

Article 59 para. 4 FMIA

Legally Required Participant Disclosure – Clearing Services for Non-Clearing Members (NCM) of SIX x-clear

1. Introduction¹

The purpose of this document is to publish the specifics concerning the levels of protection associated with the different levels of account segregation in respect of positions and collateral of indirect participants held with central counterparties **(CCP)** incorporated in Switzerland through a direct participant of such CCP. This document also gives a description of the main legal implications of the respective levels of account segregation offered and information on the insolvency law applicable.

In relation to CCPs incorporated in Switzerland, this disclosure is required under Article 59 para. 4 of the Swiss Financial Markets Infrastructure Act of June 19, 2015 (FMIA). The information provided herein is subject to Swiss law.

This document is not intended to constitute legal or other advice and should not be relied upon as such. You should seek your own legal advice if you require any guidance on the matters stated herein.

Credit Suisse (Switzerland) Ltd., a Swiss bank incorporated in Switzerland (the **Bank**), is a direct participant² with the status of a general clearing member (**GCM**) (hereinafter referred to as GCM or Bank) of SIX x-clear Ltd. (**SIX x-clear**), a CCP incorporated in Zurich, Switzerland. As such, the relationship between these two entities is subject to the Swiss rules and requirements with respect to the segregation of accounts and the protection of assets. Article 59 para. 2 FMIA requires that the Bank offers the indirect participants for whom the Bank provides the clearing services (i.e. in the case of SIX x clear the non-clearing members or **NCM**)³ the choice to hold their positions and collateral either comingled with those of other NCMs (**Individual Client Segregated Accounts**). Based on these requirements, the Bank informs its current and potential NCM about the different options for account segregation and prearranged solutions

in case of a default of the Bank. Furthermore, according to Article 59 para. 4 FMIA, the Bank is required to publish the respective costs and specifics concerning the level of protection granted by different types of accounts. Respective information on costs is provided in a separate document.

Throughout this document references to "we", "our" and "us" are references to the Bank and references to "you" and "your" are references to the client or NCM. Any references to "positions" are deemed to be references to securities cleared through SIX x-clear.

SIX x-clear, an authorized Financial Market Infrastructure (FMI) (as of January 1, 2018), is subject to FMIA and the Financial Market Infrastructure Ordinance of November 25, 2015 (FMIO). According to Article 83 (1) FMIA SIX x-clear is supervised by the Swiss Financial Market Supervisory Authority (FINMA) and subject to the oversight by the Swiss National Bank (SNB). As SIX x-clear qualifies as systemically important FMI, certain parts of the National Bank Ordinance of March 18, 2004 (NBO) also apply to SIX x-clear (Article 21a (2) NBO). SIX x-clear is recognised by the European Securities and Market authority (ESMA) as a third-country CCP under Article 25 of European Market Infrastructure Regulation (EMIR) for equities, equity derivatives and related instruments.

¹ At the end of this document is a glossary explaining some of the technical terms used in the document.

² Any person making direct use of financial market infrastructure services, Article 2 let. d FMIA or as defined in the General Terms and Conditions of SIX X-clear: General Clearing Member, a person who is admitted by SIX X-clear for clearing services for transactions of NCMs and/or for its own transactions.

³ Any person making use of financial market infrastructure services indirectly via a participant, Article 2 let. e FMIA or as defined in the General Terms and Conditions of SIX X-clear: Non-Clearing Member, is a trading platform member which is not a member and participates through a GCM for clearing services.

2. Background

The purpose of clearing is to efficiently handle the risks inherent in trading contracts that have been executed but are still unsettled. In the capacity of a clearing house and CCP, SIX x-clear steps into the contracts as the buyer with respect to each seller and vice versa. SIX x-clear maintains a principal-to-principal relationship with its GCMs. The legal framework does not establish a contractual relationship between SIX x-clear and an NCM. In case of non-segregated positions and collateral assets, the accounts recording positions and collateral with the CCP will not identify or record the ownership of NCMs in such positions and collateral assets. They are taken into account as client assets held by the GCM. If the NCM is set up with its own segregated positions and collateral accounts, the ownership of positions and collateral collateral assets is disclosed to SIX x-clear and recorded accordingly.

SIX x-clear normally requires additional information for those NCMs opting for segregated positions and collateral accounts in order to be able to execute the portability options chosen by the NCM as and when required. Due to the fact that an NCM will need to have a backup GCM, i.e. a GCM that would assume the positions of the NCM in the old GCM's stead to execute portability in a situation where it is needed, all necessary accounts and technical setups have to be in place in advance. SIX x-clear's account segregation model **(Internal Control System)** enables the monitoring of positions and collateral by separating the transactions and the positions of GCMs and those of NCMs.

