The Clearing Framework Agreement (2019) – Annotated version and background information

I. Introduction

The Clearing Framework Agreement (Clearing-Rahmenvereinbarung – CRV) was first published in 2013. It complements the German Master Agreement for Financial Derivatives Transactions (deutscher Rahmenvertrag für Finanztermingeschäfte – DRV) – the German language and German law documentation for (bilateral/non-cleared) OTC-derivatives transactions - as a German law and German language client clearing documentation for cleared derivative transactions.¹

While the CRV has been developed with a view to accept cleared transactions which have been entered into under a DRV,² it is intended to be open to all cleared transactions, including transactions entered into under other (bilateral) documentations or indeed even without any reference to a bilateral master agreement documentation. Moreover, the CRV is designed to cover both cleared OTC-derivatives transactions as well as futures and options transactions (F&O transactions/ exchange traded derivative transactions - ETD) as well as FX and precious metals futures (in this case regardless of whether they are intended to be cleared or not). As such, the CRV can be used in the place of and as a more modern and comprehensive alternative to the "Sonderbedingungen für Termingeschäfte" (Special Conditions for Forward Trading) and the "Rahmenvereinbarung für den Abschluss von Termingeschäfte" (Framework Agreement for Forward Trading) which – prior to the CRV - have been widely used in the German market as standard documentation for futures transactions. In fact, the CRV incorporates key provisions of the "Sonderbedingungen" in its Section 10 with the special provisions for F&O contracts. The title "Clearing-Framework Agreement" was thus not only chosen to distinguish it from the DRV but is also an acknowledgment of this link to the "Sonderbedingungen".

In all other respects the CRV is modeled very closely on the DRV and follows its contractual structure (underpinned by German law principles and German contractual conventions).³ Where possible, the CRV provisions follow the example of the DRV. In particular, the netting provisions of the CRV are next to identical to those of the DRV, the only difference being that the CRV netting provisions directly provide for the inclusion of collateral in the determination of the close-out amount; in the DRV this is addressed in the collateral addenda.

As in the case of the DRV, the CRV has been supplemented over time by the following further documents:

- CCP-Annexes (CPP-specific provisions):
 - LCH.Ltd-Annex
 - LCH.SA-Annex
 - ICEU-Annex
 - Eurex-Annex⁴
 - CME-Annex⁵

^{*} Updated new version reflecting limited changes/adjustments in the text of the translation of the CRV 2019 (page 10). These adjustments have been introduced in order to fully align the terminology of the translations of identical provisions across all new versions of the German master agreement documentation (DRV 2018, DRV-Amendment Agreement 2018, CRV 2019 and new German master agreements for securities lending and repurchase transactions 2022). The adjustments are marked as deleted or underlined.

¹ For more English language background information on the DRV and the especially the recently published new DRV 2018, see the background paper with an annotated version of the DRV 2018 (DRV 2018 background paper)

² The interface between the DRV and the CRV is the Clearing-Addendum, which shifts cleared transaction from the uncleared space of the DRV to the cleared space of the CRV (or any other client-clearing documentation).

³ For further information on the architecture and key characteristics of the DRV documentation as well as its basing on German legal principles and contractual conventions (which holds also true for the CRV), please see the aforementioned DRV 2018 background paper.

⁴ The Eurex-Annex has effectively become redundant following the recent changes to the Eurex client-clearing model.

⁵ The CME-Annex has become obsolete after CME Europe ended its European clearing operations as of 12 October 2017.

- CRV-Collateral Addendum of 2016 CRV CA 2016
- Annex for Indirect Clearing of 2017 (adapting and complementing the CRV for indirect clearing)

The CRV has now undergone its first comprehensive revision and has now been published as CRV 2019 (with accompanying documents).

The primary objective of this revision was to develop a new CRV fully aligned with the recently published new DRV 2018 and incorporating the new approach to the netting provisions chosen for the DRV 2018. The revision of course also offered the opportunity to modernise and clarify selected other provisions taking into account recent regulatory and market developments and to incorporate certain provisions from the annexes into framework agreement itself (making some provisions therein redundant and thereby simplifying the CRV-documentation).

As in the case of the DRV 2018, the CRV 2019 is intended to serve as an alternative to the existing CRV of 2013, which can continue to be used. However, in contrast to the DRV 2018, it was decided not to develop an amendment agreement. Should counterparties therefore wish to update the existing CRV of 2013 they would need to replace the CRV by the new CRV 2019.

The development of the CRV 2019 was also used as an opportunity to review the CRV-CA 2016 (published as CRV-CA-2019).

In addition, the changes in the CRV 2019 required some consequential adjustments in the Annexes, in particular the Annex for Indirect Clearing. These are, however, limited to adjustments of references and the deletion of provisions now incorporated into the CRV 2019 itself.

The CRV 2019 and the CRV-CA 2019 and the modifications introduced with these new documents are described in more detail hereinafter.

II. CRV 2019

1. Key changes

The CRV provisions are set out and explained in the annotated version of the CRV 2019 included under item 2 below, including information on the modifications made in relation to the CRV 2013.

The key changes introduced with the CRV 2019 can, however, be summarized as follows:

Key features and structure

The central features of the CRV, such as distinction between the party acting as "Bank" the party taking the role of the "Counterparty" and the distinction between the "transactions" between the Bank and Counterparty and the corresponding "contract" accepted for clearing have been retained just as all of the other key characteristics.⁶

The structure of the CRV 2019 also remains largely unchanged. However, some new paragraphs and sub-paragraphs were added to existing provisions (Sections 1: new lit (c) in paragraph (1) and new paragraph (10), Section 3 new paragraph (3), Section 8 new paragraph (3)) and one paragraph has been deleted (Section: former paragraph (3)). A new Section 13 was inserted - thereby changing the numbering of the subsequent Sections 13 (now 14) and 14 (now 15). The newly numbered Section 15 with the elections was considerably expanded by the addition of new elections.

⁶ For a general overview over the key characteristics of the DRV documentation, which largely also applies to the CRV, please see the aforementioned DRV 2018 background paper.

Terminology

There have been limited changes to the terminology:

- The term "Execution Venue" as used in the CRV 2013 has been replaced by the term "Trading Venue" in the CRV 2019. This change was made to better distinguish the CRVterminology from the (new) MiFID-terminology: The term "Execution Venue" is now defined in Delegated Regulation 2017/565⁷ for very specific purposes (in the context of best execution obligations) and thus with a different objective. This change in terminology was thus only introduced to avoid any potential confusion and is not intended to change the meaning in any material sense.
- The term (separate or single) "compensation claim" was replaced by "claim for non-performance" as consequence of the alignment of the netting provisions of the CRV 2019 to those of the DRV 2018 (as to the background to and reasons for these changes, please refer to the DRV 2018 background paper).
- Scope Section 1 (1) lit. (a) to (d)

The material scope of the CRV remains unchanged: However, by adding the new lit. (c) in Section 1 paragraph 1 addressing OTC-derivative transactions concluded on trading venues, it has been expressly clarified that the CRV also covers these types of transactions. This clarification was primarily included in order to reflect the fact that the new regulatory framework for indirect clearing differentiates between ETD and OTC-transactions concluded on trading venues.

In addition, lit. (b) in Section 1 paragraph (1) now includes an express clarification regarding transactions entered into without reference to a master agreement documentation (e.g. as long-form confirmation) thereby confirming that these transactions can also be covered by and included into the CRV.

• Applicable rules and regulations of trading venues – Section 1 (2)

A new sentence has been included in Section 1 paragraph (2) clarifying that ETD-transactions executed by the Bank as commission agent on trading venues on behalf of customers are necessarily subject to the rules and regulations of the relevant trading venues.

• Synchronisation of (underlying) transactions and (cleared) contracts – Section 1 (10)

The newly added paragraph (10) in Section 1 incorporates a provision into the CRV framework agreement itself which is already used in the CCP-annexes and the Annex for Indirect Clearing: The provision addresses the necessary full synchronization of the "transactions" between counterparty and "Bank" on the one hand and the corresponding "contracts" accepted by a CCP by establishing that any changes to the "contract" during its life-cycle necessarily need to be reflected in the corresponding "transaction". It ultimately only confirms a general principle underpinning derivatives clearing and is effectively one further consequence of the rule set out in Section 1 paragraph (4) that the rules and regulations of a CCP are incorporated into and take precedence over the provisions of the CRV.

Clarification/inclusion of additional paragraph addressing STM-models

In Section 3 with the general provisions concerning variation margin, a new paragraph (3) was added in order to address the settled-to-market variation margin models (STM-models), primarily in order to signal that these STM-models have been taken into account and are

⁷ Commission Delegated Regulation (EU) 2017/565 of 25 April 2016 supplementing Directive 2014/65/EU of the European Parliament and of the Council as regards organisational requirements and operating conditions for investment firms and defined terms for the purposes of that Directive.

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intended to be covered by the CRV where the parties elect them. Such election can be made under the CRV collateral addendum 2019 in the provisions addressing the account models of the CCPs.

• Alignment of netting provisions to new approach of the DRV 2018 – Sections 4 to 6

The netting provisions of the CRV 2019 have been fully aligned with those of the DRV 2018. The new approach and the background are described in greater detail in the DRV background paper.

Default of CCP – Section 8

The provision regarding a default of a CPP has been modified in two respects: In order to align this provision concerning the triggering of an automatic early termination in case of an insolvency of the CCP with the parallel provision of the revised Section 4 paragraph (1), it now also addresses the filing of the commencement of insolvency proceedings by the competent authority. In addition a new paragraph (3) was added in order to clarify that the fulfilment of the obligations vis-à-vis the client under the CRV regarding cleared transactions are necessarily dependent on the fulfilment of the corresponding obligations of the CCP vis-à-vis the Bank in relation to the parallel (cleared) contract. This again is only a further consequence of the general principle of synchronicity between contract and transactions.

• TR-Reporting – Section 9

The fallback-provision regarding the reporting obligation in paragraph (3) of Section 9 of the CRV of 2013 has been deleted in the CRV 2019. The provision has turned out to be effectively redundant because the regulatory reporting obligations are usually subject to specific and detailed reporting agreements between the parties.

Due diligence of clearing clients – Section 13

The newly inserted Section 13 implements the obligations under Art. 25 of Delegated Regulation (EU) 2017/589⁸. These obligations have been addressed by a proposed wording to be included as special provision into the CRV of 2013. The incorporation of this provision in the CRV 2019 relieves the parties from the need to include such a special provision. The provision itself is primarily of an informatory nature and does intentionally not provide for special/direct legal consequences. It, however, clarifies that non-compliance may result in an early termination under the general contractual termination rights (for material grounds – "wichtiger Grund")⁹.

Elections – Section 15

As already mentioned above, the renumbered Section 15 setting out elections has been expanded and modified (explained in more detail hereinafter in the annotated version).

⁸ Commission Delegated Regulation (EU) 2017/589 of 19 July 2016 supplementing Directive 2014/65/EU of the European Parliament and of the Council with regard to regulatory technical standards specifying the organisational requirements of investment firms engaged in algorithmic trading.

⁹ For more background information on German law principles underpinning the CRV, see DRV 2018 background paper.

