August 5, 2012

RESPONSE TO ESMA CONSULTATION PAPER ENTITLED "DRAFT TECHNICAL STANDARDS FOR THE REGULATION ON OTC DERIVATIVES, CCPs AND TRADE REPOSITORIES"

Overview

EACH, the European Association of Central Counterparty Clearing Houses, welcomes the opportunity to respond to ESMA's Consultation Paper on Draft Technical Standards for the Regulation on OTC Derivatives, CCPs and Trade Repositories ("the Consultation Paper"). EACH has contributed to the development of the associated Level 1 text, "EMIR", since its inception and strongly supports its central objective of bringing more business in standardised OTC derivatives within the ambit of CCP clearing as a means of managing systemic and contagion risk.

The mandate of the G20 was to promote the attractiveness of CCP clearing and thereby increase its use in relation to standardised OTC derivatives business. In EACH's view, however, the approach suggested in the Consultation Paper does not adequately support that mandate and in some respects it may actually undermine it. This is because the thrust of the Consultation Paper suggests that the Draft Technical Standards under EMIR will significantly increase the cost of clearing in Europe – for instance in relation to margin levels and eligible collateral – beyond the point stipulated in the Level 1 text. Test calculations by one CCP have shown an increase in margin requirement of up to 90% in the current market conditions. In other words, EACH is concerned that the Draft Technical Standards do not merely add detail to the framework Level 1 provisions, but they would have the effect of creating more onerous requirements than those which have been promulgated by the legislators at Level 1.

Furthermore, the new CPSS-IOSCO Principles must be taken into account, given that they will become the new global standards for CCPs and other post-trade financial market infrastructures. If European requirements are significantly more onerous than the accepted global standards, it may undermine the competitiveness of European CCPs, putting them at a regulatory disadvantage – particularly in light of the global nature of the OTC derivative business – and encourage regulatory arbitrage. The users of those markets are international banks and dealers, multinational corporations and asset managers and they will choose to use particular CCPs on the basis of a set of safety and affordability criteria. The main concern of European CCPs is that they may become subject to much tighter rules than the global standard of CPSS-IOSCO requires. Also compared to Dodd-Frank the proposed rules are much tighter. This would put European CCPs at a disadvantage in the global derivatives markets. While we have accepted some tighter rules in the EMIR LEVEL 1, e.g. the cover 2 principle, we feel that the sum of tighter rules which are now proposed at Level 2 put too much burden on European CCPs and makes clearing unnecessarily expensive in Europe. In that context EACH highlights as main concerns:

1. The level of prescription on margin methodology to be applied by CCPs which

   a) creates the risk of moral hazard;

   b) does not conform to statistical methods and common financial concepts such as portfolio models and Value-At-Risk;

   c) is stricter than comparable legislation and principles, such as Dodd-Frank and CPSS-IOSCO, for example on the confidence interval for OTC derivatives;

2. The amount of own capital required (which is subject to a different consultation); and

3. The amount of the so called “skin in the game”.

Moreover, many of the requirements suggested in the Consultation Paper deviate significantly from current practice, which has not been shown to be inadequate, either by ESMA or indeed anyone else. Some of the proposed requirements will be detrimental to the overall aim of CCPs, namely to deliver safety, stability and integrity to the financial system.

The stated purpose of the remit to ESMA to produce Draft Technical Standards is to ensure a consistent application of EMIR. This should be the first and paramount objective of the Draft Technical Standards, which will allow for the implementation of very clear minimum standards while allowing for flexibility and room for competition or variety above the standard.

ESMA states that it wishes to limit competition between CCPs on risk management grounds. Unless identical standards are adopted on a global basis, it will not be possible to eliminate the risk of competition from CCPs outside the EU on risk management grounds. It is the intention of CPSS-IOSCO to set out principles to be adopted by CCPs globally, and EMIR will not assist global consistency of risk management standards by going beyond these principles.

The remainder of the document contains EACH's detailed comments on the issues raised in the Consultation Paper. Those issues are covered in the order in which they appear in the Consultation Paper.

Detailed Comments

Part 1, OTC Derivatives - Chapter II, Indirect Clearing Arrangements (page 66 – 67)

- EACH understands, that the scope of the requirement for CCPs to open accounts for clients of clients only refers to OTC derivatives that are subject to the clearing obligation. A clarification on this point is appreciated.
- Article 3.1 ICA: EACH understands the Article to mean that for a CCP it is sufficient to hold an omnibus account for clients of clients. A clarification on this point is appreciated.
- Article 4.1 ICA: The Article can be interpreted as obliging all clearing members to offer indirect clearing arrangements. This is not desirable. Clearing members should be able to make their own risk assessment and decide whether they want to provide this service or not. Furthermore it is in the interest of a CCP to rely on a variety of solid members and if only the big banks are able to offer clearing services, this will impact the CCP risk model too. A clearing member that chooses to facilitate indirect clearing arrangements should however be required to do so on reasonable commercial terms.

Part 1, OTC Derivatives - Chapter III, Clearing Obligation Procedure (page 68 – 69)

- Whilst it is not specified in the Consultation Paper, we believe that for the purposes of CCP authorisation classes of derivatives should be established at the product group level (e.g. single name 5 year CDS) rather than at the level of individual products (e.g. 5 year CDS on a specific reference entity). The authorisation process would consequently follow the approach set out below:
    - A CCP will require authorisation to clear derivative contracts at the product group level rather than at the individual product/contract set level.
    - The CCP will then not need to seek approval to clear individual products within the product group.
- The CCP will be required to notify the competent authority of all individual products which they intend to clear within the product group in advance of clearing.
- This approach avoids the logistical difficulty of authorising each individual CCP contract, which number tens of thousands. Such an approach would be extremely onerous for the college system and unlikely to result in an efficient and effective system. It would also hamper the development of new products which in certain

circumstances needs to take place at very short notice to react to particular market conditions.

- Similarly, we believe that the clearing obligation should be determined at the product group level rather than an individual product level. This obligation will be subject to the relevant individual products being cleared at a relevant CCP, and such information will be available on the public register. This register will be supported by detailed information provided by CCPs on the individual products cleared and to be cleared.

