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**EACH response to the FSB discussion note  
on 'Essential Aspects of CCP Resolution  
Planning'**

October 2016

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## 1. Introduction

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The European Association of CCP Clearing Houses (EACH) represents the interests of Central Counterparties Clearing Houses (CCPs) in Europe since 1992. EACH currently has 20 members from 15 different European countries and is registered in the European Union Transparency Register with number 36897011311-96.

EACH appreciates the opportunity to provide feedback to the discussion note on Essential Aspects of CCP Resolution Planning.

## 2. General

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**Q1: Does this discussion note identify the relevant aspects of CCP resolution that are core to the design of effective resolution strategies? What other aspects, if any should authorities address?**

EACH considers that the discussion note indeed identifies the relevant aspects of CCP resolution that are core to the design of effective resolution strategies. We would like to stress the following in particular:

- **Importance of incentives** – EACH welcomes the FSB’s confirmation of the importance of maintaining the incentive structure of a CCP. CCPs are by design risk management and mutualisation systems. The CCP’s waterfall, and within it the default fund, are designed to not only provide a substantial buffer of collateral to cover counterparty credit risk, but also to ensure that the participants in the system have appropriate incentives to manage the risk they bring to the CCP and to participate appropriately in the default management process.

CCPs have performed well even during extreme market conditions and it is critical that the resolution framework, in line with the G20 mandate<sup>1</sup>, does not undermine the incentive structure of CCPs, and with it market discipline and the limitation of counterparty, market and systemic risk. In times of systemic market stress, the current incentive structure promotes good market behaviour, early and proper participation in default management, and aligns the interests of CCPs, clearing members, market participants and regulators thereby prioritising the safety of the markets and the avoidance of taxpayer loss.

Requiring CCPs to reimburse clearing members for the performance of the default management process or any foreseen recovery/resolution tool such as cash calls would fundamentally change the positive risk management features which have made CCPs

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<sup>1</sup> ‘G20 Leaders Statement: The Pittsburgh Summit’, Pittsburgh (2009)  
<http://www.g20.utoronto.ca/2009/2009communique0925.html>

so stable, undermining the incentives of the clearing members to make recovery measures work. Our views on this subject are further detailed in our response to Question 19.

- **Importance of restoring a matched book** – EACH welcomes the FSB’s confirmation of the importance of the need to restore a matched book as soon as possible. A matched book is a key feature of the CCP’s risk management framework as it ensures that all of the positions that bring risk to the CCP have been adequately dealt with and the CCP operator has no ongoing market exposure.
- **Interoperability between securities CCPs** – It is important that principles and rules on CCP resolution take into account interoperability arrangements between CCPs and are designed in such way that contagion risk is limited, as envisaged by European legislation (‘EMIR’)<sup>2</sup>. EMIR includes specific rules which are aimed at limiting contagion risk between interoperable CCPs. EMIR requires the interoperable arrangements and risk management of interoperable CCPs to ensure that a CCP is able to manage the default of clearing members without affecting the interoperable CCPs. More specifically, per EMIR requirement, a CCP may avail of the collateral provided in the context of an interoperability arrangement only in case of a default of the providing CCP. A defaulting CCP is required to return the collateral provided in the context of an interoperability arrangement to the providing CCP. In addition, the ESMA Guidelines and Recommendations on interoperability arrangements<sup>3</sup> do not allow CCPs to contribute to each other’s default funds or other financial resources.
- **Extremeness of this potential event** – The mostly likely scenario that would result in a CCP being placed into resolution is the simultaneous default (and failure of resolution) of multiple large clearing members. The market stress and losses would have far surpassed any scenario that could be deemed ‘extreme but plausible’ as defined by regulators.

The resources held by CCPs will be sufficient to cover the vast majority of circumstances. Losses will only persist and impact upon a CCP if there is a failure to fully auction off the defaulters’ positions. This means that after several rounds of unsuccessfully auctioning, the defaulters’ portfolio would have to remain a net loss, and those losses would have to exceed all of the margin and default fund resources, and the skin-in-the-game of the CCP. It is important to remember that in this extreme scenario, the losses originate and are propagated from actual market positions that the market has not absorbed. We appreciate the FSB’s understanding that this represents an extreme and unlikely tail risk.

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<sup>2</sup> EMIR Title V ‘Interoperability arrangements’ <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32012R0648&from=EN>

<sup>3</sup> ESMA/2013/322

[https://www.esma.europa.eu/sites/default/files/library/2015/11/esma\\_guidelines\\_u\\_recommendations\\_on\\_interoperability\\_arrangements\\_-\\_as\\_approved\\_by\\_bos\\_20130314.pdf](https://www.esma.europa.eu/sites/default/files/library/2015/11/esma_guidelines_u_recommendations_on_interoperability_arrangements_-_as_approved_by_bos_20130314.pdf)

- **Global consistency** – Legislators and regulators must ensure a consistent application of the recovery and resolution framework principles at an international level, given that CCPs may operate in multiple jurisdictions and clear products which are traded globally. We therefore welcome the efforts of the FSB to ensure a comprehensive set of guidelines that can be applied across jurisdictions, while adequately accounting for the specificities of different jurisdictions, CCPs, and the products and markets for which they clear.

### 3. Incentive effects of resolution strategies

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**Q2: What is the impact on incentives of the different aspects of resolution outlined in this note for CCP stakeholders to support recovery and resolution processes and participate in central clearing in general? Are there other potential effects that have not been considered?**

The **potential impacts on incentives** of the different aspects of resolution outlined in the note are the following:

- **Recovery must be given every opportunity to work** – If a CCP reaches the point where it has to use recovery tools, the market has already suffered unprecedented stress. In this circumstance, it is even more important that incentive structures for clearing members be maintained.

