



Response to the CPMI-IOSCO discussion paper on central counterparty default management auctions

Summary

The Futures Industry Association (FIA) and the International Swaps and Derivatives Association (ISDA, the associations) welcome the efforts by CPMI and IOSCO on auction design, especially the extensive engagement with the industry including the two workshops held on this topic. The CPMI-IOSCO discussion paper on central counterparty default management auctions¹ (the discussion paper) accurately represents the views presented at these workshops, including some questions where different constituents of the industry do not agree.

The following responses to the question posed in the discussion paper is a joint effort by the associations. Representatives from a CCP, clients and clearing members (CM) have contributed to this document. While not all CCPs have contributed and may not share all views presented here², some CCPs have contributed to this response³.

This response covers default management practices of CCPs clearing derivatives. Many but not all of the points made will equally apply to CCPs clearing repos and other securities products.

At the outset it is worth noting that we believe that the objective of an auction is to liquidate the defaulter(s)'s portfolio(s) while disrupting the market to the least extent possible and while minimizing the cost to the defaulter, the CCP and non-defaulting members and clients, both in normal times and in stressed market conditions.

To achieve that, a CCP requires flexibility within its rules on how to approach a particular market situation to achieve the best outcome. Such flexibility must however be complemented by strong governance, including a voice for both clearing members, whose mutualized resources are at risk, and clients whose trades are cleared through and positions are held at the CCP.

The participating CCP, clients and CMs agreed on most topics. There are two areas in which differences of views persist:

- **Governance:** The scope of the default management group's (DMG) role and the requirement to consult with the DMG in auctions across all products.
- Client participation: Whether CM and client incentives are sufficiently aligned.

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¹ https://www.iosco.org/library/pubdocs/pdf/IOSCOPD631.pdf

² This paper covers the positions of clients, clearing members and one CCPs (see below). The paper does not reflect the views of other CCPs, and many of these other CCPs are in disagreement with the views.

³ The CCP participating in this response was LCH (the participating CCP).

Responses to questions in the Discussion Paper

Roles and responsibilities (Chapter 3)

1. What are the considerations for a CCP's board when determining whether and how to assign tasks related to the planning and conduct of default management auctions within the CCP's risk management framework? How does the CCP's board identify potential limits to the assigned responsibilities?

We generally support the proposals in this section, in particular considerations around delegation. Most of the thoughts and proposals on this topic in the discussion paper are very technical. As these considerations affect the efficient operation of a CCP, we believe that CCPs are best suited to respond to this question.

For the role of members in the governance of default management, please see under question 2.

2. What different considerations may apply when a CCP's board establishes procedures for consulting external experts, such as independent consultants or clearing members, when designing or conducting a default management auction? How does a CCP's board address such concerns?

A distinction needs to be made between (a) designing default management auction procedures exante and (b) executing a default management auction.

Designing default management processes ex-ante

CCP risk committees should be closely involved in the governance of the design of default management processes (DMP). In CCPs that have instituted a DMG, the DMG will also opine on the design and functioning of the DMP.

Executing default management processes

If external parties, such as CMs and clients, are part of an auction (or default management in general), we agree that it is important that the roles of such parties are clearly defined. As the discussion paper states, confidentiality and conflict of interests are very important issues to address.

CCPs are an exception amongst for-profit entities as they can allocate default losses to their participants (CMs and their clients), both in normal default management and in recovery. There is therefore an in-built moral hazard that needs to be mitigated by strong regulation and oversight by supervisors and participation in governance by CMs and clients.

The discussion paper does not mandate a role in default management governance for CMs, despite them underwriting the tail risk of default management – as losses above the defaulter's resources will be mostly borne by non-defaulting CMs, not by the CCP – and their clients, who will be affected by the use of recovery tools if the regular DMP fails.

Not only will each CCP member default vary in its size and complexity but market conditions surrounding that default will also be difficult to predict in advance. To ensure the best possible

outcome of the auction, CCP management needs flexibility to act in response to any potential market situation, which could very well be stressed and/or exceptional. This flexibility however requires strong governance, including participation of CMs, supervisors, and the DMG.

A CCP could be supported during default management by a DMG that includes representatives from market participants. The role of the DMG is to provide market expertise and to facilitate important objectives of the DMP, namely⁴:

- Managing and closing out the defaulting participant's positions in a prudent and orderly manner (i.e. restoring the matched book).
- Minimising losses for the CCP and for non-defaulting participants.
- Limiting disruptions to the market.
- Ensuring timely completion of settlements.

The DMG also provides governance from the perspective of clearing members who contribute mutualized default resources.

The participating CCP and clearing participants did not find consensus on whether participants should be invited to a DMG for every asset class.

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The participating CCP believe the key role of a DMG is to provide the CCPs with trading experts seconded from CMs and clients. The participating CCP believe that such experts are not required in every asset class and that there might not be enough trading experts available to form DMGs in all asset classes. The participating CCP are also concerned that the DMP could be hindered if the CCPs decision making is delayed due to practical issues flowing from a hard requirement to have a DMG in all instances. In the case where such experts are not required, CCPs believe good governance is maintained by ensuring that participants are sufficiently represented in the CCP Risk Committee, Rulebook consultations, risk working groups and product advisory groups.

⁴ The below list is taken from the Principles for Financial Markets Infrastructures (https://www.bis.org/cpmi/publ/d101a.pdf), principle 13.

