a system error). Based on this information workarounds and business continuity measures are planned.
Key consideration 4 *An FMI should ensure that it has scalable capacity adequate to handle increasing stress volumes and to achieve its service-level objectives.*	
Summary narrative	CCP.A's infrastructure layout has been designed and carefully reviewed to cope with future (and raising) performance and capacity requirements. Load and performance tests have been performed as a fixed part of the final acceptance test. Since its implementation, the application is constantly monitored concerning the defined key performance indicators. New software releases run through the same performance tests prior to signing-off and going life. A monthly capacity report containing thresholds, average and peeks is available in order to realise trends and to allow proper capacity management in time. According to the current capacity and performance monitoring the system is processing on average less than 30% of the committed capacity within 20 % of the promised processing time. The infrastructure design, the current load/capacity report and the constant utilisation monitoring and review ensure that CCP.A does not experience bottlenecks or shortage in capacity/performance.
Key consideration 5 *An FMI should have comprehensive physical and information security policies that address all potential vulnerabilities and threats.*	

<table>
<tr><td>Summary narrative</td><td>CCP.A maintains a robust information security policy to protect information from unauthorised disclosure and to ensure data accuracy and integrity. The following features are included in the “Information Security Policy”:
Access control to the systems and workplaces;
Adequate safeguards against intrusions and data misuse;
Employee information security policy;
Virus detection;
Reliable networks and procedures for accurate and prompt data transmission without major disruptions;
Audit trails and logging.</td></tr>
<tr><td colspan="2">Key consideration 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.</td></tr>
<tr><td>Summary narrative</td><td>To ensure the completion of critical tasks under extreme conditions also in time and within targeted time frames the following arrangements are designed and proven:
Incident Management in place (CCP.A internally and with external providers) including defined error and exception handling procedures, data center failover and manual processing workarounds;
Emergency and crisis management including alerting, escalation and communication, as well as recovery plans and manual workarounds;
Business continuity and contingency tests of critical IT-systems (including failover between primary and secondary data centre) are performed on a regular basis in co-operation with the responsible service providers and according to the concluded SLAs.</td></tr>
<tr><td colspan="2">Key consideration 7</td></tr>
</table>

An FMI should identify, monitor, and manage the risks that key participants, 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.

Summary narrative	CCP.A has detected some risks, which may occur due to disturbances of CSD system, settlement bank system, SWIFT network or liquidity providers. A risk assessment on these risks has been performed including risk impact, control measures (if possible) or manual workarounds.
Assessment of Principle 17: **<u>Observed.</u>**	

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 1 *An FMI should allow for fair and open access to its services, including by direct and, where relevant, indirect participants and other FMIs, based on reasonable risk-related participation requirements.*

Summary narrative	In its GTC CCP.A has defined the following operational, financial and legal requirements for participation in the securities market: • Each clearing member has to conclude a clearing agreement with CCP.A; • CCP.A performs a creditworthiness assessment of each (potential) clearing member; • Minimum own funds in required amount; • Each clearing member must provide a contribution to the Default Fund; • Each clearing member must prove that it has obtained the required technical facilities; • Members of staff must participate a clearing training and pass a clearing exam with CCP.A; • Each clearing member has to open the required cash accounts and securities accounts (§ 22 GTC); • Each clearing member has to sign a direct debit order;