2. Annotated version of the CRV 2019

	 Technological and technological and
Clearing Framework Agreement 2019 ("Framework Agreement")	<u>Introduction</u>
	The primary function of the CRV is to set a contractual framework for the relation between a client on the one hand and the party providing clearing services to the client for cleared derivative transactions (ETD and OTC) - as well as for other forward/futures transactions (FX and precious metals) commissioned by the client on the other.
The following is agreed	
between	
Name and Address of the Counterparty (hereinafter the "Counterparty")	 The CRV follows the model of the DRV-documentation by distinguishing between the party assuming the role of the "Bank" and the other party assuming the role of the "Counterparty" – for further background information, see DRV-2018- background paper.
and	
Name and Address of the Bank	
(hereinafter the "Bank")	
(Bank and Counterparty jointly hereinafter referred to as "Parties")	
1. Purpose and scope of the Framework Agreement	• Section 1 defines the purpose and material scope of the CRV.
	 The CRV is intended to cover the following types of transactions: Orders for Futures and Options (exchange traded derivative transaction - ETD)
(1) This Framework Agreement shall apply to the following orders placed with the Bank and transactions entered into between the Bank and the <u>Contracting PartyCounterparty</u> (the latter referred to hereinafter as "Transactions"):	English language translation/ alignment with other English language translations of DRV-documentation)
(a) Insofar as the Bank executes orders (i) for spot, futures and options transactions ("F&O Contracts") concluded on organised markets, multilateral trading platforms or organised trading systems ("ExecutionTrading Venues") or (ii) for the clearing of F&O Contracts executed on ExecutionTrading Venues by central counterparties, in particular following their transfer by means of a give-up agreement, any Transactions which may be created under the below paragraph (2).	delineate CRV-terminology from MiFID-terminology (where the term "execution venue" is defined for a very specific purpose)
(b)—Any Transactions concluded on the basis of a (German) Master Agreement for Financial Derivative Transactions, an ISDA Master Agreement or a comparable master agreement (hereinafter	

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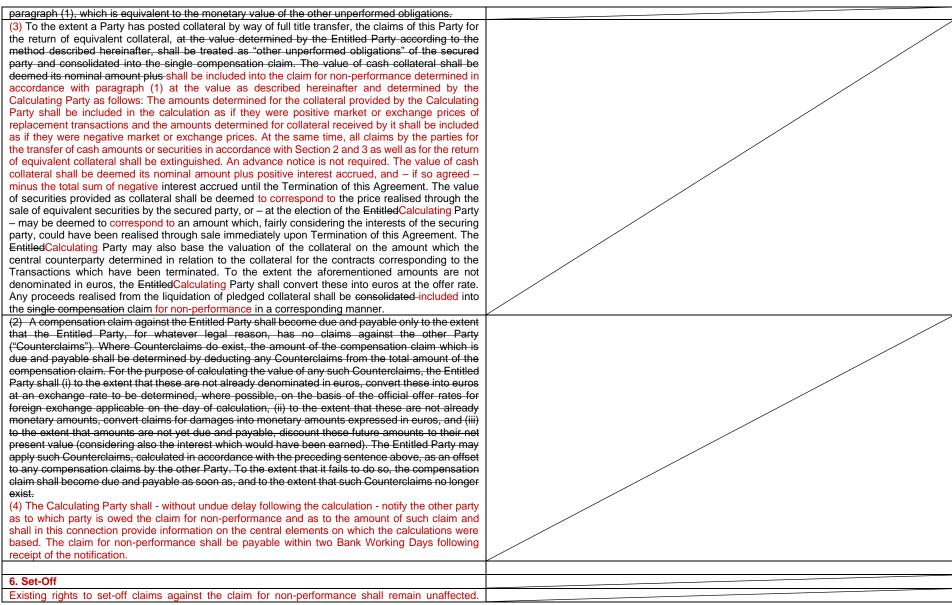
referred to as "Master Agreement") as well as OTC-derivatives Transactions not concluded under or not included in such a Master Agreement which are intended to be cleared by central counterparties, as of the point in time at which the Transaction is accepted by the clearing system of a central counterparty in accordance with the below paragraph (3). This shall also apply to transactions originally concluded with a third party which have been transferred to the Bank.	documentation, for example in the form of a long form-confirmation.
(c) OTC-derivatives Transactions concluded on Trading Venues to the extent not already covered by lit. (a) and (b).	 <u>Modifications</u>: Inclusion of new lit. c) expressly addressing OTC-derivatives executed on trading venues reflecting the fact that new regulatory framework for indirect clearing distinguished between ETD and OTC-transactions executed on trading venues.
(d) Foreign currencies and precious metals futures Transactions to the extent not already covered by lit. (a) and (b), where these have not been concluded under or included into a Master Agreement, and irrespective of whether reference has been made to this Framework Agreement or whether the Transactions are to be cleared by a central counterparty, any futures on foreign currencies and precious metals which are not covered by the above sub-paragraphs (a) or (b).	 <u>Modifications</u>: language/editorial changes.
(2) The Bank shall-will execute the orders relating to F&O Contracts referred to in item (i) of the above lit. (a) of sub-paragraph (1)(a) as commission agent in its own name and for the account of the Contracting PartyCounterparty. The execution of these orders is subject to the legal requirements and terms and conditions (customs - "Usancen") applicable at the relevant Trading Venues. Simultaneously with the execution of an order on an Execution a Trading Venue, or the transfer of the F&O Contract to the Bank, in particular by means of a give-up agreement, a corresponding Transaction is being created between the Contracting PartyCounterparty and the Bank.	 Sentence 1: Description of role of Bank in connection with orders for F&O Contracts and characterisation of the legal relationship with client as commission agent (acting on behalf /on commission of client - "Kommissionär"). Sentence 3 describing interrelation between Transaction (as between Bank and Counterparty) and F&O Contract (as between Bank and CCP). Modifications: Inclusion of new sentence 2 confirming/clarifying that orders for transactions to be executed on trading venues are necessarily subject to the rules and regulations of these venues.
(3) The Transactions referred to in the first sentence of lit. (b) of sub-paragraph (1)(b) and lit. (c) and (d) of in sub-paragraph (1)(c) shall be concluded by the Bank acting as proprietary trader in its own name and for its own account. With the acceptance of Transaction within the meaning of sub-paragraphsparagraph (1) lit. (b) or paragraph (1) lit. (c) and (d) into the clearing system of the central counterparty, this Transaction shall be extinguished and, simultaneously therewith, corresponding transactions with reversed positions but otherwise identical terms shall be created between the Bank and the central counterparty (hereinafter, an "OTC Contract") on the one hand and between the Bank and the Contracting PartyCounterparty on the other hand. Where the rules and regulations of a central counterparty provide that the OTC Contract is to be created not with the Bank but rather directly between the central counterparty and the Contracting PartyCounterparty, the Bank shall – in relation to the central counterparty – ensure that the Contracting PartyCounterparty fulfils all obligations under the relevant rules and regulations.	 Provision describing role of Bank in connection with cleared OTC-derivatives and interrelation between Transaction (as between Bank and Counterparty) and OTC-Contract (as between Bank and CCP) <u>Modifications</u>: Consequential changes reflecting above modifications and additions in paragraph 1 (new lit (c)/new numbering)
(4) The Parties agree that the legal requirements, contractual documents and general business conditions of the central counterparty whose clearing system has accepted the Transaction, in the version applicable at the relevant time, (the "Rules and Regulations") shall apply correspondingly, with such Rules and Regulations to be construed in accordance with governing law. These Rules and Regulations shall take precedence over the terms of each Transaction as well as the provisions of this Framework Agreement, and the specific terms of each Transaction shall take precedence over the terms of this Framework Agreement. This shall also apply in relation to the business terms of contracts and Transactions, and their execution as well as clearing – such as exercise date, term or margin requirements – and the provisions in the event of a suspension or cessation of clearing operations by the central counterparty associated with the ExecutionTrading Venue or any other third parties engaged by the Bank in the execution of the order. In deviation from the above, the provisions set out in the Sections 4 to 6and 5 shall take precedence in the event of an insolvency of the Centracting PartyCounterparty within the meaning of Section 4 paragraph (2), or upon occurrence of	 Provision establishing that rules and regulations of relevant CCPs are incorporated into to the framework and agreement in order to be applied correspondingly as between the parties (construed in accordance with the applicable law) as well as establishing the principle that such rules and regulations are incorporated into and take precedence over the provisions of the framework agreement in case of any conflict. <u>Modifications</u>: consequential changes reflecting terminological changes

an event entitling the Bank to terminate the Framework Agreement in relation to the Contracting PartyCounterparty in accordance with Section 4 paragraph (1).	
(5) All Transactions – in relation to each other and in conjunction with this Framework Agreement – constitute a single agreement (hereinafter referred to as "Agreement"). They are concluded under this Framework Agreement on the basis of, and in reliance on an aggregated risk assessment.	 Single agreement clause (corresponding to Clause 1.(2) of the DRV) Madificational Circulification (deletion of uppercenter words)
(6) The Bank shall be entitled to reject the execution of Transactions.	 <u>Modifications:</u> Simplification/deletion of unnecessary words. Provision establishing/ confirming right reject transactions (clarifying that the
	framework agreement does not establish an obligation for the Bank to enter into transactions)
(7) The Bank shall book all F&O Contracts or OTC Contracts (jointly "Contracts") to be executed through its systems in one or more position accounts held in the name of the Contracting PartyCounterparty. It shall, in addition, maintain one or more position accounts for its clients with the central counterparties.	 Provision reflecting regulatory EMIR-requirement to book client transactions.
(8) Should any Contract be excluded from the clearing system of the central counterparty, the Bank shall be entitled, in lieu of a continuation of the relevant Transaction, to demand early termination of	 Provision (together with paragraph (9)) governing de-clearing: If a contract is de- cleared, the Bank is entitled to terminate the underlying transaction (see
the corresponding Transaction by way of cash settlement with effect from the date specified in the declaration of the termination (the "Termination Date"). In this case, the payments owed by the	paragraph (9) for provisions covering the case that the Bank chooses not to exercise this right).
Parties to each other which would have become due subsequent to the Termination Date, or any performance of other obligations, are instead to be replaced by a cash amount to be determined by	 Modifications: consequential changes reflecting modifications in Section 8 (see
the Bank based upon the net present value of the relevant Transaction, in accordance with the second to fourth sentences of Section 5 paragraph (1). Section 8 paragraphparagraphs (2) and (3)	below)
shall apply correspondingly.	
(9) To the extent that the Bank does not exercise its right under Section 1 paragraph (8), any such Transactions concluded between the Bank and the Contracting PartyCounterparty on the basis of a	 Provision concerning the event that Bank chooses not to exercise the termination right under paragraph (8). In this case the transaction corresponding to the de-
Master Agreement shall no longer form part of this Framework Agreement but shall instead be governed solely by the applicable Master Agreement they were originally concluded under.	cleared contract are re-accepted into the (bilateral) master agreement it was originally concluded under – however only – where the relevant transaction had been concluded on the basis of a (bilateral) master agreement between the same two parties being parties to the framework agreement. Where the parties are not identical, the Bank is precluded from this possibility and needs to rely on a termination under paragraph (8).
	<u>Modifications:</u> Language/clarification.
(10) Any amendment or termination of a Contract, including as a consequence of a transfer, netting, a trade compression or a comparable process, as well as of an amendment of the rules and regulations or any other action of the central counterparty, shall result in a corresponding amendment or termination of the Transaction which corresponds to the relevant Contract.	 <u>Modifications</u>: Addition of new paragraph (10) incorporating a provision regarding the necessary synchronization of the "transactions" between counterparty and "Bank" on the one hand and corresponding "contracts". Similar provisions are already included in a number of annexes.
2. Initial Margin	 Sections 2 and 3 set out the general framework and for margins by describing the
	 Sections 2 and 3 set out the general namework and for margins by describing the purpose and function of the initial margin (including the right to demand additional margins (the "Bank Margin") and the variation margin and the processes involved. Thus, the CRV – in contrast to the DRV - already includes margining rules. The collateral addendum to the CRV therefore builds on these general rules with more detailed provisions.
(1) Central counterparties require their clearing members to post collateral for each executed Contract ("Initial Margin"). The amount of this Initial Margin is generally determined by central	
counterparties based upon principles of mathematical finance as an amount which, by considering	
certain extreme variations in market value, corresponds to the potential replacement value by	