CMs believe that there needs to be increasing levels of governance and oversight where results of auctions could result in losses that flow deeper through the waterfall – for instance, the CCP can take decisions if just the defaulters resources were to be used, whereas the Board may have to be involved if the SITG is used while participant participation may be justified if there is an expectation that the losses will result in the usage of the default fund (DF) and/or use of recovery tools. Therefore CMs believe that a CCP should offer participation in a DMG in all asset classes and that depending on the particular situation, participants should have the flexibility to determine if they would want to participate in the DMG. In their view, the DMG's role, other than providing experts to the CCP, is to provide governance during default management and to give a voice to the CM firms whose mutualised default resources are at risk, especially if there is a possibility of these resources to be used.

While CMs do not question that CCP management is in overall control of the DMP, a DMG would complement the flexibility that a CCP requires during default management by adding oversight and challenge. CMs believe that DMGs should be set up ex-ante, and that assembling the DMG should not prevent a CCP from acting if time is of the essence, especially where actions are unlikely to lead to the use of mutualized resources. CMs agree that there can be only one party in overall control of the DMP and this should be the CCP, however CMs also believe that having members whose DF contribution is at risk represented in the room can effectively challenge CCP management if they believe that the interest of the providers of mutualized resources are not taken into account sufficiently.

CMs believe that assembling a DMG in a timely fashion could also be supported by creating arrangements and procedures ex-ante. The discussion paper already suggests that "As timing can be a critical factor in an auction's success, a CCP may specify alternative arrangements or decision-making personnel should the party responsible for authorising a certain action be unavailable, so as not to delay the progress of the auction." Such fall-back arrangements could also be put into place if the DMG cannot be assembled quickly enough.

Clients believe that it is important to include their viewpoint in CCP governance committees that are established, including any DMG that is established in connection with an auction.

CCPs should – as required by regulation – also inform their supervisor(s) about a default⁵ as soon as possible. Oversight by the CCP's supervisor will make the flexibility required for default management more palatable to market participants.

⁵ This is a requirement in many regulations, for instance article 48 of EMIR:

Considerations for a successful auction (Chapter 4)

3. Do you agree with the description of a successful auction in the discussion paper? Do you agree with the scenarios identified that would constitute an unsuccessful auction, and are there additional such scenarios?

We agree with the aim that "In an auction, a CCP generally seeks to liquidate the portfolio at a reasonable estimate of its market value (which may reflect a risk premium) while at the same time seeking to limit disruptions to the market to the extent possible".

Similarly, we agree that minimum prices can be problematic. Our views on minimum prices are provided under question 11 b.

We also agree with the high-level description of a failed auction as an auction where the CCP does not receive any bids for a portfolio or part thereof, or the received bids are too far away from fair value.

There is however not huge value in defining failure too rigidly on an ex-ante basis. Rather one should look at what the next steps in a given situation would be. If CCP management and the DMG believe that the auction price is too far away from fair value and have good reason to believe it could be improved at a subsequent auction, or the pattern of bids is not commensurate with a successful auction, they could consider running another auction. If not, they need to accept the price. The flexibility required for such decisions requires effective governance.

If no acceptable bids are received and the CCP and DMG believe another auction would not improve the situation, other tools like partial tear-up could be considered. The methodology for how partial tear-up would be applied to each type of asset cleared by a CCP should be defined on an ex-ante basis and agreed with clearing participants.

4. What are the primary challenges to achieving a successful default auction? In addition to those included in the discussion paper, are there other elements in the design of an auction that a CCP could consider in order to increase the likelihood of a successful auction?

We agree with the importance of planning for a successful auction. We also agree with the wide range of factors that will drive a successful auction:

- Hedging strategy (see questions below).
- Portfolio split in relation to the capacity of auction participants.
- Choice of auction format.
- Choice of auction participants both in terms of which participants, their capacity, and the number of bidders.
- Managing information leakage.
- Impact of the product, as well as its liquidity and concentration, to be auctioned.
- Timing considerations.
- Incentives.
- Considerations on predictability vs flexibility.

Some choices the CCP makes when deciding to clear a product will affect the success of the auction, for instance whether there is enough capacity to bid for the products to be cleared, or whether the products to be cleared are suitable to be auctioned in a stressed environment. A CCP should continually monitor the ongoing suitability for clearing of the products that it clears.

In this context we would like to refer to ISDA's whitepaper on CCP Best Practices⁶ and FIA's Recommendations for CCP Risk Management.⁷ Many of the recommendations in these papers will have an impact on auction success, for instance:

- Sufficient margin taking into account factors like concentration and liquidity.
- Sufficient margin period of risk (MPOR) in line with the time it takes the CCP to neutralize the risk in the defaulter's portfolio.
- Capacity for bidding in the market.

Please see the response to question 17 for the associations' views on information leakage.

5. What process/set of factors, including applicable governance, is used/considered to determine whether an auction is successful or unsuccessful? What governance would apply to this determination, including the decision whether to run an additional auction (as opposed to using other tools) and why?

The decision whether the result of the auction is acceptable or not, will largely depend on the specific situation. The CCP and the DMG will have to analyze the bids in relation to market conditions and should also consider the distribution of bids. Based on such considerations, CCP management and DMG will have to apply judgement to determine whether the achieved auction price is the best possible under the prevailing circumstances or whether a second auction could improve the result.

We agree with the proposal for the CCP to seek feedback on why an auction has failed. In general we support extensive communication to auction participants on the failure of the auction, reasons for the failure and implications on the waterfall so that auction participants can factor in this information into future bids.

Subsequent auctions must be improved, for instance by:

- Including more bidders in the auction.
- Different cut of auction portfolios these will likely be smaller portfolios containing contracts in a more granular sub-asset class.
- Additional hedges.
- · Changed market conditions.
- Belief that auction participants would bid differently, knowing the extent of default waterfall likely to be used.
- Other improvements.

Simply re-running the same auction approach a second time should, prima facie, be avoided.