Unless and until recovery is clearly ineffective or it is determined that continuing the recovery plan could result in greater losses for market participants, the recovery plan defined by the CCP should be permitted to run as anticipated by the market. CCPs will have performed the necessary work to define the available tools, their impacts, and the circumstances under which they could be called in, providing the market with as much transparency and certainty as will be available considering the extreme nature of this event.

CCP recovery relies on the trust and cooperation of market participants who are willing and able to bid effectively on the defaulters' positions. Since these positions are held by the CCP, and the CCP will remain the counterparty on the other side of the position, market participants must have faith in the CCP to continue its operations in order to bid effectively. If market participants believe they would be better off in resolution then this will severely reduce or eliminate any cooperation from the market in management of the default, they would have no reason to actively bid on a portfolio, and the likelihood of a successful recovery would be significantly undermined.

The resolution regime should therefore not create incentives that promote resolution over recovery. In fact, the resolution framework should be designed to maximise the likelihood of a successful recovery.

- **Maintain existing incentive structures** - In order to ensure the safety of the markets, CCPs have developed a structure that incentivises appropriate behaviour by market participants. These incentive structures not only facilitate certainty of process during normal market conditions, but most importantly serve to bring markets back into alignment during times of severe market stress. It is **crucial to ensure that non-defaulting clearing members actively participate throughout the default management process**. A CCP operates on the basis of mutual benefits and shared risk between itself, its members, and their clients. These incentives support the CCP function and if these are distorted then the risk mitigation benefits of the CCP will be jeopardised. In particular during the extreme and remote scenario that could drive a CCP to exhaust its prefunded default management waterfall and use its recovery tools, the certainty and reliability of these incentives will be crucial to returning to normal market function. To understand how incentives should work in the extreme stress of a CCP recovery or resolution, the existing incentives must be understood.

#### Normal Circumstances

In a normally functioning market, clearing members' main obligation is to support the risk of their portfolios through the deposit of margin. CCPs incentivise clearing members to meet these obligations through penalties defined in their rulebooks. Typically, failure to meet a financial obligation would result in the clearing member being put into default. In default, the clearing member's portfolio and assets would be seized by the CCP and auctioned off or liquidated. This incentivises the clearing member to manage its obligations (i.e. reduction of positions or prioritising payments to the CCP) rather than default to the CCP.

#### Clearing Member Default

In a clearing member default situation, the biggest impact to the market and non-defaulting clearing members comes from the defaulter's portfolio, which will sit on the CCP's books and create an unmatched book. In order to return the CCP to a matched book and limit the repercussions suffered as a result of the default, all participants must act in the best interest of the broader market. CCPs provide incentives to the non-defaulting clearing members to participate in the auction of the portfolio, actively and accurately bidding on the defaulter's positions. Such incentives only work if clearing members believe that resolution is more painful than the choice they otherwise face.

#### Clearing member reimbursement and CCP owner penalisation

Historically, clearing members have not needed reimbursement to incentivise their proper participation in the default management and recovery process. Existing incentives have created an efficient balance between a clearing member's best interests and the best interests of the broader market. Changes to the current incentive structure risk disrupting this balance.

Reimbursing clearing members for participating in the resolution process will dramatically alter the existing incentive structure and threaten to change their behaviour away from proper participation in the default management and recovery process. In the midst of an unprecedented market stress, offering clearing members any amount of reimbursement in resolution will skew the incentive structure in unpredictable ways.

## 4. Timing of entry into resolution

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**Q3: What are the appropriate factors for determining timing of entry into resolution? How might a presumptive timing of entry (or range of timing), if any, be defined in light of the criteria set out in the FMI Annex to the Key Attributes? If defined, should the presumptive timing of entry be communicated to the CCP and its participants?**

The factors for determining timing of entry into resolution will be dependent on the particular stress scenario threatening the CCP. However, unless and until recovery is clearly ineffective or its continued application could result in greater losses for market participants, the recovery plan defined by the CCP should be permitted to run as anticipated by the market.

EACH therefore believes that the **timing of entry (or range of timing) to resolution should be defined by reference to** the following considerations:

- **Unsuccessful (or likely unsuccessful) recovery** – Authorities should avoid the presumption of resolution for CCPs or the creation of a defined limit to the CCP's recovery plan. Doing so could arbitrarily truncate, or condemn to failure, the recovery process before the recovery plan has had the opportunity to work properly. A CCP should only be put in resolution once the previously described CCP tools and processes are exhausted or have proven ineffective, or the CCP is *materially* breaching its core obligations as described in the CCP's rulebook (e.g. meeting its payment obligations towards its members or maintaining the appropriate level of regulatory capital as defined in EMIR). This is reflected in the FSB's guidelines on resolution which prescribe that resolution is triggered when *'the recovery tools failed to return the FMI to viability, have not been implemented in a timely manner, or relevant authorities determine that recovery measures are not likely to return the FMI to viability'*<sup>4</sup>.

We understand some authorities may be concerned that intervening too late may result in resolution being less effective. We believe this concern is unwarranted as CCPs are required to inform their regulatory authorities in a variety of stress events and throughout the default management process regulators are kept apprised. The CCP would therefore be in **continuous contact with the relevant authorities**. This would allow resolution authorities to be able to intervene at the appropriate time.