entering into offsetting transactions. In order to satisfy these requirements for Initial Margin of the relevant central counterparty, the Contracting PartyCounterparty shall, at the request of the Bank, post collateral conforming to banking standards with the Bank in an amount at least corresponding to this Initial Margin. The Bank shall be entitled to demand additional collateral ("Bank Margin"), the amount of which shall be determined through the use of the Bank's internal procedures for risk measurement.	
(2) The manner in which collateral is to be posted, and the assets to be posted as collateral, shall be determined jointly by the Bank and the Contracting PartyCounterparty, whereby such collateral may be posted either by way of full title transfer or by way of a pledge. The Bank shall, to the extent possible, fulfil its own obligations toward the central counterparty for the posting of Initial Margin by posting collateral of the same kind and quality as the assets received from the Contracting PartyCounterparty by way of full title transfer or by way of pledge. The same shall apply in the event the Bank is obligated to pass on the Bank Margin to the central counterparty. In the event that the assets posted by the Contracting PartyCounterparty as collateral do not or no longer conform to the requirements under the relevant Rules and Regulations, or in the event that the Bank is, for any other meason, unable to utilise the assets posted by the Contracting PartyCounterparty or this purpose, the Bank shall post – at the expense of the Contracting PartyCounterparty – other assets as collateral to the central counterparty.	
(3) In the event that the amount of the Initial Margin determined by the central counterparty, the amount of the Bank Margin arising from the Bank's risk evaluation, or the value of the collateral posted by the Contracting PartyCounterparty should change to the detriment of the Contracting PartyCounterparty, the Bank shall be entitled to demand, with reasonable advance notice, the posting of additional assets as collateral. The notice period for such provision of additional or stronger collateral may, depending upon the individual case, be set in hours – for example, where market prices are subject to rapid fluctuation. In the event that the amount of the Initial Margin determined by the central counterparty, the amount of the Bank Margin arising from the Bank's risk evaluation, or the value of the collateral posted by the Contracting PartyCounterparty should change to the benefit of the Contracting PartyCounterparty, the Contracting PartyCounterparty shall have the right to request the release or return of its posted collateral in the amount that it exceeds the sum of the Initial Margin and Bank Margin	
(4) Should the Contracting PartyCounterparty fail to meet a demand for the initial posting of collateral, or for the subsequent posting of additional or stronger collateral, such demand to be made by telephone, fax, e-mail in text form or any other electronic format agreed upon with the Bank, the Bank shall – without prejudice to the rights under Section 4 paragraph (1) – be entitled, following a notice to this effect and, to the extent possible, taking into consideration the interests of the Contracting PartyCounterparty, to unwind some or all of the Contracts executed on behalf of the Contracting PartyCounterparty and covered by this Framework Agreement with offsetting transactions. In the event that the Bank relies on this right to offset some or all Contracts with offsetting transactions, the Transactions corresponding to these Contracts shall terminate and the Bank shall, in the case that losses are incurred, demand reimbursement for these or directly debit these to the account of the Contracting PartyCounterparty or credit these to its account. Should the Bank be unable to contact the Contracting PartyCounterparty or credit these to its account. Should the Bank be unable to contact the Contracting PartyCounterparty, this right to enter into offsetting transactions shall remain unaffected. The Contracting PartyCounterparty shall thus take measures to ensure that it can be contacted by the Bank at any time on Bank Working Day.	 <u>Modifications:</u> Modernisation of provision concerning formal requirements for declarations (text form), as regards text form concept under German law, see comments in DRV-2018-background paper.
2 Variation Manuin	
3. Variation Margin	
(1) Central counterparties determine, on a daily basis, and on the basis of their Rules and	

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Regulations, the net present value of each Contract accepted in their clearing systems, and, by taking into account the amount of collateral already posted, the amount of the collateral to be to-be transferred ("Variation Margin") as well as, and in relation to any Variation Margin already posted, the amount of collateral to be returned ("return of Variation Margin") and also the party obligated to make the transfer. Where the central counterparty, through these calculations, determines that the Bank is obligated to post or to a return Variation Margin to the central counterparty, the Bank shall be entitled to demand payment of this same amount or to directly debit this amount from the account of the Contracting PartyCounterparty. Where the central counterparty is obligated to post or return Variation Margin to the Bank, the Bank shall payprovide this same amount to the Contracting PartyCounterparty or credit this amount to its account.	 <u>Modifications:</u> Modernisation of provision concerning formal requirements for declarations (text form), as regards text form concept under German law, see comments in DRV-2018-background paper.
Bank, the provisions of Section 2 paragraph (4) shall apply correspondingly.	
 (3) The parties may agree that the variation of the present value determined in accordance with paragraph 1 can also be settled by way of debiting or crediting the determined amounts to the account of the client ("Settled-to-Market-Variation Margin"). 	 <u>Modifications</u>: Addition of a new paragraph addressing settled-to-market variation margin models (STM-models), primarily in order to signal that these STM-models have been taken into account and are intended to be covered by the CRV where the parties elect them. The CRV collateral addendum 2019 now provides for such an election in the provisions addressing the account models of the CCPs.
4. Termination	 Netting provisions (termination rights, automatic early termination and provisions
4. Termination	 Netting provisions (termination rights, automatic early termination and provisions governing determination of close-out amounts). As the CRV netting provision are practically identical to those of the DRV, please refer to the DRV 2018 background paper for a more detailed description and background information.
(1) Insofar as Transactions have been concluded and but not yet completed, this Agreement may only be terminated for material cause. Such cause may exist, among other reasons, in the event a payment or other obligation to be performed which has become due is, for whatever reason, not received by the Party to which it is owed within fivethree Bank Working Days following notification to receipt by the party owing the payment or performancedelivery of the a notification of its failure of the recipient to have received such payment to pay or deliver other performance owed, or where there has been a failure to post collateral within the meaning of Section 2 paragraph (4) or Section 3 paragraph (2). The notification, as well as notice of termination, must have to be made in writing, by fax or in a comparable manner text form. A partial termination of this agreement, in particular its termination with respect to some but not all Transactions, is not permissible.	
(2) The Agreement shall terminate without exercise of a termination right in the event of insolvency. Such an event of insolvency shall exist where an application is filed for the initiation commencement of an insolvency proceedings proceeding or any other similar proceedings comparable proceeding is filed in respect of the assets of either Party, whether a party, and either (i) such party has filed for the application itself or is an authority or public entity which is entitled to file for such proceedings in relation to this party has filed for such proceedings, or (ii) the relevant party is generally unable to pay its debts or is otherwise in a situation that justifies the initiationcommencement of such proceedings.	
(3) In the event of termination of this Agreement, whether through exercise of a termination right-in accordance with paragraph (1) or by reason of insolvency (2) (hereinafter referred to as "Termination"), neither Party shall be required to make any further payments or perform any other obligations under this Agreement which would have become due on the same day or thereafter. Such	

obligations shall be replaced by compensation claims the claim for non-performance in accordance	
with Sections 5 and 6 , which claim becomes due upon Termination.	
5. Claims for demonston and componentian for benefits received Nen Derformance	
5. Claims for damages and compensation for benefits received Non-Performance (1) In the event of Termination, the party giving notice of termination or the solvent party, as the case may be, (hereinafter referred to as "Calculating Party") shall determine the claim for non- performance. The claim for non-performance will be determined by the Calculating Party on the basis of market or exchange prices of replacement transactions which are entered into in place of the terminated Transactions. The Calculating Party is required to enter into these replacement transactions without undue delay but at the latest by the end of the fifth Bank Working Day following the Termination, or, where this is necessary for a value-conserving execution of the transactions settlement of the open positions, by the end of the twentieth Bank Working Day following the Termination. Where market or exchange prices of the replacement transactions are denominated in currencies other than the Euro, the Calculating Party shall convert them into Euro on the basis of currency exchange rates offered by leading market participants for selling the relevant currencies. To the extent the Calculating Party refrains from entering into such replacement transactions, it is entitled to determine the claim for non-performance on the basis of market or exchange prices entered-inte at the time of Termination, however, not later than by the end of the fifth Bank Working Day following the Termination, or (ii) determined by the central counterparty for the Contracts corresponding to the Transactions. Where market conditions prevent or would have prevented the execution of replacement transactions in accordance with sentences 2 or 5 within the relevant time limits, the Calculating Party is entitled to determine the value of the terminated Transactions in accordance with methods and procedures which sufficiently ensure an adequate valuation. The market or exchange prices obtained for the replacement transactions in accordance with sentence 2, the amounts deter	
netting is – from the perspective of the Calculating Party – ultimately negative, the other party is	
entitled to the claim for non-performance corresponding to this absolute amount.	
(2) The following applies to payments and deliveries owed, interest accrued and costs and expenses incurred in connection with the determination of the claim for non-performance (all as of the time of the Termination): Where the party obligated to pay the claim for non-performance also owes payments, deliveries, costs, expenses or interest to the other party, the claim for non-performance shall be increased by these unpaid amounts; otherwise the claim is reduced by such unpaid amounts. Paragraph (1) sentence 4 shall apply correspondingly to payments not denominated in Euro. For any unperformed deliveries an equivalent value in Euro shall be determined accordance with paragraph (1) sentences 2 to 6.	
(2) In the event that the Entitled Party receives, in the aggregate, a net financial benefit from the termination of the Transactions, it shall owe to the other Party, subject to Section 6 paragraph (2), an amount equal to the amount of such financial benefit received, but in any case not more than the amount of damages incurred by the other Party. The principles for the calculation of damages set forth paragraph (1) shall apply correspondingly to the calculation of such financial benefit. 6. Final Payment (1) Any unpaid amounts, as well as any other unperformed obligations and any compensation for damages, shall be combined by the Entitled Party into a single consolidated compensation amount in euro, to be determined in accordance with the second through fourth sentences of Section 5	