	• Each clearing member has to sign pledge declaration for collateral in favor of CCP.A; • The provision of collateral by the clearing member must be covered by § 2 Financial Collateral Act. These criteria are based on risk-related requirements and allow for fair and open access to the clearing system. For the electricity spot market, the following requirements shall be met: • Each clearing member shall make the required contribution to the Default Fund; • Each clearing member shall install the required technical facilities including access to the clearing systems; • Each clearing member shall have the professionally trained staff required (clearing diploma) according to the requirements of the Schedule of Fees Spot Market Products in Electric Energy of CCP.A; • Each clearing member shall provide the required direct debit authorization, the list of authorized signatories as well as the pledge declarations for the financial clearing; • Each clearing member shall assume the function of a Balance Responsible Party in the Control Area where clearing takes place itself or has a valid contract with a Balance Responsible Party (confirmation of membership in a balance group), which enables it to participate in clearing with CCP.A; • Each clearing member shall have a valid authorization of the competent authority to act as a Balance Responsible Party or a valid Balancing Group Contract in the Control Area where clearing takes place, in each case including proof of its unchanged validity at the time of the application; • Each clearing member shall have the required cash and, optional, securities accounts are available; • Each clearing member shall belong to one of the categories pursuant to § 2 para. 1 or 2 of the Austrian Financial Collateral Act.
Key consideration 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.	
Summary narrative	The objective of the above mentioned clearing membership requirements is to admit clearing members which are in the position to fulfil their obligations resulting of the clearing membership in a proper and timely way. They are included in CCP.A's GTC which are publicly available: https://www.ccpa.at/en/rules-regulations/rules-regulations-securities-clearing/legal-framework/ https://www.ccpa.at/en/rules-regulations/rules-regulations-electricity-clearing/legal-framework/ The requirements are tailored depending on the type of clearing membership: e.g. GCMs have higher minimum equity capital requirements and Default Fund Contribution than DCMs.
Key consideration 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 participant that breaches, or no longer meets, the participation requirements.*	
Summary narrative	CCP.A monitors the compliance with the participation requirements on an ongoing basis in both markets by: • Assessing the credit rating of each member annually; • Continuous monitoring the fulfilment of payment, delivery and collateral obligations on the clearing members' accounts; • Monitoring the knowledge and understanding of CCP.A's rules and procedures (annual check of trained staff). When a clearing member no longer meets the admission criteria, CCP.A will terminate the clearing agreement in writing based on an extensive risk analysis and with sufficient grounds being given. The procedures for managing the termination are described in the CCP.A's GTC: https://www.ccpa.at/en/rules-regulations/rules-regulations-securities-clearing/legal-framework/ https://www.ccpa.at/en/rules-regulations/rules-regulations-electricity-clearing/legal-framework/

Assessment of Principle 18: **<u>Observed.</u>**

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 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.*	
Summary narrative	According to the GTC CCP.A enters into a clearing agreement only with clearing members (which are Exchange Members). Thereby they become members of CCP.A with all of the rights and obligations of direct participation in clearing. In the securities market, a clearing member may be either a Direct Clearing Member (DCM) or a General Clearing Member (GCM). The clearing members bear the full responsibility towards CCP.A to fulfil the obligations arising from their transactions in CCP-eligible instruments as well as the transactions of their assigned clearing clients. Clearing clients are participants who – with the exception of any agreements on the transfer of assets and positions to another clearing member – do not maintain their own contractual relationships with CCP.A and use the services of a clearing member for the clearing and separate processing of their transactions. They take indirectly part in the clearing process. A clearing client may be a Non-Clearing Member (i.e., with its own exchange membership) or a Registered Client (without exchange membership). The NCMs and RCs must enter into a clearing agreement with its responsible clearing member and sign a standardised declaration form for participation in CCP.A's clearing system. In this declaration form the responsible clearing member is appointed and the chosen level of account segregation is specified:

	• Declaration of a clearing service agreement between a GCM and a NCM; • Declaration of a clearing service agreement between a clearing member and a Registered Client. https://www.ccpa.at/en/rules-regulations/rules-regulations-securities-clearing/clearing-agreement/ Furthermore, the NCMs and RCs commit themselves to comply with CCP.A's GTC. In the electricity spot market, all exchange members who take part in trading of spot market products for electric energy on the Vienna Stock Exchange as a general commodity exchange shall be clearing members at CCP.A. In its role as the central counterparty, CCP.A positions itself between the seller and the buyer and takes on the counterparty risk. As a consequence, before taking up clearing activities, every clearing member is obliged to enter into a clearing agreement for the Electricity Spot Market with CCP.A (see also § 11 of the General Terms and Conditions for the Electricity Spot Market). The clearing agreement thus forms the basis for future clearing activities and contains - including all annexes - a complete picture of the clearing member's desired structure with regards to the financial clearing and physical fulfilment by CCP.A.
Key consideration 2 *An FMI should identify material dependencies between direct and indirect participants that might affect the FMI.*	
Summary narrative	In both markets, the clearing members bear the full responsibility for the fulfilment of the transactions of their assigned clearing clients. Clearing members must provide collateral for the exposure of their assigned clearing clients according to CCP.A's margin requirement calculation.
Key consideration 3 *An FMI should identify indirect participants responsible for a significant proportion of transactions processed by the FMI and indirect participants whose transaction volumes or values are large*	

