



**Response: CPMI-IOSCO Discussion Paper on CCP Practices for
Addressing Non-default Losses, October 7, 2022**

Background

The World Federation of Exchanges (WFE) is the global trade association for regulated exchanges and clearing houses. We represent the operators of over 250 market infrastructures, spread across the Asia-Pacific region (37%), EMEA (43%) and the Americas (20%), with everything from local entities in emerging markets to international groups based in major financial centres. In total, member exchanges trade around \$100 trillion a year and are home to some 60,000 companies, with an aggregate market capitalisation of around \$120 trillion. The 50 distinct central counterparty clearing services (CCPs, both vertically integrated and stand-alone) collectively ensure that traders put up \$1 trillion of financial resources to back their risk portfolios.

With extensive experience of developing and enforcing high standards of conduct, WFE members support an orderly, secure, fair and transparent environment for all sorts of investors and companies wishing to invest, raise capital and manage financial risk.

Founded in 1961, the WFE seeks outcomes that maximise financial stability, consumer confidence and economic growth. We also engage with policy makers and regulators in an open, collaborative way, reflecting the central, public role that exchanges and CCPs play in an internationally integrated financial system.

If you have any further questions, or wish to follow-up on our contribution, the WFE remains at your disposal. Please contact:

Ryan Ingram, Senior Adviser, Regulatory Affairs: ringram@world-exchanges.org

Richard Metcalfe, Head of Regulatory Affairs: rmetcalfe@world-exchanges.org

Charlie Ryder, Manager, Regulatory Affairs: cryder@world-exchanges.org

Nandini Sukumar, Chief Executive Officer: nsukumar@world-exchanges.org

WFE response to the CPMI-IOSCO Discussion Paper on CCP Practices for Addressing Non-default Losses

October 2022

The WFE welcomes the opportunity to comment on the CPMI-IOSCO Discussion Paper on CCP Practices for Addressing Non-default Losses (the **Paper**)¹ to share perspectives and feedback on behalf of our members. We remain supportive of the broader effort to ensure that the international policy framework best promotes the resilience, recoverability, and resolvability of CCPs in both clearing member default scenarios and loss scenarios unrelated to a clearing member default (referred to as **NDLs**).

Industry discussions have appropriately continued to focus on CCP resilience, and, in part, this has led to discussions on the operational resilience of CCPs, as well as their enterprise risk management, which forms an important part of a CCP's framework for mitigating the risk of NDLs occurring in the first place.

The WFE has publicly expressed support for initiatives that prioritise financial stability, whether led by CPMI-IOSCO², the FSB^{3,4,5}, or jurisdictional regulatory agencies⁶, and has sought to proactively contribute to the international dialogue on these and related initiatives. In doing so, our members have contributed significantly to ongoing engagement on the implementation of many post-crisis initiatives. On NDLs, the WFE published a paper in June 2020 that describes approaches that CCPs have taken for addressing NDLs that relate to operational risks, custodial and banking risks, and investment risks. As described in the paper, we believe it is fundamental to recognise that, due to the different facts and circumstances underpinning different types of NDLs, CCPs treat specific types of NDLs differently, and therefore the focus should continue to be on the avoidance and mitigation of risks resulting in NDLs in the first place.⁷

The WFE maintains the view that principles-based approaches set a framework within which CCPs can effectively identify and manage the specific risks that they may experience, regardless of whether they are related to default losses or NDLs. We appreciate the ongoing efforts to ensure the resiliency of the broader financial system, however we do not believe that further guidance related to CCP NDLs is necessary at this time. In large part, this is due to the strong framework that the *Principles for Financial Market Infrastructures (PFMIs)*⁸ have already established for a CCP's management of NDLs. Nevertheless, we appreciate the importance of efforts to establish further understanding and ensure practices are in place to prepare for and manage NDL risks should they materialise. In that context, the WFE appreciates the

¹ [CPMI-IOSCO: A discussion paper on central counterparty practices to address nondefault losses - August 2022](#)

² [WFE: CPMI-IOSCO Consultative Report: Framework for Supervisory Stress Testing of Central Counterparties \(CCPs\) - September 2017](#)