 provide in this case that some or all of the Contracts entered into by the Bank are to be terminate, of a default of the Bank within the meaning of such Rules and Regulations, the Transactions corresponding to the Contracts which have been terminated shall, in deviation for management of a default of the Bank and the Contracts and vibour any declaration of terminates in utilateously with such termination of the Contracts and vibour any declaration of the contracts and collateral. These separate compensation claims for non-performance are to be determined in relation to each segregation model (to the extent so provided by the Rules and Regulations) on the basis of the valuations of the contracts and collateral. These separate compensation claims for non-performance between the Bank and the contracts are terminated in accordance with Section 6, as other uperformance date mined in accordance with Section 6, as other uperformance claims. For olicit, with any protective measures of client protection measures of client protection on performance determined in accordance with Section 6, as other uperformance dates and perform any legal acts required under the Rules and Regulations of the relatal counterparty. 8. Default of a central counterparty is unable to pay its debts or otherwise in a situation that justifies the initiation of such perceedings are initiated in respect of the assets of the central counterparty is unable to pay its debts or otherwise in a situation that justifies the initiation of such proceedings are initiated in respect of the contracts. 9. Default of a central counterparty is unable to pay its debts or otherwise in a situation that justifies the initiation of such proceedings are initiated in respect of the contracts are and eshall segregation in declared by the central counterparty is and black and the contract and and that the contract and counterparty. 9. Default of a central counterparty is unable to pay its debts or otherwise in assumation	 denominated in Euro. For any unperformed deliveries an equivalent value in Euro shall be deternin accordance with Section 5 paragraph (1) sentences 5. 7. Default of the Bank (1) Where the Contracting PartyCounterparty has elected omnibus client segregation or indicipient segregation or a comparable segregation model, and where the relevant Rules and Regulation 	ined	
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 (2) Separate compensation claims for non-performance determined in accordance with the paragraph (1) shall be netted against each other in accordance with Section 5 paragraph (1) sentence 7 and included into the single compensation-claim, as for non-performance determined in accordance with Section 6, as other unperformed obligations. The foregoing sentence-5. Sentence 1 shall not apply where such inclusion would conflict with any protective measures for client positions provided by the Rules and Regulations. (3) In order to ensure that Contracts may be transferred to another clearing member, either Party may demand that the other Party take any measures and perform any legal acts required under the Rules and Regulations of the relevant central counterparty. (4) Where insolvency proceedings or similar proceedings are initiated in respect of the assets of the central counterparty and where-(i) the application was filed by the central counterparty has filed or an authority or public entity which is entitled to file for such application itself or proceedings in relation a situation that justifies the initiation of such proceedings, the Transactions concluded between the Bank and the Contracting-PartyCounterparty with correspond to the Contract cleared by this central counterparty and where-(i) and simultaneously. Where the Bank is the Entitled Party. Section 4 paragraph (3) and Sections - 5 and - 5 shall insofar apply 			
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claim for non-performance against the Bank is limited to the amount which the Bank has received from the central counterparty for the Contracts that have been terminated.	claim for non-performance against the Bank is limited to the amount which the Bank has rec from the central counterparty for the Contracts that have been terminated.	ived	
for the performance of obligations under this agreement shall be subject to the condition of the full or of the obligations vis-à-vis the client under the CRV regarding cleared trans.		ates •	Modifications: Addition of new paragraph (3) in order to clarify that the fulfilment
	for the performance of obligations under this agreement shall be subject to the condition of the partial performance of the obligations owed by the central counterparty in connection wit		are necessarily dependent on the fulfilment of the corresponding obligations of

9. Involvement of third parties and reporting obligations	
(1) The following shall apply unless agreed otherwise in Section 1415: The Bank shall be entitled to engage third parties in connection with the execution of orders, in particular in connection with Transactions which are to be cleared by central counterparties located in other countries; in the case of the performance of obligations in accordance with Section 10 paragraph (7), this shall also apply to delivery and acceptance services.	<u>Modifications</u> : Adjustment of cross-reference.
(2) The Bank shall only be liable for due care in the selection of any third parties thus engaged. In the event of deficiencies in the performance of obligations, the Bank shall assign to the Contracting PartyCounterparty any claims it may hold against the relevant third party.	
(3) The following shall apply unless agreed otherwise in Section 14: The reporting to trade repositories required in accordance with EMIR or any comparable legal requirements shall be performed by the Bank, which shall be entitled, in conjunction therewith, to rely upon third parties.	 <u>Modifications</u>: Deletion (no practical purpose/redundant).
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10. Special provisions applicable to orders within the meaning of Section 1 paragraph (1) sub-paragraph-lit. (a) regarding the execution of F&O Contracts on ExecutionTrading Venues and their clearing execution	 Special provisions governing F&O-Contracts / ETD <u>Modifications</u>: Adjustment of terminology.
(1) The Contracting PartyCounterparty shall also be entitled to place orders within the meaning of Section 1 sub-paragraph (1) lit. (a) with the Bank by means of telephone, fax, e-mail-in text form or any other electronic format agreed with the Bank.	 <u>Modifications:</u> Modernisation of provision concerning formal requirements for declarations (text form), as regards text form concept under German law, see comments in DRV-2018-background paper.
(2) When placing orders with the Bank for the execution of F&O Contracts on ExecutionTrading Venues, the Contracting PartyCounterparty shall be entitled to set price limits (limit orders). An order for the execution of F&O Contracts not expressly stating the period of validity shall be valid only for the day upon which the order is placed.	 <u>Modifications</u>: Adjustment of terminology.
(3) The Bank reserves the right, at its discretion, to reject individual orders, except where such orders serve as Transactions to unwind F&O Contracts which are still outstanding by way of offsetting transactions. The Bank shall also be entitled to reject orders for spot transactions where the Contracting PartyCounterparty has failed to ensure that sufficient deliverable assets are held in its foreign currency account, securities account, or other place designated by the Bank, or has failed to demonstrate that it has made the necessary arrangements for the acceptance of the such deliverable assets. Section 7 paragraph shall (2) apply correspondingly.	
(4) In the event of the purchase of an option, the Bank shall either demand payment of the option premium or directly debit the account of the Contracting PartyCounterparty. In the case of options for which the premium is not paid in full upon purchase (futures-style options), Sections 2 and 3 shall apply correspondingly.	
(5) The Bank will provide, upon each change in open positions, the Contracting PartyCounterparty with a position statement listing all F&O Contracts which are still outstanding.	
(6) In the event that the Contracting PartyCounterparty wishes to exercise an option, or request the performance of a futures transactions by way of physical delivery, it shall be obligated to make a declaration thereof to the Bank no later than the deadline specified by the Bank. The Bank is under no obligation to notify the Contracting PartyCounterparty of the impending expiry of an option dates or the deadlines for declaring its exercise.	
(7) In the case of F&O Contracts to be fulfilled by means of physical delivery, the Bank shall await instructions from the Contracting PartyCounterparty as to whether such delivery is to be effected. In the event the Contracting PartyCounterparty has failed to provide instructions by the specified deadline, or has failed to ensure that sufficient funds for payment upon delivery are held in its account, or that sufficient deliverable assets are held in its foreign currency account, securities account or such other place designated by the Bank, the Bank shall be entitled to unwind the F&O Contract for which delivery would otherwise have to be made or accepted by entering into offsetting transactions,	

in order to prevent such settlement by means of physical delivery. The second to fourth sentences of Section 2 paragraph (4) shall apply correspondingly.	
(8) The Bank shall charge the Contracting PartyCounterparty with the price of the F&O Contracts; it shall be entitled to charge its fees. Any potential claims of the Bank for reimbursement of expenses shall be governed by applicable law.	
(9) If trading in certain F&O Contracts is partly or completely suspended at a Trading Venue at the direction of an entity authorised to do so, and if consequently all open orders for such F&O Contracts are cancelled, all orders placed by the Contracting PartyCounterparty for the execution of these F&O Contracts at the relevant ExecutionTrading Venue shall likewise be cancelled. In this case, the Bank shall promptly notify the Contracting PartyCounterparty of such cancellation.	 <u>Modifications</u>: Adjustment of terminology.
(10) Where option contracts are sold ("written"), the Contracting PartyCounterparty shall irrevocably authorise the Bank, and release it from the restrictions under Section 181 of the German Civil Code, so that the Bank may receive, on behalf of the Contracting PartyCounterparty, any notifications regarding the exercise of such options. In the event of such exercise, the Bank shall promptly notify the Contracting PartyCounterparty.	
11. Special provisions applicable to orders within the meaning of Section 1 sub -paragraph (1) lit. (b) concluded on the basis of a Master Agreement and (c)	 Special provisions governing cleared OTC-derivatives Modifications: Adjustment of cross-reference/simplification.
(1) Unless the central counterparty has already directly notified the Contracting PartyCounterparty thereof, the Bank shall promptly notify the Contracting PartyCounterparty of the acceptance of the Transaction into the clearing system of the central counterparty; in addition to telephone, fax, e-mail text form or any otherelectronic format agreed with the Bank, this notification may also be in the form of an entry in the position statement. Section 10 paragraph (5) shall apply correspondingly.	 <u>Modifications</u>: Modernisation of provision concerning formal requirements for declarations (text form), as regards text form concept under German law, see comments in DRV-2018-background paper.
(2) Unless agreed otherwise by the Parties, fees for services rendered shall be determined in accordance with the Bank's schedule of prices and services, as applicable at that time.	
12. Special provisions applicable to orders within the meaning of Section 1 sub-paragraph (1) (b) lit. (d) concluded on the basis of this Framework Agreement	
(1) Where the Parties have agreed on the terms of a Transaction, the Bank shall confirm the relevant details thereof to the Contracting Party in writing, by fax or by any other electronic means agreed with the Bank. The Contracting PartyCounterparty in text form. The Counterparty shall be entitled to request an executed copy of the confirmation. Such confirmation shall, however, not be a prerequisite for the legal validity of the Transaction.	 Special provisions governing FX- and precious metals futures (forwards). <u>Modifications:</u> Modernisation of provision concerning formal requirements for declarations (text form), as regards text form concept under German law, see comments in DRV-2018-background paper.
(2) The Bank shall demand payment of amounts owed by the Contracting PartyCounterparty, or directly debit the account of the Contracting PartyCounterparty, as well as demand performance of any other obligations, on or before the agreed due date.	
(3) The following shall apply unless agreed otherwise in Section 1415: In the case of Transactions in currency futures, notification must be received no later than 12:00 noon on the second Bank Working Day before the maturity date of the currency futures transaction confirming that the amount to be delivered by the Contracting PartyCounterparty in the applicable currency (whether in euros or a foreign currency) will be available as agreed on the maturity date. Such notification shall not be required if the Contracting PartyCounterparty already has an adequate credit balance as of this notification date on an account held with the Bank. Otherwise, the Bank shall be entitled, while also taking the interests of the Parties into account, to purchase or sell the open positions resulting from the Transaction, whether on a currency exchange or through an OTC transaction, for the account of the Contracting PartyCounterparty.	

(4) Where Transactions are accepted into the clearing system of a central counterparty, the second and third sentences of Section 11 paragraph (1) as well as paragraph (2) shall apply correspondingly.	
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13. Due diligence assessments of clearing clients	
The Bank will annually review whether the Counterparty continues to conform to the criteria in accordance with Art. 25 Delegated Regulation (EU) 2017/589 which it applied in the initial assessment regarding the type, scope and complexity of its business activities it made prior to the establishment of the business relationship. Non-compliance with the criteria may result in a termination of the agreement.	
14. Miscellaneous	 General provisions: definitions, extension to transactions concluded under previous version, provision regarding transfer of data, severability, applicable law and jurisdiction, appointment of agent for accepting service of process. <u>Modifications</u>: Adjustment to new numbering.
(1) "Bank Working Day" for the purpose of this Agreement shall mean each day (other than a	
Saturday or a Sunday) on which banks are open for business in Frankfurt am Main, Germany,	
specifically including for trading in foreign currencies and for acceptance of foreign currency deposits.	
(2) "Business Day" shall mean any day determined under its Rules and Regulations on which the relevant central counterparty accepts transactions into its clearing system, calculates valuations, and determines payments and deliveries on the basis of these.	
(3) This Framework Agreement in its currently agreed form shall also apply to any transactions	
between the Parties which were entered into under a previous version of the framework agreement.	
This shall also include transactions which have been concluded under the Special Conditions for	
Forward Trading (Sonderbedingungen für Termingeschäfte). To the extent necessary for the	
interpretation of the provisions agreed therein, however, the earlier version shall, for such	
transactions, continue to apply.	
(4) The Parties, as well as any third parties acting on their behalf, shall be entitled, in conjunction with the clearing of Transactions, to provide Transaction data and client-related data to third parties,	
in particular to trade repositories, to central counterparties and to supervisory authorities.	
(5) In the event that any provisions of this Agreement are invalid or unenforceable, the remaining	
provisions shall remain unaffected. Should any omissions or gaps arise in the Agreement as a	
consequence of such invalidity or unenforceability, these shall be remedied by way of supplementary	
interpretation (<i>ergänzende Vertragsauslegung</i>) which fairly considers the interests of the Parties.	
(6) This Agreement shall be governed by the laws of the Federal Republic of Germany.	
(7) The courts at the place of establishment of the Bank shall have non-exclusive jurisdiction.	
 (8) The following person or agent within Federal Republic of Germany shall be authorised to accept service of process on behalf of the Counterparty: 	

¹⁰ Commission Delegated Regulation (EU) 2017/589 of 19 July 2016 supplementing Directive 2014/65/EU of the European Parliament and of the Council with regard to regulatory technical standards specifying the organisational requirements of investment firms engaged in algorithmic trading.