relative to the capacity of the direct participants through which they access the FMI in order to manage the risks arising from these transactions.	
Summary narrative	As described under Key considerations 1 to 3 the clearing member is responsible to fulfil all obligations towards CCP.A. If extraordinary increases in turnover are observed, CCP.A automatically calls for more collateral to be delivered. Furthermore, additional margin calls may be executed as well as changes in the collateral portfolio may be required (e.g. more cash instead of securities.). If the clearing member fails to fulfil its collateral, payment or settlement obligation within the pre-defined timeframe, CCP.A declares a default and the clearing member, including all his clients, are suspended in the trading and the clearing system, thus no new transactions are accepted for clearing by CCP.A.
Key consideration 4 *An FMI should regularly review risks arising from tiered participation arrangements and should take mitigating action when appropriate.*	
Summary narrative	See above.
Assessment of Principle 19: **Observed.**	

Principle 20: FMI Links

An FMI that establishes a link with one or more FMIs should identify, monitor, and manage link-related risks.
Not applicable - CCP.A has no interoperability links with other CCPs.
Observation of Principle 20: **Not applicable.**

Principle 21: Efficiency and Effectiveness

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

Key consideration 1 *FMI should be designed to meet the needs of its participants and the market it serves, in particular with regard to choice of Clearing and Settlement arrangements, Operating structure, scope pf products cleared, settled or recorded; and use of technology and procedures.*	
Summary narrative	• CCP.A serves its participants (national and international members) and the Austrian capital market. The ownership of CCP.A ensures a close cooperation of all layers of the Austrian financial market (exchange, CCP, CSD). • CCP.A is a member of EACH (European association of clearing houses) and cooperates closely with national implementation groups like CANIG or T2S NUG. • CCP.As internal organization is very streamlined and cost efficient CCP.A's clearing and settlement arrangements are state-of-the-art standard procedures (e.g. DvP, T2S, SWIFT) and the members are involved in the change management process. • The operating structure and interfaces between the different layers of the Austrian market of CCP.A is straightforward. CCP.A does not have any interoperability links or links to multiple trading venues. CCP.A receives all transactions from the Vienna Stock Exchange, and all the settlement instructions are processed at OeKB CSD. • CCP.A is clearing all cash market products for the Vienna market since 2005 in a CCP regime with a safe and sound risk management system. There have been no disturbances. During the Lehman crisis in 2008 and results of the BREXIT referendum in 2016, CCP.A's procedures have proven to be sufficient and appropriate. • All products and asset classes are cleared on the same CCP.A platform within the same clearing and settlement regime. This reduces internal costs for connectivity and back-office infrastructure. • Regarding use of technology, CCP.A aims to use standardized technology and communication protocols, which reflect the size and the business of the participant. • CCP.A offers its participants standard communication via SWIFT as well as a user-friendly GUI front-end.