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<sup>4</sup> 'Key Attributes of Effective Resolution Regimes for Financial Institutions', FSB, 2014, [http://www.financialstabilityboard.org/2014/10/r\\_141015/](http://www.financialstabilityboard.org/2014/10/r_141015/)

- **Early intervention** – Early intervention should be considered as a **tool of last resort** as it would likely distort the incentives for a successful recovery of the CCP. Early intervention could potentially create moral hazard which may weaken the CCP’s ability to conduct an orderly loss allocation in full and lead to the premature resolution of the CCP. Maximising the likelihood of a private sector recovery arrangement is important in order to avoid a shift of responsibility to the public sector.

If early intervention occurs, it is critical that the legal responsibility of either the CCP management or the resolution authority is clear at all times to avoid a situation whereby the CCP’s management would find itself only partially independent but legally accountable for the decisions made.

- **Financial stability concerns** – The resolution authority should consider whether its intervention is justified based on financial stability concerns (e.g. to avoid a contagion effect across multiple CCPs). We would expect this to be the core driver for intervention.

## 5. Adequacy of financial resources in resolution

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**Q4: Should CCPs be required to hold any additional pre-funded resources for resolution, or otherwise adopt measures to ensure that there are sufficient resources committed or reserved for resolution? If yes, what form should they take and how should they be funded?**

### Additional pre-funded resources for resolution

Any discussion of additional resources for resolution requires consideration of the resources that already exist, as well as the goal and potential impact of additional pre-funded resources.

For **default losses**, European CCPs are already required to hold considerable pre-funded resources to meet a variety of purposes. This includes being able to withstand the default of their two largest clearing members by sizing their default fund based on the potential uncovered exposure of their two largest clearing members (‘cover 2 requirement’), an unprecedented stress situation. We believe that the **existing cover 2 requirement for European CCPs provides a sufficiently high degree of protection in extreme but plausible circumstances** and ensures the preservation of incentives towards robust risk management.

EMIR also requires CCPs to contribute some of their **own capital** to the default waterfall right before the use of the mutualised resources<sup>5</sup>. Such dedicated resources (skin-in-the-game) provide a significant layer of pre-funded resources, in addition to providing additional, direct incentives for the CCP to perform prudent risk management. Furthermore, such resources align

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<sup>5</sup> Article 35 of the EMIR RTS 153/2013 sets the minimum level of the CCP’s SIG to 25% of its capital requirements.

the CCP's interests of the CCP with those of its stakeholders in managing a default, minimising losses and stabilising the market.

For **non-default losses**, European CCPs also hold **capital** proportionate to the risk stemming from the activities of the CCP<sup>6</sup>. This includes addressing potential winding down or restructuring, operational and legal risks, credit, counterparty, and market risk as well as business risks. This would be relied upon for non-default losses.

While all of these are **pre-funded resources**, they serve different purposes in CCP recovery but importantly reinforce the incentives for appropriate risk management on the part of both CCPs and their clearing members.

In addition to these existing pre-funded resources, CCPs could also use certain **non-prefunded resources** and tools in circumstances where their default management resources are exhausted. Such additional contributions from clearing members, known as assessment powers, are called by the CCP relative to the member's contribution to the pre-funded default fund. Contributions are not pre-funded but the quantum of such resources is generally much smaller than the amount of variation margin payments previously called by CCPs during periods of significant market stress and as such it is reasonable to conclude that clearing members will continue to be able to meet their assessment obligations.

We consider that the resources held by European CCPs are sufficient to cover the vast majority of circumstances, including the simultaneous default (and failure of resolution) of multiple large clearing members. When combined with assessment powers, we consider that sufficient resources are available to enable CCPs to withstand market stress and losses that would far surpass any scenario that could be deemed 'extreme but plausible'.

Requiring **additional pre-funded resources would have two detrimental effects**. Firstly, it would disrupt the incentive structure previously described. As previously discussed, such structure is of fundamental importance to the success of the CCP's risk management and default management processes. Secondly, requiring additional pre-funded resources would impose additional cost on all participants, which may not be justified when considering how unlikely it is that such resources will be utilised. In this regard, it is important to consider how such costs would be distributed. As ESMA noted in their recent proposal to delay the clearing mandate for Category 3 financial counterparties in Europe, increased costs disproportionately impact upon smaller market participants, potentially limiting their access to clearing services<sup>7</sup>.

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<sup>6</sup> Article 16 of EMIR states that the total capital of CCP shall be high enough to address potential winding down or restructuring, operational and legal risks, credit, counterparty, and market risk as well as business risks.

<sup>7</sup> [https://www.esma.europa.eu/sites/default/files/library/2016-1125\\_cp\\_on\\_clearing\\_obligation\\_for\\_financial\\_counterparties.pdf](https://www.esma.europa.eu/sites/default/files/library/2016-1125_cp_on_clearing_obligation_for_financial_counterparties.pdf)

**Measures to ensure that there are sufficient resources committed or reserved for resolution**

While we agree that additional resources would be needed to stabilise the operations of a CCP in resolution, EACH considers that resources should not be reserved solely for resolution. The tools defined in the CCP's recovery plan will normally result in a return to a matched book, prevent further losses and return the market to stability. As previously discussed, a CCP's recovery plan must be permitted to run as anticipated and therefore the CCP must have recourse to the full range of resources necessary to support the implementation of its recovery plan. Ring-fencing of resources such that the CCP is not able to use them in recovery would undermine the likelihood of the CCP returning to a matched book in recovery.

