



Clearing Notice SIX x-clear Ltd

New regulations and amendments in the General Terms and Conditions including amendments to SIX x-clear's risk management with respect to the:

- Segregation of x-clear Members' accounts and custody accounts
- Transfer of positions and margin of an NCM in the event of the Default of the GCM ("portability") including a change to x-clear's relationship with the NCM and alternative protection procedure in the event of the Default of the GCM
- Contribution of equity capital from x-clear in the event of an x-clear Member's Default
- Integration of the Trading Platform-specific GTCB into the GTCB
- Composition of the Collateral (Permissible Collateral)
- Introduction of concentration limits
- Margin validation taking into account additional risk elements

1.0 Preliminary remarks

With the amendments to the General Terms and Conditions for Business (GTCB) set out below, SIX x-clear Ltd (hereinafter "x-clear") is implementing the additions and stricter conditions for the applicable legal basis (here the National Bank Ordinance). This primarily concerns an expansion of the protection for indirect clients (x-clear Non-Clearing Members, "NCMs"), involving the introduction of concentration limits, improvements to adequacy with respect to the composition of Collateral as well as the inclusion of additional risk elements, such as procyclicality and concentration risks, in the margin model. All points of revision were developed in consultation with specialist external law companies and then presented to the supervisory authorities for approval ("non-objection" approval).

2.0 Validity

In accordance with Para. 3.6 lit. g and h of the Contract for Clearing Services, a general consultation process with x-clear Members is not required in the case of amendments due to regulatory requirements. The new provisions will therefore enter into effect as at 1 July 2014.

3.0 Segregation of accounts and custody accounts at the CCP

See section 18.9 of the GTCB and Clearing Terms.

In accordance with Principle 14 of the CPSS/IOSCO Principles for Financial Market Infrastructures and in analogous application of the requirements of the European Market Infrastructure Regulation (EMIR), provisions were also incorporated into the revised National Bank Ordinance (NBO) (Art. 24b) aimed at ensuring better and direct protection of Outstanding Contracts and Collateral provided as Margin by an indirect client (NCM) in the event of a default of its General Clearing Member (GCM).

This protection initially applies at the level of the accounts and custody accounts of the x-clear GCM and its x-clear NCMs: Pursuant to Art. 24b para. 1 and 2, the CCP is now obliged

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to make available to its direct and indirect x-clear Members account and custody account structures that allow them to segregate the positions and therefore to clearly be able to allocate them to the respective beneficial owners of these assets. Depending on the required degree of segregation, it must be possible to differentiate between the positions in Clearing and Margin provided for this purpose that belong to an x-clear Member (ICM and GCM)

- a. and those of the CCP itself
- b. and those of other x-clear Members
- c. and those of the x-clear NCMs linked to it.

With regard to the last level (c), it is the responsibility of the GCM to decide whether it only offers an omnibus solution (segregation of GCM assets from the group of assets belonging to the NCMs) for its NCMs or whether it also offers individual client account segregation (the assets of the NCMs each segregated individually per NCM).

The segregation of and ability to differentiate between the positions and Margins enable x-clear, in the event of the GCM's default, to allocate them to the beneficial owners or their Back-up GCM (portability) or facilitate the Close-out Process.

x-clear takes into consideration the specific constellations and requirements of its GCMs and NCMs and offers them the following **account/custody account structures**:

1. Omnibus Client Segregation (OCS)

The graphic below depicts the account structures at GCM level. The GCM positions and assets are segregated from the ones of its NCM(s). The client segregation is mandatory between GCM (proprietary transaction in the House Clearing Account) and NCM (client transactions in the Client Clearing Account) as well as at collateral account level. The cross-netting (cross-margining) of positions takes place on Clearing Account. OCS is the standard solution offered by x-clear.