- Further, the clearing obligation should apply to a product group together with economically equivalent contracts. This approach will minimise the dangers of evasion of the clearing obligation more effectively than any possible approach at the individual product level.

- The danger of including inappropriate individual products under the clearing obligation within a product group can be eliminated through careful definition by a CCP of criteria and conditions to be met by individual products, including criteria relating to liquidity, pricing data and availability of central clearing, together with specified exceptions where appropriate. Such criteria and exceptions would be part of a CCP's application for authorisation.

- Article 1 DET: At a more specific level, the fact that the information set out in the Article may not always be available for OTC products is acknowledged in the Consultation Paper (P.10, paragraph 29), but this point is not acknowledged in the Article. In particular, much of the market information set out in Article 1.3 DET is likely to not be available for OTC products. Quantification of the number of days per year with reliable reference price information is also likely to be difficult to quantify for many OTC derivatives products.

Part 1, OTC Derivatives – Chapter V, Public Register (page 70 - 71)

- Article 1.2 PR: EACH notes that the classes of OTC derivative contracts which are included in the ESMA public register are defined in a vague manner, which potentially creates loopholes. A small change in the maturity will impact the class definition. Therefore EACH asks for a more detailed definition of the classes. Furthermore EACH proposes that sub items (d) – (l) are deleted.

Part 1, OTC Derivatives – Chapter VI, Liquidity Fragmentation (page 71 - 72)

- EACH does not have a shared position on this issue and refrains from comment on this Article.

Part 1, OTC Derivatives – Chapter VII, Non Financial Counterparties (page 72)

- EACH understands that the clearing thresholds are not a risk issue for the CCP. Therefore EACH refrains from commenting on this Article.

Part 2, CCP Requirements – Chapter IV, Organisational Requirements (page 92 - 99)

- Article 1.5 ORG: According to the Article the obligation to have own dedicated human resources is without prejudice to outsourcing arrangements. In general, with respect to all requirements set out in Article 1 ORG et seq., it should be referred to potential outsourcing arrangements pursuant to Article 35 EMIR which ESMA is not allowed to restrict by way of regulatory technical standards under Article 26 EMIR. In particular, Article 35.1 EMIR allows for the outsourcing of major activities linked to risk management provided that the approval from the competent authority has been obtained. Clearly, as implicitly acknowledged within the Consultation Paper there are many areas where it is appropriate for a CCP to share resources and services with affiliated companies. Indeed, having shared resources could mitigate operational risk by enabling people to back each other up more easily. The experience of handling recent defaults showed that increased coordination across jurisdictions brings benefits. It is a responsibility of the management of a CCP to ensure that such arrangements operate effectively. The establishment of formalised outsourcing arrangements for all shared services (including at the extreme ancillary services) would be cumbersome, inefficient and not justified on risk grounds. We would suggest clarifying that the CCP should have "*sufficient dedicated resources*" instead of "*dedicated resources*".

- Article 1.5 ORG: The Article also states that a *"CCP that is part of a group shall take into account any implications of the group for its governance arrangements including whether it has the necessary level of independence to meet its regulatory obligations as a distinct legal entity and whether its independence could be compromised by the group structure or by board members also being members of the board of other parts of the same group*". EACH believes that such conflicts of interest can be addressed by having robust procedures in place to manage these conflicts and suggest deleting "*and whether its independence could be compromised by the group structure or board members also being members of the board of other parts of the same group"*.

- Article 2.5 ORG: The Article requires that the risk management function has a direct reporting line to the board. EACH agrees that the risk management function should keep the Board informed of any relevant risk issue and also have direct access to it. However, the current draft suggests that the risk management function would "sit under" the Board which would manage the staff (performance assessment) of the risk department. We do not believe that this was the intention. EACH would suggest replacing "*has a direct reporting line*" to "*makes information available to the Board*".

- Article 5 ORG: The Article specifies that the remuneration for staff engaged in risk management, compliance and internal audit functions be independent of the business performance of the CCP. We have the following comments on this requirement:

- The business performance of a CCP is critically dependent on its risk management performance. A risk management failure is likely to have a more dramatic impact on the business performance of a CCP than most other failures. For this reason, the business performance (and indeed continued existence) of a CCP is inevitably dependent on effective risk management and compliance throughout the organisation. A CCP therefore aims to recruit top class professionals, with risk management expertise, in a range of functions throughout the organisation.
- It is not appropriate to arbitrarily define that the form of remuneration for one group of individuals (e.g. risk management, compliance and internal audit staff) should be determined on a different basis from other groups of individuals, who also have risk management and compliance responsibilities.
- It is preferable for the remuneration committee to determine appropriate policies for remuneration based on the staff responsibilities, rather than department title.
- Clearing house remuneration standards should be no more onerous than those applicable in other sectors.
- No such requirement exists in CPSS-IOSCO principles for FMIs.
- We suggest replacement with the requirement to ensure that the remuneration policy of the CCP appropriately incentives all staff, taking into account their roles and responsibilities.

- Article 5.5 ORG: It should be clarified what the scope of the independent audit should be. It should be clarified that this can be performed as part of the annual statutory audit and is not a separate audit. Annual statutory audit is a current requirement for CCPs.
- Article 6.6 ORG: It should be clarified whether independent audit in the context of review of IT systems means internal audit which is independent from operational units or if it means external audit. If external audit is meant than it should be clarified that this is a task for the annual external statutory auditor. It would be beneficial to clearly define tasks and reporting requirements for the external statutory auditor (this would replicate current requirements on CCPs).
- Article 7 ORG: The Article requires a CCP to make available to the public relevant business continuity information. Confidentiality of specific business continuity information is critical to its effectiveness, and this should be acknowledged in the standards.
- Article 7 ORG: The Article requires a CCP to make available to clearing members and clients known to the CCP *"all relevant information on its design and operations as well as on their rights and obligations necessary to enable them to identify clearly*

and understand fully the risks and costs associated with using the CCP's services". (underlining added). The scope of this requirement is too broad, making it extremely difficult for any CCP to achieve in practice, since a CCP is unlikely to be fully aware of all participants' "*full range of rights and obligations*". We would suggest removing the words underlined.