1415. Special agreements		Elections
		 <u>Modifications</u>: Adjustment to new numbering.
(1) The following provisions shall apply only to the extent that the relevant boxes ha	ave been marked	
completed or ticked:		
(2) Section 6 shall be replaced by the following.		
"Where the claim for non-performance is owed to the other party, this claim shall – Section 4 paragraph 3 only become due, when the Calculating Party does not have whatever legal reason – against the other party (counterclaims). Where such cou their value shall be subtracted from the claim for non-performance in order to deter of the claim for non-performance, which is due and payable. For the purpose of calc of the counterclaims, the Calculating Party shall (i) where these refer to currencies convert them into Euro on the basis of currency exchange rates offered by leading ma for selling the relevant currencies, (ii) where these are not claims for payment of mon into claims expressed in Euro, and (iii) where these are not due, take them into acc of their present value (also taking into account claims for interest accrued). The C shall be entitled to set off the claim for non-performance of the other party against amounts of the counterclaims calculated in accordance with sentence 3. Where the fails to do so, the claim for non-performance shall become due when and as far as Party is no longer exposed to counterclaims."	e any claims – for interclaims exist, rmine the portion culating the value other than Euro, arket participants iey, convert them ount on the basis Calculating Party t the value of the Calculating Party	election (corresponding to elections under DRV 2018, for further explanations and background, please see DRV 2018 background paper).
(43) Section 9 paragraph (1) shall not apply.		
		 Deletion of now redundant election (because of deletion of Section 9 (3), see above)
(4) Section 12 paragraph (3) shall not apply.		
□ (45) Section 1314 paragraph (3) shall not apply.		
□ (6) Use of the Framework Agreement also for indirect clearing purposes		 <u>Modifications</u>: Introduction of provisions (optional/as election) regarding use of CRV for indirect clearing services where these are to be offered in parallel to services offered to the (direct) client, in particular regarding the determination of separate claims-for non-performance.
To the extent this Framework Agreement is used for transactions of the Counterpart transactions commissioned by clients of the Counterparty (Indirect Clearing), the follo as regards the determination of a claim for non-performance in the case of the Counterparty:	owing shall apply be default of the	
(a) Where the Counterparty has notified the Bank that one or more omnibus segregation, individual client account segregation or comparable segregation more elected, Section 4 paragraph 3 and Section 5 shall apply with the proviso that segnon-performance shall be calculated in relation to each segregation model, and in the omnibus client account segregation, as far as provided by this segregation model, a each client of the Counterparty.	odels have been parate claims for ne case of gross- also in relation to	
(b) Separate claims for non-performance determined in accordance with lit. (a) shall the claim for non-performance determined in accordance with Section 5. Sentence		

where such inclusion would conflict with the client protection measures required under applicable supervisory law or set out by the segregation model.	
 (c) In order to enable the transfer of Contracts and Transactions to another clearing member or to another client of a clearing member, each party is entitled to demand that the other party takes all necessary measures and performs all necessary legal acts. 	
□ (7) Restriction of the effects of an automatic early termination:	
The following shall be added at the end of Section 4 paragraph 2 sentence 2:	
"; however, this shall only apply subject to the proviso that the insolvency proceedings or comparable proceedings are filed at the location of the head office or a relevant branch of the party. Location of the main branch shall be the location where the party has its registered office in accordance with its articles of association, its centre of main interest or its place of residence. Relevant branches shall be branches established in Germany, Japan and Switzerland where such party maintains branches in these countries. Where insolvency proceedings or any comparable proceedings are filed in respect of the assets of the party located in a place other than that of the head office or a relevant branch, the right to terminate the agreement for material cause in accordance with Section 4 paragraph (1) shall remain unaffected."	2018, for further explanations and background, please see DRV 2018 background paper).
(8) Other agreed provisions:	
Signature(s) on behalf of the Bank	
Signature(s) on behalf of the Counterparty	



III. CRV CA 2019

1. Introduction

The CRV CA 2019 complements the CRV 2019 with additional and more detailed provisions concerning the provision of collateral as initial margin (IM) and variation margin (VM). As already mentioned above, the CRV-CA builds on the provisions concerning to provision of IM and VM contained in the CRV itself already establishing the obligation to provide collateral in view of the IM and VM-requirements of CCPs. In this respect, the CRV-CA differs from the collateral addenda to the DRV.

In addition, since the provision of IM and VM in connection with cleared transactions is necessarily largely predetermined by the requirements of the CCPs, the CRV-CA concentrates on the technical aspects of the relationship between Bank and Counterparty in connection with the provision of collateral as IM and VM. Since the provision of VM is comparatively straightforward and in practice mostly only reflects the corresponding requirements of the CCP, CRV-CA also focuses primarily on IM.

In all other respects the CRV-CA follows the model of the DRV collateral addenda as much as possible so that parties already familiar with the DRV-documentation can build on their experience with these DRV collateral addenda.

The new CRV-CA 2019 will be accompanied by a (non-binding) English language translation.

As most of the provisions, especially those regarding individual agreements and elections to be made are self-explanatory, the comments in the annotated version below limit themselves to brief descriptions of key elements.¹¹

¹¹ In view of the fact that no English translation of the 2016 version had been publicly available, the (in any event primarily technical) modifications and changes introduced with the CRV-CA 2019 are not specifically set out and explained in this background document. They are, however, addressed in detail in the German language background paper for the CRV 2019.

2. Annotated version of the CRV-CA 2019

Collateral Addendum to the Clearing Framework Agreement 2019 ("Framework Agreement")	
The following is hereby agreed between	
Name and address of Counterparty	
(hereinafter referred to as the "Counterparty")	
and	
Name and address of the Bank (hereinafter referred to as "the Bank") (Bank and the Counterparty jointly hereinafter referred to as "the Parties")	
1. Purpose and scope of the Addendum	
In addition to the provisions of the Framework Agreement as well as the supplementary provisions contained in the applicable addenda for the respective central counterparties, the Parties undertake to provide the collateral they are required to post in accordance with Sections 2 and 3 of the Framework Agreement pursuant to the following provisions. The collateral provided on the basis of this Addendum serves to secure all existing, future, contingent and time-limited claims of the collateral receiver against the collateral provider arising from or in connection with the Agreement. Section 1 paragraph (5) and Section 6 of the Framework Agreement shall remain unaffected.	 Provision defining purpose and scope of CRV-CA: Sentence 1 addresses the underlying purpose and clarifies relation to CRV. The reference to Sections 2 and 3 of the CRV reflects and confirms that the basic requirement regrading collateralisation is already addressed in the CRV itself (in contrast to DRV approach where collateralisation is addressed exclusively in the collateral addenda). Sentence 2 determines the collateralisation objective ("Sicherungszweck") for all collateral provided under/in accordance with the CRV-CA. The collateralisation objective captures all collateral provided by the parties and determine that this collateral serves to secure future, contingent and time-limited claims under or in connection with the Agreement (meaning the CRV and all transactions covered by the CRV or connected thereto).
2. Definitions	
The following definitions apply within the scope of this Addendum:	 Provision with definitions for key terms
 "Value" of cash and securities serving as collateral, to the extent that they correspond with the collateral permitted by the respective central counterparty, is the value determined by the Bank; the valuation method and rates used by this central counterparty may be taken into consideration; Cash Collateral must be valued at its nominal value and securities at their Market Value, multiplied in each case by the rates agreed in Section 12 paragraph (1); the same shall apply in the event that a central counterparty does not provide a value or a valuation method; if amounts 	

	not denominated in Euro are converted into Euro, this shall be done according to the reference rate.	
-	"Cash Collateral" means cash amounts in Euro or other eligible currencies pursuant to Section 12 paragraph (1);	
-	"Notification Day" means any Business Day;	
-	"Notification Time" means the point in time referred to as such in Section 12 paragraph (5);	
-	"Valuation Day" means any Business Day; where the central counterparty requests collateral more than once on a Business Day from the Bank in relation the relevant Contracts, or where - on a Business Day - the VM-Collateralisation Claim of the bank or the value of the IM-Collateral held by the Bank changes to the detriment of the collateral provider, each such request or change represents an independent Valuation Day, if the Bank determines this to be the case.	 Definition of valuation day also addresses the case of intra-day changes in the value of collateral or to the exposure.
-	"Valuation Time" means the point in time the central counterparty has used as a basis for determining the collateral to be provided and, otherwise the time of banks operating in Frankfurt/Main close for business;	
-	"Offer Price" means the price for the sale of a security or a currency in each case quoted by leading market participants.	
-	"Received IM-Collateral" means IM-Collateral held by the Bank on the basis of this Addendum, including any IM-Collateral pledged to the Bank.	
-	"Bid Price" means the price for the purchase of a security or a currency in each case quoted by leading market participants.	
-	"IM Claim" means the total sum of all initial margin demanded by the central counterparty in relation to the Contracts concluded for the Counterparty;	
-	"IM-Cash-Collateral" means Cash Collateral provided as IM-Collateral;	
-	"IM Collateralisation Claim" of the Bank means the amount of its IM claim plus a possible Surcharge agreed for the benefit of the Bank; if this results in a negative amount, then the IM Collateralisation claim of the Bank shall be zero;	
-	"IM-Collateral" means the Collateral to be provided in accordance with Section 2 paragraph (1) of the Framework Agreement and posted in accordance with Section 8 paragraph (2);	 Definition of IM-Collateral includes a clarification that the term also covers additional IM posted in accordance with Section 8 (2) – the IM-Additional Collateral (defined term).
-	IM-Securities-Collateral" means Securities Collateral provided as IM-Collateral;	
-	"IM Additional Collateral" means any collateral provided by the Counterparty to the Bank in accordance with Section 8 paragraph (2) as Initial Margin exceeding the IM-Collateralisation Claim at the time of the provision as collateral;	
-	"Market Value" of Securities Collateral means the Bid Price at the Valuation Time on the relevant Valuation Day; in the case of debt securities – depending on the terms agreed in Section 12 paragraph(1) – either including or excluding interest accrued by the end of such day;	
-	"Average Rate" means the arithmetic mean of the Bid and Offer Price;	
-	"Negative Interest Amount" means the absolute value of an Interest Amount lower than zero;	
-	"Reference Rate" is the average rate of a currency determined at the Valuation Time on the relevant Valuation Day;	
-	"Collateral" means Cash and Securities Collateral to be provided either as IM-Collateral or VM- Collateral;	
-	VM Collateralisation Claim" means the Collateral to be provided by the Counterparty in accordance with Section 3 paragraph (1) of the Framework Agreement in order to comply with the variation margin obligations and the amounts payable or to be credited by the Bank;	
-	VM Collateral" means the collateral to be provided in accordance with Section 3 paragraph (1) of the Framework Agreement;	