⁶ https://www.isda.org/a/cigME/CCP-Best-Practice.pdf

⁷ https://fia.org/articles/fia-issues-updated-ccp-risk-management-recommendations

Governance is crucial: it is very difficult to define good or bad bids in advance especially since each default is likely to be an idiosyncratic event. The decision whether bids are valid will come down to the judgement of the CCP and the DMG at the time of the auction. For this judgment to be accepted and trusted by participants, especially CMs who are exposed to the tail risk, CMs need to be part of the governance structure. Please see our response to question 2 for more details.

In this context we do not support the statement under "4.3 Response to an unsuccessful auction" that "A CCP may take into consideration the financial soundness of itself.... when determining next steps." Explicitly allowing the CCP to factor this in while determining steps to be taken in a default situation could lead to moral hazard, as the aim to ensure financial soundness of the CCP might result in decisions that affect non-defaulting CMs, clients and financial stability. Such moral hazard makes strong governance and an oversight role for the regulator/supervisor indispensable.

6. What are the considerations for CCPs in choosing to utilise auctions as a default management tool? What product categories are most suitable for auctions and what product categories are least suitable for auctions? How do you assess suitability?

Auctions require time and interactions between the CCP, DMG and participants. Ideally, where possible, closing out the defaulter's portfolio via a central limit order book (CLOB) is preferable.

Auctions may be most suitable for products that are not liquid enough or too complex to be closed out on a CLOB, or where no CLOB exists.

We do not think that any product category is unsuitable for an auction. However, if a quick sale on a CLOB or a direct sale is possible, then such a sale should be explored as the additional time required to set up an auction might make the auction results more costly than a direct sale or sale via CLOB, due to longer exposure to market risk.

The requirement for an auction should not be dependent on whether the products involved are classified as exchange traded derivatives (ETD) or over-the-counter (OTC). The delineation between OTC and ETD is not clear-cut in all cases. Some ETD contracts may not be liquid enough to be actively quoted and traded quickly, and in size, on a CLOB, especially under stressed conditions. CCP management and the DMP should respect the liquidity of the products to be closed out and provide appropriate mechanisms for each of the products the CCP clears. It is therefore imperative that liquidity of products is factored both into the DMP and in the MPOR when calculating initial margin (IM).

7. In addition to those outlined in the discussion paper, are there other considerations that may be useful for a CCP to take into account when designing its hedging strategy, including circumstances where a CCP may wish to delay hedging?

We agree with the points made in the discussion paper.

An additional consideration is the availability of existing arrangements (for instance documentation like ISDA agreements) with potential counterparties for hedges.

The CCP should also take into account cost considerations. The cost and benefits of hedging needs to be carefully analyzed.

The discussion paper states that increasing the chance of a successful auction is the main objective of hedging a defaulted participant's portfolio. We would like to add that hedging also reduces variation margin (VM) payments on behalf of the defaulter and therefore reduces the potential to exhaust the defaulter's IM thus reducing time pressure to auction the portfolio.

Many aspects of default management, for instance managing information leakage, choice of participants, flexibility and governance are very similar between the hedging and the auction phase. Our recommendations on auction processes will therefore also be relevant to the hedging phase.

8. How do you incorporate cross-margining arrangement considerations in the hedging strategy and in the broader auction design process?

How to hedge portfolios in cross-margin arrangements between CCPs will be linked closely to the nature of the cross-margin arrangements, especially how netting benefit between the portfolios across CCPs taking part in cross margining are achieved. This is particularly important in case of cross-margining products which are subject to different approaches to position re-balancing in the event of a failed auction (for instance partial tear-up for derivatives vs. expedited settlement for repos). For cross margin to be acceptable all levels of the DMP must be aligned, otherwise there is a risk that offsetting positions might be closed out at different times and, thus, the offsets removed.

Depending on the nature of the cross-margining arrangement, there will be a range of possible hedging strategies, from all of the CCPs involved hedging their own portfolios on the one extreme; to all involved CCPs agreeing hedges together based on the overall portfolio on the other.

These arrangements will also be dependent on the contractual arrangements for how the cost of default management is distributed between CCPs or if contingent bidding between the two CCPs is permitted. Equally, the design of the most efficient / least cost liquidation process should also drive the design of the cross-margining arrangements and rules.

These considerations not only affect hedging, but also auction design, for instance, how portfolios are cut, and which participants are asked to bid.

Portfolio margining within a CCP will be easier to manage as products that are margined together will usually also be default managed together, including hedging and auctions.

In both cases, cross margining between CCPs or portfolio benefits within a CCP, it is important that offsets need to be based on an enduring economic relationship between contracts.

9. The discussion paper notes that, with respect to hedging, execution methods vary and depend on a CCP's choice of hedging instruments. What methods are used for hedging, and what is the rationale for implementing (or not implementing) a particular method?

We agree with the choices of execution methods and the consideration on information leakage.

The discussion paper states: "However, if the market discovers that the CCP is looking to trade multiple hedging-style instruments, there may be speculation that a default event in those product classes has occurred, in turn leading to an increased risk of market price movements." We agree with this statement but would like to highlight that the types of hedges sought can also lead to information leakage in general.

We wonder whether this statement assumes that the CCP commences with hedging before the default has been declared or made public. In general, CCPs can only trade on behalf of a CM once they have been formally declared to be in default.

As is already a practice in most CCPs, once a member has been formally put into default the CCP should immediately inform all surviving CMs about the default and identity of the defaulter, subject to appropriate confidentiality obligations being in place, unless a regulatory or resolution authority explicitly prevents the CCP from doing so.⁸ Prompt information sharing will support successful porting and avoid new transactions with the defaulter.