- Article 7.1 ORG: According to current regulatory practice CCPs should make available back testing and model validation results to the Competent Authority but not to the public to avoid negative side-effects. Therefore the disclosure requirement of Art. 7.1 (g) ORG "*and performance in accordance with Chapter XII*I" should be deleted.

Part 2, CCP Requirements – Chapter V, Record Keeping (page 99 - 102)

- Article 1.2 (c) RK: EACH would like to highlight, that the standard under the Article: "*it is not possible for the records to be manipulated or altered*" cannot be met in practice. Whilst there should be procedures established relating to the preservation of records and maintenance of amendment logs, it is considerably more difficult to ensure the impossibility of alteration. This point is acknowledged on page 28, paragraph 150, of the Consultation Paper. We therefore suggest that the requirement be modified to specify that there be procedures and controls in place relating to the preservation of these records and the authorisation and logging of any alterations.

- Article 2.2 RK: The Article specifies that *"the terms and modality of settlement*" be recorded on a per contract basis. Such arrangements will usually be specified in the Rules, not recorded in a "per contract" basis. This field should be deleted, or modified to read: *"the terms and modality of settlement, to the extent recorded on a per contract basis"*.

- Article 3.2 RK: The Article outlines that a CCP should make records of the margin and default fund for each recorded position, however in practice such a link is not possible. Due to portfolio effects total margin requirement on a portfolio will not correspond to the sum of the (theoretical) margins which can be calculated for the individual positions. The relation between an individual position and the default fund is even more remote, not only due to the fact that it is calculated on the basis of stress tests but also because the size of the default fund is based on the stress testing results of only a few clearing members (with the largest exposure(s).

Part 2, CCP Requirements – Chapter VI, Business Continuity (102 – 104)

- Article 1 BC: The Article includes the following requirement: "*At a minimum, the CCP shall ensure recovery of its critical functions within 2 hours*". The requirement to ensure recovery within 2 hours seems onerous especially as the CCP is required to conduct a business impact analysis to establish maximum downtimes. We believe this should be harmonised with the relevant CPSS-IOSCO Principle and read "*At a minimum, the policy ~~shall~~ <u>should be designed to</u> ensure recovery of its critical functions within 2 hours*.".

- Article 4 BC: The Article requires that testing of business continuity arrangements must *"include participation of clearing members, external providers and relevant institutions in the financial infrastructure with which interdependencies have been identified in the business continuity policy".* An FMI has no means of ensuring participation from such a wide range of participants, and this requirement should be accordingly caveated appropriately.

- Article 6.1 BC: The current phrasing of the responsibility for the crisis management function is unclear in a two tier board system: this function should clearly rest with the management board as it requires quick decisions that cannot be taken by the supervisory board. We therefore suggest that this is clarified by stating that in a two-tier board structure the management board is responsible for the crisis management function.

Part 2, CCP Requirements – Chapter VII, Margins (page 104 - 107)

Moral hazard

- EACH notes that with regards to the entire margins section, there is a tendency to be overly detailed and prescriptive in the regulation of the margin calculations. This potentially creates a moral hazard whereby CCPs just follow the rules without attempting to find the most appropriate risk model for their specific situations.

- One possible way to go forward would be to extend or introduce an escape clause in relevant articles to allow the usage of other reasonable procedures provided that the margin method is subject to testing programmes defined in Chapter XIII to ensure that outcomes show that required coverage levels as defined in Chapter VII Article 1 and 3 are achieved.

Distinction between OTC derivatives and exchange traded derivatives

Article 1.1 & Article 3.1 MAR: A majority of EACH agrees that the distinction between "OTC" or "other financial instrument" is not the appropriate criteria for determining the confidence interval or holding period. As for treating confidence levels differently, we are unable to see the rationale for treating the inherent market risk in an OTC derivative contract differently from an exchange traded derivative contract that has the same underlying instrument. With respect to the number of closing days, the suggestion is that OTC derivatives are by definition less liquid than other (exchange traded) derivatives. EACH would argue that this is not necessarily the case. Some CCPs noticed during the Lehman crisis that some exchange products had lower liquidity and longer liquidation periods than OTC products.

- EACH is of the opinion that the *observed* liquidity should be the criteria for differentiating between derivatives rather than an assumed liquidity. These differences in observed liquidity should result in different liquidation periods rather than different confidence intervals. Moreover, CCPs should ensure they have the right and capacity to impose additional margin for concentrated positions or products which have a constrained liquidity as a feature. These measures should be based on observed liquidity and not on a distinction on the basis of how the product or position was traded.

- The artificial distinction between OTC derivatives and exchange traded derivatives leads to the strange and undesirable result that a different confidence interval (and therefore) margin rate is applied to derivatives on the same underlying value while there may be no differences in liquidity or risk profile. In addition, it will not be possible to allow off-sets between OTC and exchange traded derivatives on the same underlying instrument.

- The requirement to treat exchange traded and OTC derivative contracts differently has also an impact on system design and operational capacity. Systems for margin calculation may require changes to the logic of treatment, so as to comply with the requirement – this represents a one-off cost for the CCP. The implication is a duplication of existing processes, which in turn may impact on the speed of calculation, contradicting the near to real-time requirement for margining. Furthermore, there is an additional burden on the administration of the CCP, since it will be required to maintain different sets of margin rates, and which is counterintuitive to being an efficient CCP.

- The Basel framework as well as the current CRD IV proposal treats OTC derivatives and non-OTC derivatives equally with respect to capital requirements. This is a clear indication to not distinguish between OTC and non-OTC derivatives for risk management purposes.

Confidence interval Percentage(s)

- Article 1 MAR: There remains a majority opinion within EACH for 99% minimum confidence interval all products and minority which agrees with 99.5% or higher.

Margin basis (product vs. portfolio)

- Article 1.1 MAR: It is unclear what is meant by "margined on a product basis" especially as there is no requirement for the confidence level for products that are not margined on a product level. We would like to stress that the confidence interval should be defined at portfolio level (meaning the lowest account level on which a margin requirement is calculated) rather than at product level.

- One possible way to address this area of concern would be to extend Article 4.5 MAR to allow the usage of other reasonable procedures provided that the margin requirements are subject to reliable back testing process which demonstrates that the required coverage level is consistently achieved.

