



clear to trade

Eurex Clearing Response to the

CPMI-IOSCO Consultative Report on

**“Resilience and recovery of central
counterparties (CCPs): Further guidance on
the PFMI”**

Frankfurt, 18 October 2016

A. Introduction

Eurex Clearing welcomes the opportunity to respond to the 'CPMI-IOSCO consultative report (the consultation) on the resilience and recovery of central counterparties (CCPs): Further guidance on the PFMI' document published by Committee on Payments and Market Infrastructure (CPMI) and the Technical Committee of the International Organization of Securities Commissions (IOSCO) in August 2016.

This comment paper is arranged as follows. The first section contains general remarks on the CPMI-IOSCO consultation paper as well as on the CCP workplan. The second section provides answers to the questions in the report.

B. General Comments

Eurex Clearing appreciates being part of international consultations and assessments conducted by supranational committees such as the CPMI and IOSCO including connected sub-groups, as well as the Financial Stability Board (FSB) and the International Monetary Fund (IMF) during the Financial Sector Assessment Program (FSAP). We support the aim to strengthen financial stability through harmonized international standards.

While participating in several assessment exercises during the recent years, Eurex Clearing's compliance with the Principles for Financial Market Infrastructures (PFMI) was audited and confirmed twice by the IMF within their 'Detailed assessment of observance – Eurex Clearing AG observance of the CPSS-IOSCO Principles for Financial Market Infrastructures' report published in September 2011¹ and June 2016².

In addition, Eurex Clearing provided extensive information to the CPMI-IOSCO Policy Standing Groups (PSG) questionnaire on CCP resilience and recovery as well as in the CPMI-IOSCO Implementation Monitoring Standing Groups (IMSG) level 3 assessments report³ on the consistency of the implementation of the PFMI.

Eurex Clearing values the principle based approach of the PFMI as a well-balanced and adequately detailed guidance for FMIs, in particular CCPs. In that respect, we would like to emphasize that any additional guidance provided by CPMI-IOSCOs should focus on achieving a consistent application of the PFMIs' across jurisdictions and to establish a level playing field amongst FMIs and also, importantly, at the level of supervisory authorities.

This should be considered also in light of the situation that according to the latest "Third update to Level 1 assessment report"⁴ published in June 2016 by CPMI-IOSCO only 19 out of 28 member jurisdictions have achieved the highest rating for all FMI types, meaning at least in our reading that the PFMI are not fully implemented yet in all

¹ <https://www.imf.org/external/pubs/ft/scr/2011/cr11271.pdf>

² <https://www.imf.org/external/pubs/ft/scr/2016/cr16197.pdf>

³ <http://www.bis.org/cpmi/publ/d148.htm>

⁴ <http://www.bis.org/cpmi/publ/d145.pdf>

member jurisdictions. The first IMMSG level 3 assessment on the consistency of the implementation of the PFMI covered only 10 CCPs out of 9 member jurisdictions. Unfortunately, the cover note to the consultation paper is silent on how differences in the status of compliance with the PFMI for different member jurisdictions and CCPs are considered and reflected for future assessments.

The cover note to the consultation document outlines that one major input for the guidance were the results of the IMMSG level 3 assessment report. Any change to the existing PFMIs based on the report must balance the provision of further and higher requirements by preparing a more detailed guidance on the one hand and ensuring a level playing field for all CCPs from the 28 member jurisdictions looking forward on the other.

C. Detailed Comments

Governance

Is the guidance provided on CCPs' governance sufficient and appropriate?

With regards to CCP governance arrangements the current principles already provide an adequate level of detail on how to implement the principles. We fully support the approach to further elaborate on the tasks of the "board". However, we would advocate that a clear distinction between the tasks assigned to the "(supervisory) board / board of directors" and the "management board / executive board" has to be made. The PFMI⁵ recognize that in some jurisdictions a two-tier board structure has to be maintained and the responsibilities between the (supervisory) board and the (management/ executive) board should be clearly allocated. In such a structure the supervisory board has the important function and duty to oversee the work of the management board and to approve important corporate decisions amongst others the setting of the (risk) strategy, approval of the risk framework, its annual review and all matters with a material effect on risk management as well as company planning.

The tasks of the supervisory board need to be clearly distinguished from the tasks of the management or executive board as the ultimate decision body and responsible entity for the CCP management.

In addition, we would like to highlight that certain aspects related to day to day risk management such e.g. deleting a historical scenario, should not be with the management board but within the risk managing department and only important matters need to be approved by the Chief Risk Officer (CRO). We consider it of course mandatory that the day to day risk management tasks are clearly defined and results are regularly reported to the CRO.