**Q5: How should the appropriate quantum of any additional CCP resources be determined? In sizing the appropriate quantum, what factors and considerations should be taken into account? Do your answers vary for default and non-default losses?**

As discussed above, EACH considers that the **resources held by European CCPs are sufficient** to cover the vast majority of **default circumstances**, including the simultaneous default (and failure of resolution) of multiple large clearing members. When combined with assessment powers and other potential recovery tools, we consider that sufficient resources are available to enable CCPs to withstand market stress and losses that would far surpass any scenario that could be deemed 'extreme but plausible'.

Any changes to existing funding structure would likely detrimentally impact upon the incentive structure of the CCP and risk jeopardising the successful outcome of the default management and recovery processes.

For **non-default losses**, European CCPs hold **significant capital** to support the losses which may be caused by a non-default event. These are calculated proportionate to the risk stemming from the activities of the CCP<sup>8</sup> and includes capital to address the potential winding down or restructuring of the CCP, operational and legal risks, credit, counterparty, and market risk, as well as business risks. This capital would be available for non-default losses.

**Q6: Should resolution funds external to the CCP be relied upon? If so, how should such funding arrangements be structured so as to minimise the risk of moral hazard, including for CCPs with significant cross-border participation? Where these are pre-funded, how should the target size be determined and which entities should be required to contribute?**

EACH considers that resolution funds external to the CCP should not be relied upon as the cost and difficulty in securing and maintaining such funding would be **disproportionate to the risk of confronting such a remote situation** (if such a fund is to be utilised then the

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<sup>8</sup> Article 16 of EMIR states that the total capital of CCP shall be high enough to address potential winding down or restructuring, operational and legal risks, credit, counterparty, and market risk as well as business risks.

situation has already exhausted the CCP's default fund and is therefore beyond extreme but plausible). External funding would **threaten financial stability** in several ways:

- CCPs are carefully constructed **risk management and loss mutualisation systems**. The CCP's waterfall comprises of a set of pre-funded resources designed to not only cover (and provide a substantial buffer of collateral to address) counterparty credit risk, but also to ensure that participants in the system have appropriate incentives to undertake proper risk management and to support an orderly default management process.
- The introduction of external resolution funds would **distort these incentives** and create **inefficiencies** in the market. In particular, by placing additional mutualised resources later in the resolution process, clearing members would have less incentive to undertake appropriate risk management, exhibit good market behaviour, or properly participate in default management.
- External resolution funds would impose **additional cost on all market participants**. Not only is there insufficient justification for this cost, considering how improbable it is that such resources will be utilised, but such costs would disproportionately impact smaller market participants, potentially limiting their access to clearing services. It is unlikely that clearing members of all sizes could provide additional pre-funded resources, potentially driving some firms from the market and creating concentration risks. Evidence for this can be found in ESMA's recent proposal to delay the clearing mandate for Category 3 counterparties in Europe due to the lack of access to clearing for smaller market participants as a result of existing cost and capital pressures<sup>9</sup>. Rather than introducing external resolution funds, EACH considers it more valuable for funds to reside within, rather than outside of, the default waterfall.
- The introduction of external resolution funds would likely **concentrate risk** in fewer market participants as contributions to such funds prove overly burdensome for smaller market participants in addition to their existing contributions to the CCP's default waterfall (initial and variation margins and default funds). This concentration would reduce the number of available participants for an auction or for porting where a member defaults, weakening the CCP's default management process and therefore threatening financial stability.

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<sup>9</sup> [https://www.esma.europa.eu/sites/default/files/library/2016-1125\\_cp\\_on\\_clearing\\_obligation\\_for\\_financial\\_counterparties.pdf](https://www.esma.europa.eu/sites/default/files/library/2016-1125_cp_on_clearing_obligation_for_financial_counterparties.pdf)

## 6. Tools to return to a matched book

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**Q7: What factors should the resolution authority consider in choosing and exercising tools to return the CCP to a matched book? Is one (or more) of the tools for restoring a matched book preferable over others and if so, why?**

### **What factors should the resolution authority consider in choosing and exercising tools to return the CCP to a matched book?**

The factors for determining the tools to be used to return the CCP to a matched book will be dependent on the particular stress scenario threatening the CCP. EACH considers it would be inappropriate for resolution authorities to constrain themselves to a defined set and order of tools before they know anything about the circumstances of the stress and market at that time.

EACH considers that should resolution be necessary, the following factors should be considered by the resolution authority in choosing and exercising tools to return the CCP to a matched book:

- **CCP Recovery** – The first factor to consider is whether the CCP has been able to fully perform its recovery plan and use all of its recovery tools. The tools defined in the CCP's recovery plan will normally result in a return to a matched book, prevent further losses and return the market to stability. Where the CCP's recovery plan has not been permitted to run as anticipated then consideration should be given to whether implementation of the recovery tools by the CCP would likely be more successful in returning the CCP to a matched book.
- **Clearing member participation in the auction process** – In order to return the CCP to a matched book and limit the repercussions suffered as a result of the default, CCPs provide incentives to non-defaulting clearing members to participate in the auction of the portfolio – actively and accurately bidding on the defaulter's positions. Such incentives only work if clearing members believe that resolution is more painful than the choice they otherwise face. Therefore, the resolution authority should only choose tools in resolution that incentivise appropriate behaviour in the CCP's auction process.
- **Partial/Full tear-up** – These tools should be implemented only after multiple failed auction cycles and after reasonable effort has been made to port the positions of the defaulted clearing member. Multiple unsuccessful auctions indicate that there is no longer an appetite for the products in the market. Partial tear-up is preferable to full tear-up as it allows the isolation and elimination of a smaller, illiquid market segment while allowing the broader market to recover from the relevant stress event. Partial tear-up is one of the least invasive tools available for this purpose.