Prior to the formal declaration of a default (and where the CCP has prior knowledge) the CCP may formulate its hedging strategy such that the CCP is able to place hedging trades the instant a default is declared.

The decision to invite all CMs to participate in the hedging phase should be balanced by an evaluation of the potential impact on pricing. Before running an auction for hedges, the CCP must take steps to mitigate the risk of information leakage as such an auction could trigger market moves against the CCP, also see response to question 17 below. CCPs should consider seeking two-way prices to address such risk of information leakage. Further CMs should not be juniorized without having had the opportunity to participate and provide good prices. All such mechanisms must be clearly set out in the rulebook to ensure clearing members are ex-ante aware of their obligations.

CCPs could also consider the use of swap executive facilities (SEFs), multilateral trading facilities (MTFs) or organized trading facilities (OTFs) for OTC derivatives and exchanges or brokers for ETD as potential sources of hedges. These platforms might even be useful to sell parts of the defaulter's portfolio instead of an auction.

10. What factors, other than those identified in the discussion paper, do you see as relevant when determining how to split a portfolio? Are there situations where certain factors would be more important than others? Please provide examples.

We expect that more granular auction packages will attract more and better bids as they will be accessible for more participants. Therefore, we agree that smaller portfolios, where positions are grouped together according to their asset class, are potentially easier to price and to absorb.

⁸ This could be for instance the resolution authority for the defaulted clearing members.

Smaller, more granular, portfolios could also increase auction participation, as smaller firms might not have the capacity to bid for larger portfolios that might contain a variety of risks.

We agree with the criteria listed in the discussion paper like size, asset class, product type, segment, currency and maturity. CCPs may also want to consider grouping contracts together that are frequently traded together as part of a spread or trading strategy.

While the actual portfolio cut in an auction will depend on the situation, it must be clear for all participants ex-ante on which auction portfolios they will be required or invited to bid on. CCPs should make available to participants which type of contracts and sub-asset classes might be grouped into auction portfolios ex ante. This will allow participants to better prepare for auctions.

Generally, the more granular the auction portfolio, the higher the likelihood of more participants being able to bid on the portfolio. Bidding might however be more expensive in terms of margin requirements, as potential netting benefits might not be applicable. If the CCP uses contingent bidding, where auction participants bid separately on several portfolios, but offer a better price if they win multiple portfolios, those bidders could win a combination of auction portfolios that include netting benefits.

11. The discussion paper describes two common auction formats. Are there other auction formats not included that could be beneficial for a CCP to consider employing? What factors influence the decision to implement (or not implement) a particular auction format?

We agree with the description of "Single unit pay your price" ("winner takes it all") and "modified Dutch" as the two predominant auction formats.

Factors influencing the decision to implement a particular auction format include:

- Size of portfolio and whether there will be an appetite for one participant to "take it all".
- Homogeneity of the portfolio / ability to split the portfolio into discrete tranches of even risk such that participants can bid for small fractions of the overall risk.
- Complexity of the portfolio that will impact appetite to bid for an entire portfolio.

To enable better coordination of default management, it might be helpful to review whether the auction processes could be standardized where possible and reasonable and be consistent across CCPs clearing the same product type and communicated to participants ex-ante to ensure preparedness.

Standardization by product type will align bidding processes for CMs and avoid mistakes because of differences in DMP between CCPs.

As referenced in the IOSCO discussion paper, CCPs should consider the adoption of standardized auction terms and formats. CCPs should whenever possible adopt standardized terminology and formats for conducting auctions such as the standards that have previously been developed by the

Default Risk Management Working Group in the framework of the CFTC Market Risk Advisory Committee (composed of eight CCPs).⁹

a. Besides promoting competitive bidding, are there other considerations for choosing two-way pricing? Are there circumstances where it would be beneficial or circumstances where it might not be appropriate? If so, please describe.

We agree with the use of two-way prices for suitable products, and for which there is an established market practice of providing two-way prices. However, we see advantages in asking for two-way prices mainly to manage information leakage: The risk that the direction of a defaulter's position can be guessed can be reduced by the CCP asking for bid and ask prices. For products where this is not straightforward, the CCP could distribute two portfolios; one containing the true portfolio and the other containing the same positions but with the opposite sign/direction. While two-way bidding may not always mask the direction of the defaulter's portfolio, it is a helpful tool to manage information leakage.

We do not believe that two-way prices would promote more competitive bids, other than auction bidders not pricing in information leakage. Auction participants will consider not bidding at all if they are forced to provide prices on a portfolio that would put them in a position where their existing portfolios could become even more directional and risky, especially in stressed situations.

As such we do not recommend imposing mandatory two-way pricing in CCP auctions or hedging activities, but to give the CCP the flexibility to use the auction mechanism that is expected to yield the best outcome in terms of bid quality and information leakage.

b. What are the considerations for choosing to use a reserve price in an auction? Are there circumstances where it would be beneficial or circumstances where it might not be appropriate? If so, please describe.

We agree with the concern that minimum prices could be far from the market and act like forced allocation if they are combined with mandatory bidding. It would be likely that firms would rather accept juniorization or a fine before bidding on a portfolio at a price they do not believe to be a reasonable market price or indeed on a portfolio that contains positions they are unable to trade or risk manage.

For these reasons, there should be no minimum price set and publicized by the CCP in advance of an auction that would force deterministic actions such as overriding the CCP's and DMG's judgment as to whether the auction price is reasonable or not.

If there was a minimum price that would force the CCP to hold a second auction, there is a possibility that the market will move in the meantime even further and that the results of the next auction are

9

 $https://www.cftc.gov/sites/default/files/idc/groups/public/@aboutcftc/documents/file/mrac062716_uniformccp.pdf$

worse than accepting the result of the first auction. It should be in the power of the CCP and the DMG to determine whether the bids resulting from an auction are market prices or not.