⁵ PFMI number 3.2.15

Furthermore, at least for all European CCPs regulated under EMIR all decisions qualified as "EMIR Matters" (including but not limited to changes to the default procedures and significant changes of the risk model) have to be consulted with the Risk Committee. The Risk Committee is composed of an equal number of direct and indirect participants of the CCP as well as members of the supervisory board of the CCP. Hence a direct information flow to the supervisory board is ensured. The advice of the Risk Committee is taken into account by the supervisory board as well as the management board.

For example, the supervisory board and the Risk Committee should approve the general validation approach and be regularly provided with a high level summary of test results and major findings. The design and implementation of individual validation instruments however can remain in the CRO's responsibility. As for model changes, the Risk Committee should advise before the supervisory board approves material changes. The supervisory board and the Risk Committee should also be provided with the validation results for such material changes.

Eurex Clearing would advocate that CPMI-IOSCO strive to harmonize the tasks and the composition of the Risk Committee on a global scale. The standards set by EMIR have proven to be robust and might serve as a guideline.

Disclosure

Is the current level of public disclosure by CCPs appropriate? In particular, is there a need for further disclosure related to margin and stress testing methodologies? If so, would the disclosure of the items included in the list (or a subset of the list) suggested by an industry group and attached as an Annex be appropriate and sufficient for disclosure and feedback purposes?

Disclosure and feedback mechanism for reviewing the margin system and stress-testing framework

CCPs have always been very transparent in the approach to risk management, margin computations, etc. It is in our interests that our members understand, and can give feedback on our approach, as this adds a valuable layer of due diligence as well as acceptance. Of course, there are natural restrictions as CCP cannot and should not reveal critical business information or member specific portfolio or disclose data with the potential to "game the system".

Concerning public disclosure, a very detailed set of quantitative data is already provided by the recently established CPMI-IOSCO quantitative disclosure. In a first step, we would propose to analyze the data already published to identify any specific gaps in the data that – when filled – would add additional value with respect to the aim of reducing systemic risks in the financial system or the interaction between FMIs and their stakeholder. All additional disclosure requirements should carefully balance the added value compared to the sensitivity of the data for FMIs risk management aspects. In case the quantitative data should be

enriched it is important that the information and format provided by CCPs is comparable. E.g. for stress testing a proposal could be to define a common template for all CCPs concerning the scenarios and include this as part of the quantitative disclosure.

Stress Testing

Is the guidance provided on stress testing sufficient and appropriate?

Eurex Clearing agrees with the guidance provided on the structure of credit and liquidity stress-testing frameworks as well as on the identification of risks. We support the aim to have exposures always covered by financial and liquid financial resources. However, given the attempts of various supervisory bodies⁶ to further detail the structure, content and parameters etc. of stress testing we see a need for consolidation and harmonization on a global level first before new tools are proposed.

Eurex Clearing employs a comprehensive set of stress testing scenarios. With respect to the calibrated scenarios, it should be clear if CPMI-IOSCO intends that all scenarios should be employed for calibrating the size of the Default Fund or if certain scenarios should be solely used for analyzing special risk constellations. Eurex Clearing is of the opinion that the scenarios for determining the coverage requirement need to be 'extreme but plausible', whereas the scenarios for analyzing special risk constellations can go beyond plausible. Certain constellations recommended in the guidance, e.g. "peak to trough equity and interest rate price changes" cannot necessarily be considered plausible. In addition, when calibrating historical scenarios based on intraday data, it should be considered that taking risk factors from different points during the day (due to non-synchronous availability of data) might break the correlation structure.

Knock on effects of member defaults are an important macro-prudential aspect. We believe these macro-prudential considerations should first be assessed in CCP-wide stress tests. In any case, aspects like the 'possibility that the failure of one or more participants will precipitate or exacerbate market volatility' make stress test much more complex and significantly more difficult to understand and communicate. The added value of including complex higher order effects should be weighed against these aspects.

In the light of the potential for member positions and market prices to change significantly during the day, is the proposed guidance on capturing intraday positions and price movements in stress tests appropriate and sufficient?

In considering intraday positions and price movements, we would like to highlight that the current practice of many CCPs include the monitoring of intraday exposures throughout the day. In case of Eurex Clearing, the monitoring of intraday exposures is

⁶ E.g. in 2015 ESMA conducted the first EU-wide stress test and provided a list of proposed minimum shifts for different asset classes.

done on a real time basis. While we see certain added value to extend stress testing also to intraday, we would see a more urgent need to first have an automated real time exposure monitoring implemented at all CCPs in order to see intraday rising exposures that could cause a problem and to mitigate the risk through intraday margin calls.