³ [WFE: Comment: FSB Report on Central Counterparty Financial Resources for Recovery and Resolution – April 2022](#)

⁴ [WFE: Response to FSB discussion paper on the financial resources to support CCP resolution - February 2019](#)

⁵ [WFE: Response: FSB consultation on treatment of CCP equity in resolution - July 2020](#)

⁶ [WFE Response: ESMA Consultation Paper on draft RTS on the content of CCP resolution plans - January 2020](#)

⁷ [WFE: Briefing paper on non-default loss - June 2020](#)

⁸ CPMI-IOSCO: Principles for financial market infrastructures - April 2012

opportunity to further engage on these topics and to share perspective on how CCPs identify and address potential losses arising from NDLS.

EXECUTIVE SUMMARY

The WFE welcomes this Paper and the associated efforts from CPMI-IOSCO to enhance the understanding of practices that are in place to address and manage NDLS. Importantly, the extent to which NDL risks may arise for a CCP will demonstrably vary, therefore it is not something that can or should be assessed, managed, or overseen in an overly prescriptive or uniform manner. We continue to strongly support the principles- and outcomes-based approach of the PFMI, which allow CCP's to appropriately tailor their risk management practices to the unique risks that they face.

The Paper helpfully highlights numerous practices that CCPs employ for identifying NDL scenarios and quantifying NDLS as well as the various types of resources and practices for addressing NDLS in the unlikely event they arise. One of the more significant takeaways we had from the Paper is the diversity of practices that CCPs employ as well as the recognition that assumptions and scenarios CCPs use to quantify potential NDLS are commonly informed by expert judgement given the challenges of modelling losses that are low probability, high-impact events and with limited historical data and empirical evidence. We believe the diversity of these practices and the use of expert judgement should be embraced to the extent they are consistent with a given jurisdiction's local implementation of the PFMI.

The Paper rightly acknowledges that instances where NDLS threatened or had the potential to threaten the viability of a CCP are very limited. We believe that this is testament to the fact that comprehensive frameworks are already in place to identify potential NDL risks, and that risk management practices have already been established to prevent, manage and address these risks, should they materialise. And while the Paper notes that "there is limited common understanding of CCPs' current practices to address NDLS" as compared to default losses, we believe that this is not due to lack of disclosure by CCPs, but rather can be, in general, attributed to the diversity of practices employed by CCPs, which are tailored to the unique characteristics of how specific NDL risks and scenarios may present themselves to a given CCP. In fact, CCPs provide significant disclosure, including with respect to NDLS, through the existing PFMI disclosure framework.

Consistent with the PFMI, we concur that CCPs should consider a range of scenarios that may arise related to general business risk, operational risk, investment risk, custody risk and legal risk, including the failure of a highly interconnected entity. WFE further believes that the range of scenarios and corresponding quantification of losses need to reflect the unique risks to a given CCP. Recognition of this point is fundamental as each CCP will face risks related to NDLS that are unique to its individual characteristics, such as the market it operates, its operational structure, its risk management practices, and its specific clearing offerings. The diversity of NDLS, generally, and the unique characteristics of CCPs only further affirms the appropriateness of the PFMI, which state CCPs "should have risk-management policies, procedures, and systems that enable it to identify, measure, monitor, and manage the range of risks that arise in or are borne by the" CCP, and would include those related to NDLS.

Nevertheless, we agree with the reference in the Paper that ‘low risk’ does not mean ‘no risk’ and that NDLS must be accounted for. However, in that context, we believe that the focus should be less on extrapolating extreme (at times implausible) scenarios or attempting to estimate the impact of a specific event (where no reliable or consistent applicable data is available), and more on ensuring that CCPs are able to demonstrate that risk management practices have been established to address this category of risks and potential scenarios. Furthermore, we have concerns that prescriptive and/or common approaches to address NDLS scenarios and events would actually be less effective in preventing or mitigating NDLS than the current approach set out in the PFMI as it is highly unlikely that the facts and circumstances underpinning different types of NDLS and the scenarios and events that may lead to them will be the same at a given CCP, nor among different CCPs.