We acknowledge that while the CCP may have to demonstrate to the defaulter's estate that they accepted a "fair" bid, minimum prices which artificially set a price based on available default resources is not a reflection of a fair price; and that the distribution of bids received would be a better indicator of market prices.

12. The discussion paper highlights two factors that affect the amount of time auction participants may need to evaluate a portfolio and submit bids. Are there other factors that are important to consider? Is there a minimum time period that a CCP should consider providing to auction participants?

We agree with the two factors that affect timing of participants to provide bids, namely type of bidder and type of contract.

We however suggest not to look at the type of bidder but refer directly to the operational capability of the bidder – many clients, e.g. principal trading firms will be at least as fast in providing bids as CMs.

We also suggest that the size of portfolios and the way portfolios are cut will determine the time needed to value a portfolio. Please see the response to question 10 for more detail.

Also, the more standardized file formats are, the easier for firms to load the auction portfolio into their systems for pricing, also see response to question 20 below.

Furthermore, as CCPs conduct more fire drills with broader market participants, the familiarity with the process will help reduce reaction time.

13. If a clearing member contributes a "significant" part of the default fund, should that clearing member automatically be included in the auction process? What reasons are there for not including the clearing member?

If too many participants (CMs or clients) know about the auction portfolio, any winner of the auction may have difficulties in closing out the risk in the auction portfolio. This could lead to bidders factoring in the market knowledge of the portfolio into their bids, overall resulting in worse auction outcomes.

On the other hand, many CMs whose DF contributions are at risk would like to have the chance to protect their DF contribution by bidding well in the auction, especially if it is likely that mutualized resources are required.

No participant should be automatically included in the auction. CCP management and the DMG need to look at various considerations and to weigh the concerns about widespread market knowledge, which might lead to worse prices, against wider participation and therefore likely better prices resulting from the auction.

There are various considerations for the CCP to determine who should take part in an auction, for example:

- Only participants who have successfully completed the default management fire drills should be included.
- Participants could indicate ex-ante that they would bid in an auction.
- Participants whose portfolios, operational and risk management capabilities and capital are commensurate with bidding on the defaulter's portfolios.
- Ask participants who are known to the CCP to be able to provide good bids in auctions of a
 given product, for instance because they post on their trading platforms or stream or
 response to requests for quotes with the best prices for the products in the auction
 portfolios.
- Attractiveness of the auction portfolio: the more attractive the auction portfolio, the more likely there is competition and good prices, even if there are more bidders in the auction.
- Market structure, including which firms are providers of liquidity and that make markets.

14. The discussion paper discusses the trade-off between flexibility and predictability. How do you assess these trade-offs? Can you elaborate on the ways you provide for predictability while still maintaining flexibility (eg establishing rules and conditions to govern the determination of auction parameters)?

We agree that CCPs need to have flexibility. Please see the response to question 2 for more detail. On the other hand, participants require predictability, and might provide better prices if they are not surprised by how the auction is conducted.

We propose that the best trade-off between flexibility for the CCP and predictability for participants is that, while the requirement for flexibility is acknowledged, the CCP provides as much information as possible, in an easily readable format, on how the CCP would cut portfolios, select bidders and conduct auctions under different conditions and what consideration they will have in mind when making these decisions. CCPs should also consider making available default management guides for CMs and clients as rulebook text can be time consuming to digest and often lack the granularity needed by participants.

Frequent fire drills and ensuring operational consistency will also support predictability.

With this approach, participants are mindful that the CCP will have to be flexible but would have a good understanding of how the CCP will probably act unless there are unforeseen circumstances.

15. If a CCP uses juniorisation as an incentive to encourage competitive bidding, and in a scenario where the CCP has invited only a subset of participants to an auction, how will the CCP apply the juniorisation to the clearing participants who were not invited?

Juniorization should only be employed where a participant has been given the opportunity to bid. If a participant is not required to bid and does not volunteer to do so, this participant should not be juniorized.

Seniorization implicitly juniorizes other CMs and might therefore affect firms who were not required or able to bid. Seniorization is however a powerful incentive to support DMP and submit fair bids and is acceptable as long as firms that could get seniorized are also at risk of being juniorized if they bid badly. The use of seniorization makes most sense where auctions are mandatory compared to auctions where only a small number of CMs are invited.

Operational considerations (Chapter 5)

16. CCPs may distribute information that would help auction participants estimate the potential impact of a successful auction bid on their margin requirements. Besides those that members and clients would having during BAU, what information (and at what level of detail) or tools would be most useful for calculating these estimations and why?

We agree that it would be very helpful for bidders to know what the impact of winning a portfolio would be on the winner's margin requirements.

To prevent erroneous bids, CCPs should provide some risk metrics of the auction portfolios, for instance last day's mark-to-market (MtM) or sensitivities (IR01, CS01) as of the last settlement run and the standalone IM requirement of the portfolio.

CCPs could also consider whether to encourage bidders to break-up the bid price into components reflecting the mid MTM and associated margin charge separately. This could help the CCP to identify and to prevent errors of calculation and direction if either the MTM component or the margin charge are inconsistent with prevailing market conditions.

17. The sharing of confidential information (ie the defaulted participant's portfolio) carries potential risks, as discussed in the paper. What are the potential risks associated with information leakages, how does the CCP balance such risks with other objectives (eg sharing sufficient information for a successful auction), and what are the measures the CCP uses to address such risks?

Communication during the whole DMP should be transparent, consistent and frequent to ensure equitable treatment to market participants while ensuring it does not impact the success of the auction.