**Is one (or more) of the tools for restoring a matched book preferable over others and if so, why?**

Preferred tools would be those that have the narrowest impact on the market, as the wider the impact then the more likely it would be that financial stability is further threatened through contagion between different parts of the market.

**Q8: Should any tools for restoring a matched book only be exercisable by resolution authorities? If so, which tools and subject to what conditions?**

EACH **does not agree with reserving certain tools for exclusive use by the resolution authority** in case it decides to intervene.

While we agree that the resolution authority must have the ability to step in if recovery is clearly ineffective or has created a scenario that could result in greater losses for market participants, **all of the tools defined in the CCP's recovery plan should be permitted to be used by the CCP**. It should not be assumed that the resolution authority will step in until the CCP recovery plan has been exhausted and CCPs should not be prevented from exercising particular tools.

CCPs will have performed the necessary work to define the available tools, their impacts, and the circumstances under which they could be called in, providing the market with as much transparency and certainty as will be available considering the extreme nature of this event. At the onset of significant market stress event, such as a clearing member default or material non-default loss, the CCP will have informed their supervisory authority and will likely include the resolution authority in the on-going updates. The appropriate authorities will have full transparency into the CCP's processes and impact on the market, ensuring they are able to take action if and when necessary.

## 7. Allocation of losses in resolution

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**Q9: What are in your view effective tools for allocating default and non-default losses and what are the pros and cons of these tools? Should initial margin haircutting be considered as a tool for the allocation of losses in resolution? Is one or more of the tools preferable over others? What are your views on the use of tools to restore a matched book as a means of loss allocation?**

With regard to **default-related losses**, loss allocation tools serve two main functions: 1) maintain the CCP's services and allow the market more time to cure the losses associated with the default and 2) ensure clearing members are incentivised to participate in the default management process. No loss allocation tool will satisfy all market participants, but in order to establish a comprehensive recovery plan, the various steps the CCP can take to continue operating their critical functions must be considered. It is important to remember that most

loss allocation tools will be preferable (both for market participants and the financial market more broadly) to the alternative of the failure of the CCP and the disorder such an event would bring to the market.

The following loss allocation tools meet both of these goals and should be available for inclusion by CCPs in their recovery plans. The CCP should be able to implement these tools in light of the facts and circumstances of the particular stress event and should not be limited to applying such tools in a certain prescribed order:

- **Assessment powers** - Assessment powers, also referred to as 'assessment calls' or 'cash calls', are available to CCPs through their rulebooks if prefunded resources have been exhausted. This ability to request additional contributions from surviving participants is an important recovery tool.

The size of assessment powers is generally relative to the participant's contribution to the CCP's pre-funded default fund. Assessment powers are not pre-funded although the quantum of such assessments is generally much smaller than the amount of variation margin payments previously called by CCPs during periods of significant market stress and as such it is reasonable to conclude that clearing members will continue to be able to meet their assessment obligations. Assessment powers are typically callable immediately from clearing members in cash and in a liquid currency.

- **Gains haircutting (VMGH/profit cropping)** – Gains haircutting is a limited-time tool that allows the market to have continued access to the critical clearing services and operations of the CCP while a matched book is re-established. EMIR limits the exposure of its clearing members toward the CCP<sup>10</sup>. It is implemented through the reduction of the net variation margin (VM) gains or profits owed to the non-defaulting members. The VM/profits owed by the defaulter's portfolio, a result of an inability to auction the positions and return to a matched book, is distributed to all clearing members and clients according to their net VM gains/profits, rather than to all clearing members and clients. Different types of contract are subject to varying methods of haircutting/cropping (e.g. mark to market, contingent profit and loss flows). Gains haircutting may be implemented differently by different CCPs.

Unless capped, the cumulative sum of clearing participants' VM gains/profits following a participant's default would always be sufficient to cover the defaulter's mark-to-market losses in the same period. How haircuts are applied to clients may vary per CCP and depends on the contractual arrangements between the clearing members and their clients.

- **Loss distribution** – Under loss distribution, the defaulter's VM losses may be distributed across all clearing members, usually in proportion to the risk they pose (i.e.

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<sup>10</sup> EMIR Article 43(3) states that 'The clearing members of a CCP shall have limited exposures toward the CCP'.

by default fund contribution or initial margin), and not just those clearing members with positive VM, as in VM haircutting and profit cropping.

EACH supports the resolution authority's right to exercise flexibility in the application of tools in resolution as necessary to maintain proper incentives. Such application would be subject to the insolvency counterfactual and the no creditor worse off safeguard.

**Loss allocation** for non-default losses should in our view be **proportional to the level of responsibility of each stakeholder involved** (e.g. CCP owner or CCP user) in either bringing risk into the CCP or defining the policies to mitigate those risks. Effective tools to allocate non-default losses include:

- **Capital of the CCP**
- **Clearing member contributions**
- **Insurance agreements**

These tools are described in more detail in our response to Question 13.

**Q10: Which, if any, loss allocation tools should be reserved for use by the resolution authority (rather than for application by a CCP in recovery)?**

EACH **does not agree with reserving certain tools for exclusive use by the resolution authority** in case it decides to intervene.