- This can be done by amending Art. 4.5 MAR as follows: “5. A CCP may use any other procedure for the calculation of the adequate offset between different sets of products periods provided that the margin requirements are at least as conservative as defined in the Article 1 and 3 when applied in portfolio context and verified according to definition in Chapter XIII Article 3 SBT, it is able to demonstrate a clear convergence with the parameters specified in Articles 1-3 and the approach used is based on a sound theoretical framework and subject to ongoing review

Determinants of the confidence interval

- Article 1.2 MAR: EACH agrees that when determining the level of the confidence interval, a CCP should take into account any uncertainties there might be around the level of pricing, the correct modelling of the risk and the adequacy of the other risk controls as far as they have a negative impact on the confidence the CCP may have in the results of its margin calculation.

- It is, however, unclear why the determination of confidence intervals should consider risk characteristics of the class of financial instruments as listed in Art.1.2.b. These characteristics are covered differently in the margin model. Volatility and duration are measured and incorporated in the margin calculation as part of the margin parameterisation. The liquidity should be reflected in the holding period. Non-linear price characteristics jump to default risk and wrong way risk should be addressed in the risk (margin) model itself. They cannot, almost by definition, be adequately addressed by a higher confidence interval.

- One possible way to address this area of concern would be to extend the Article 1.3 MAR to allow the usage of other reasonable procedures provided that the margin requirements are subject to reliable back testing process which demonstrates that required confidence level is achieved.

- This can be done by extending Article 1.3 MAR with: “A CCP may use other procedures for calculation of confidence intervals provided that the margin requirements respect at least the confidence interval as defined in Article 1.1 (b) MAR and account for the factors described in Article 1.2 MAR based on a sound theoretical framework and subject to ongoing review and testing programmes in accordance with Chapter XIII Articles 1 and 3 SBT.”

Text proposal Article 1 MAR

Taking into account the comments made above, we would propose the following text for Article 1.1 and 1.2 MAR:

1. A CCP shall calculate the initial margins to cover the exposures movements for each financial instrument that ~~it~~ is margined on a product basis, over the time period defined in Article 2 MAR and assuming a time horizon for the liquidation of the position as defined in Article 3 MAR. For the calculation of initial margins the CCP shall at least ~~respect the following~~ **use a minimum confidence level of 99.[x] %.** ~~intervals:~~ **To capture risks inherent to the products cleared (for example, but not limited to concentration and constrained liquidity), which the CCP considers to be inadequately covered by initial margin at any time, the CCP shall have the necessary powers, but also the operational capacity to impose additional margins.**

    ~~a. for OTC derivatives, 99.5%.~~

    ~~b. for financial instruments other than OTC derivatives, 99%~~

2. For the determination of the adequate confidence interval for each class of financial instruments it clears, a CCP shall in addition consider at least the following factors **to establish whether they have a material negative impact on the confidence the CCP may have in the results of its margin calculation and should therefore lead to an increase of the confidence interval:**

    a. The complexities and level of pricing uncertainties the class of financial instruments have that may limit the validation of the calculation of the initial and variation margin calculations

    ~~b. The risk characteristics of the class of financial instruments, which can include, but are not limited to, volatility, duration, liquidity, non-linear price characteristics, jump to default risk and wrong way risk.~~

    c. The degree to which other risk controls do not adequately limit credit exposures.

    d. The inherent leverage of the class of financial instruments, including whether the class of financial instruments is significantly volatile, is highly concentrated among few market players or may be difficult to close out.

Use of two periods for calculating historical volatility

- Article 2 MAR: The current proposal of 6 month stress and 6 month current conditions is not supported by EACH, for the following reasons:
    - It is unclear why the historical volatility (for the purpose of initial margin) should include periods of extreme stress. In general, initial margin aims to cover counterparty risk in current market conditions. The default fund then has to cover counterparty risk in extreme market conditions. The inclusion of the 6 month stress conditions de facto creates a structural stress margin and will have an impact on the different CCP layers of financial resources. It will significantly increase the level (and therefore cost) of initial margin and at the same time erode the level of the CCP's mutualised protection in the form of the default fund.

- It is unclear how a valid statistical statement can be made about the 99.5% confidence interval on the basis of a period of only 6 months (i.e. approximately 125 observations).
- The use of a mixed basis of recent history and the worst period observed over the last 30 years makes it impossible to correctly statistically interpret the results from daily back testing and therefore invalidates any model validation approach.
- It creates a high risk that inappropriate data is used in the model as it is highly unlikely that the characteristics of contracts remain unchanged over a 30 year period.
- The requirement appears not to be in line with CPSS-IOSCO requirements and is more stringent than US regulations potentially creating issues that clearing will be mov from the EU to the US to benefit from lower margin requirements

Use of other time horizons

- Article 2.2 MAR: This requirement would mean calculating margin parameters according to paragraph 1 and according to the model used by the CCP in order to be able to show the differences. Maintaining two models (additional to regular back testing) seems overly burdensome. The requirement to at least demand margins covering the period of stress as described in paragraph 1 will result in prohibitively high margins even though not indicated by back testing. This would render the concept of setting a confidence level and back testing it (which allows a number of outliers without rejecting the model) obsolete.

Conservative margin requirement

- Article 2.3 MAR: It is unclear, what "conservative margin requirement" means. This definition should be deleted as minimum requirements for the confidence level are already included in the technical standards.

Text proposal Article 2 MAR

Taking into account the comments made above, we would propose the following text for Article 2.1 MAR and we would propose to delete Article 2.2 MAR:

1. A CCP shall ensure that according to its model methodology and its validation process established in accordance with Chapter XIII, **it determines an appropriate time horizon for the calculation of historical volatility for each asset class that it clears. Selection of the time horizon should be based on the properties of the margin model and empirical tests on these properties using historical data.** ~~initial margins cover at least with the confidence interval defined in article 1 .~~ ~~an historical volatility calculated weighting equally the two following periods:~~

   ~~a. The latest 6 months~~

~~b. The 6 months reflecting the most stressed market conditions during the last 30 years or as long as reliable price data is available.~~

The CCP shall have its methodology for defining margin rates, including making estimates of volatility verified by a qualified and independent party.