Extension of liquidity stress testing to intraday stress testing in addition to tests conducted on a daily basis should be aligned with further international initiatives like BCBS 248 on intraday liquidity stress scenarios.

In addition, Eurex Clearing believes that the guidance with respect to potential changes of member positions leaves too much room for interpretations and subjective assessments. This could lead to a very different treatment across CCPs and hence yield an un-level playing field. We strongly recommend performing stress tests based on actual and not on potential positions. More specifically, it is not clear how statements like 'increasing the size of the cleared portfolios' should be consistently put into practice.

Coverage

Is the guidance provided on coverage sufficient and appropriate?

Is the current two-tiered Cover 1 / Cover 2 minimum standard still appropriate in relation to the guidance in the report?

Eurex Clearing supports the requirement for a CCP to maintain sufficient prefunded financial resources to cover its credit exposures on an ongoing basis. CCPs should cover fully their current and potential future exposures to each participant with a high degree of confidence. This also holds true for additional prefunded financial resources a CCP should hold in an amount sufficient to cover a wide range of potential stress scenarios. In order to harmonize international standards, and to avoid different interpretation of the wording "more complex risk profile" and "systemically relevant in more than one jurisdiction" the amount of prefunded financial resources should include (in alignment with existing regulation e.g. Europe) the default of the two participants and their affiliates that would cause the largest aggregate credit exposure to the CCP in extreme but plausible market conditions (Cover 2).

The Cover 2 requirement should also be established as a global standard with respect to sufficient liquid financial resources that need to be maintained on an ongoing basis. Eurex Clearing considers a Cover 2 for both credit and liquidity exposure as an important aspect to strengthen the lines of defense in a CCPs default waterfall.

For the aggregation of stress testing results the applied segregation structure should be honored, e.g. a stress gain from a client account should not be used to offset a shortage from a proprietary account. Concerning client exposures, we support the approach that all client positions are liquidated, which is also in line with EMIR requirements. Eurex Clearing currently does not foresee any porting of clients in its stress tests.

Eurex Clearing recommends guidance with respect to the consistency of stress testing scenarios. Clearing Members that belong to the same corporate group can only default in the same stress testing scenario.

For determining the Cover 2 requirement, the largest 2 corporate groups are considered and the stress results of these corporate groups should follow different scenarios, i.e. corporate group 1 may default under a different scenario compared to corporate group 2. The reason behind this is that market conditions can change during the management of the defaults of the largest two corporate groups.

With respect to voluntary, excess contributions, Eurex Clearing is of the opinion that a withdrawal of collateral (covering the outflows under extreme but plausible market conditions) should be assumed.

Margin

Is the guidance provided on margin sufficient and appropriate?

Is the guidance provided on procyclicality appropriate and sufficient?

The PFMI do not explicitly address margin add-ons. Is the guidance provided on margin add-ons adequate to ensure sufficient coverage by the margin system and other prefunded financial resources in line with the PFMI?

The PFMI do not prescribe a minimum margin period of risk or closeout period. Is further guidance in this area needed?

Eurex Clearing generally agrees with the guidance provided on margin and that the CCP should regularly review and validate the margin model(s). However, which validation instruments are used beyond the mandatory scope of backtesting and sensitivity analysis should be left to the CCP as the instruments used may be chosen to account for model specific aspects. In order to receive adequate feedback the risk committee should advise on validation results. As the advisory role of the risk committee should include validation results, the feedback process however should not be designed by CPMI-IOSCO. The principle based approach needs to give the Risk Committee and the CCP discretion on how the feedback from Risk Committee is processed.

The MPOR is the number of days a CCP should assume it needs for liquidating a respective liquidation group/ respective asset class (group of products with similar risk characteristics). In line with European regulation the MPOR is set between 2 and 5 days depending on the place of execution (Exchange vs. OTC). However, the number of days set for the respective liquidation group should be established by the guidance of two sources:

The first source is an internal estimation of the overall CCP Risk Management Department. Every single step of the default management process has to be analyzed with respect to how time consuming it is.

The second estimation source should be taken directly from the market (i.e. involvement of the Risk Committee) and aligned with regulatory requirements. The proposed MPOR has to be validated by the Risk Committee in order to verify if the chosen MPORs are reasonable.

In addition, and as a further important step to validate the applied MPOR Eurex Clearing regularly conducts default simulations involving Clearing Members on a regular basis in which the time frame for the Default Management process is challenged.

Regulators have observed such simulations in order to judge that the MPOR is sufficient. In addition, the historic Clearing Member defaults that have been managed by Eurex Clearing proved that the liquidation period assumed is realistic.