The following sections include the WFE’s feedback to specific questions in the Paper. Our responses seek to ensure that NDLS risks are appropriately characterised and look to raise awareness on how such risks are covered by existing risk management practices of CCPs, as part of, and consistent with, established regulatory guidance from standard setting bodies, as well as direct regulation already in place.

I. Overarching Questions

1. Are there areas in the context of CCP NDLS where further guidance under the PFMI might be helpful? If so, what are the potential areas where further guidance might be most helpful?

We do not believe that there are areas in the context of NDLS where further or more prescriptive guidance is required at this time. The current framework for CCPs’ management of NDLS set forth by the PFMI is sufficiently strong. In fact, we are concerned that more prescriptive guidance may act to impair or limit the flexibility required for CCPs’ efforts to prevent, mitigate, or manage NDLS.

The PFMI, as implemented locally by jurisdictions, already require CCPs to identify, prepare, and establish plans to address potential scenarios that will, among other things, describe measures to manage and mitigate the impact of NDLS should they materialise. Such measures may be part of the risk management framework; however, it should be recognised that such measures may otherwise be incorporated as part of an enterprise risk management framework and/or internal control framework (together referred to as the **ERM-IC Framework** for purposes of this response).

2. Are there any additional points of consideration or practices, in addition to those mentioned in this discussion paper or in the PFMI and existing guidance, that would help CCPs effectively and comprehensively address losses from non-default events? Are there areas that require additional clarity from authorities? If so, what are they?

The existing requirements, specifically those in place through jurisdictions’ local implementation of the PFMI, to systematically identify potential risks and implement approaches to manage or mitigate them are consistent with the stated objectives for CCPs to effectively and comprehensively address NDLS. Such requirements are embedded in CCPs’ risk management frameworks, as well as through any applicable ERM-IC Framework, including, as example, business continuity planning and disaster recovery planning (**BCP-DR**), as relevant. While the impact of NDLS on a CCP’s operations and the allocation of such losses

are clearly legitimate policy considerations, the focus should continue to be on the avoidance and mitigation of risks resulting in NDLS.

In addition, as noted in the Paper, CCPs employ a number of different practices for addressing NDLS in the unlikely event that they arise that are tailored to the unique nature of each CCP and its underlying characteristics. Given the diverse set of circumstances each CCP will face regarding the events that might lead to NDLS at any given CCPs, it is logical that CCPs would face any such circumstances with different tools and risk management practices. Therefore, we believe it is imperative to sustain the appropriate flexibility provided for in the PFMI so that CCPs can employ practices tailored to the unique risks that they face. **More specifically, we fear that overly prescriptive guidance that attempts to granularly define requirements related to NDLS could undermine the ability of CCPs to appropriately manage and address NDLS should they arise.**

3. Are there particular challenges that CCPs face in planning for an orderly wind-down in a NDL scenario? Are there means to motivate further progress in orderly wind-down planning?

Existing frameworks for NDLS already establish the requirement to plan and prepare a comprehensive approach to recovery and orderly wind-down. In doing so, if challenges are identified, they would already be considered and addressed through current requirements of existing frameworks.

4. Would a similar review of practices in the context of NDLS for FMIs other than CCPs be helpful? Would further guidance under the PFMI be helpful in this context?

No comment.

II. Identifying NDL scenarios, quantifying NDLS and assessing the sufficiency of resources

5. How can a CCP identify potential NDL scenarios comprehensively as well as with an appropriate degree of granularity?

We agree with the Paper's notation that CCPs generally consider "a range of NDL scenarios that may arise from risks relevant to their business activities, including general business risk, operational risk, investment risk, custody risk and legal risk" and that many CCPs employ frameworks (eg, risk management frameworks, ERM-IC Frameworks) that also "consider such risks from their activities both comprehensively and separately from each other, in line with the nature of the CCP's business, its products and markets cleared". The PFMI provide a structured, methodical, and comprehensive approach to identify potential NDL scenarios and risks that can be appropriately tailored to a CCP's specific offering within its respective risk management framework and ERM-IC Framework, as relevant.

6. Given that a CCP's efforts to prevent losses from non-default events may fail, what are effective approaches to prepare for and address resulting losses, in particular from low-probability, high-impact events?