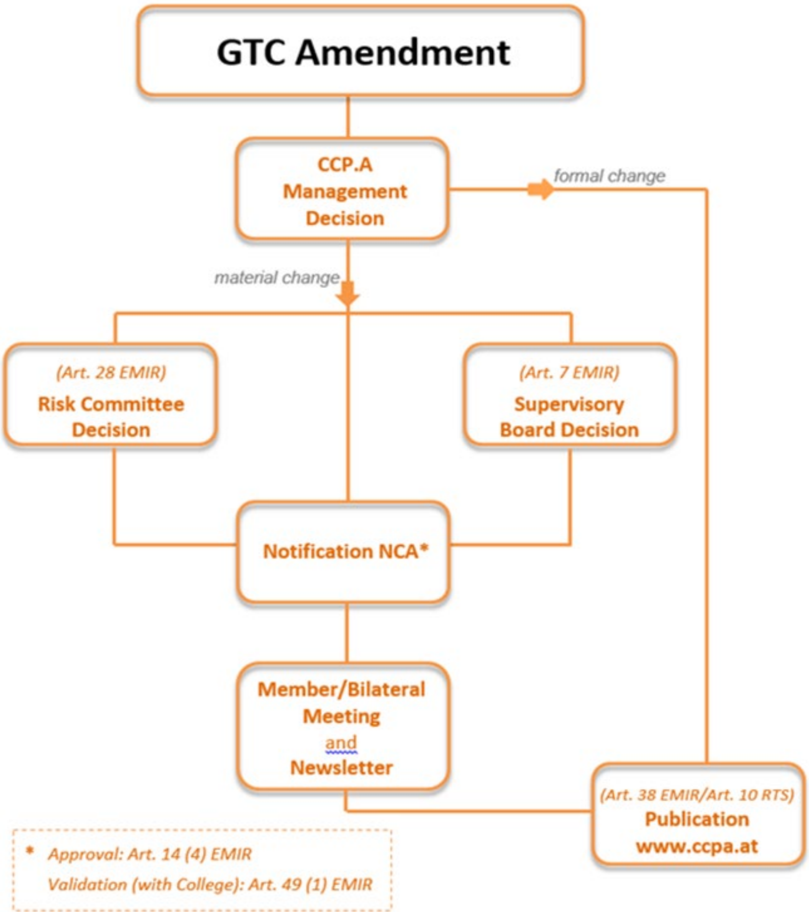
	• CCP.A as a Central Counterparty is responsible for the clearing and risk management of all day-ahead electricity spot market transactions executed on the energy exchange platform of EXAA Abwicklungsstelle für Energieprodukte AG. • In addition, CCP.A is commissioned to manage clearing & risk management on behalf of EXAA (including NEMO clearing). • CCP.A processes the settlement of payments for electricity exchange transactions on the next banking day, thus reducing the credit risk and the margin requirements.
Key consideration 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.*	
Summary narrative	CCP.A's financial goals and objectives are defined in its business plan. CCP.A's *Investment Policy* defines investment objectives. The contracts between CCP.A and its providers include Service Level Agreements and Transaction Agreements where recovery times and performance objectives are defined. Risk management objectives are specified in CCP.A's *Risk Management Framework* and support EMIR requirements (e.g. margin confidence level, Default Fund size, CCP.A's dedicated own resources, minimum own capital, etc.).
Key consideration 3 *An FMI should have established mechanism for the regular review of its efficiency and effectiveness.*	
Summary narrative	CCP.As has established mechanisms on 3 levels: 1. Company-wide internal control system 2. Compliance function 3. Internal audit system
Assessment of Principle 21: **<u>Observed.</u>**	

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 1 *An FMI should use, or at a minimum accommodate, internationally accepted communication procedures and standards.*	
Summary narrative	CCP.A as ICP (Indirectly Connected Participant) to T2S uses ISO 15022 SWIFT messages in its communication with the Austrian CSD, OeKB CSD. Furthermore, CCP.A offers its clearing members standard reporting via ISO 15022 SWIFT messages as well as a user-friendly web-frontend with the possibility to download csv and pdf-reports. Thus, the size and the business of the clearing member are taken into consideration.
Assessment of Principle 22: **<u>Observed.</u>**	

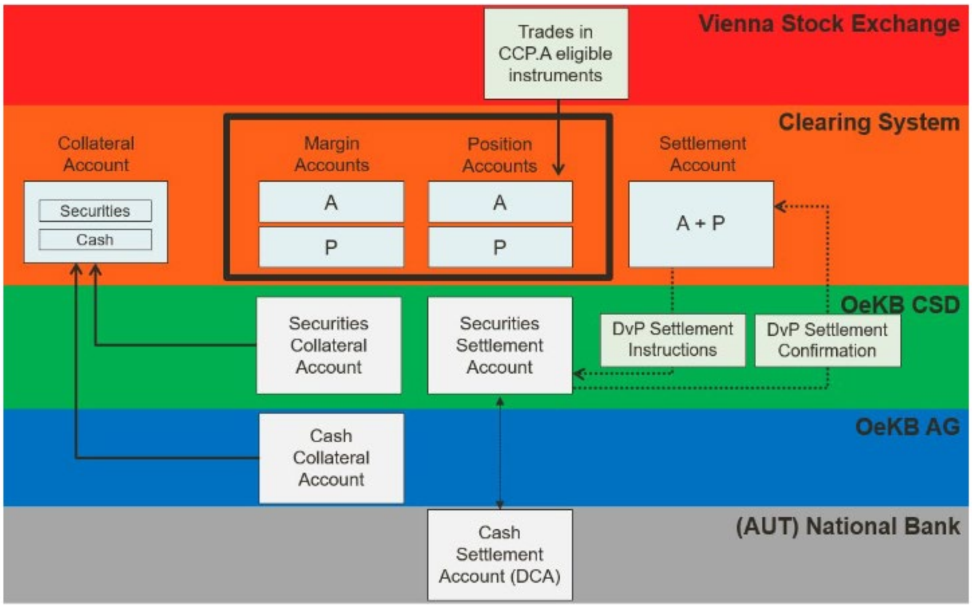
Principle 23: Disclosure of Rules, Key Procedures and Market Data