~~2. A CCP may use any other time horizon for the calculation of historical volatility periods provided that the use of such time periods results in margin requirements at least as conservative as those obtained with the time periods defined in the paragraph 1.~~

Text proposal Article 3 MAR

Taking into account the comments made under *Distinction between OTC-derivatives and exchange traded derivatives* we would propose the following text for Article 3.1 MAR:

A CCP shall define the time horizons for the liquidation period taking into account the characteristics of the financial instrument cleared, the market where **it** is traded, and the period for the calculation and collection of the margins. This liquidation period shall be at least **2 business days.** ~~:~~

~~a. for OTC derivatives, 5 business days.~~

~~b. for financial instruments other than OTC derivatives, 2 business days.~~

Portfolio margin

- Article 4 MAR as currently proposed is counterintuitive to current Portfolio Theory and the use of Value-at-Risk (VaR) or corresponding models in margining. Several models, such as Parametric VaR (used by several CCPs), historic simulations, also known as historic VaR, and Monte Carlo VaR, would become redundant under the draft technical standards. The restrictions imposed on the dependency between assets will lead to the portfolio margin model operating far above the given level of confidence.

  We assume that it is not the intention of Article 4 MAR to disallow the use of portfolio based models, where correlations are central parameters. We assume that the intention of the article is to establish a framework to assure that the models used to determine correlation coefficients of a correlation matrix are prudent and demonstrate reliable relations of dependency.

  The entire margin model shall be subject to a comprehensive validation, in accordance with Article 1 SBT, and subject to back testing, in accordance with Article 3 SBT; this should already cater for sufficient quality assurance of the correlation model. The validation would hence also ensure that a portfolio margining model meets a given level of confidence. There should thus be no objective reason to impose boundaries on correlation coefficients, nor restrict any correlation offset.

However, in order to provide additional comfort to the competent authorities, we are prepared to accept a separate verification process on the models for parameterisation, such as models for establishing volatilities or correlations: a qualified and independent party performing a validation of the correlation model.

- Article 4 MAR: The rules around portfolio margin and off-sets are also not supported by EACH, for the following reasons:
    - Article4.2 (a) MAR: It is unclear why correlations have to be stable over a two year period while volatility has to be calculated over two 6 month periods. This appears to be inconsistent. It is unclear what resilience means without a definition.
    - Article 4.2 (b) MAR: Rather than prescriptive methods, the CCP should demonstrate by back testing that the portfolio margin adequately covers the portfolio risk. The thresholds of 70%/50% and the three months seem arbitrary. The objective should be to demonstrate that there are stable dependencies between (underlying) instruments, and hence there is no need to restrict the correlation coefficients to a small interval.
    - Given a perfect positive correlation (ρ = 1) between two assets in a portfolio and the portfolio is LONG both assets, they will behave like the same asset, and consequently, there should be no offset between the two - the intuition behind this is that the two assets then bear the exact same risk, thus the portfolio risk shall not be different. On the other hand, if there is a perfect negative correlation (ρ = - 1) between the two assets they will also behave like one asset, but the portfolio value will be reduced, thus netting the risk between the assets. Hence a maximum offset will be obtained at ρ = - 1. The intuition is that being the same risk the assets are natural hedges for each other – should we further assume that the assets are held in equal proportions, the two asset portfolio will be perfectly balanced, and hence an effective margin requirement of zero will apply in this special case. Note also that for all correlations between 1 and -1, there will be an offset, and this offset will increase as the correlation decreases, obtaining the maximum effect at ρ = - 1 (for a portfolio LONG both assets).
    - Article 4.4 MAR: ESMA requires a direct (linear) relation between margin reduction and correlation. Portfolio VaR however is related to correlation with $\sqrt{(1-\rho)}$ so this requirement would not work for a VaR margin methodology. Also, it is not clear why only 80% of the correlation is allowed to be used. This threshold seems arbitrary. The requirement to validate the margin model through back testing is sufficient to show if the used correlations are adequate. This requirement should be deleted or be replaced by a criteria based approach that allows e.g. the correlations to be adjusted by correcting for statistical error using an approved methodology (e.g. resampling).

- Article 4.4 MAR: The haircut on the correlation offset, as required by the Article implies that the margin model will become more conservative, thus 'overshooting' in respect to the given level of confidence. With reference to Article 4.5 MAR below, such a requirement will make it difficult to assess at which level of confidence the model operates.

- Article 4.5 MAR: This requirement would mean that a CCP uses at least two margin methods (his own and the methodology described by ESMA to proof the required conservativeness). This is burdensome and not necessary if the CCP can validate its model through back testing against the set level of confidence (see also comment to Art 2 No. 4 MAR) and should therefore be deleted. It should be clarified what "clear convergence" means.

- Article 4 MAR: EACH presumes that for the purpose of paragraphs 2 and 4, different series and delivery months of options and futures on the same underlying will be treated as different forms of the same instrument, and not as different instruments. If this is not the case, then the restriction of margin offsets under paragraph 4 to 80% of the correlation will be prohibitive for market-making purposes and for any combination strategies, and market liquidity will be fundamentally and unnecessarily damaged.

Text proposal Article 4 MAR

- Taking into account the comments made above, we would propose the following text for Article 4 MAR.

1. A CCP may allow offsets or reductions in the required margin across the financial instruments that it clears if ~~the price risk of~~ one financial instrument or a set of financial instruments is ~~significantly and~~ reliably ~~negatively~~ correlated with ~~the price risk of~~ **an**other financial instrument.

2. The CCP shall document its approach on portfolio margining, **and the model used by the CCP to establish correlation coefficients and building correlation matrices if applicable shall be verified by a qualified and independent party.** ~~in particular it shall at least provide that:~~

~~a. The correlation between two or more financial instruments cleared is evidenced over two years and, demonstrates resilience during stressed historical or hypothetical scenarios. The CCP shall demonstrate the existence of an economic rationale for the price relation.~~

b. ~~The level of negative price correlation should be at least minus 70% for each pair of financial instruments or for each pair of baskets of financial instruments where the offsets are allowed. Temporary fluctuations in the level of correlation may be~~

~~acceptable provided that the negative price correlation remains below minus 50% and that the fluctuation is for a period no longer than 3 months.~~

3. All financial instruments to which portfolio margining is applied shall be covered by the same default fund.

~~4. The amount of margin offsets shall be proportional to the level of correlation evidenced. The maximum offset shall be calculated as 80% of the correlation for the time horizon for calculation of historical volatility as defined in Article 2 MAR.~~

~~5. A CCP may use any other procedure for the calculation of the adequate offset between different sets of products periods provided that the margin requirements are at least as conservative as those defined in this Article, it is able to demonstrate a clear convergence with the parameters specified in paragraph 2 and the approach used is based on a sound theoretical framework and subject to ongoing review.~~

~~6.~~ **4.** The margins offsets related to portfolio margining shall be subject to a sound and meaningful stress test programme in accordance with Chapter XIII.