- "Securities Collateral" means the securities permitted as such under Section 12 paragraph (1);	
 "Surcharge" means surcharges agreed in Section 12 paragraph (3) as Bank Margin for the benefit of the Bank and any surcharges imposed by any third parties involved; 	
 "Interest Amount" with reference to each calendar day on which a party holds Cash Collateral on the basis of this Addendum means the amount corresponding with the nominal amount of such Cash Collateral on this day multiplied by the reference interest rate agreed in Section 12 paragraph (6); a multiplication by the reference interest rate shall also made if it is lower than zero. 	
3. Full title transfer or pledge	 Sections 3 to 5 cover the technical aspects of the provision of margins (VM and IM), including the manner (full title transfer or pledge and related issues (equivalent status to title where transfer of securities under foreign law does result in something other than title) the rights of disposal of the collateral receiver (unrestricted) in case of a pledge, requirements regarding form in which pledge is to be made (either in form provided in the CRV-CA under Section 14 or in another individually agreed form) details regarding provision of IM (cover shortfall as trigger, amount of IM to be provided, manner in which requested but yet received collateral is to be taken into account, timeframe/time limits) details regarding release and return of IM (corresponding to details regarding provisions, however also addressing right to refuse return and right to replace returnable collateral under certain circumstances) requirements regarding to clateral in order to qualify as VM/IM. Since the obligation to provide initial and variation margin is already established in the CRV itself and considering that the provision of variation margin (as a central aspect of clearing) is a (comparatively) straightforward process and largely determined by the requirements of and processes existing at the relevant CCP, the CRV-CA focuses more on the technicalities concerning IM and only addresses selected aspects of the VM-Collateral process.
(1) Title to any Collateral provided by way of a full title transfer shall pass to the collateral receiver or in the case of Cash Collateral it shall become part of the assets of the collateral receiver. If the transfer of securities is governed by foreign law, this can mean that a legal status other than title may be conferred, however, such other legal status being equivalent to title and customary under the relevant law. The collateral receiver is entitled to dispose of the Collateral without any restrictions whatsoever.	
(2) Where Collateral is provided by way of a pledge, the Counterparty shall - unless and to the extent agreed otherwise - effect the pledge in accordance with Section 14.	
4. IM-cover-shortfall and provision of IM Collateral	
(1) In the event of an IM-cover-shortfall on a Valuation Day, the Counterparty shall provide IM Collateral to the Bank with a Value which shall at least correspond with the amount of the IM- cover-shortfall.	

(2) An IM-cover-shortfall exists where and as far as the IM Collateralisation Claim of the Bank exceeds the Value of the IM Collateral held by it. IM Collateral that the Bank has requested pursuant to paragraph (1) but which it has not yet received on the relevant Valuation Day shall be deemed to be held by it where that the claim for the provision of the IM Collateral is only due on or after such Valuation Day. Any IM Collateral which the Counterparty has requested to be transferred or returned in accordance with Section 5 (1) but which it has not yet received, shall be deemed to continue to be held by the Bank where for the claim for the provision of the IM Collateral has already been due before the relevant Valuation Day.	
(3) In the event the Counterparty receives the request for collateral pursuant to paragraph (1) prior to the Notification Time on a Notification Day, the IM Collateral shall be provided without undue delay on the same day; and, in the event the request for collateral is received after the Notification Time, without undue delay on the immediately following Bank Working or Business Day to the Bank. Unless and to the extent agreed otherwise, IM-Collateral is to be provided to the account or securities account of the Bank specified in Section 12 paragraph (2) or to the securities deposit or cash account pledged in accordance with Section 14. The time limit set in sentence 1 shall not apply, where the bank as set a different time limit – which may be measured in hours, or where the parties agreed on effecting the collateral transfer without undue delay following the request for collateral.	
5. IM-cover-excess and release of IM Collateral	
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6. Requirements regarding Collateral	 Provision setting out the requirements regarding collateral in order to qualify as VM/IM: The parties can chose between CCP requirements (that the requirements of the relevant CCP regarding the Contract apply correspondingly in respect of the Transaction between Bank and Counterparty) and flexible requirements (granting the Bank a greater discretion). The relevant elections are made under Section 12 (4).
(1) Where the Parties elected "Requirement of the central counterparty" in Section 12 paragraph (4), Collateral has to be provided which at least corresponds in the amount, type and quality with the collateral required by the central counterparty in respect to the corresponding relevant contracts.	

 (2) In the avent the Parlies elected "Faculte requirement" in Section 12 paragraph (4). Collateral has to be provided at the choice of the Bank, however, the amount has at least to corresponding contracts. (3) Where the Collateral no longer meets the requirements are the corresponding contracts. (3) Where the Collateral no longer meets the requirements are the corresponding contracts. (3) Where the Collateral no longer meets the requirements are the contract contract of the contract contrapt has been elected - no longer meet the requirements of the contract on the contract on the contract on the requirements of the contract on the		
 accordance with Section 12 paragraph (1) or - to the extent paragraph (1) Requirements of the central counterparty, barse nelectedno longer meet the requirements of the central counterparty, parse, (1) and (2) and Section 4 paragraph (1) shall apply correspondingly. As of the point in time they fail to meet the requirements for acceptance. Collateral provider is to attributed a value of zero is attributed a value of zero is attributed, a value of zero is collateral provider is manufactable reglacement. The collateral provider is to a more short and in the collateral provider is an amount of defermining a cover shortfall. An the collateral provider is to a more shortfall of the collateral provider value of zero is attributed, a value of zero is attributed, a value of zero is the collateral provider with collateral provider value of zero is a more shortfall of the collateral provider value of zero is a more shortfall of the collateral provider value of zero is a co	to be provided at the choice of the Bank, however, the amount has at least to correspond with amount of collateral requested by the central counterparty in respect of the corresponding	
(1) The Bank shall be the Calculation Agent except in the in the event of a default of the Bank where the Counterparty shall be the Calculation Agent. The Calculation Agent determines the following for each Valuation Day in Euro or in the agreed currency: a) a) The amount of the IM Collateralisation claim, b) b) the Value of the Collateral held under this Addendum c) a) potential IM-cover-shortfall or IM-cover excess, as well as d) c) a potential IM-cover-shortfall or IM-cover excess, as well as d) the VM Collateralisation Claims or claims for the return of Variation Margin in accordance with Section 3 paragraph (1) of the Framework Agreement. (2) The Calculation Agent shall notify the other Party of the results of the calculations on the Notification Time agreed in Section 12 paragraph (5) by in text form or other form conforming to market practice. An otification is not required where and to the extent no changes have occurred since the last notification. Where a Party rejects the determinations made by the Calculation Agent, as the evalued. The obligation to provide IM-Collateral in accordance with Section 4, or to transfer or return IM-Collateral no agreement can be reached by the calculation Agent, shall be revalued. The obligation to provise excess as a determined by the Calculation Agent, as the case may be, shall be revalued. The obligation to provise excess as determined by the Calculation Agent, and the calculation Agent and the dain for the return of variation margin in accordance with Section 5, in each case the amount of the IM-Collateral in the amount of the undisputed portion of the VM-Collateral ison Calcuration Agent, and the calculation Claim as determined by the Calculation Agent shall remain unaffected. Sentence 4 shall apply co	accordance with Section 12 paragraph (1) or – to the extent paragraph (1) "Requirements of the central counterparty has been elected –no longer meet the requirements of the central counterparty, paras. (1) and (2) and Section 4 paragraph (1) shall apply correspondingly. As of the point in time they fail to meet the requirements for acceptance, Collateral provided is to be attributed a value of zero for the purposes of calculating a cover shortfall. Where a value of zero is attributed, arrangements have to be made for an immediate replacement. The collateral provider is required to replace the Collateral provided by way of full title transfer - subject to the approval of collateral receiver - with other acceptable Cash or Securities Collateral a in an amount corresponding with or exceeding the Value. The collateral receiver will release any pledged Collateral at the request of the collateral provider has been attributed a value of zero for the purpose of determining a cover shortfall. An obligation to release Collateral by the collateral receiver only exists if the collateral provider has fulfilled its obligations in accordance with Section 4 paragraph (1). Until the replacement has been effected, Collateral not meeting the requirements	
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	12.07.2025
8. Exchange of items of Collateral and IM-Additional Collateral	 Provision addressing the rights of the Bank to demand substitution of collateral and of the Counterparty to substitute collateral as well as the right to post additional collateral (IM-Additional Collateral).
(1) Upon request of the Bank, the Counterparty shall replace Collateral provided under this Addendum either in whole or in part with other permitted Collateral with at least the same Value. Subject to the Bank's prior consent, the Counterparty shall be entitled to substitute, in whole or in part, any permitted Collateral by other permitted Collateral with the same or a higher Value. The release or transfer of the permitted Collateral to be replaced shall be effected without undue delay from time to time after the Counterparty has provided the Collateral.	
(2) The Counterparty is entitled to post IM-Additional Collateral to the Bank on each Bank Working Day.	
9. Interest amounts in case of Collateral provided by way of a full title transfer	 Provision addressing interest on IM-Cash Collateral as well as interest accrued or earnings made in the case of IM Securities Collateral.
(1) With regard to IM-Cash Collateral provided by way of a full title transfer, interest shall be payable for the interest periods agreed in Section 12 paragraph (6) and at the reference interest rate agreed therein. The interest is to be credited to the account specified in Section 12 paragraph (2). In the case of IM-Cash Collateral, one of the two parties shall be entitled to an Interest Amount for each calendar day as follows: if the Interest Amount for this calendar day exceeds zero, then the Bank shall pay this Interest Amount to the Counterparty; if the Interest Amount for this calendar day is lower than zero, then the Counterparty shall pay the relevant Negative Interest Amount to the Bank. If, with respect to an interest period, only one party is obligated to pay Interest Amounts to the other party, the total sum of such Interest Amounts for all calendar days of such interest period shall – unless agreed otherwise - become due two Bank Working Days following the expiration of the interest period. If, with respect to an interest period, both parties are obligated to pay Interest Amounts to the respective amounts owed; such difference amount shall – unless agreed otherwise - become due two Bank Working Days following the expiration of the interest period. If, with respect to an interest period, both parties are obligated to pay Interest Amounts to the respective amounts owed; such difference amount shall – unless agreed otherwise - become due two Bank Working Days following the interest period. If the Bank is obligated to transfer of all IM-Cash Collateral held by it, the Interest Amounts shall become due at the same point in time at which this transfer is due. The party that is required to pay a sum of Interest Amounts or a difference amount for an interest period to the respective other Party shall credit the relevant amount to the account of such other party specified in Section 12 paragraph (2). Where no interest period and reference interest rate have been agreed in Section 12 paragraph (6), the i	
 (2) With regard to IM-Securities Collateral provided by way of full title transfer, the Counterparty shall be entitled to all interest payments and other earnings in respect of the securities in relation to the Bank, except in the case that they are added to the total amount of the IM-Securities Collateral posted for these transactions and insofar this is required under the rules and regulations in respect of the contracts underlying these transactions. The Bank shall forward the relevant amounts to the bank account specified in Section12 paragraph (2). Where any interest payments on IM-Securities Collateral to the Bank are subject to withholding tax or result in a tax credit, the Bank shall owe the amount according to sentence 1 which the Counterparty would have received as owner of the relevant Securities Collateral on the basis of its tax reimbursement or credit claims previously notified to the Counterparty including (a) the withholding tax, to the extent that the Counterparty would be entitled to an exemption from such tax or to reimbursement, as well as (b) any tax credit payable to the Counterparty under these provisions. (3) The Bank is not required to pay out any interest earned where and to the extent this would result in 	