An FMI should have clear and comprehensive rules and procedures and should provide sufficient information to enable participants to have an accurate understanding of the risks, fees, and other material costs they incur by participating in the FMI. All relevant rules and key procedures should be publicly disclosed.
Key consideration 1 *An FMI should adopt clear and comprehensive rules and procedures that are fully disclosed to participants. Relevant rules and key procedures should also be publicly disclosed.*

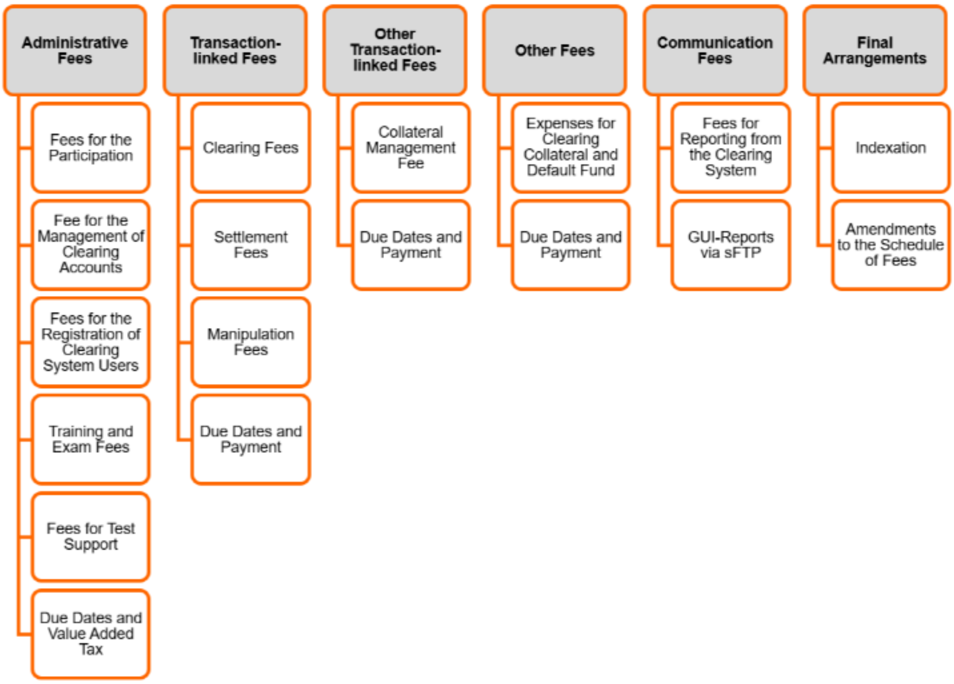
Summary narrative	The General Terms and Conditions of CCP.A are publicly disclosed on the website of CCP.A (www.ccpa.at). They are written in a clear and comprehensive way. The intention of the structure was to make it as easy to understand as possible. The GTC unambiguously outline CCP.A's participants' right and obligations, since on the one hand they show the respective roles in Parts I and II (especially §§ 13 – 15 of GTC) and on the other hand they describe the procedures that will be followed in routine operations and non-routine events in Parts III and IV in detail. CCP.A has implemented and publicly disclosed a procedure for amending the GTC. There is also a graphic display of this procedure on the website: 