While we agree that the resolution authority must have the ability to step in if recovery is clearly ineffective or has created a scenario that could result in greater losses for market participants, **all of the tools defined in the CCP's recovery plan should be permitted to be used by the CCP**. It should not be assumed that the resolution authority will step in until the CCP recovery plan has been exhausted and CCPs should not be prevented from exercising particular tools.

CCPs will have performed the necessary work to define the available tools, their impacts, and the circumstances under which they could be called in, providing the market with as much transparency and certainty as will be available considering the extreme nature of this event. At the onset of significant market stress event, such as a clearing member default or material non-default loss, the CCP will have informed their supervisory authority and will likely include the resolution authority in the on-going updates. The appropriate authorities will have full transparency into the CCP's processes and impact on the market, ensuring they are able to take action if and when necessary.

**Q11: How much flexibility regarding the allocation of losses is needed to enable resolution authorities to minimise risks to financial stability? For example, to what extent should a resolution authority be permitted to deviate from the principle of *pari passu* treatment of creditors within the same class, notably different clearing members in resolution? What would be the implications of a resolution strategy based primarily or solely on a fixed order of loss allocation in resolution set out in CCP rules vs. a resolution strategy that confers discretion to the resolution authority to allocate losses in resolution differently to CCP rules?**

In our view, the FSB should strike the right balance between transparency and predictability while also considering the role of the resolution authority if it does intervene in a distressed CCP. If it is necessary for the resolution authority to intervene, that authority must be able to make a material difference to the execution of the loss allocation tools over and above what could be achieved by the CCP in stabilising the market and restoring a matched book.

For this reason we would suggest that while the resolution authority should use the **set of tools prescribed** in the CCP's rulebook, the resolution authority should keep a certain degree of **flexibility to apply such tools to a different magnitude or in a different order** from the CCP's approach. This framework of '**constrained flexibility**' would optimise the potential intervention of the resolution authority.

The resolution authority should only be intervening in the CCP to apply tools in a different way to that available to the CCP in its recovery plan. For example, according to its recovery plan, the CCP might only be able to use partial contract tear-up *after* it has performed several cash calls and gains haircutting where applicable. The resolution authority may decide to intervene if it deems that the market conditions justify the performance of a partial tear-up *earlier* in order to limit the losses for the market and generate a better outcome than what the CCP would have achieved by following its rulebook.

In general, we do not recommend any action that would lead to the same class of clients being treated differently by the resolution authority, but recognise that such actions, where they are behaviour-based (for example juniorisation of the default fund to encourage clearing member participation in the auction of the defaulter's portfolio) may be beneficial to create proper incentives.

**Q12: What are your views on the potential benefits or drawbacks of requiring CCPs to set out in their rules for both default and non-default losses: (i) The preferred approach of the resolution authority to allocating losses; (ii) An option for, or ways in which, the resolution authorities might vary the timing or order of application of the loss allocation tools set out in the rules?**

### **Potential benefits or drawbacks of requiring CCPs to set out in their rules the preferred approach of the resolution authority to allocating losses**

EACH supports the inclusion in the CCP's rulebook of the full set of tools that can be used for loss allocation. Including the full set of tools in the CCP's rulebook predicates that the CCP will have performed the necessary work to define the tools, their impacts, and the circumstances under which they could be called in, providing the market with as much transparency and certainty as possible, which is important considering the extreme nature of this event.

However, EACH **does not agree with reserving certain tools for exclusive use by the resolution authority** in case it decides to intervene – this includes tools defined in the CCP's rulebook. All of the loss allocation tools defined in the CCP's rulebook should be permitted to be used by the CCP in recovery, unless recovery is clearly ineffective or the resolution authority determines that execution of the recovery plan by the CCP would adversely affect financial stability.

### **Ways in which the resolution authorities might vary the timing or order of application of the loss allocation tools set out in the CCP's rules**

As discussed previously, the resolution authority should keep a certain degree of **flexibility to apply tools to a different magnitude or in a different order** than the CCP's approach. If the resolution authority intervenes, the scenario will be unprecedented, requiring authorities to be adaptable to address the specific stress facing the CCP at the time.

## 8. Non-default losses

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**Q13: How should non-default losses be allocated in resolution, and should allocation of non-default losses be written into the rules of the CCP?**

There are a variety of non-default stresses that could lead to losses at the CCP. Given the heterogeneous nature of such stresses, it is important to give separate consideration to each type of stress.

There are three main types of stress scenario that could give rise to a non-default loss:

- **Investment and custody risks** - The potential losses faced by the CCP as a result of the investment of the resources of the CCP, and those provided by its clearing members and clients, or as a result of the default of a custodian.

- **General business or operational risks** - The potential losses that could result from events other than the default of a clearing member or those related to investment and custody risks.
- **Uncovered liquidity shortfalls** - The potential losses faced by the CCP in being unable to transform assets in a timely way or transfer assets (collateral and cash variation margin payments) between members. In particular where the CCP has to enter the markets to cover such shortfalls.

**Loss allocation** for non-default losses should be **proportional to the level of responsibility of each stakeholder involved** (e.g. CCP owner or CCP user) for bringing risk into the CCP or defining the policies to mitigate those risks. The appropriate tool to allocate a particular non-default loss will therefore depend on the type of loss in question:

- **Capital of the CCP** – In line with the Principles for Financial Market Infrastructures (PFMIs)<sup>11</sup> and the EMIR legislation, European CCPs hold capital, including retained earnings and reserves, proportionate to the non-default risks that the CCP is exposed<sup>12</sup>. This capital *'shall at all times be sufficient 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 which are not already covered'* by the CCP's other lines of defence.