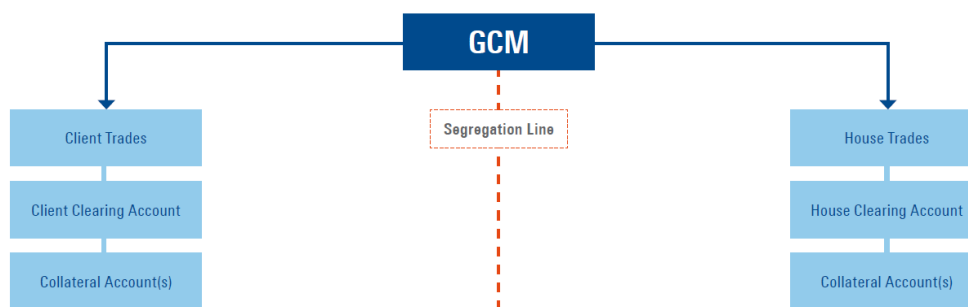


Figure 1: Omnibus client segregation (OCS)

The segregation of Collateral and Clearing Accounts of GCM and NCMs assets ensures a clear client segregation. From a risk management and default management point of view, the account set-up is looked at on a credit group level. The credit group combines, on a technical level, Clearing Account(s) with respective Collateral Account(s) to a transfer (portability)/close-out unit.

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2. Individual Client Segregation (ICS)

The graphic below depicts the account structure at NCM level. The GCM positions and assets are segregated from the ones of its NCM(s). In addition, each NCM is segregated from the other NCM(s). The account structure for the ICS model allows dedicated individual and segregated Clearing and Collateral Accounts to be held that show receivables and liabilities in terms of assets and positions of an NCM. The cross-netting (cross-margining) of positions takes place on Clearing Account level. If the clearing member chooses to use one Clearing Account, the other account is set inactive in the system.

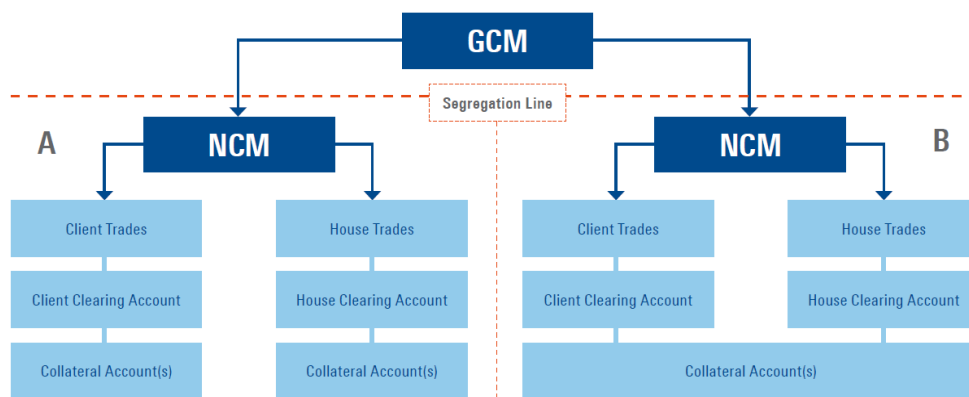


Figure 2: Individual client segregation (ICS)

Concerning the Collateral Accounts, the x-clear Member can choose for each NCM between segregated Collateral Accounts for each client and House Clearing Account (model A) or an omnibus Collateral Account (model B) for both Clearing Accounts. The collateral of the GCM is always segregated from the individual NCM collateral. The GCM has to pass through the collateral amount or positions requested from the NCM if the collateral fulfills the collateral eligibility requirements of SIX x-clear.

From a risk management and default management point of view, the account set-up is looked at on a credit group level. The credit group combines, on a technical level, Clearing Account(s) with respective Collateral Account(s) to a transfer (portability)/ close-out unit.

3. Mini-Omnibus Client Segregation (Mini OCS)

The picture below depicts the account structure at NCM level. The GCM positions and assets are segregated from the ones of its NCMs. Similar to the OCS model, but at NCM level, the NCMs share an omnibus Clearing Account. The Mini-OCS model is a partial segregation, contrary to the ICS model, whereby a group of NCMs of a GCM use one Clearing Account.

The cross-netting (cross-margining) of positions takes place on Clearing Account level. If the clearing member chooses to use one Clearing Account, the other account is set inactive in our system.