Key consideration 2

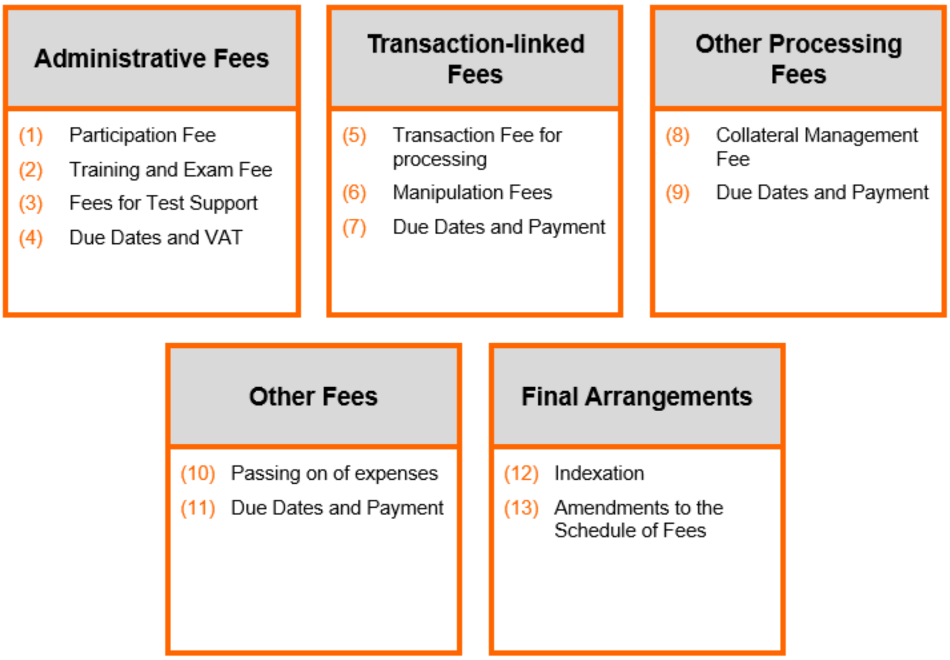
An FMI should disclose clear descriptions of the system's design and operations, as well as the FMI's and participants' rights and obligations, so that participants can assess the risks they would incur by participating in the FMI.

Summary narrative	On CCP.A's website there is a clear and comprehensive description of the clearing system's design and operations for the securities market, which also includes a graphic display of the account structure and system architecture:  Regarding CCP.A's clearing system, there is also a publicly disclosed participant information concerning a potential business disruption, which directly affects the clearing system, and its consequences/procedure. Furthermore, CCP.A's website contains a public disclosure of the relevant key highlights of the *Business Continuity Policy*. CCP.A's Operations Team continuously observes all transactions and actions of participants in the clearing system. This work is carried out in close cooperation with Wiener Börse AG and OeKB CSD GmbH, since all relevant participant information is received from or forwarded to CCP.A. In case of a default there is a publicly disclosed document "Procedure in the Event of Member Default", in which the detailed default process, including suspension and termination of participation in clearing, is being described. A rough procedure is also stated in the CCP.A GTC (Part IV). For the electricity spot market, clearing is performed fully electronically through the state-of-the-art real-time clearing system of CCP.A. After the closed auction, the trades are netted according to CCP.A's netting rules. This minimizes the cash flows as well as the risk and leads to an efficiency in clearing. The clearing and risk management information is available to the clearing members in a timely and comprehensive manner.

Key consideration 3 *An FMI should provide all necessary and appropriate documentation and training to facilitate participants' understanding of the FMI's rules and procedures and the risk they face from participating in the FMI*	
Summary narrative	In § 14 para. 2 GTC for the securities market and in § 11 para. 2 GTC for the electricity spot market a credit check and furnish proof is being determined before participants are able to enter into a clearing agreement. This proof also includes the participant's need for professionally trained staff. Said requirement has been set to ensure the (new) participants' complete understanding of CCP.A's rules, procedures and risks. CCP.A offers such training sessions at any time. For the securities and the electricity spot markets the sessions consist of three thematic blocks: A general part, a risk management part and an operations training. The supporting documents are provided to the participants after attending. Of course, existing participants – if requested – can also attend these training sessions. As regards CCP.A's stress test scenarios, there are two publicly disclosed documents on CCP.A's website: *Test Policy and Model Validation* as well as *Public Information on Default Fund Calculation*. These documents fully show the participants' potential financial risks stemming from participation.
Key consideration 4 *An FMI should publicly disclose its fees at the level of individual services it offers as well as its policies on any available discounts. The FMI should provide clear descriptions of priced services for comparability purposes.*	
Summary narrative	CCP.A's *Schedule of Fees* for the securities market consists of the following topics:



For the electricity spot market, CCP.A's *Schedule of Fees* consists of the following topics:



The *Schedule of Fees* is publicly disclosed on the website of CCP.A for both markets:

https://www.ccpa.at/en/membership-securities-clearing/fees/

	https://www.ccpa.at/en/membership/membership-electricity-clearing/fees/ As one can see, the fees are disclosed at the level of individual services. A clear description of the priced services is given. As regards technology and communication costs, CCP.A has implemented these provisions in the *Schedule of Fees* (see graphic display above). CCP.A gives timely notices of any changes to services and fees to the participants and the public via newsletters and/or on the website.
Key consideration 5 *An FMI should complete regularly and disclose publicly responses to the CPSS-IOSCO Disclosure framework for financial market infrastructures. An FMI also should, at a minimum, disclose basic data on transaction volumes and values.*	
Summary narrative	The following relevant risk parameters are published in addition: • Daily list of applicable r-factors for margin calculation: https://www.ccpa.at/risikomanagement-wertpapierabwicklung/berechnung-der-marginhoehe/risk-faktoren/ • Haircuts and specification of accepted collateral: https://www.ccpa.at/en/risk-management-securities-clearing/collaterals-collateral-policy/ The figures according to the CPSS-IOSCO Guideline *Public quantitative disclosure standards for CCPs* (as of Feb 2015) are publicly disclosed on a quarterly basis. The template has been used from the CCP12 Quantitative Disclosure Group. https://www.ccpa.at/cpmi-iosco/
Assessment of Principle 23: **<u>Observed.</u>**	

IV. List of Publicly Available Resources

Document name	Link
General Terms and Conditions of Business	https://www.ccpa.at/en/rules-and-regulations/legal-framework/ https://www.ccpa.at/en/rules-regulations/rules-regulations-electricity-clearing/legal-framework/
Risk Management System, Test Policy and Model Validation	https://www.ccpa.at/en/download-area/disclosure-of-information-pursuant-to-reg-eu-1532013/ https://www.ccpa.at/uploads/u/ccpa/PDF/Electricity_Spot_Market/Risk_Management/Test_Policy_and_Model_Validation_Electricity_Spot_Market_V1.2_20221013.pdf
Public Information on Default Fund Calculation	https://www.ccpa.at/en/risk-management/default-fund/ https://www.ccpa.at/en/risk-management/default-fund-1/
Margin Calculation Methodology	https://www.ccpa.at/en/risk-management/margin-calculation/ https://www.ccpa.at/en/risk-management-electricity-clearing/margin-calculation/
Collateral Policy	https://www.ccpa.at/en/risk-management/collaterals-collateral-policy/ https://www.ccpa.at/en/risk-management-electricity-clearing/collaterals-collateral-policy/
Procedure in the Event of Member Default	https://www.ccpa.at/en/risk-management/default-management/ https://www.ccpa.at/en/risk-management-electricity-clearing/default-management/
Default Waterfall	https://www.ccpa.at/en/risk-management/default-management/ https://www.ccpa.at/en/risk-management-electricity-clearing/default-management/
Clearing Agreements	https://www.ccpa.at/en/rules-and-regulations/Clearing-agreements/ https://www.ccpa.at/en/rules-regulations/rules-regulations-electricity-clearing/clearing-agreement/
Account Structure	https://www.ccpa.at/en/membership/cash-and-securities-accounts/
Investment Policy	https://www.ccpa.at/en/download-area/disclosure-of-information-pursuant-to-reg-eu-1532013/
CCP.A Schedule of Fees	https://www.ccpa.at/en/membership/fees/

	https://www.ccpa.at/en/membership/membership-electricity-clearing/fees/
CPMI-IOSCO Public Quantitative Disclosure	https://www.ccpa.at/cpmi-iosco/