Eurex Clearing agrees with all elements outlined by CPMI-IOSCO in the consultative report but advocates that at minimum a 2 day minimum MPOR should be established as the global standard and in any case the chosen MPOR has to be aligned with the time necessary for an orderly Default Management Process. Hence, CCP should be incentivized to establish regular default simulations in order to demonstrate to their regulators that the chosen MPOR is sufficient.

Eurex Clearing sees a clear advantage for the financial system if CCPs calculate their margin requirements of each Clearing Member intraday on a real-time basis automatically. If the potential future price risks of a Clearing Member increases above the amount of collateral that is provided then the CCP should issue an intraday margin call towards that Clearing Member that has to be covered within a certain time frame, e.g. one hour. In this case the MPOR could serve as basis for risk calculation. Therefore the margin could be calibrated to hold throughout the whole default management process (including client positions and collateral transfer (where possible), hedging, independent sale and auction) assuming severe market conditions.

Eurex Clearing believes the MPOR should be calibrated based on real procedural capabilities assuming severe market conditions rather than regulatory minimums.

As the initial Margin is a forward-looking margin component, it quantifies an estimate of future potential losses over the holding period of all Clearing Members' liquidation groups at a pre-defined and appropriate confidence level (statistical confidence level of 99 per cent for listed and 99.5 per cent for OTC products is assumed). Generally, the requirements described by this consultation are already set out by EMIR which Eurex Clearing considers what could be used as a benchmark in order to harmonize global standards.

Backtesting

Eurex Clearing agrees that backtesting should be performed daily on all productive portfolios on portfolio level. Where the results suggest that the model is not performing well, the CCP should trigger investigations and propose actions accordingly. We further agree that the reporting should run through the governance structure.

A CCP should at least use a statistical test for evaluating the number of outliers per portfolio. In general, the methods and statistical tests used in backtesting should be chosen by the CCP, where completeness in the sense of portfolio/product coverage is more important than the number of used tests. We agree that margin components which correspond to risks which cannot be observed in the market and therefore are not reflected in the PnL should be excluded.

Sensitivity analysis

Eurex Clearing believes that the consultation mixes up market data sensitivities and parameter sensitivities. We agree an analysis of the model parameter sensitivities should be conducted monthly. The results should be considered in the model review process. The effect of severe market moves should be analysed as part of stresstesting, not sensitivity analysis.

As for model parameter some parameters may be calibrated on market data and can be shifted to different levels of statistical confidence. Others are set by expert judgement and can therefore not be shifted to values with respect to a probability law. Parameter Sensitivity analysis provides valuable insights into model behavior but cannot be used to prove or disprove sufficient margin coverage. Margin coverage in stressed market conditions is analyzed in stress testing. As for the suggested minimum scope of parameters we think confidence level, MPOR and length of sample period make sense. Alternative choices for stress periods only make sense if the CCP's model uses also explicitly stress periods in the margin calculation (as opposed to other anti-procyclicality measures such as 10-year volatility floors, see ESMA RTS Article 27).

Addressing procyclicality

Eurex Clearing agrees that CCPs margin systems should be designed to address the need to appropriately respond to risks that arise from ongoing market dynamics without compromising financial stability, meaning destabilizing, and procyclicality changes.

As a European CCP, Eurex Clearing adheres to the requirements of EMIR on procyclicality which provides a solid framework for this topic. EMIR offers 3 options which need to be fulfilled in order to address procyclicality events. The way on how to achieve the results are left to the CCP's discretion which underlines the advantage of a principal based approach.

With respect to procyclicality in the consultation we would like to stress that a principle based approach is important in order to avoid unintended consequences. A general guidance on when and if add-ons will be charged might limit the CCPs ability to meet

and address unforeseen circumstances and to react appropriately. A prescribed rule might in itself be procyclical as a CCP might decide to not charge an add-on if deemed appropriate.

Eurex Clearing would question if the outcome of the consultation on procyclicality is practicable and will lead to the expected results. E.g. the major source of liquidity shortfall is VM payments and not incremental IM payments due to pro-cyclical margins.

Portfolio margining

We agree that the performance of a portfolio margining system needs to be monitored on an ongoing basis, in particular with respect to offsets granted in Margining. Rather than defining offsets granted between instruments using correlations, it is crucial that the risk calculation and the liquidation procedures match, in the sense that offsets are only allowed between financial instruments which can be handled and are handled jointly in the liquidation process following a Clearing Member's default.

CCP Contribution to Losses

Is the guidance provided on a CCP's contributions to financial resources to cover losses sufficient and appropriate?