SIX x-clear calculates collateral requirements for the positions held at SIX x-clear, which have to be covered by collateral by the Bank and the NCMs. The Bank interacts with SIX x-clear on a principal-to-principal basis and is required to provide adequate collateral to SIX x-clear to cover its own positions and those of its NCMs to ensure that the collateral requirements of SIX x-clear are met at any time. The Bank will provide the required collateral assets to SIX x-clear under a "title transfer" security arrangement in accordance with the requirements set by SIX xclear.

You may have either entered into a standard form General Deed of Pledge **(GDP)** or an Irregular Pledge **(IP)** with the Bank. Under a GDP, you provide a pledge to the Bank to secure any claim the Bank may have against you over all the assets held by you in your safekeeping and cash accounts with the Bank (please consult the GDP and related credit documents for details). We will ask you to keep a sufficient amount of assets in your safekeeping and cash accounts with the Bank at all times to ensure that our claims against you under the NCM transactions are fully covered and, to that effect, the Bank may issue margin calls to you as further agreed in the GDP and any related documents as well as the documentation governing the NCM transactions. Under an IP, you provide for a transfer of full ownership to the Bank of the collateral assets. Such collateral covers all your liabilities and obligations owing to the Bank and must be transferred to the respective collateral account as agreed with the Bank. The terms and conditions with regards to the GDP or IP will be laid down in the Non Clearing Member Agreement **(NCMA)**.

When offering indirect clearing services, the Bank provides clearing services in its own name and not as agent on behalf and for the account of the CCP or the NCM. However, as regards the choice of the applicable account segregation, the Bank acts as agent on behalf and for the account of the NCM.

As a general rule, the Bank offers two types of accounts in connection with its indirect clearing services via SIX x-clear: Individual Client Segregated Accounts **(ISAs)** and Omnibus Client Segregated Accounts **(OSAs)**.

The following common features apply to both account segregation options available

- The positions and collateral of the GCM will always be segregated from positions and collateral of the CCP itself and the positions and collateral of other GCMs. Depending on the choice of ISAs and OSAs, the positions and margin assets of the NCM will either be held separately from those of other NCMs and from those of the GCM (in the case of ISAs) or jointly with those of other NCMs, but separately from those of the GCM (in the case of OSAs).
- The CCP does not offer any protection for any contribution of the NCMs to the GCM relating to the portion of collateral provided by such GCM to the default fund

 The margin assets provided by NCMs can be set-aside in the insolvency of a GCM after completing any netting of claims and any private sale of margin assets in the form of securities or other financial instruments, as agreed between the GCM and SIX x-clear

The account options differ in their levels of protection in case of default and/or termination of membership of the GCM as they rely on different approaches in insolvency proceedings.

SIX x-clear offers the segregation options described below for their clearing accounts (positions) and their collateral accounts.

3. Account types

3.1

Individual Client Segregated Account (ISA)

Individualization means that positions and collateral assets can be properly allocated to the account holder and/or to the account's beneficial owner. All funds in excess of the NCM's margin requirement must be held on a segregated account with the CCP, i.e. such excess margin must be held separately from the margin assets of other NCMs, (see Article 59 para 3 FMIA). Below, you will find further details on the ISA.