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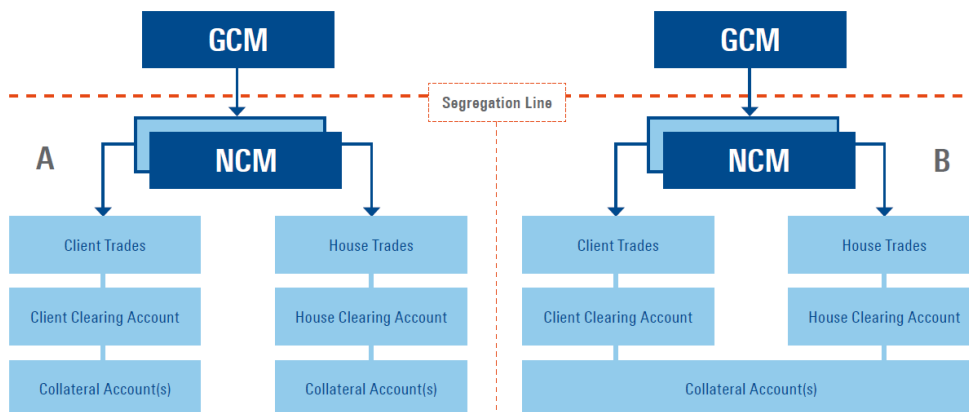


Figure 3: Mini-omnibus client segregation (Mini OCS)

Concerning the Collateral Accounts, the clearing member can choose for its NCM between segregated Collateral Accounts for each client and a House Clearing Account (model A) or an omnibus Collateral Account (Model B) for both Clearing Accounts. The collateral of the GCM are segregated from the NCM group collateral.

From a risk management and default management point of view, the account set-up is looked at on a credit group level. The credit group combines, on a technical level, Clearing Account(s) with respective Collateral Account(s) to a transfer (portability)/close-out unit.

4.0 Portability and alternative protection procedure in the event of the GCM's Default

4.1 Portability to a Back-up GCM:

See sections 5.0 and 30.0, Annex 2 of the GTCB and the enclosed graphical representation (slide 1).

The purpose of portability is to remove positions (from Outstanding Contracts) and Collateral (Margins) of NCMs from the assets of the Defaulting GCM and to transfer them to a Back-up GCM. This not only ensures the assets of the NCMs are structurally protected, but that they remain in the Clearing process and continue to be managed via the Back-up GCM. This also minimizes any delays in the trading and clearing business to the greatest degree possible.

The reasons for such a portability process taking place not only include bankruptcy, but any reason that is classed as a Default pursuant to the contractual agreements between the GCM and x-clear and are therefore handled in accordance with section 29.0 of the GTCB – in particular the loss of licenses, disciplinary proceedings, significant payment difficulties etc.

x-clear shall carry out the pre-arranged solution selected by the x-clear NCM within 48 hours of the declaration of Default by the x-clear GCM concerned and the following requirements being met:

1. The following documents must be in place and the corresponding measures taken:

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- If individual porting is selected: Order by the Back-up GCM as the representative of the x-clear NCM to x-clear as well as the completed technical activation as an x-clear Member, or
 - If independent membership is selected: Request by the x-clear NCM for admission as an x-clear ICM and completed activation as an x-clear Member.
2. Existence of a Legal Opinion as to the reliability and feasibility of the selected solution (in particular, based on the applicable insolvency law) in the country of domicile of the respective GCM, if this has not already been clarified by x-clear. The following jurisdictions are currently supported by x-clear with respect to portability (further are in clarification):
 - UK
 - Germany
 - Netherlands
 3. Coverage of the same settlement markets by the Back-up GCM as the Defaulting x-clear GCM, provided the Defaulting x-clear GCM also acts as a Settlement Agent.
 4. In the case of porting, a confirmation from the Back-up GCM concerning its unconditional agreement to porting must be in place. This confirmation must be issued within **8 business hours** of the Back-up GCM being informed by x-clear of the occurrence of the Default of the 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.

Please note that even if all the requirements are met in the event of a Default of a GCM with a Swiss domicile (and subject to Swiss bankruptcy law), due to the currently applicable law it is possible that porting may not be allowed by the restructuring agent or liquidator or that such a procedure may not be recognized by the responsible bankruptcy judge. Any interference in bans under bankruptcy law on orders (that are to the detriment of creditors) from debtors that require restructuring or are already bankrupt must be overridden by an exemption clause that is based in law; to do so – based on the principles of finality and protection of netting and financial collateral (pursuant to Art. 27 of the Swiss Banking Act and EU Guidelines 98/26/EC and 2009/44/EC) – the reliable functioning of recognized financial market infrastructures must be given priority over individual mechanisms of insolvency law. Such a regulation is expected to be included in the new Swiss Financial Market Infrastructure Act (FinfraG) in 2015.

Part VII (sections 158 and 159) of the English Companies Act contains a "carve-out" solution in favor of the agreements of a CCP in question. We would be happy to provide x-clear Members additional information – insofar as we have clarified this – on the situation in other European countries

4.2 **Alternative process with comparable protection**

See section 30.0 of the GTCB and the enclosed graphical representation (slide 2).