As is already a practice at most CCPs, once a member has been formally put into default the CCP should inform all surviving CMs about the default and identity of the defaulter, unless a regulatory

or resolution authority explicitly prevents the CCP doing so.¹⁰ Prompt information sharing will support successful porting and avoid new transactions with the defaulter.

As discussed in responses to previous questions, if too many participants (CMs or clients) know the details of the auction portfolio, the winner of the auction may have difficulties in closing out the risk in the auction portfolio. The likelihood of this could lead to winner's curse and bidders factoring in this market knowledge in their bids, overall resulting in worse auction outcomes.

Two-way bidding could be one measure to address the risk of information leakage. Please see the response to question 11a.

All participants in the auction must be subject to an appropriate confidentiality agreement, which can be part of the rulebook or separate agreements. These agreements should have been executed ex-ante.

However, no confidentiality agreement will be able to erase the knowledge in the market of what kind of risk has been auctioned to another participant. For instance, the general trading behavior of market participants, where participants seek prices selectively in case of large and sensitive positions, demonstrates the concern around broader market knowledge. CCP management and the DMP will have to strike the right balance between improved prices by including more bidders and the potential of wide market knowledge negatively impacting the bid price. Factoring in this tradeoff, the CCP will have to determine the optimal number and composition (clearing members and/or clients) of bidders for an auction. The decision about the tradeoff between increased participation and increasing effect of winners curse impacting price should be made on a case-by-case basis and cannot be a one size fits all approach defined ex-ante.

Once a participant has been selected for the auction, each bidder needs to receive enough information as to be able to price the portfolio.

We suggest careful consideration of the proposal in the discussion paper that "Participants may consider how such a non-disclosure agreement may limit the day-to-day activity of the signatory, as well as information-sharing within a participant's organisation during an auction. Participants may also consider how any such limitation would be managed in light of potential resource constraints. participants may also consider how any such limitation would be managed in light of potential resource constraints."

Auction participants and their staff involved in the auction must follow all usual rules on managing conflict of interest and client confidentiality. Any NDA should not be worded in a way that restricts the role of staff bidding in the auction more than necessary and care should be taken to ensure that such NDAs do not result in resource constraints for participants.

¹⁰ This could be for instance the resolution authority for the defaulted clearing members.

18. CCPs use various modes of information transmission during a default management auction (eg email, web-based portal). Can you elaborate on which modes are the most effective in which circumstances and whether it varies depending on the type of information, and why? Would you consider web-based portals a best practice? If so, why?

We agree that the two options presented, either email or dedicated web portals for default management are the dominant methods.

Processes using emails are easy to set up but can be prone to manual / operational errors, including not having the latest list of contacts and their email addresses. Email based processes will also support the exchange of unstructured information, which could lead to operational errors in times of stress. Also, if emails are used, these should be encrypted and measures should be in place to ensure emails cannot be forwarded resulting in information leakage.

Web portals are overall better suited and can provide tailor-made functionality for an auction. Auction processes and workflows can also be better supported in web-based portals and be managed more closely by the CCP. CCPs and CMs however need to ensure that all relevant users know their access details at all times.

When informing auction participants that a default auction is upcoming, a CCP might also make use of emergency messaging tools known from business continuity planning, for instance simultaneous text messages or emails that have to be acknowledged by the recipient.

19. What are the challenges and trade-offs of creating a realistic default management testing exercise? What processes are used to create the scenarios used in such exercises?

We agree with the comprehensive list of considerations and potential issues when designing realistic default management tests.

The biggest issue with simulating tests under stressed conditions is that both the CCP and its members need to keep functioning. It is very difficult to simulate "all-out" market stress and involvement that would happen in a real default, including the psychological stresses on market participants if they feel their firm's financial health is under threat. Such a simulation would also be restricted to cleared exposures and would not include issues in the bilateral market.

- 20. There may be benefits in pursuing greater standardisation and harmonisation across CCPs in relation to certain operational elements which support execution of an auction.
- a. For example, should auction portfolio files be in a standard (or partially standardised) format (for different product types)? If so, which aspects of the portfolio file would benefit the most from cross-CCP standardisation (eg file type, layout, order of information, or content)?

Ideally, bidders should receive files from CCPs that are exactly the same format as from other CCPs clearing similar product types. CCPs could for instance use standards like the financial products markup language (FpML) to achieve this goal. Using a markup language-based file format would be

able to cover a large variety of products and also allow for the flexibility to add product attributes that haven't been added to the standard format yet.

Standardized auction files would require firms to develop a loader for trading / pricing systems only once and would reduce the time for firms to upload the portfolio and to make themselves comfortable that the data has been loaded correctly.

A CCP could improve acceptance of the standard format and efficiency by using the same format for other services, for instance their margin calculator.

b. Besides CCP portfolio files, which other operational elements would benefit (the most) from greater standardisation and harmonisation across CCPs?

To enable better coordination of default management, it might be helpful to review whether the auction process could be standardized where possible and reasonable across CCPs clearing the same product type and communicated to members ex-ante to ensure preparedness. Standardization by product type will also align bidding processes for CMs and avoid mistakes because of differences in DMPs between CCPs.

As mentioned in the response to question 11, CCPs should consider the adoption of standardized auction terms and formats.

CCPs could also consider standardizing rules around seniorization / juniorization and what defines bad bids.

CCPs should make available the mapping of all exchange/CCP contract codes to the codes used by software vendors and data vendors (Bloomberg etc.) to all potential auction participants to facilitate testing and common understanding of the content of the default portfolio.

c. Are there specific operational elements or areas where standardisation and harmonisation may not be helpful

We are not aware of any examples.