Part 2, CCP Requirements – Chapter VIII, Default Fund (page 107-108)

- A review of stress testing scenarios by the Risk Committee every 3 months as outlined in article 3 DF is not useful, if there have been no changes in current market conditions.
- Wrong Way risk and concentration risk are included in the risk framework but not as generic stress testing scenarios but as specific risk measures applied to the specific positions of identified members (e.g. through margin multipliers).

Part 2, CCP Requirements – Chapter IX, Liquidity Risk Controls (page 108 – 109)

- Article 2 LIQ: EACH understands the term “same day liquidity” as used in the Article to cover the variation margin flow or settlement needs at the start of the day and not any intraday margin calls. A clarification on this point is appreciated.
- Article 2.1 LIQ: besides the referred five liquidity sources/mechanisms, CCPs should be allowed to use “*pre-arranged agreements with non-defaulting clearing members providing a same degree of security of the mentioned alternatives*”.
- Whilst it is not made explicit in the text, ESMA states in the introduction to the Consultation Paper on page 35, paragraph 185 b that money market funds will not be regarded as liquid financial resources. We believe this restriction is unnecessary, inflexible and is not compatible with CPSS-IOSCO principles. It cannot be the case that there is no possibility of any money market funds ever being suitable irrespective of their characteristics, even if most or even all of the current money market funds

available are considered unsuitable. We propose that ESMA should instead specify the conditions which would need to be satisfied for money market funds to be regarded as liquid financial resources.

Part 2, CCP Requirements – Chapter X, Default Waterfall (page 111)

- Article 1 DW: The article stipulates that an amount of dedicated own resources for the purpose set out in Article 45(4) EMIR as at least equal to the 50 per cent of the capital, including retained earnings and reserves, held in accordance with Article 16(2) of EMIR.

  Our comments on this proposal are as follows:

  - The amount is excessive and rather “an arm and a leg” than “skin in the game”;
  - The motivation provided reads as follows: “For the incentive to be effective, the percentage of capital dedicated to the skin in the game should be substantial. For this reason ESMA is considering 50% of the minimum capital requirements to be the appropriate percentage for the “skin in the game”.

  There are many other percentages which can be considered “substantial”, and the CP fails to make clear why the percentage of 50 was chosen. We feel ESMA is under the obligation to properly motivate its choices.

- We are of the opinion that the minimum amount of 50% is too high, is not properly justified in the impact assessment and might lead to a situation where CCPs are encouraged to hold as less own capital as possible. On the contrary, CCPs with higher amounts of capital will be sanctioned.

- In defining the dedicated amount of CCP’s own resources to be used in the default waterfall ESMA may consider the outcome of the current EBA consultation on CCPs’ own capital and more importantly the potential detrimental effects on the default procedures of CCPs.

- With respect to the default procedure ESMA needs to carefully balance mainly two factors: the amount of the CCP’s own resources as well as the contribution of clearing members to the default fund. The amount of the latter is an incentive for clearing members to participate in close-out actions, particularly when it might be most appropriate.

- The current ESMA proposal clearly puts a high weight on the CCP (through high own contribution in the default waterfall – “skin in the game”). This will lead to the situation that clearing members are less incentivized to participate in a close out auction (moral hazard).

- Therefore EACH proposes to modify Article 2.1 DW as follows:

  A CCP shall keep, and indicate separately in its balance sheet, an amount of dedicated own resources for the purpose set out in Article 45(4) of Regulation (EU) No xx/xxxx [EMIR]. This amount shall be at least equal to the ~~50~~ 10 per cent of the capital, including retained earnings and reserves, required to ensure an orderly winding-down or restructuring of the activities over an appropriate time span and an adequate protection of the CCP against credit, counterparty, market, operational, legal and business risks, held in accordance with Article 16(2) of Regulation (EU) No xx/xxxx [EMIR]. The CCP shall revise this amount on a yearly basis.

- Article 2.2 DW: The Article provides that in case the dedicated own resources fall below the amount required by Article 1 DW, presumably because of a (partial) use in case of a default, only the residual amount of skin in the game remains available for default handling until such time as the dedicated resources are reinstated. Article 2.3 DW provides for a time window of maximum three months for such reinstatement.

  This may lead to a situation in which a CCP is in limbo for a certain period. Swift reinstatement would provide a clear signal to the market as to whether a CCP which has used its dedicated resources is a going or a gone concern. At the same time shareholder exposure is reduced during the three months period, which may be an incentive not to reinstate the resources as soon as possible.

  We consider that this may create risks rather than reduce risks. In particular in the framework of interoperability arrangements, a situation in which the stability of a CCP would be not clear seems highly undesirable.

  This potential result of the proposed RTS can be mitigated by reducing the percentage to a level at which it still is a serious blow to the CCP and its shareholders, but not a blow which could lead to make or break questions. On that basis we propose the skin in the game to be 10% of the minimum required capital.

  Lastly we would like to point out that the text of article 45 EMIR does not require the dedicated resources to be set as a percentage of the capital of Article 16 EMIR. However by doing so in the Article 1 DW RTS through the wording "*capital, including retained earnings and reserves, held in accordance with Article 16(2) EMIR*" the skin in the game is then linked to the actual capital rather than the minimum required capital, the latter being the intention. This provides an incentive to maintain capital at the lowest possible level, which appears undesirable.

Part 2, CCP Requirement – Chapter XI, Collateral (page 111 – 116)

- EACH would appreciate the usage of a more principle based approach. This would create more flexibility for the acceptation of new types of collateral.