Individual Client Segregated Account

Description	 The positions and collateral assets of the GCM are segregated from the positions and margin assets of its NCM(s). In addition, the positions and collateral assets of each NCM are segregated from those of other NCM(s). The account structure for the Internal Control System model by SIX x-clear allows dedicated individual and segregated clearing and collateral accounts to be held that show receivables and liabilities in terms of positions and collateral related to each NCM separately. The cross-netting (cross-margining) of positions takes place on clearing account level, i.e. per NCM and not across different clearing accounts The collateral of the GCM is always segregated from the collateral related to the individually segregated NCM. The GCM has to pass through the collateral amount or positions requested from the NCM if the collateral fulfils the collateral eligibility requirements of SIX x-clear.
Collateralization and Margin calculation	 For positions related to the GCM and each NCM, individual margin requirements are calculated. The GCM must use a separate cash and/or a securities collateral account(s) for each NCM for separate coverage of each individual client clearing account.
Protection of NCM's positions and collateral in case of default of the GCM	 The individualized segregation of positions and collateral (margins) enables SIX x-clear in the event of the GCM's default to allocate them to the individual NCM (who is the beneficial owner), port them to the designated back-up GCM (portability) or facilitate the close-out procedure and if applicable, pay out any positive amount to the individually segregated NCM. The GCM shall post the value of any margin payment in excess of the NCM's requirement to SIX x-clear (on the collateral account referable to that NCM) and it shall be distinguished from the margins of any GCM or any other NCM. Thus, it will not be exposed to losses connected to positions recorded in another account. No set-off of collateral and receivables of NCMs with liabilities of GCMs (own positions of GCMs) No realisation of collateral of the NCMs to satisfy losses of GCMs (own positions of GCMs) No set-off of collateral and receivables of NCM of other NCMs No realisation of collateral of NCM to satisfy losses of other NCMs The following prearranged solutions can ensure protection: Porting Positions and collateral will be ported individually from the accounts of a defaulting GCM to the clearing and collateral accounts with the back-up GCM. Accounts with the back-up GCM will need to have been prearranged on behalf of and clearly designated to the respective NCM. Self-standing Membership An independent membership will be established with account structures according to the NCM's preferences (provided that the NCM fulfils SIX x-clear's admission criteria) Close-out Individual positions related to the NCM will be closed out and set off against the individualized collateral related to the NCM

Omnibus Segregated Account (OSA)

An OSA is used to hold the securities of a number of clients on a collective and comingled basis.

Omnibus Client Segregated Account

Description	 The positions and the collateral of the GCM are segregated from the ones related to its NCM(s) but there is one account set up to jointly hold all those relating to the NCMs. This means positions and collateral assets of the GCM are segregated from those of the NCMs. However, the omnibus client segregation model is only a partial segregation, as several NCMs use one clearing account. The cross-netting (cross-margining) of positions takes place on clearing account level. Omnibus client segregation is the standard solution offered by SIX x-clear.
Collateralization and Margin calculation	 Each clearing account requires margin calculation. For the separate coverage of the client omnibus clearing account, the GCM can use a cash and/or a securities collateral account(s)
Protection of NCM positions and collateral in case of Default of GCM	 No set-off of collateral with receivables of NCMs with GCMs (own positions of GCMs) No realisation of collateral of NCMs to satisfy losses of GCMs (own positions of GCMs) However, collateral and receivables of NCMs can be used to satisfy losses of other NCMs Only porting is available as a prearranged solution. Collective positions and margins of all NCMs will be ported in a bulk transfer from the accounts of a defaulting GCM to collective clearing and collateral accounts with the back-up GCM. Accounts with

the back-up GCM will need to have been prearranged on behalf of the respective NCMs. The GCM elects the back-up GCM after consultation with the NCMs.

4. Main legal implications of levels of segregation

4.1

General Insolvency (bankruptcy) risks

If a Swiss bank were to become insolvent, the insolvency proceedings would take place in Switzerland and be governed by Swiss insolvency law. The Swiss Federal Banking Act (Banking Act) applies to such insolvency proceedings.

If insolvency proceedings are commenced in respect of us, you may not receive all of your assets back or retain the benefit of your positions and there are likely to be time delays and costs (e.g. funding costs and legal fees) connected with recovering those assets. These risks arise in relation to Individual Client Segregated Accounts and Omnibus Client Segregated Accounts.

Before FINMA would initiate insolvency proceedings, FINMA would most likely order a combination of reorganisation proceedings under Article 28 to 32 of the Banking Act with protective measures under Article 26 of the Banking Act. FINMA may order a stay of termination rights and certain other rights, including rights to "port' positions and margin assets, for a period of up to two business days according to Article 30a of the Banking Act, to the extent that such termination and other rights would be triggered by the reorganization proceedings or protective measures. In that case, your counterparty and/or your counterparty risk may change. It is unlikely that you will be able to stop such transfer or to enforce any early termination rights against us as a result of such transfer if the reorganization is successful.

In the event that a reorganization fails, bank insolvency proceedings would be initiated by FINMA under Article 33 et seq. of the Banking Act. In such proceedings, you will no longer be permitted to dispose of your positions and assets held with us; and any stage of a cleared transaction may be challenged by the insolvency liquidator in a claw-back action before the competent Swiss court if, broadly speaking, it was not on arm's length terms and therefore classified as an impairment of creditors.