Client participation (Chapter 6)

21. For which markets, asset or product classes and client types would client participation be most feasible and/or desirable? What would be the incentives for clients to participate in auctions? Does this differ for direct vs indirect client participation? Please elaborate in your response.

There are a variety of reasons why it is beneficial for clients to be able to participate in CCP default management auctions, including:

- Permitting all available sources of private investment capital to participate in an auction increases the likelihood of success. Relying solely on a (sometimes) small group of clearing member banks, many with similar regulatory capital constraints, is suboptimal.
- Often, clients are the primary liquidity suppliers in a particular asset class. It is critical to include principal traders and other liquidity providers in an auction, as they have the capacity to price and absorb a large risk transfer.

In addition, CCPs have observed that, in real-life examples of defaults, clients often bid very aggressively and are important in resolving the default at the lowest possible cost.

Clients are incentivized to bid in an auction by:

- The aim to support the CCP in its default management process and to avoid the CCP having to invoke recovery tools like variation margin gains haircutting (VMGH) or partial tear-up.
- The chance to acquire a portfolio at an attractive price.

The above incentives also apply equally to CMs. In addition to these, CMs are incentivized as their mutualized resources, namely their DF contribution and any powers of assessment are at risk of being consumed if the CCP has to mutualize losses. Often, CCPs also employ additional tools to incentivize CMs like juniorization.

We note that the discussion on information leakage under question 17 also applies if clients participate in auction.

Direct or indirect participation affects the process of bidding, but not necessarily the available incentives.

22. The discussion paper describes some ways to address the risks borne by a clearing member arising from its clients bidding in an auction. Are there additional ways to address the risks? Are there incentives that a CCP could employ to encourage client participation in an auction (eg ways to encourage clearing members to facilitate their clients' participation)?

Where clients are involved in default auctions, subject to operational and confidentiality requirements, their CM will need to clear any positions obtained by the client in the auction. The CM needs to have the capacity in terms of risk, balance sheet and regulatory capital for the additional portfolio and therefore ultimately needs to agree to clear the auction portfolio. Details on how to manage these decision processes should be left to the terms bilaterally agreed between a clearing member and client.

CCPs must ensure that their CMs and their client bidders are suitable for the portfolios they bid on.

CCPs should ex-ante identify the best suited clients and liquidity providers to bid in auctions. Criteria and processes for the selection of bidders should be subject to usual governance, including the risk committee. Where possible, the CCP should communicate what types of participants are allowed and invited to bid in any given asset class; and what circumstances will affect their decision.

For markets not traded on a CLOB, all auction participants should know at the time of the auction who the other participants invited to the auction are, regardless whether CMs or clients. This would help auction bidders know who else has knowledge about the auction portfolio and determine who could be approached to offload risk after the auction.

During an auction process with client participation, the usual CM to client relationship would be suspended as, for that bidding period, the CM and the client are acting as market peers, not as provider / customer in the normal course of business.

a. One option for addressing a disparity in incentives between clearing members and clients is to require clients to contribute an established amount to the default fund prior to participating in an auction. What are the implications of this requirement (such as regulatory, economic or contractual implications) and how can a CCP address these implications?

The participating CCP, parts of the buy-side, principal traders and CMs did not find consensus whether clients should be further incentivized in a similar way to CMs.

CMs believe that incentives to bid aggressively and provide the best possible price should be aligned between clients and CMs. While all CCPs, clients and CMs are well intentioned, all auction participants will have to act in the interests of their shareholders or owners. Financial incentives are therefore helpful and are already in place for CMs. Clients are not different from CMs when bidding. CMs therefore believe that requiring a DF contribution or a similar financial contribution from clients who wish to bid in the action is a good way to align incentives between clients and CMs and will level the playing field. This DF contribution could be posted prior to the portfolio being shared with a client ("pay to play") or on an ongoing basis ("season ticket"). Clients who can bid in the auction and accept the won portfolios are usually not prohibited to make DF contributions.

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Incentives between clients and CMs could also be aligned by not having a DF in the first place. In this model, once the defaulter's IM and the CCPs' skin-in-the-game are depleted, the CCP would employ tools like VMGH to cover any shortfalls. Whether this is a realistic or desirable model is questionable.

Another solution might be to invite clients to only participate without DF/ penalty in the second round of auction when there is a strong likelihood of VMGH being used (since they are then incentivized to submit good bids). However, clients couldn't participate in the initial/ first round of auctions if they do not have financial incentives.

CMs don't see any regulatory issues with a DF contribution by clients and believe that there should not be contractual implications. A question warranting further analysis would be the sizing of the DF contribution – whether this will be the minimum contribution, or linked to the size of the client's portfolio, or the size of the defaulter's portfolio.

Clients believe that arguments about a free look are completely misplaced:

- Client incentives are already perfectly aligned with CMs in wanting to see a successful
 auction at the lowest possible cost for the CCP given that an auction failure would
 likely result in the CCP utilizing other default management tools, such as VMGH,
 which negatively impact clients. In addition, clients, like all CCP participants, have a
 strong interest in seeing the CCP remain solvent.
- Imposing requirements associated with direct clearing membership onto clients will
 only serve to reduce auction participation to the detriment of the DMP. It is
 important to note that many clients like asset managers or pension funds are legally
 prohibited from making DF contributions.
- Experience with client participation in CCP auctions has clearly demonstrated that clients bid aggressively, reducing the overall cost of resolving the default.
- Clients are subject to the same strict confidentiality agreements as CMs. Clients will be bound by these agreements in the same way as CMs. Including a client in the auction will not increase market knowledge any more than including a CM.