Eurex Clearing generally supports the proposals for CCP contributions to losses made in the Consultative Report.

Losses related to a participant's default

Based on EMIR as well as the PFMI's CCPs already must have rules and procedures in place to absorb losses resulting from a participant default as well as the custody and investment of participant assets. In addition, the implementation of the aforementioned rules should be consulted with the market and the National Competent Authority.

As an example we would like to point out that EMIR requires all European CCPs to establish multiple layers in a Default Waterfall protecting the clearing house and its members in case of a Clearing Member default. The first two layers comprise financial re-sources provided by the defaulted clearing member (margin and its Clearing Fund contribution), the subsequent layers are the "Dedicated Amount" of the CCP or "skin in the game" (SIG) itself and Clearing Fund contributions provided by non-defaulted Clearing Members. EMIR also stipulates minimum standards. Article 35 of the EMIR RTS 153/2013 sets the minimum level of the CCP's SIG to 25 per cent of its capital requirements. This calibration was suggested by ESMA as a result of the public consultations that took place in the process of designing the EMIR legislation. The portion a CCP has dedicated to the waterfall is deemed to be the right balance for CCPs to be incentivized to exercise prudent risk management

In addition, the requirements of Article 35 EMIR are complemented by the requirements of Article 16 of EMIR, stipulating that the CCP's capital shall be proportionate to the risk

stemming from the activities of the CCP. This ensures that the SIG of the CCP is relative to the risk management responsibilities of the CCP. The regulatory capital of a CCP itself is determined based on the CCP's non-default risk (e.g. legal, operational, investment). This link incentive CCPs to implement robust operations and a conservative investment approach. As the amount of margin and default fund contribution of Clearing Members is based on their risk exposure the above described approach considers the risk neutral position of a CCP.

The next step in the default waterfall is the Clearing Fund contributions provided by non-defaulted Clearing Members with the potential next level of Clearing Fund assessments (Clearing Members are obliged to replenish their Clearing fund contributions). It is important that the amount of the SIG ensures the right incentives also for the risk management of clearing members. With a too high SIG the CCP would at a certain point fund risk taking clearing members with the potential downside that Clearing Members incentive to participate in auction and the following steps in the default waterfall decrease. This is particularly the case when Linking SIG to the size of the default funds as clearing members potentially engage in riskier activities as they will, in effect, be partially subsidized by the CCP operator.

Custody and investment losses

European CCPs are obliged through EMIR to ensure that participants' assets (cash and securities) are only held with custodians selected by the CCP and that these assets are only invested, in accordance with an investment policy approved by the CCP's board(s) after consultation of the risk committee. EMIR also stipulates that CCPs use supervised and regulated custodians, and that any invested assets should be in instruments with minimal credit, market and liquidity risks.

As outlined above EMIR also defines capital requirements for non-default losses including potential custody and investment losses. Hence in line with European legislation, European CCPs already ensure the availability of resources in order to deal with non-default losses. We would advocate aligning with the exiting regulation.

Recovery Planning

Is the guidance already provided on recovery planning in the Recovery Report sufficient and appropriate?

Eurex Clearing appreciates that consultation is aligned with the guidance provided in the CPMI-IOSCO report on the Recovery of financial market infrastructures to which Eurex Clearing has also responded. Nonetheless we would like to draw the attention to the following:

Eurex Clearing recommends that CPMI-IOSCO considers explicitly including a Cover-2 liquidity requirement for consistency with Cover-2 for member defaults. Additionally, Eurex Clearing considers that the CCP industry would benefit from exchanging views

on how to measure liquidity requirements, and would like to participate in such exchanges.

Eurex Clearing disagrees with the distinction of reserving some assessment rights for direct loss allocation, and some for replenishment. In our view, it would be disadvantageous if any committed resources that could help recovery would be not deployed. It is preferable to fix the situation, and then consider continued operations, rather than not use them in full. This is not to say we don't agree for a need to plan for replenishment, but consider this a secondary problem.

Other considerations

Is there a need for further guidance on the role of risk committees as an effective means of achieving proper corporate oversight and for receiving input from persons representing stakeholder interests?

Eurex Clearing elaborated on the role and composition of the risk committee in the chapter on governance.

Is there a need for guidance regarding governance and the organisational (legal) structure of the CCP?

Eurex Clearing sees no need for further guidance.

Is there a need for further guidance on the allocation of default fund requirements among clearing participants?

Eurex Clearing sees no need for further guidance.

Is there a need for further guidance on the composition of prefunded financial resources?

Eurex Clearing sees no need for further guidance.