In the Bank's insolvency, any reorganisation proceedings under Article 28 to 32 of the Banking Act or if protective measures under Article 26 of the Banking Act are ordered

in respect of the Bank, you can benefit from the protections of Article 90 para. 1 and 2 FMIA, which are statutory rights affecting the entitlements of NCMs in assets (margin) and positions (transactions) held on their behalf by the GCM with SIX x-clear. Under Article 90 para. 2 FMIA, the liquidator in insolvency proceedings of a GCM, or the administrator in the event of reorganisation proceedings under Article 28 to 32 of the Banking Act, must set-aside any assets (margin) and positions (transactions) of NCMs from the estate of the GCM after:

- i) Completing any netting of claims, as agreed pursuant to the default management processes between the GCM and SIX x-clear (Article 90 para. 1 lit. a FMIA); and
- ii) Completing any private sale of margin assets in the form of securities or other financial instruments, provided that their value may be determined based on objective criteria (Article 90 para. 1lit. b FMIA).

Such rights of Article 90 para. 2 FMIA arise by operation of law and would be exercised automatically by the Swiss liquidator in an insolvency of a GCM.

Nonetheless, you only have an entitlement to the return of any collateral assets or proceeds, respectively; in excess of any claims we may have against you. Also, any excess collateral assets held by us and not passed on to SIX x-clear will only be returned to you once we complete any private sale of collateral assets pledged to us under the GDP to cover our claims.

Please also note that insolvency law may override the terms of contractual agreements, so you should consider the legal framework as well as the terms of disclosures and legal agreements. Further, you should understand the contractual arrangements governing the relationship with SIX x-clear in order to evaluate the level of protection that you have in the event of our default. It is important that you review the relevant disclosures by the relevant clearing broker and SIX x-clear in this respect [(https://www.six-group.com/securities-services/dam/downloads/ regulatory/consultation-responses/six-x-clear-iosco-en.pdf)].

CCP insolvency risks

You may not receive all of your assets back or retain the benefit of your positions if other parties in the clearing structure default - e.g. SIX x-clear itself, a custodian or a settlement agent.

In relation to SIX x-clear's insolvency, broadly speaking, the Bank's (and therefore also your) rights will depend on the specific protections of SIX x-clear has put in place. You should review the relevant disclosures carefully in this respect and take legal advice to fully understand the risks in these scenarios (link attached above).

SIX x-clear's default provisions provide rules and procedural instructions to be pursued in case of default of a GCM, a co-CCP, or SIX x-clear's own default. They comply with the requirements set out in Article 24a NBO, which are considered equivalent to Article 42 (default fund), 45 (default waterfall) and 48 (default procedures) of EMIR. A default waterfall is in place to protect the non-defaulting GCMs in the case losses arising from the default of a GCM exceeds the provided collateral.

Insolvency/default of GCM

In the event of a default of a GCM, SIX x-clear will, in accordance with its default rules, no longer accept any trades for clearing. SIX x-clear will inform all relevant parties; of the occurrence of the default. In accordance with the relevant procedures, SIX x-clear will either (i) liquidate the open positions or (ii) initiate the process of porting the segregated NCM accounts to the back-up GCMs (if any). SIX x-clear is obliged to carry out the prearranged solution selected by the GCM and/or the NCM within 48 hours of the declaration of default.

In the event of (i) a potential net loss is covered by the defence lines, i.e. the proceeds of selling the contents of the collateral accounts and, if necessary, the (liquidated) default fund contribution of the defaulting member, SIX x-clear's own resources and the solidarity part of the default fund.

Under an omnibus client account segregation, you will not have any direct entitlements against SIX x-clear resulting from your entitlements against the GCM to set-aside any positions and

margin assets in the default of the GCM (for further information please see above section 3.2 OSA – *"Protection of NCM's position and collateral in case of default of GCM").*

Under an individual client account segregation, protection of the NCM's rights will be individually ensured by SIX x-clear within the prearranged solution chosen (for further information please see above section 3.1 ISA – *"Protection of NCM's position and collateral in case of default of GCM"*).

The arrangements regarding the porting of positions and collateral are enforceable under the rules of FMIA and FMIO, provided that the "porting processes" are validly agreed under the contractual arrangements between the GCM and NCM (for further information please see below section 5. *"Portability"*).

5. Portability

The purpose of portability is to transfer positions and collateral (margins) related to an NCM to a back-up GCM. This not only ensures that the economic interest in the positions related to the NCMs is protected but also that they remain in the clearing process and continue to be processed via the back-up GCM. This also minimizes any delays in the trading and clearing business to the greatest degree possible.