- EACH understands that equities are acceptable as collateral. A clarification on this point is appreciated.

- Article 1.3 (a) COL: The rule relating to currency collateral is very difficult to apply in practice. It is not clear why such a complex management of currency in relation to the specific CCP exposure is necessary when any FX risks can easily be covered by specific haircuts.

- Article 1.3 (b) COL: The eligibility criteria for collateral create room for interpretation as to which instruments may qualify. Financial instruments are eligible in accordance with Article 1.3 (b) COL, provided they:

  - have been issued by an issuer that the CCP can demonstrate to the competent authority with a high degree of confidence has low credit risk based on a stable and objective internal or external assessment.

  - are able to demonstrate with a high degree of confidence that the financial instruments have a low market risk.

- Some clearing members may construct "*perfect hedge*" strategies, where a SHORT derivative contract in an underlying instrument is backed by a LONG position in the same underlying instrument (typically a covered call) – assuming the financial instruments are posted as collateral to the CCP. Provided sufficient amounts of this specific collateral, the combined position (or strategy) would effectively sum to a zero margin requirement. In the case of a default by the member that holds such positions, the CCP will take possession of the collateral, enabling physical delivery of the underlying instrument at expiry of the derivative contract.

- The current CPSS-IOSCO Principles are specific in allowing the above mentioned strategies, cf. recommendation 4.4.6 p. 22. We ask for clarification on the treatment for margining for these particular strategies. for confirmation on the treatment of such strategies (e.g. covered calls), as the requirements ESMA sets on issuers and market risk impacting on eligible collateral does raise questions as to what is allowed, even when considered forming part of a perfect hedge.

- Article 1.3 (b) (vii) (2) COL: The exclusion for real estate appears odd to be mentioned so specifically.

- Article 1.3 (b) (vii) (1) COL: Clearing members' own issues should be allowed if they are guaranteed by a member state similar to government bonds that are also allowed.

- Article 1. (c) COL: While guarantees are allowed for initial margin, the conditions render the option useless. This will have a heavy impact on liquidity requirements for industry.

- Article 1.3 (c) COL: Commodities (e.g. emission allowances) should also be admissible collateral, if they are traded on a regulated market. Gold is a good example for this principle, and is already included.

- Article 1.3 (c) COL: The concentration limits around commercial bank guarantees do not appear sensible. A 50% coverage by commercial bank guarantees of an individual position is not conservative and is inconsistent with the rules around concentration limits (Article 4 COL) which specify that only 10% of the collateral can be provided by one issuer. In addition, setting concentration limit at the level of each clearing member may increase both operational and market risk. Operational risk may increase because members will have to provide several types of collateral and market risk because it may force them to use lower quality forms of collateral.

- Article 1.3 (c) (vi) (3) COL: Disallowing banks, which perform certain settlement and payment functions for the CCP, from issuing commercial bank guarantees would disincentivise these banks to engage in these activities. EACH outlined that the relevant exposures to these counterparty should be included in concentration risk monitoring.

- Article 2 COL: A valuation near to real-time should not be necessary if conservative haircuts are applied on collateral and the CCP can demonstrate that the risk can be managed.

- Article 4 COL: Specifies that credit ratings should be 'based upon an internal or external opinion given with a high degree of confidence based on a stable and objective assessment'. This is an onerous requirement, which is not clear would be totally satisfied by any credit ratings agency or assessment. The alternative is not to use credit ratings at all, which would be counter-productive. We propose that the wording be changed to require the CCP to reflect the likely degree of confidence of any credit rating in the use to which it is put. Article 4.2 (e) COL: As the current phrasing is unclear we propose to clarify this subsection as follows: "the level of Credit Risk;". This would be in line with e.g. Article 4 INV 3, (c) of the consultation at hand as well as with regulatory practice of banking supervision.

- Article 4.3 COL: It is unclear what is meant by commercial institution or group of institutions. It is unclear if the 50% refers to the total collateral of the CCP or a single Clearing Member. It is unclear to what the 25% applies. We would suggest a clarification.

- Article 4.3 COL: Concentration limits should be set on a clearing member level and not across the entire CCP as this would assume a simultaneous default of all Clearing Members. An exemption should be made for collateral from highly rated entities (e.g. such as government bonds or assets guaranteed by governments in the CCPs home currency) as otherwise especially small CCPs could be forced to reject good collateral (even cash constitutes an asset with default risk).

- Article 4.8 COL: It is unclear what constitutes a material breach. Immediate reporting to the supervisor should not be required.

Part 2, CCP Requirement – Chapter XII, Investment Policy (page 116 – 119)

- Article 1 INV: The list of instruments is too restrictive in our opinion. This should be extended.
    - At least all issuers with a regulatory risk weight of 0 should be included. In the current situation it is not certain that governments are less risky than international corporations.
    - It is unclear how to fulfil the requirement to prove that an asset in a specific currency has low inflation risk, and how this risk can be separated from other price risks: this requirement should be deleted.
    - It is unclear why the time to maturity is set to 2 years. This unnecessarily excludes many bonds. The risk could be managed with banking standard regulation, and thus the requirement should be deleted.
- Article 1.2 INV: This phrase is unclear: Within the set of permissible investments given by the risk management policy, it is only reasonable to assume that the CCP will invest to maximize profit, as CCPs are commercial entities. If the investment were to be considered too risky, this would be impermissible, and thus the requirement should be deleted.
- Art. 1.3 INV: The Article allows using of derivatives for the purpose of macro-hedging the portfolio of a defaulted clearing member. Under such circumstances, the CCP is required to address the situation swiftly, so as to avoid unnecessary exposure to market risk for any prolonged period, exposing the CCP, but also non-defaulting clearing members to bear a potential loss relative to the default. A CCP shall act promptly to close positions through market intervention (outright sale or purchase, auctions, etc.), but also entering in to a hedge, using derivatives. The requirement of an approval by the board and prior consultation with the risk committee for the use of derivatives will delay the resolution and potentially lead to increased damage to be supported by the CCP. We suggest the last sentence in art. 1.3 INV deleted.
- Article 2 INV: The legal terms for depositing collateral are not very clear. The term "full protection" in the Article should be further clarified.
- Article 3.2 INV: 98% coverage through secured investments appears to be very restrictive and it is very questionable whether it is feasible for CCPs to comply with this rule, particularly as it may not have access to a well-functioning repo market in "smaller" currencies. Even where this is feasible, the credit risk mitigation must be balanced against the effect of incurring new operational risk.. A CCP needs cash in bank accounts for daily operation (e.g. payment of rent, payroll etc.). This is held in regular accounts that are typically not collateralized. Furthermore, the 98% seem