Should it be necessary, a CCP might increase its capital resources through the use of capital preservation tools (e.g. reduction in dividend payments, cost reductions, asset sales), payment of its liabilities in instalments or conversion of its debt into equity (subject to an appropriate agreement between the CCP and its counterparty), or general capital raising from investors.

CCP capital is appropriate for the allocation of non-default losses for which the CCP is the only entity with the responsibility for creating and managing those risks. European CCPs are well placed to meet such losses and thus ensure continuity of the CCP's critical services and the preservation of market stability.

- **Clearing member contributions** – Where the clearing members are responsible for determining the way in the risks they bring to the CCP are managed, such as directing the investment strategy for their assets, or selecting the custodian at which their assets are deposited, then the CCP should not be held accountable for losses associated with such decisions (or a proportion of such losses where the CCP and its clearing members

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<sup>11</sup> <http://www.bis.org/cpmi/publ/d101a.pdf>

<sup>12</sup> <http://bit.ly/1Nr5w4l> European Market Infrastructure Regulation (EMIR) - Article 16 Capital requirements: A CCP shall have a permanent and available initial capital of at least EUR 7,5 million to be authorised pursuant to Article 14. CCP's capital, including retained earnings and reserves, shall be proportionate to the risk stemming from the activities of the CCP. It shall at all times be sufficient 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 which are not already covered by specific financial resources as referred to in Articles 41 to 44.

are jointly responsible). Another example would be where a fraud was perpetrated by a clearing member, in which case that clearing member should be liable for any losses.

- **Other potential resources** – CCPs may maintain additional resources for the allocation of those non-default losses for which the CCP is the only entity with the responsibility for creating and managing those risks. These **additional resources** include **insurance agreements** which can in some cases be a potential additional resource to address losses from activities that the CCP undertakes.

**Q14: Aside from loss allocation, are there other aspects in which resolution in nondefault scenarios should differ from member default scenarios?**

EACH considers that a non-default loss scenario is no different to a default loss situation insofar as the resolution authority should only intervene once the CCP's recovery tools and processes are exhausted or have proven ineffective, or the CCP is *materially* breaching its core obligations. In the case of non-default losses, this means the failure of the resources described in Question 13 to extinguish the losses.

The only difference between a default and non-default loss scenario is the **tools available for loss allocation** (e.g. gains haircutting or partial tear-up would not be appropriate for non-default losses).

## 9. Application of the “no creditor worse off” (NCWO) safeguard

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**Q15: What is the appropriate NCWO counterfactual for a resolution scenario involving default losses? Is it the allocation of losses according to the CCP's rules and tear-up of all the contracts in the affected clearing service(s) or liquidation in insolvency at the time of entry into resolution, or another counterfactual? What assumptions, for example as to timing and pricing or the re-establishment of the CCP's matched book, will need to be made to determine the losses under the counterfactual?**

The appropriate NCWO **counterfactual** for a resolution scenario involving default losses is the **application of the CCP's rulebook** by the CCP itself assuming that members fulfilled their contractual assessment rights and gains haircutting/contract tear-up were applied.

If the primary driver for the intervention of the resolution authority is financial stability concerns, EACH would appreciate further clarity with regard to how the NCWO principle would be applied in a way that captures the benefits of preserving financial stability.

**Q16: What is the appropriate NCWO counterfactual for a resolution scenario involving non- default losses? Is it the liquidation of the CCP under the applicable insolvency regime, assuming the prior application of any relevant loss allocation arrangements for non-default losses that exist under the CCP's rules or another counterfactual?**

The appropriate NCWO counterfactual for a resolution scenario involving non-default losses is the applicable **insolvency regime**, assuming the prior application of any relevant loss allocation arrangements for non-default losses that exist under the CCP's rulebook.

**Q17: How should the counterfactual be determined in cases that involve both default losses and non-default losses?**

Although the possibility of a simultaneous occurrence of default and non-default event is in the view of EACH very remote, these two events would effectively be treated separately and using separate tools and resources (as described in response to Questions 15 and 16). The NCWO counterfactuals would also be those described in response to Questions 15 and 16.

## 10. Equity exchange in resolution

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**Q18: Should CCP owners' equity be written down fully beyond the committed layer of capital irrespective of whether caused by default or non-default events?**

In the case of **default losses**, we do not think there is a need to write down the CCP owners' equity as, with the appropriate tools, we consider that CCPs are able to fully allocate losses to their members.

The same may hold true for the type of **non-default losses** for which clearing members are solely or jointly responsible (e.g. where the clearing members are responsible for determining the way in the risks they bring to the CCP are managed, as discussed in response to Question 13).

For **other non-default losses**, and further to the use of the CCP's capital, the CCP's shareholders would be subject to a write down of their equity as per a normal corporate insolvency.

**Q19: Should new equity or other instruments of ownership be awarded to those clearing participants and other creditors who absorb losses in resolution?**

CCPs are a risk management and mutualisation system designed to ensure that the participants in the system have appropriate incentives to undertake proper risk management and to support an orderly default management process.