CCPs

Clients

The participating CCP believe that requiring DF contributions from clients will stop these clients from participating in the auction. Some of whom are market makers whose ability to provide bids are needed for a successful auction.

Default of a common participant across multiple CCPs (Chapter 7)

23. The discussion paper suggests that the conduct of multi-CCP default management exercises may provide useful insights into the hedging and auction procedures, should these be conducted by multiple CCPs concurrently. Can you elaborate on what specific insights could be obtained in relation to hedging and auctions via these multi-CCP default management exercises, if possible with concrete examples?

The associations are currently considering coordination of DMPs between CCPs. Two proposals that could lead to better outcomes if a large participant defaults across several CCPs are synchronized DMPs and identification of hedges between CCPs.

Synchronized DMPs: During a default of one or more large CMs, many CCPs globally would initiate their DMP, with a large clearing member overlap. If every CCP initiated their DMP as early as they can, market capacity for hedges and auction bids might already be used up when the CCPs in later time zones start their day. This proposal might involve regulatory issues and conflicts of interests.¹¹

¹¹ A participating CCP cautions that there are issues with this proposal, for instance anti-trust and conflict of interest risks. Many CCPs would never disclosure hedging times or auctions times to a competitor, nor would they alter their procedures in a way that might give rise to a conflict over the fiduciary obligations to its beneficiaries. For example in a contingent bid scenario, at least one CCP will need to delay their auction and therefore acceptance of bids until the contingent bid was known, which may expose the CCP to greater market risk than otherwise would have occurred.

The only possible exception would be under the joint direction of the CCPs' supervisors (regulators). However, delays in the execution of the exit strategy have been experienced in similar situations.

Synchronizing DMP will have the advantage of CMs being able to look at all default portfolios across all CCPs in a joined-up way and will be better able to apportion their risk appetite.

The proposal is for CCPs to run separate DMP, but to synchronize their timing in relation to hedging and auctions and employ tools like contingent bidding: participants would bid on each auction portfolio on its own. They would also be allowed to additionally bid higher prices for a combination of auction portfolios that would be payable only if the participant wins this combination.

Identification of hedges between CCPs: An independent third party would identify hedges between the participating CCP and seek quotes from participants for such hedges.

Once these processes are fully thought through and detailed in terms of default management procedures, these tools could be tested in a multi CCP default management test.

We note that there are already cross margining arrangements across CCPs where some level of coordination between CCPs during the DMP is currently required. Such arrangements could be leveraged and enhanced to extend the solution to other CCPs.

Even without implementation of such proposals, multi CCP fire drills will be immensely helpful in preparing the whole market for a large default.

24. Feedback from the industry suggests that introducing a cap on the number of traders that can be seconded to multiple CCPs from a particular common clearing participant at any one time may mitigate the potential burden on clearing participants' participation in DMGs. How could such caps be instituted and implemented in practice? What could be the challenges of introducing such caps? Apart from caps, are there other options a CCP could consider to mitigate this potential burden?

CCPs should coordinate their DMG rotas to make sure that the burden of providing traders is shared equally and that no firm faces capacity constraints from being required to send traders to CCPs for default management. The impact of trader secondment and the resource burden that it creates could be one aspect evaluated during a multi-CCP default management exercise.

In the absence of coordination or dialogue over resource contention, having a cap of traders could be a fallback solution.

25. Are there efficiencies or benefits to be gained from CCPs coordinating their respective default management auctions or hedging arrangements? If so, how?

See above under question 23.

a. Are there any arrangements that could be coordinated ex ante (eg cross CCP netting arrangements)? How could these arrangements be established? What would be the challenges with these arrangements? How could these challenges be mitigated?

Please see our comments under question 23.

Should arrangements to coordinate default management auctions be feasible, any such arrangements have to be agreed ex-ante, as the amount of operational, legal and anti-trust issues involved could not be solved when time is of the essence. Some examples for arrangements to be established ex ante could be:

- Defining uniform file formats for exchange between the CCP and the independent third party.
- Defining and establishing the independent third party, including agreements and confidentiality arrangements with the involved CCPs.

General

26. Are there any additional points of consideration that would contribute to a successful auction that are not mentioned in this discussion paper? If so, what are they?

Additional points not covered by the discussion paper have been provided in responses to previous questions. Key points:

- Role of CMs (as the provider of mutualized resources) and clients in governance of the auction option to have a DMG with voluntary participation at every default.
- Role of sufficient margining the more defaulter resources are available, the less likely the auction will fail or result in the use of mutualize resources.
- CCPs working with any CM at risk of being declared in default to de-risk its portfolio to either avoid a default or reduce the impact of a default.
- Considerations and trade-offs involved for the CCP when deciding which firms to invite to auctions.
- Risk metrics that a CCP should share with bidders to enable them to verify they have loaded and valued the portfolio correctly.
- Standardization of auction formats, incentive mechanisms and run-books.
- Standardization of file formats.
- CCPs should also consider making available default management guides for CMs and clients as the requirements contained in the CCP rulebook can be time consuming to digest.

Successful porting is critical for clients and also avoids having to include client portfolios in the auction. We welcome that IOSCO is also engaged in this topic and are looking forward to a discussion paper.

27. What are the potential areas in the context of default management auctions where guidance might be most welcome?

The majority of our recommendations could be used initially to document best practice that should be widely implemented by CCPs.

Given the disagreements between clients, CMs and CCPs, two areas could benefit from guidance:

- The level of involvement of CMs as providers of mutualized default resources in governance of the default management.
- Client participation in auctions and whether incentives need to be aligned.

Regarding the coordination of default management processes between CCPs, while no immediate guidance is required, regulatory support could be required to overcome legal, regulatory and antitrust challenges.