The Paper recognises that certain NDL events are low-probability, high-impact events for which there is a limited amount of historical data in which to assess potential exposures, therefore the most effective way for a CCP to prepare for such an event is to continually assess the effectiveness of their risk management practices in place for addressing NDLs. Additionally, in the continually evolving environment, CCPs should (as many do already) regularly evaluate the set of potential NDL scenarios, including the potential size of losses that could result from such a scenario, and establish practices for how such losses would be managed and allocated (where it is deemed the appropriate course of action). As such, the existing requirements embedded into the CCPs' risk management frameworks, as well as through any applicable ERM-IC Framework, to identify potential risks and implement approaches to prevent, manage, and mitigate them, are already highly effective in preparing for and addressing resulting losses, in particular from low-probability, high-impact events.

It is highly unlikely that the facts, circumstances, scenarios, and potential impact underpinning different types of NDLs (and the scenarios that may lead to them materialising) will be the same. Therefore, we maintain that the focus should be on ensuring that frameworks are implemented to best prepare a CCP to not only mitigate, but effectively manage, NDLs.

7. Are approaches such as sensitivity analysis, scenario simulations, drills or stress-testing analysis useful for quantifying resource needs and assessing adequate NDL coverage? If so, what are potential obstacles hampering progress in this area and what could be possible avenues for reducing those obstacles?

Where CCP risk management frameworks (consistent with a jurisdictions' local implementation of the PFMI) and any applicable ERM-IC Framework are effectively implemented, the practices described in this question (eg, sensitivity analysis, scenario simulations, drills, and stress-testing analysis) are typically already in place, where relevant, and serve as a useful tool to provide the CCP with analysis of NDLs. In performing such practices, we believe that the existing frameworks already provides for assessing NDL coverage.

8. Are there particular types of NDL scenario that CCPs could consider to help assess potential resource needs and coverage for NDLs? (eg stressed business and operational risk scenarios extrapolated from past events, NDL scenarios exacerbated by wider macroeconomic stress, or other hypothetical NDL scenarios)?

No comment.

9. How and to what extent can the potential simultaneous occurrence of default and non-default-related events be taken into account?

First, it should be recognised that the scenarios and corresponding risks associated with both a clearing member default and a NDL are most commonly separate and distinct, however many CCPs already do consider the possibility of them occurring simultaneously. And consistent with the PFMI, CCPs put in

place frameworks and resources to manage each of them. **However, when considering if clearing member default and NDL events can occur simultaneously, it is particularly important to consider the plausibility of such scenarios occurring. Although a CCP must consider what is appropriate for its offering and the unique risk that it faces, it is likely that the simultaneous occurrence of a clearing member default and most NDLs is extreme and implausible.**

Furthermore, the potential for simultaneous occurrence should generally be viewed as less likely, given the material enhancements to the regulatory framework that applies to financial institutions (FIs) that serves to further reduce the likelihood and potential impact of any such disruptions and/or failures to perform services to CCPs. As example, the resolution regime for FIs (particularly for those classified as globally systemic banks, or G-SIBS) endeavours to mitigate the occurrence of resolution events, as well as support the continuity of critical services to CCPs should a resolution event occur. The 2017 FSB report ‘Guidance on Continuity of Access to FMIs for a Firm in Resolution’⁹ outlines arrangements and safeguards to facilitate continuity of access to/for FMIs for/to a firm in resolution, including ex-ante preparations, planning, and assessments by FMIs and their supervisors, and by FIs and their supervisors. It is also relevant to consider that different legal and/or separately regulated entities may have a relationship to the CCP, even where such entities are part of the same parent company.

- 10. What factors, in addition to those suggested in the PFMI, might a CCP helpfully consider when calculating the amount of liquid net assets funded by equity that is sufficient to implement its recovery and orderly wind-down plans? How can a CCP effectively incorporate its general business risk profile and the length of time required to achieve recovery or orderly wind-down into this analysis?**

The factors to be considered in the calculation of sufficient liquid net assets funded by equity (LNAFBE) are already considered as part of CCP recovery and wind-down planning. It is important to note that the factors that a CCP will need to consider in calculating the appropriate amount of liquid net assets will rightfully vary based on the unique characteristics of the CCP. As such, it is imperative that a CCP have the ability to calculate its liquid net assets in line with the unique facts and circumstances that are relevant to its recovery and wind-down plans. That said, CCPs often estimate the costs that would be incurred during wind-down and the timeframe over which they would have to bear those costs to estimate LNAFBE.