If porting is not possible, under Swiss law (Art. 24b para. 4) x-clear is obliged to also offer processes for the assets of the NCMs (positions and collateral) that offer a comparable level of protection to portability in the event of a Default of an GCM.

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With the current individual segregation process, an NCM can apply for its **own membership** and therefore – providing the 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 a Default of the GCM, the segregated assets of the NCM would be transferred as quickly as possible to its own structure at x-clear.

If neither porting nor a transfer to its own account structures can be carried out, or if these pre-arranged solutions (in particular due to the requirements not being met) cannot be implemented in time, the legal order must nevertheless be fulfilled by subjecting the segregated assets of the NCMs to the **Close-out** procedure. This is different to the procedure defined in section 29.5 lit. d GTCB inasmuch as a positive Close-out Settlement Amount is not credited to the Defaulting GCM but directly to the NCM concerned. If the Close-out Settlement Amount is only just sufficient or is even insufficient, it is offset with the Collateral provided by the GCM or is invoiced to the GCM/its bankruptcy assets.

4.3 **Change in relationship between x-clear and NCMs**

See section 5.0 and Annex 2 of the GTCB.

The ability to choose between the segregation and porting options made it necessary to provide more detailed information and add additional information with respect to the relationship with the x-clear NCMs. In particular, this concerns the obligations of the GCM representing the NCM with respect to x-clear (e.g. Margin requirements must be calculated separately). The regulations in section 5.0 and the requirements for the **GCM/NCM Agreement** and the specimen orders of the Back-up GCM to x-clear (pursuant to Annex 2) were revised/rewritten accordingly.

5.0 **Contribution of equity capital form SIX x-clear Ltd**

Within the scope of the regulations of the National Bank Ordinance, x-clear set the existing regulation concerning the allocated equity capital ("skin-in-the-game") to 25% of the capital of SIX x-clear Ltd (see section 19.0, item 3 GTCB).

In the event of a client Default, this equity capital contribution will be used to cover losses before the Default Fund Contributions of the Members that are not in Default are used to cover any such loss.

6.0 **Integration of the Trading Platform-specific GTCB into the GTCB**

An excess of documents meant that the overall set of rules had become unclear and confusing. Therefore we have integrated the Trading Platform-specific GTCB into the General Terms and Conditions. However, it was only possible to truncate these from an editorial perspective; the rules were taken over unchanged in terms of content.

7.0 **Composition of the Collateral (Permissible Collateral)**

7.1 **Change of the scope of collateral-eligible ISINs**

To avoid wrong-way-risk, any security of which the issuer is a bank or other credit institution will in principle no longer be accepted as Permissible Collateral. However, bonds issued by

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supranational banks or development banks as well as covered bonds that have a low default correlation with the issuing bank may on a case-by-case basis be accepted as collateral.

In addition, x-clear reserves the right to refuse the acceptance of the following types of collateral:

- Covered bonds or securitizations that include receivables originated by the collateral-providing counterparty;
- Securities that are guaranteed by the collateral-providing counterparty or whose payment stream depends on the credit standing of the collateral-providing counterparty.

8.0 Introduction of collateral concentration limits

In order to ensure that the margin and default fund collateral remains sufficiently diversified to allow its liquidation without a significant market impact, x-clear introduces issue-specific, trading volume-related and collateral type-related maximum concentration limits. The respective requirements are defined in Art. 28a of the NBO.

In addition, a minimum concentration limit for cash and securities from the SNB GC basket is introduced. Initially this limit is set to zero.

The concentration limits are established for each x-clear Member at a credit group level. Collateral exceeding the respective concentration limits has to be replaced such that the concentration limits are met after replacement.

Further details about the concentration limits, including the threshold values for intervention, will be provided in the lending norms of x-clear and SIX SIS, which are set to be published on 1 July 2014.

8.1 Issue-specific maximum concentration limits

Issue-specific concentration limits are applicable for bond collateral only. They are based on the face value of the respective bond and are set as a percentage of the bond issue size (total issued capital):

Government bonds: 10% of the issue size

All other bonds: 5% of the issue size

8.2 Trading volume-related maximum concentration limits

The trading volume-related concentration limits are applicable for equity collateral only.

The limit is set to 15% of the 30-day average daily trading volume (ADTV) on the most liquid stock exchange for the respective ISIN.