arbitrary. The credit and concentration risk are already covered by imposing capital requirements for credit risk (set by EBA) and the concentration risk requirements in this technical standard. As long as the percentage of cash with a commercial bank remains in acceptable proportion to the capita, this requirement is not necessary and therefore should be deleted. According to the text only collateral which has a maximum maturity of 2 years is allowed to secure these investments. This is not in line with current market practice for these types of transactions and will make it even more difficult to achieve collateralisation of investments. A threshold on average would be more appropriate.

- For cash held with an institution that has a regulatory risk weight of zero, no requirement on collateralization should be in place, as similar investments in bonds would be acceptable, which would also not be collateralized.

Part 2, CCP Requirements – Chapter XIII, Review of Models, Stress Testing and Back Testing (page 119 – 126)

- Article 1.1 SBT: EACH is of the opinion that is not desirable that changes to models/scenarios are only possible after external validation. The rules around procyclicality appear to be inconsistent with other rules on margin adaption. EACH believes that in case of unforeseen market conditions, CCPs should have the possibility to make changes without the up-front validation of a qualified third party.

- Article 3.3 SBT: It is unclear why different statistical confidence level should be used. We propose that the tests are conducted against the confidence level used by the CCP. A back testing to another confidence interval does not generate additional value.

- Article 3.5 SBT: Disclosure of information is regulated in a separate article of EMIR. Furthermore the disclosure of individual back test results is not sensible as back test results can only be interpreted with difficulty, as the different contracts prices are correlated, and thus multiple outliers may have a different meaning depending on the correlation of the constituents. This requirement should be replaced by a requirement equivalent to Art. 4.6 SBT.

- Article 4.5 SBT: EACH would like to ask for a clarification on client stress testing. Would the results of stress testing per client account be used only for informational purposes or would it be used for calculating the size of the default fund?

- Article 5.7 SBT: The Article makes a reference to making all stress testing information available to clearing members and clients. EACH highlights that this is not desirable as it could lead to clearing members and clients “gaming” the scenario and may also hamper the default management process.

- Article 5.7 SBT: The results of stress tests depend highly on the calibration of the test, and thus require deep methodological insight. Thus we believe that a requirement equivalent to Article 4.6 SBT would be more suitable.

- There are various references to clients in the ESMA provisions relating to testing, including the following:
  - Article 2.4 SBT: The Article requires that a CCP "*shall include any client positions which expose it to uncovered losses as a result of clearing member default when performing all tests*". We welcome the acknowledgement that client positions only expose the CCP to loss in the event of a clearing member default.
  - Article 5.5 SBT: The Article requires that a CCP "*shall consider potential losses arising from the default of a client which clears through multiple clearing members"*. A CCP is not necessarily aware of all circumstances where a client clears through multiple routes, and there is no mechanism for CCPs to be made aware of all such circumstances. In any case, as highlighted above, such losses are only relevant to the extent that they are accompanied by clearing member default. Given the existence of Article 2.4 SBT we propose that this provision be deleted.
  - Article 3.5 SBT: The Article requires that a CCP shares back-testing results with known clients. We suggest that CCPs be explicitly permitted to make such information available to known clients through the client's clearing member.
- Article 6 SBT: The Article specifies that a CCP should include a number of additional considerations in its stress tests, including concentration risk and wrong-way risk. We are totally supportive of CCPs being mandated to set out and enforce clear policies in relation to concentration risk and wrong-way risk. There is no rationale for these arrangements to be included within stress tests, and indeed we believe it is more effective in many cases for these policies to be established, tested and enforced independently from the more general purpose stress tests. We suggest that the requirement to include these considerations within the stress test is removed.
- Article 7 SBT, 1 + Article 8 SBT, 3: The precise definition of group is unclear.
- Article 11.3 SBT: Reverse stress testing is not used to discover plausible scenarios but to look at what moment resources may no longer be sufficient.
- Article 12 SBT: After the latest changes the article has become more palatable, however one should still consider to what level involvement of clearing members is useful, which could be different per market (auction process in an OTC market compared a liquidation without direct involvement of clearing members for exchange traded markets).
- Article 13.12 SBT: A review of the default procedures on a quarterly basis and the simulation after the introduction of new types of contracts is not feasible as this would increase the frequency of review and simulation to an unmanageable level. We propose to mandate at least one annual review and one annual simulation as well as a review in case of material changes to the process or in the relevant legal environment.

- Article 14.2 SBT: The usage of 1 year of data for back testing is not consistent with the look back periods used for margin setting. It will also not be possible to perform reliable statistical tests on a high confidence interval as a longer data history is required.

- Article 14 SBT: The time horizon for back-test shall include data from the most recent year, in accordance with the Article. The requirement implies that a back-testing the margin model will be performed using too few data to actually provide statistically significant results, and hence its ability to hold the given confidence level. At a 99% confidence level we should expect 1 breach per 100 days, however more data are required to perform a statistically significant test; a much used test is the likelihood ratio test statistic by Kupiec (1995). The amount of data must be sufficient to avoid particular flaws in a testing process, where a true null hypothesis was incorrectly rejected (type 1 error) or where one fails to reject a false null hypothesis (type 2 error). The type 2 errors of back-testing increase rapidly as the confidence level is raised, and more data is therefore needed for higher levels.

About EACH

European central counterparty clearing houses (henceforth CCPs) formed EACH in 1991. EACH's participants are senior executives specialising in clearing and risk management from European CCPs, both EU and non-EU. Increasingly, clearing activities are not restricted exclusively to exchange-traded business. EACH has an interest in ensuring that the evolving discussions on clearing and settlement in Europe and globally, are fully informed by the expertise and opinions of those responsible for providing central counterparty clearing services.

EACH has 23 members:

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