It should be also noted that CCPs have clear incentives to ensure the continuity of their services, and through their risk management frameworks as well as ERM-IC Frameworks have determined the tools and financial resources needed to support resiliency and recovery from clearing member default losses and NDLs. CCPs’ recovery and wind-down plans are comprehensive and are regularly reviewed and challenged through their governance frameworks and the CCPs’ primary supervisors.

- 11. Given the limited availability of historical data on severe NDL events, what do you consider the most important sources of information in developing plans to address NDLs, particularly for potential recovery situations (eg internal expertise, key stakeholders such as clearing participants and service**

⁹ [FSB: Guidance on Continuity of Access to Financial Market Infrastructures \(“FMIs”\) for a Firm in Resolution - July 2017](#)

providers, external market experts, relevant authorities, frameworks and practices in place for other types of financial institution)?

As described in our response to Question 5, it is highly unlikely that the facts, circumstances, scenarios, and potential impacts underpinning different types of NDIs will be the same for any given CCP over time, or among different CCPs at any time. Therefore, a general application of historical data may lack context, relevance, plausibility, and due consideration to practices already in place, implemented through risk management and ERM-IC Frameworks.

We agree that when CCPs establish plans to address NDIs, there are important sources of information (eg, those described in the question) that they can draw upon. We consider internal expert judgement and internal data as the most relevant sources of information for the development of plans to address NDIs. Internal subject matter experts, in particular, are a valuable resource to supplement limited historical data. However, these information sources must be relevant to the risks for which the given CCP is exposed and more specifically, the risk it is evaluating. Once again, this demonstrates the appropriateness of the PFMI, which require that a CCP address the range of risks for which it is exposed (including those related to NDIs), but allows a CCP to employ practices and in this case, use of information, that is appropriate for its risk management needs.

12. Do you have any suggestions for how the clearing industry could leverage loss data from other industries or collaborate to share anonymised loss data?

Considering the rarity of relevant NDIs and the institution-specific factors related to their occurrence, it is questionable whether such data sharing within the clearing industry (if legally feasible) will provide any valuable insights for CCPs. CCPs already have the possibility to source loss data from other industries. While such external data may be a helpful complement, the underlying cases may not be applicable to a CCP, and the benefits of using data must be assessed individually by each CCP.

As described in our response to Question 11, CCPs must apply internal expert judgement to determine if using loss data from other institutions is appropriate based on the unique NDI-related risks it faces.

13. What key measures can help to ensure that capital replenishment could be achieved in a timely and effective manner? Does the clear definition and testing of processes to obtain backup funding from affiliates or external sources underpin the credibility of that funding? How do you assess the current availability of committed or legally binding funding arrangements?

Consistent with the PFMI, CCPs' recovery plans already comprehensively describe practices and procedures to promote its recovery, including the estimation of financial resources needed to complete such processes. The recovery plans must also consider the need and mechanisms for capital replenishment. Typically, CCPs undertake an analysis to estimate the resources needed to recover and replenish its capital adequacy, where impacted. The individual CCP is then best placed to calculate the amount that would constitute a sufficient sum for capital replenishment based on the specific facts and circumstances relevant to its recovery planning. Where a CCP enters into any contractual agreement

which it may rely upon for purposes of liquidity and/or financial resources, this contract should have a strong legal basis, consistent with the expectations established within the PFMI. The reliability and timeliness (as would be defined in any such agreements) is often part of routine CCP testing (eg, through test draws).

14. What role should insurance play for NDL, considering potential uncertainties about coverage, pay-out delays and performance risk? Are there certain types of NDL risk for which insurance may be a more appropriate loss-absorbing resource than for other types of NDL risk?