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8.3 Collateral type-related maximum concentration limits

Individual concentration limits are set with respect to the following types of Permissible Collateral as a percentage of the total collateral value provided per credit group:

Cash:	100%
Government bonds:	100%
Non-government bonds rated higher than A+:	80%
Non-government bonds rated A+ or lower:	70%
Non-government bonds with special features ¹⁾ :	60%
Equities:	50%

¹⁾ Eligible non-government bonds with special features may be:

- Embedded options (e.g. convertible bonds, exchangeable bonds, callable bonds etc.)
- No periodic interest payments and face value repaid at maturity (zero-coupon bonds)
- No fixed maturity

8.4 New optional SECOM collateral report

In the context of introducing the concentration limits, x-clear provides a new print format report:

RPXL310 – “CONCENTRATION RISK DETAILS REPORT”:

This report informs the x-clear Member about the current usage of concentration limits.

x-clear Members who wish to receive the above report are kindly requested to tick the relevant box in the updated *Member reporting for Clearing and Settlement Standing Instructions (CSSI) notification form (annex 2)* and send the form to their Relationship Manager. This form will be updated and published in the third week of June 2014 on: www.six-securities-services.com > Clearing > Forms & Guides > Forms

9.0 Margin validation taking into account additional risk elements

9.1 Introduction of a margin validation and calibration module

x-clear’s real-time margining module is supplemented by a margin validation and calibration module performing up to 6 daily (and if required ad hoc) risk-factor-based Monte Carlo simulations of the margin requirement. This approach allows for an independent and comprehensive portfolio-based assessment of the margin requirement and a comparison with the initial margins calculated by the real time margining module. x-clear reserves the right to adjust the margin requirements based on the outcome of this margin validation.

The simulation technique of the margin validation and calibration module takes into account the prevailing volatilities and correlations between the risk-factors to which the clearing

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portfolios are exposed. The validation methodology consists of the following five main elements:

1. Definition of the risk-factor set
2. Mapping the underlying securities to the risk factors via regression analysis
3. Scenario generation of the risk factor and security returns via Monte Carlo simulations
4. Scenario generation of clearing portfolio returns
5. Measuring the clearing portfolio risk

The simulation approach of x-clear's margin validation and calibration module allows for taking into account further risk components as required by the applicable regulation in the EU and in Switzerland (Art. 27 and Art. 28c NBO). x-clear may notably reflect the following additional risk components in its margin validation and calibration process:

- a. Stressed VaR (incorporates periods of stressed marked conditions in order to avoid procyclicality of the margin requirements)
- b. Liquidity-adjusted VaR (takes into account potential adverse price movements due to concentration risk in the clearing portfolio)
- c. Variable close-out periods (allows for an adjustment of asset class-specific VaR horizons)

Further details on the margin validation and calibration module can be found in the new Clearing Terms, which are set to be published on 1 July 2014.

9.2 **Adjustment of margin requirements**

The margin validation and calibration shall be implemented in two phases:

Phase 1 (July 2014 until fourth quarter 2014):

With the introduction of the margin validation and calibration module, x-clear reserves the right to adjust the margin requirements based on the outcome of the validation.

Phase 2 (as of fourth quarter 2014):

In the fourth quarter of 2014, x-clear will introduce a dedicated scaling factor at credit group level in order to adjust the margin requirements methodically. The implementation of this regime will be accompanied by an extension of the existing member reports and member queries, i.e. the clearing members will not only be informed about the adjusted total margin requirement but also about the clean real-time margin and the incremental margin due to the application of the scaling factor, respectively. Detailed information on these changes will be provided in due time.

10.0 **Contacts**

For further information please contact:



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your Relationship Manager (see: www.six-securities-services.com > Login > SIX SIS Private > Contacts > List of contacts of SIX SIS > Customer Relations).

In this context, SIX x-clear Ltd draws its Members' attention to paragraphs **7.1 lit. f** and **14.3** of the General Terms and Conditions of SIX x-clear Ltd stipulating that the Member is responsible for the tax requirements and consequences of Clearing with SIX x-clear Ltd pursuant to the Applicable Law and that SIX x-clear Ltd assumes no liability for any charges that are owed in relation to Clearing with SIX x-clear Ltd or any other negative consequences arising in conjunction with clearing that are a result of tax laws or ordinances issued by tax authorities pursuant to the Applicable law.