an IM-cover shortfall. Interest Amounts not paid out in accordance with sentence 1 are to be taken into account as IM-Cash Collateral for the purposes of determining an IM-cover-shortfall or IM- cover-excess.	
(4) Section 9 paragraph (1) shall apply correspondingly, where and to the extent VM-Collateral is not provided in the form of daily debits or credit entries, and where the relevant central counterparties provide for interest to be paid for Cash Collateral provided as VM-Collateral.	
10. Failure to provide Collateral and termination	 Provision clarifying that the failure to provide collateral constitutes one (further) example of a material reason ("wichtiger Grund") triggering a termination right (for further information on the concept of material reason, see DRV 2018 background paper).
A material reason within the meaning of Section 4 paragraph (1) of the Framework I Agreement shall also exist, if a performance owed and due in accordance with Section 4 of this Addendum or Section 3 paragraph (1) sentence 2 of the Framework Agreement is not effected within one Bank Working Day after the notification of the failure to perform.	
11. Right of the Bank to realise Collateral	 Provision addressing the right to realise collateral and circumscribing the process of such realisation of collateral.
(1) The Bank shall be entitled to realise pledged assets where the Counterparty is in delay with payment obligations due on the claims secured in accordance with Section 1. The Bank will make use of this right only to the extent necessary for fulfilment of the payment obligations which are overdue.	
(2) The Bank shall issue an advance warning ("Androhung") to the Counterparty of any such realisation of the pledged assets by giving prior notice to the Counterparty in text form and setting a cure period. In the event that the conclusion of this Agreement constitutes a commercial business transaction ("Handelsgeschäft") for the Counterparty, the cure period shall at least be one week. In all other cases, the cure period shall be one month. In the notice, the Bank shall specify the amount in respect of which realisation shall be effected. An advance warning with the setting of a cure period shall not be required where the Counterparty has discontinued its payments or where an event of insolvency has occurred in accordance with Section 4 paragraph (2) of the Framework Agreement.	
(3) If the Counterparty is an undertaking, a legal entity under public law or a public-sector special fund, the Bank and the Counterparty hereby agree that the pledged assets shall be realised in accordance with Section 1259 of the German Civil Code (BGB) by way of a free market sale at current prices by the Bank or third parties. An advance warning of the realisation shall not be required.	
12. Individual arrangements	
	 Sections 12 and 13 set out the framework for the various necessary individual agreements to be made by the parties regarding the specifics of collateralisation, some as tick-boxes with election, and blank fields to be completed by the parties with any additional provisions they deem useful or necessary.
(1) Permitted Collateral:	
Valuation Percentage ("Anrechnungssatz")	

bankenverband

VM-Collateral					
Cash-Collateral					
IM-Collateral					
Cash Collateral					
Securities Collateral					
Consideration of Interact	l				
Consideration of Interest accru	and on the Market Value: end of this day shall be taken into account in the Market Value.				
	end of this day shall not be taken into account in the Market Value).			
Additional agreements:					

Juless agreed otherwise, VM Collateral and IM Collateral is to be provided by way of full title transfer uding VM-Collateral provide by daily debiting or crediting) and payments of interest and other ings on such Collateral are to be made to the following accounts- and securities deposit accounts: Bank Counterparty Collateral are to be made to the following accounts and securities deposit accounts: Bank Counterparty Cash collateral are to be made to the following account and the point of the	
Bank Counterparty	
Bank Counterparty	
sh	
sh	
late-	
sur-	
S S	
la- al	

(4) Applicable requirements:				
	Transactions in terms of Section 1 paragraph (1) (b) and (c) of the Framework Agreement	Transactions in terms of Section 1 paragraph (1) (a) of the Framework Agreement	Transactions in terms of Section 1 paragraph (1) (d) of the Framework Agreement		
	Central counterparty requirements	 Central counterparty requirements 	 Central counterparty requirements 		
	Flexible requirements	Flexible requirements	Flexible requirements		
(5) Notification Time:				
(0) Internet next and and refer				
(6) Interest period and refer	CILCE Idle			
In	terest period:		1		
Reference rate					
VI	M-Collateral				
I IN	1-Collateral				



(7) Rou	Inding				edicated space for provisions/clarifications regarding rounding (if the parties eem this useful)
	ons in accordance with the Ad	dendum shall be directed to:			
Counterparty:					
Bank:					
(9) Oth	er arrangements				
13 Applicabl	e account model in relation	to each central counternar	ty (CCP)		
ССР	Account Model	IM-Collateral by way of:	Other agreements	• Th th	ne Section regarding elections concerning the account model also allows for ne election of the STM-model now expressly addressed in the CRV 2019 itself
	□ OSA	□ Full Title Transfer	☐ Settled-to-Market- Variation Margin	in a	Section 3 (3) see comments to the CRV 2019. The Section also provides for dedicated blank field for further additional provisions regarding - the account model (e.g. additional provisions addressing the specific model
	□ ISA	□ Pledge			and /or details regarding the provision of collateral) and - the STM-model (if so agreed).
	other				

		□ OSA □ ISA	Full Title Transfer Pledge	□ Settled-to-Market- Variation Margin	
		other			
		 _ OSA ISA	Full Title Transfer Pledge	☐ Settled-to-Market- Variation Margin	
		□ other			
		□ OSA □ ISA	Full Title Transfer Pledge	☐ Settled-to-Market- Variation Margin	
		□ other			
S	pecial provisi	ons regarding account mo	odels		 Room for additional provision regarding account models and related issues (e.g.
					additional provisions/explanations regarding the specifics or provisions concerning the involvement of clearing brokers)

Special provisions in case of application of Settled-to-Market Variation Margin	
	 Room for additional provision addressing STM-Model (if so agreed), e.g. in order
The following additional provisions shall apply with regard to the application of Settled-to-Market- Variation Margin:	to address/describe the specific model and requirements.
14. Pledge	 Provision setting out a pledge arrangement (with a number of alternatives and possible elections) based on standard German law pledge arrangement. The parties can, of course, also agree on an individual/other format for the pledge

		agreement.
(1) Pled	ging of securities deposit account	
□ The	Counterparty hereby pledges to the Bank:	
	The securities and other assets booked, at present and in future, to the securities deposit	
	account listed below, including any interest-, dividend- and participation certificates together with renewal certificates as well as subscription rights relating to any shares, and bonus shares:	
	Designation of securities deposit account:	
	The pledge does not cover securities located abroad as well as own shares, participation rights and profit-participation certificates of the Bank as well as securitised and non-securitised subordinated claims against the Bank.	
Π	As regards securities located abroad, the Counterparty shall pledge to the Bank any claims-	
	in particular any existing or future claims for delivery and return rights - it has in relation to securities located abroad but booked to the securities deposit account held with the Bank, including interest and participation certificates together with renewal certificates.	
assets fro	k may realise such claims at the location of the securities by way of the sale of corresponding om its cover portfolio ("Deckungsbestand")	
well as of Bank sha of pledge secure th payments Counterp	k shall credit the equivalent values of the assets pledged (e.g. repayment of securities due) as ther payments on the assets pledged (such as dividends and interest) to an account which the all open on behalf of the Counterparty for this purpose. The Counterparty hereby confers a right to the Bank in relation to the relevant credit balances in such accounts for the purpose to the claims addressed in Section 1. The equivalent values of the assets pledged and other is thereon may also be credited to the pledged account indicated below. The Bank will allow the party to invest said credit balances in securities which fulfil the requirements for permitted is collateral and which are to be booked to the above-mentioned securities deposit account.	
deposit a Counterp relating to	osal over assets pledged, as well as the cancellation of and transfer of rights to the securities account shall - in order to become effective – require the prior approval of the Bank i. The barty is not entitled to require the Bank to hand over any interest and participation certificates o the pledged securities.	
	ent required for the realisation of the pledged assets.	
(2)	Pledging of cash account	
	The Counterparty hereby pledges to the Bank its existing and future claims against the Bank	

	arising from the account(s) held with the Bank specified hereinafter, including any interest.	
	Designation of the account:	
	Designation of the account:	
	Any disposals over credit balances pledged, as well as the cancellation and transfer of rights	
	to the account, shall - in order to become effective – require the prior approval of the Bank.	
(3) Separ	ate pledge agreement (securities custodians / accounts with third parties)	
	The Counterparty hereby pledges to the Bank its securities booked, at present an in the future,	
	to the securities deposit account specified below, including any interest, dividend and	
	participation certificates together with renewal certificates, as well as subscription rights and bonus shares. The pledge does not cover securities located abroad as well as own shares,	
	profit rights and profit participation certificates of the Bank as well as securitised and non-	
	securitised subordinated claims against the Bank. The transfer of the securities pledged is in	
	this case substituted by an assignment of the Counterparty's claims against the custodian to the Bank.	
	ITIE BATIK.	
	Designation of securities deposit account	
	Designation of the custodian bank	
	As regards securities located abroad, the Counterparty shall pledge to the Bank any claims –	
	in particular any existing or future claims for delivery and return rights- it has in relation to	
	securities located abroad and booked to the above-mentioned securities deposit account,	
	including interest and participation certificates together with renewal certificates.	
	The Counterparty is not entitled to require the Bank to hand over any interest and participation	
	certificates relating to the pledged securities.	
The Co	unterparty herby instructs the custodian bank to credit the equivalent values of pledged assets	
upon m	naturity to an account to be opened for the Counterparty for this purpose and to be assigned to	
the rele	evant securities deposit account, as the case may be.	
The C	ounterparty hereby confers a right of pledge to the Bank in relation to the relevant credit	

balances in such accounts for the purpose to secure the claims addressed in Section 1. The equivalent values of the pledged assets and other payments thereon may also be credited to the pledged account indicated below.		
The Bank will allow the Counterparty to invest said credit balances in sec requirements for permitted securities collateral and which are to be booked to securities deposit account held with the Custodian Bank.	curities which fulfil the the above-mentioned	
The Counterparty hereby pledges to the Bank its respective credit bal account, including any interest:	ance on the following	
Designation of the account:		
Designation of the account-holding bank:		
Designation of the account-holding bank.		
The Bank is hereby authorised to notify the pledge for and on behalf of th custodian bank / account-keeping bank and to obtain any consent required for pledged assets.	e Counterparty to the or the realisation of the	
The Counterparty herby authorises the custodian bank/account-keeping bank any time with information on the securities account portfolio as well as on the cr The Contacting Partner instructs the custodian bank to provide the Bank securities accounts statements.	edit balances pledged.	
Any disposals over assets/credit balances pledged, as well as the cancellation to the securities deposit account/cash account, shall - in order to become effect approval of the Bank.	n and transfer of rights ctive – require the prior	
Signature(s) of the Counterparty		
	1	



Signature(s) of the Bank		

IV. Annex for Indirect Clearing

The Annex for indirect Clearing first published in December 2017 has been re-published as 2019 version reflecting the changes implemented with the introduction of the CRV 2019. The changes are limited to an alignment with the terminology of the modernised netting provisions ("claim for non-performance" and "calculating party"), adjustments to the references to provisions in the CRV 2019 and an alignment of the terminology English language versions of the documentation (i.e. replacing "Contracting Party" with "Counterparty" and uniform use of "Section" rather than section)

All adjustments are set out in the below marked version.