Insurance arrangements, where available, may be an effective way of mitigating the impact of NDLs and are often considered in combination with other tools (to mitigate and manage potential losses) and financial resources. Commonly, CCPs may consider insurance coverage for legal, operational, and general business risk events, including civil liability and crime, internal and external fraud, property damage, cyber-security events, and business interruption. However, the costs (premiums) of obtaining such insurance must be proportionate to the benefits (scope of coverage). We also agree with CPMI-IOSCO on the limitations of insurance in the context of a severe NDL event and accordingly the context to which it can be relied on as a risk mitigation measure in the risk management framework of a CCP.

15. What practices might improve CCPs' planning for an orderly wind-down necessitated by NDLs?

For CCPs to tailor their plans most appropriately for an orderly wind-down necessitated by NDLs, they must continue to have the appropriate discretion and flexibility to determine how to address NDLs in line with their unique characteristics. Further, it should be noted that the use of certain recovery tools, resources, and wind-down strategies will be dependent on the types of losses that have led to the wind-down. Therefore, given that the types of NDLs a CCP is likely to face will vary by CCP and among CCPs at any time, it is important that CCPs be able to tailor their recovery and wind-down plans for the specific scenarios that they could potentially face.

In addition, WFE believes that practices that can support and improve wind-down planning include: conducting a prior analysis of the amount of time and costs needed to achieve an orderly wind-down based on the particular CCP's businesses and services and testing of available recovery and wind-down tools to the extent possible.

III. Achieving operational effectiveness

16. Are there any additional notable practices that could promote the operational effectiveness of plans to address NDLs?

Consistent with the PFMI, risk management and ERM-IC Frameworks have already established a comprehensive approach to address NDLs, including, as part of recovery, orderly wind-down, and BCP-DR planning. Regarding operational effectiveness, these frameworks typically require an annual review and approval, and in most cases, testing the effectiveness of corresponding plans, including with other stakeholders (where relevant).

These frameworks already establish comprehensive approaches regarding operational risk management for CCPs that promote the operational effectiveness of, among other things, measures to identify, mitigate, and manage NDL scenarios and risks. And as described above, NDL risks will vary by CCP, and among CCPs at any time, and are addressed by measures already in place to mitigate and manage NDLs; therefore, any efforts to assess the operational effectiveness of plans to address NDLs will vary depending on the facts and circumstances surrounding a given NDL and the particular CCP.

In that context, specific to CCPs, we also consider that it should not only be incumbent upon the CCP to identify measures to enhance the operational effectiveness of plans to address NDLs. Proactive measures should be advanced by all stakeholders, counterparties, and supervisors to reduce the likelihood of NDLs occurring in the first place, as that is the most effective way to address NDLs.

As an example, to address NDL risks related to third-party custodial and banking losses, investment losses, and liquidity constraints, the following measures could be implemented:

- Implementation of the FSB Guidance on Continuity of Access to FMI for a Firm in Resolution. In doing so, where CCPs rely (at times with no other alternatives) on FIs for critical services (beyond that of a clearing member), CCPs would be assured that such disruptions would not lead to potentially catastrophic NDLs which may have wider consequences on financial markets (eg, as cited in the CPMI-IOSCO Analysis on Central Clearing Interdependencies).
- Allow qualified CCPs to maintain deposit and custody accounts at central banks to reduce NDL risks related to investment loss and custodial failure. CCPs (and likewise the broader financial market) have very little choice in terms of settlement banks and custodians, and such access would also act to reduce such exposures.

17. What approaches might be helpful to ensure that relevant third parties (such as service and liquidity providers) fully understand and are prepared for their potential role in addressing NDLs?

Consistent with the expectations of the PFMI that critical third parties will provide the services for which a CCP relies upon, as part of the initial and ongoing engagement by a CCP of a third-party, there are relevant contractual obligations and protections that can be included in a legally binding services agreement between a CCP and third parties that serve to affirm that the third-party understands and acknowledges their obligations, including performance under stress scenarios. Such provisions can include, but are not limited to, service descriptions across scenarios, performance criteria and protections and termination provisions. These approaches, already in place by many CCPs, are tailored to the unique offering of each CCP and the service providers utilised, and serve to identify potential gaps in availability and test their effectiveness. With respect specifically to liquidity providers many CCPs also conduct test draws to affirm that funds are available in a timely manner.