EACH believes that requiring CCPs to reimburse clearing members for the performance of the default management process or the use of any foreseen recovery/resolution tool (such as assessment powers) would fundamentally change the positive risk management features which make CCPs so stable, undermining the incentives of the clearing members to properly participate in the auctions and the broader recovery process. Clearing member reimbursement would severely disrupt the risk management incentives of CCPs as follows:

- **‘Ex-ante’ incentives** - The potential for clearing member reimbursement and CCP owner penalisation could result in the clearing members putting pressure on the CCP to reduce the size of the default fund or lower risk management standards, making CCP stress more likely, in order to attain reimbursement. This would dramatically disrupt the incentive structure on which the CCP is built, where the use of additional lines of defence is increasingly punitive.
- **‘In-a-crisis’ incentives** - The potential for clearing member reimbursement and CCP owner penalisation would naturally incentivise clearing members against appropriately participating in the default management process (e.g. ‘poor’ bidding in the auction), unnecessarily prolonging the default management process and increasing systemic risk. In particular, providing clearing members with equity in the CCP would allow those members additional control over the CCP’s risk management processes (in addition to existing participation on risk committees), thus jeopardising the independence of the CCP’s risk management functions.

In the default management process, the resources available in the default waterfall of the CCP are contributed by the clearing members as part of the CCP’s risk mutualisation system. If these pre-funded resources were exhausted, cash calls would be performed in line with the CCP’s rulebook. In practice, the risk of the CCP performing cash calls and therefore clearing members having to contribute additional resources to the recovery of the CCP, acts as an incentive for the clearing members to participate properly in the regular default management process. However, if there was an expectation of reimbursement for clearing members, then members may see a potential benefit in not properly participating in this process, dramatically disrupting the incentive structure and increasing systemic risk.

**The potential for reimbursing clearing members should be clearly distinguished from the potential for shareholders to bear losses**, a totally different situation which under certain circumstances could be enforced in line with the FSB Key Attributes.

## 11. Cross-border cooperation

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**Q20: What are your views on the suggested standing composition of CMGs? Should resolution authorities consider inviting additional authorities to the CMG on an ad-hoc basis where this may be appropriate?**

CCP resolution will be most effective if it is **led by the resolution authority of the jurisdiction** in which the CCP is established.

The efficient resolution of a cross-border CCP will only be facilitated if the relevant jurisdictions have taken a consistent approach to the development of CCPs recovery and resolution regimes.

In the case of resolution of a CCP that belongs to a group, the resolution authority should step in at the lowest possible level of consolidation. Other FMIs in the group might not be affected. The resolution authority should always be mindful of the impact of their actions on the broader group to which the CCP belongs.

**Q21: What should be the nature of engagement with authorities in jurisdictions where the CCP is considered systemically important, for the purpose of resolution planning and during resolution implementation?**

When it comes to defining the resolution plan ex ante, EACH believes that the resolution authority should closely interact with all of the relevant authorities involved in the supervision of the CCP and the appropriate authorities for the stakeholders that will be impacted by the resolution of the CCP. We think that cooperation mechanisms and information sharing processes should be defined and tested ex-ante (e.g. authorities' fire drills).

However, at the time the resolution plan needs to be implemented, the resolution authority should be empowered to take decisions and act swiftly.

**Q22: Should CCP resolution authorities be required to disclose basic information about their resolution strategies to enhance transparency and cross-border enforceability? If so, what types of information could be meaningfully disclosed without restricting the resolution authority's room for manoeuvre?**

EACH believe that the full suite of powers available to the resolution authorities should be agreed ex-ante, disclosed publicly and to the extent possible included in the CCPs' rulebooks. This would ensure that all participants potentially involved in resolution (e.g. clearing members) will be able to build their own recovery plans and understand their potential liabilities.

We however understand the need for some flexibility in the order and magnitude in which the tools should be used by the resolution authority.

## 12. Cross-border effectiveness of resolution actions

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**Q23: Does this section of the note identify the relevant CCP-specific aspects of crossborder effectiveness of resolution actions? Which other aspects, if any, should also be considered?**

EACH believes that the discussion note correctly outlines the need for cross border cooperation given the fact that actions in one jurisdiction could impact another.

We would suggest that ad-hoc interactions with CMGs, cross border fire drills and stress test be part of the cross border cooperation arrangements.

**Q24: What should be the role, if any, of the suspension of clearing mandates in a CCP resolution and how should this be executed in a cross-border context?**

It is not obvious that suspension of the clearing mandate is a necessary or helpful step during a CCP's resolution. In the case of EMIR-authorized CCPs, for a clearing mandate to take effect, there should officiously be at least two CCPs clearing a particular asset class<sup>13</sup>. If one of those CCPs is in resolution, the clearing mandate could still be performed by the other CCPs.

The only reason why the market in a mandated product would cease to function is if there is lack of liquidity and the CCP's matched book cannot be restored. In this case, we do not think it is any more likely that the market would continue to function outside of central clearing. Therefore, in circumstances where the market lacks liquidity we consider it more appropriate that all trading in that product should be suspended rather than focussing on suspension of the clearing mandate. In this extreme scenario, we consider it essential that the relevant authorities maintain the exclusive power to trigger the temporary suspension of trading in a product. It would not be appropriate to allow market participants to trigger the suspension of trading and, with it, a core regulatory obligation.

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<sup>13</sup> The list of asset classes subject to the clearing obligation in the EU and the CCPs that clear those asset classes can be found on the ESMA website  
[https://www.esma.europa.eu/sites/default/files/library/public\\_register\\_for\\_the\\_clearing\\_obligation\\_under\\_emir.pdf](https://www.esma.europa.eu/sites/default/files/library/public_register_for_the_clearing_obligation_under_emir.pdf)