In Switzerland, the legal basis for portability is provided for in Articles 55 and 90 FMIA. The transfer of positions and collateral would be upheld under Swiss law upon the occurrence of a default of the GCM, provided that any assets to be transferred are either securities or other financial instruments with a value that may be determined on the basis of objective criteria (e.g. market price). The relevant statutory provisions are Article 27 para. 1 li. (c) of the Banking Act and Article 90 para. 1 (c) FMIA. This recognition applies irrespective of whether the porting implies a close-out netting of outstanding positions and a re-establishment of new positions or whether it results in a transfer of outstanding positions without a close-out netting (Article 74 para. 2 FMIO).

Portability may not only be caused by an event of insolvency or the start of reorganisation proceedings with respect to a GCM, but also by any reason that leads to a default pursuant to the contractual agreements between the GCM and SIX x-clear.

In the case of execution of a portability process, a confirmation from the back-up GCM concerning its unconditional agreement to the porting must be readily available. This confirmation must be issued within 8 business hours of the back-up GCM being informed by SIX x-clear of the occurrence of the default of the SIX x-clear GCM and the amount of the outstanding claims and liabilities as well as the margins that must be transferred in the form of permissible collateral. Therefore, under a title transfer collateral agreement, in a porting scenario, such margin assets or entitlements to claim the return of the margin assets may be "ported" to a back-up GCM. However, with regard to pledge solutions, the collateral pledged by the NCM to the GCM would not be available to be ported as title transfer collateral in an event of porting. The porting may therefore require either that a back-up GCM also accepts to receive collateral in the form of a pledge from the NCM or, alternatively, that the collateral (margin) originally pledged to the GCM is transferred to the GCM in return for the GCM porting to the back-up GCM the collateral assets it has transferred as title transfer to SIX x-clear.

The enforceability of the porting processes is subject to the above-mentioned power of FINMA to order under Article 30a Banking Act, in connection with protective measures under Article 26 of the Banking Act or reorganisation proceedings under Article 28 to 31 of the Banking Act, a temporary stay of the porting of assets or positions for up to two business days.

If portability is not possible in the event of default of a GCM, SIX x-clear is obliged to also offer alternative measures for the protection of positions and collateral related to the NCMs. The following solutions are available as alternative processes with a comparable level of protection:

An NCM can apply for its own membership and – provided that SIX x-clear's admission requirements are met – receive the full status of an Individual Clearing Member **(ICM)**, even if it intends to continue carrying out some or all of its clearing activities via its GCM. In the case

of default of the GCM, the positions and collateral related to such an NCM will be transferred as quickly as possible to its own account structure at SIX x-clear, and such an NCM will henceforth act as an ICM. (The other option is further described in section 6. "Close-out"). However, the ICM must be eligible for ICM membership according to the membership terms of SIX x-clear.

SIX x-clear has established a sound legal basis to support portability to a back-up GCM of an NCM's positions and collateral as well as to execute a close-out procedure for GCMs and NCMs (for further information please see below section 6. "Close-out").

6. Close-out

If – due to a selection not being made or for legal, technical or any other reasons – neither porting nor a transfer to its own account structures can be carried out, or cannot be implemented in time, the positions and collateral referable to NCMs will be subject to the close-out procedure of the defaulting GCM.

The proceeding is further described in SIX x-clear General Terms and Conditions. With regard to ISA arrangements, where a *positive* close-out settlement amount and any unrealized collateral resulting from the NCM's clearing and collateral accounts will not be credited to the defaulting GCM, but directly to the NCM. If the close-out settlement amount is **negative**, the negative amount is netted against the realized value of the collateral which was provided by the GCM and relates to the NCM, and if the collateral is not sufficient to offset the negative close-out settlement amount, the remaining value will be invoiced to the defaulting GCM's estate. Positions in OSAs could be netted with another's NCM account. There is a risk that this netting across accounts could happen automatically as a result of ordinary Swiss insolvency law or the automatic termination may be agreed as part of the contractual arrangement.

If the GCM or SIX x-clear is in default, the close-out netting provisions of the General Terms and Conditions of SIX x-clear apply. In case of bankruptcy of GCM the close-out netting procedure envisages one single amount to be calculated and paid to SIX x-clear or received by GCM. In case of bankruptcy of SIX x-clear, GCM will calculate the share to be paid or received by NCM.