18. What are the essential elements of appropriate due diligence vis-à-vis relevant third parties on which CCPs would expect to rely in an NDL event?

Many CCPs have dedicated areas within their risk management organizations that are focused on assessing and addressing third-party risks, including those resulting from reliance on third-party service providers. These departments often conduct due diligence during the onboarding process as well as ongoing monitoring of third parties.

19. What are the key factors and constraints that impact the choice and order of different tools for the various types of NDL scenario?

It is important to recognise that CCPs' financial resources cannot be looked at apart from its fundamental risk management practices, which greatly mitigate the likelihood of any NDL scenario or event leading to recovery measures in the first place. As a principal matter, the viability of a clearing service is not based *only* on the quantum of financial resources available in the event of NDL scenarios; rather, and more significantly, the ability for the CCP to successfully apply its practices and procedures to mitigate the likelihood of NDLs occurring in the first place. That said, consistent with the PFMI, CCPs establish practices ex-ante to not only identify but also address NDLs – which often are effected through lines of defence to cover each NDL type. And in that context, the appropriate measures or tools to address a particular NDL will therefore depend on and vary depending on the facts and characteristics of the type of NDL in question.

As described in the Executive Summary, it is highly unlikely that the facts and circumstances underpinning different types of NDLs and the events that may lead to them will be the same at a given CCP, nor among different CCPs – therefore, it would be inappropriate to establish prescriptive and/or common approaches (eg, sequencing of tools) to address NDL scenarios and events. In the scenario where actions to address an NDL concern financial resources, we believe that these actions should be viewed in the context of how any such NDL may materialise and what financial resources would be required.

20. What technological tools should be developed to promote the operational effectiveness of plans to address NDLs?

No comment.

IV. Reviewing and testing plans for NDLs

21. Are there additional notable practices for reviewing and testing plans to address NDLs?

No comment.

22. What challenges are there to achieving the goal of increasing the involvement of additional stakeholders in different stages of review and testing of plans to address NDLs?

No comment.

23. Are multi-CCP crisis management drills an effective tool for testing preparedness to address NDLS? Are there any barriers to effectively conducting this type of exercise? What role should authorities play in supporting these exercises?

We do not consider that multi-CCP crisis management drills would be an effective tool or exercise to test preparedness of the CCP to address NDLS. As described in our response to Question 5, it is highly unlikely that the facts, circumstances, scenarios, and potential impacts underpinning different types of NDLS will be the same, for a given CCP or among CCPs.

As described in the WFE response to the FSB Report on Central Counterparty Financial Resources for Recovery and Resolution, the nature of NDLS scenarios and risks is critically important. Analysis of such scenarios must consider whether they are grounded in actual experience and/or are demonstrably plausible (when considering the extensive nature of both risk management and ERM-IC Frameworks). Hypothetical scenarios which assume that a single NDLS scenario or risk would affect multiple CCPs at the same time in the same manner are likely to be beyond extreme as well as implausible. This discussion must also recognise the actions that would be taken by regulators, the CCP, the clearing members, and/or the other counterparties of the CCP, many of which are already accounted for in existing regulatory frameworks and the rules/procedures of the CCP.

V. Providing effective governance, transparency and engagement with participants and authorities

24. Are there additional notable practices for providing effective governance, transparency and engagement with participants and authorities in the context of NDLS?

Appropriate and sufficient guidance for effective governance, transparency, and engagement with participants and authorities in the context of NDLS has already been established through the PFMI and related disclosures. Further, through the qualitative PFMI disclosures and other publicly available information provided by CCPs (eg, rulebooks, rule filings, etc.), and participation of participants on boards, risk committees, and risk working groups there is already meaningful transparency related to approaches and practices to address NDLS.

25. What are the most important elements of appropriate processes and governance arrangements for rule-based loss allocation to support clearing members in anticipating and preparing for potential exposures?

To best support clearing members in anticipating and preparing for potential NDLS-related exposures, any specific treatment or liability for NDLS including any rules-based allocations of NDLS should be transparent and included in the publicly available CCP rulebook, as is the practice of CCPs today.

+++++