	Annex for indirect clearing to the Clearing Framework Agreement 2019 ("Framework Agreement") for indirect clearing
betw	een
	Name and address of Contracting Party
and	(hereinafter referred to as "Contracting Party Counterparty")
and	
	Name and address of Bank
	(hereinafter referred to as "Bank")
	Bank and Counterparty jointly hereinafter referred to as "Parties"
the f	ollowing is agreed:
	urpose and scope of the Annex
(1) (2)	In addition to the provisions of the Framework Agreement, the provisions of this Annex apply if the Bank offers to the Contracting Party the execution of F&O Contracts through central counterparties by means of members of these central counterparties (each a "Clearing Member") chosen by the Bank ("Indirect Clearing"). The Bank will instruct one or more Clearing Members to perform clearing services as regards the Counterparty on the basis of a clearing agreement (each a "Client Clearing Agreement") for Indirect Clearing purposes. The Client Clearing
	Agreement contains, in particular, provisions regarding the establishment, margining, termination or transfer of clearing contracts between the Clearing Member and the Bank (each a "Client Clearing Transaction") relating to the respective Contracts entered into the execution system of the central counterparties for Indirect Clearing purposes.
	onclusion of Transactions, applicability of Framework Agreement, account structure
(1)	Upon the entering into of a Client Clearing Transaction between the respective Clearing Member and the Bank pursuant to the Client Clearing Agreement - as a consequence of the entering into of a Contract in respect of the Counterparty into the execution system of a central counterparty - a Transaction with identical terms to the Client Clearing Transaction, albeit with a reverse position of the Bank, comes into existence between the Bank and the Counterparty. The parties agree upon the applicability of the Framework Agreement to the Transactions mentioned in paragraph (1)
	a) the transfer of collateral occurs on the basis of the corresponding application of Section 2 and Section 3 of the
	Framework Agreement, although the Bank can request additional collateral; and b) the Bank is entitled, in the context of the Framework Agreement, to refer to calculations, valuations and (risk) reductions of the Clearing Member; this applies particularly if the Framework Agreement refers to a calculation or valuation of or by the control context of the context.
(3)	the central counterparty. The Bank and the Counterparty can agree upon a specific segregation model as regards to Indirect Clearing. If the Counterparty does not notify its choice to the Bank within a set time limit, a net omnibus client segregation model is deemed to be agreed on. The Bank is entitled to request all legally required or necessary information from the Counterparty and, to
	the extent necessary or legally required, to pass on information, directly or indirectly, to the Clearing Member or the central counterparty. The Bank shall provide the Counterparty with sufficient information regarding the central counterparty and Clearing Members through which the execution of Contracts occurs.
	efault of the Bank
(1)	Where the Rules and Regulations or the Client Clearing Agreement provide in respect of an agreed segregation model in the context of Indirect Clearing that upon the occurrence of an event of default in respect of the Bank some or all Client Clearing Transactions entered into by the Bank are terminated, the Transactions which correspond to the terminated Client

Clearing Transactions shall, in deviation from Section 4 of the Framework Agreement, terminate simultaneously without notice upon termination of the Client Clearing Transactions. For these Transactions, Section 7 paragraph (1) sentences 2 to 4 and paragraph (3) of the Framework Agreement apply, provided that references to Contracts, the Rules and Regulations and collateral are to be replaced with references to Client Clearing Transactions, the Client Clearing Agreement and collateral pursuant to the Client Clearing Agreement.

- (2) Section 7 paragraph (2) sentence 1 of the Framework Agreement applies correspondingly to Transactions in the context of Indirect Clearing, unless such inclusion conflicts with the relevant agreed protection of client positions pursuant to the respective segregation model. In case of an individual client segregation or a gross omnibus client segregation model, the Bank agrees to a direct transfer by the respective Clearing Member to the Counterparty in performance of the compensation-claim for non-performance of the Counterparty against the Bank pursuant to paragraph (1) in conjunction with Section 7 paragraph (1) of the Framework Agreement.
- (3) In order to enable the transfer of Transactions to a Clearing Member or a different client of a Clearing Member, the Counterparty may request that the Bank takes all actions and legal measures necessary pursuant to applicable laws, the Rules and Regulations of the respective central counterparty and the Client Clearing Agreement to effect such transfer.
 (4) Section 5 applies without limitation in case of a default of the Bank.
- (5) In case of the Bank's insolvency, Section 4 paragraph (2) of the Framework Agreement does not apply to Transactions for which a segregation model has been chosen. In such case, this Section 3 shall apply exclusively.

4. Additional provisions regarding the default of a central counterparty

Where Client Clearing Transactions are terminated because of a default of a central counterparty, the corresponding transactions between Bank and Counterparty shall terminate automatically and simultaneously and a claim for non-performance shall be determined in accordance with Section 5 of the Framework Agreement, with the Bank acting as Calculating Party. A compensation claim for non-performance against the Bank pursuant to Section 8 paragraph (1) sentence 2 of the Framework Agreement is limited to the amount which the Bank receives from the respective Clearing Member for the terminated Client Clearing Transactions which correspond to the terminated Transactions. Section 5 paragraph (2) applies correspondingly.

5. Additional provisions regarding the Clearing Member, limited recourse

- (1) The Bank assumes no liability for the performance of Clearing Members. Accordingly, the following shall be applicable:
 - (a) Where an application is filed for the initiation of insolvency proceedings or other similar proceedings in respect of the assets of a Clearing Member and (i) where it– either filed the application itself or where it was filed by an authority or public entity entitled to file for such proceedings in relation to this party, or (ii) where the Clearing Member is generally unable to pay its debts or is otherwise in a situation that justifies the opening of the proceedings, the Transactions between the Bank and the Counterparty shall terminate automatically and simultaneously with the corresponding Client Clearing Transactions cleared by this Clearing Member. Section 4 paragraph (3), Section 5 and Section 56 of the Framework Agreement shall apply correspondingly subject to the proviso that the Bank shall be deemed to be the Entitled Calculating Party.
 - (b) A compensation claim for non-performance against the Bank shall be limited to the amount received by the Bank from the Clearing Member or the central counterparty, as the case may be, in relation to the terminated Client Clearing Transactions. To the extent that the Bank only receives partial payments in respect of clients to which the omnibus client segregation model applies, the Bank shall be entitled to make a proportionate allocation - in relation to the claim of the Counterparty - of the partial payments received.
 - (c) In addition, any obligation of the Bank to perform under a Transaction as well as any due date are subject to the condition of the full or partial performance of the obligations by the Clearing Member or the central counterparty, as the case may be, in connection with the relevant Client Clearing Transactions. Subject to Section 3, this also applies in the case of a default of the Bank.
- (2) Any amendment to or termination of a Client Clearing Transaction,- including as a consequence of a transfer, netting, trade compression or comparable processes in respect of the respective Contracts or as a consequence of an amendment of the Rules and Regulations or other action of the central counterparty or a regulatory authority shall result in a corresponding amendment to or termination of the Transaction that corresponds to the Client Clearing Transaction. Subject to Section 3, this also applies in case of a default of the Bank.
- (3) If Client Clearing Transactions are terminated pursuant to the Client Clearing Agreement due to the occurrence of an event of default in respect of the Clearing Member, all Transactions between the Bank and the Counterparty that correspond to such Client Clearing Transactions terminate automatically and simultaneously. To this extent, Section 4 paragraph (3),-Section 5 and Section 56 of the Framework Agreement and Section 2 paragraph (2) b) apply correspondingly, subject to the proviso that the Bank shall be deemed to be the Entitled Calculating Party.
- (4) If a transfer of Contracts and Client Clearing Transactions to a different Clearing Member occurs in respect of a default of a Clearing Member pursuant to the Rules and Regulations of a central counterparty, the Bank is entitled to effect such amendments to the Transactions, which correspond to the transferred Client Clearing Transactions, as are necessary to conform the content of the Transactions to the content of the transferred Contracts and Client Clearing Transactions. The Bank is entitled to request from the Counterparty the compensation of all costs, disbursements and additional amounts which have been invoiced by the central counterparty or the other Clearing Member and which the Bank incurred in respect of the transferred Contracts and Client Clearing Transactions.
- (5) Paragraphs (3) and (4) apply correspondingly in case of a termination of the Client Clearing Agreement and its winding up or a transfer of Contracts and Client Clearing Transactions to a different Clearing Member.

6. Indirect Clearing of the Bank for a second level indirect client

- (1) In addition to the provisions of the Framework Agreement, the provisions of this Annex apply if the Bank offers to the Counterparty the execution of F&O Contracts through central counterparties by means of clients of a Clearing Member ("Client") chosen by the Bank ("Second Level Indirect Clearing"). This Section 6 applies, in addition to Sections 1 to 5, if the Bank also offers Indirect Clearing pursuant to Section 1 paragraph (2); otherwise this Annex only applies in accordance with this Section 6.
- (2) The Bank will instruct one or more Clients to perform clearing services as regards the Counterparty on the basis of an indirect clearing agreement (each an "Indirect Clearing Agreement") for Second Level Indirect Clearing purposes and the entering into of indirect clearing transactions (each an "Indirect Clearing Transaction"). On this basis, the provisions of Sections 2 to 4 as well as Section 5 paragraphs (1) to (3) and paragraph (5) apply correspondingly, subject to the following:

	12.07.2023**
	 references to the Clearing Member, the Client Clearing Agreement and the Client Clearing Transaction are deemed references to the Client, the Indirect Clearing Agreement and the Indirect Clearing Transaction; and Section 5 paragraph (1) applies additionally in respect of the Clearing Member.
7. Spec	ial agreements
Sig	nature(s) on behalf of the Bank
Sig	nature(s) on behalf of the Counterparty

V. CCP-specific Annexes

1. Eurex-Annex and CME-Annex

The existing Eurex-Annexhas become redundant due to the recent changes to the Eurex-clearing model. It can continue to be used for transactions under a CRV 2013 and under the relevant clearing model addressed by the addendum. For all other transactions it is no longer applicable.

The CME-Annex has become obsolete since CME Europe ended its European clearing services in October 2017.

2. LCH-Annexes and ICEU-Annex

Annex versions adapted to the CRV 2019 have been developed for the LCH.Ltd, the LCH.SA and the ICEU-Annex. The changes made are limited to the following:

- The definition of LCH.Ltd.-, LCH.SA- and ICEU-Transaction has in each case been expanded to also cover transactions within the meaning of Section 1 (1) lit. (c) CRV 2019.
- The provisions in Section 3 (1) and (2) of the Annexes have been deleted as new or revised provisions in the CRV 2019 cover the same issues, namely the revised Section 1 (1) (a) which addresses the inclusion of transactions not covered by a master agreements into the CRV and Section 1 (10) which concerns the necessary alignment of transactions with any amendments made to contracts.
- Consequently, all references to Section 3 (2) of the Annexes have been replaced by references to Section 1 (10) of the CRV 2019.

In this connection the name change of LCH-Clearnet Limited to LCH Limited is now also reflected in the LCH.Ltd-Annex.