7. Margin

In case you provide assets to the Bank by way of security interest, e.g. under a GDP, you would retain the legal title to such assets. As a result, to the extent that we have not passed on the collateral assets to SIX x-clear under a right of use, you would be entitled to set-aside excess collateral from our insolvency estate (after settling your obligations to us). However, as regards cash on a cash account, in our insolvency, you are only protected to the extent that you may benefit from the Swiss deposit protection scheme (which provides coverage up to an amount of CHF 100,000) or, if we are acting through a foreign branch, any foreign deposit protection scheme. Note that the actual result will depend on, amongst other things, the exact terms of our legal arrangements and the facts of the circumstances.

Where you provide for the transfer of assets by way of title transfer, the Bank becomes the full owner of such assets and you no longer have legal title to such assets. In our insolvency, you will have no direct right of recourse to SIX x-clear in respect of the collateral assets we transferred to SIX x-clear. You will have a claim against our estate for a return of the assets along with all our other general creditors. However, according to the protections of Art. 90 (2) FMIA, margin assets provided by you would be set-aside in our insolvency after completing any netting of claims and any private sale of margin assets in the form of securities or other financial instruments, as agreed between us and SIX x-clear (for further information please see section 4.1. *"General Insolvency (bankruptcy) risks").*

Excess margin is any amount of assets we require from you or you provide to us in respect of an NCM transaction that is over and above the amount of assets SIX x-clear requires from us in respect of the related GCM/CCP transaction.

If you choose an ISA, we are required to pass all excess margin on to SIX x-clear. However, if you provide us with assets, which are not related to your individually segregated clearing activities and such assets are not dedicated to cover your current positions with that SIX x-clear, those assets will not be posted to the SIX x-clear.

Under the FMIA, excess margin should be treated in accordance with the terms of the GCM/NCM agreement between you and us. As regards the client assets provided as excess margin, which we are not passing on to SIX x-clear, you will retain title to such client assets and your interests will be treated in the same way as any other cash or securities held on accounts with us, which are pledged under the GDP.

Glossary

Central Counterparty (CCP)	means SIX x-clear Ltd. which is a bank under Swiss law and a Recognized Overseas Clearinghouse under English law
European Market Infrastructure Regulation (EMIR)	is the EU Regulation on OTC derivatives, central counterparties and trade repositories
Federal Act on Banks and Savings Banks (Banking Act or BA)	is the Swiss Act regulating banks, private bankers and savings banks, dealing, amongst others, with operating licences and specifying rules for business conduct
Financial Market Infrastructure Act (FMIA)	is the Swiss Act regulating financial market infrastructures (e.g. CCPs incorporated in Switzerland and their participants) as well as the market conduct for trading derivatives instruments
Financial Market Infrastructure Ordinance (FMIO)	is the Ordinance to the FMIA
General Clearing Member (GCM)	means a member of SIX Swiss Exchange and also a member of SIX x-clear
Indirect Participant	means any person making use of financial market infrastructure services indirectly via a Participant
Individual Client Account (ISA)	is an account used to hold the securities or margin assets of a client on a segregated basis
Non Clearing Member (NCM)	means a member of SIX Swiss Exchange that is not a clearing member of SIX x-clear
Omnibus Client Account (OSA)	is an account used to hold the securities or margin assets of a number of clients on a commingled basis
Participant	means any person making direct use of financial market infrastructure services in Switzerland



CREDIT SUISSE (Switzerland) Ltd. Financial Institutions

CH-8070 Zurich, Switzerland credit-suisse.com/Financial Institutions

This document is provided solely for information purposes. It does not constitute any advice or recommendation in matters such as investment, finance, tax, accounting or legal, is not an interpretation of law and is not based on any consideration of the personal circumstances of the recipient. The information provided herein is not legally binding and does not constitute any offer, invitation, advice or recommendation to enter into any transaction. The information provided herein was produced by Credit Suisse Group AG and/or its affiliates (hereafter "CS") with due care and to the best of their knowledge and belief. It is based on assumptions and parameters determined in good faith. The assumptions and parameters used are not the only ones that might reasonably have been selected and therefore no guarantee is given as to the accuracy, completeness or reasonableness of any quotations, disclosure or analyses contained herein. The information and views expressed herein are those of CS at the time of writing and may be subject to change at any time. CS provides no guarantee with regard to the information and does not accept any liability for losses that might arise from making use of the information. The information provided herein is for the exclusive use of the recipient. It may not be reproduced, neither in part nor in full, without the written permission of CS. Copyright © 2019 Credit Suisse Group AG and/or its affiliates. All rights reserved.