

**Response to the CPMI-IOSCO Consultative report
FMI's management of general business risks and general business losses: Further guidance
to the PFMI**

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Executive Summary

ISDA and FIA (collectively referred to as the Associations) have long-established views on general business losses.

In our previous papers, such as the whitepaper on [CCP non-default losses](#) or the [response](#) to the CPMI/IOSCO paper “[A discussion paper on central counterparty practices to address non-default losses](#)” we emphasized that non-default losses (NDLs), now referred to as general business losses (GBLs), should typically not be allocated to participants. Such losses stem from risks under the control and governance of the financial market infrastructure (FMI), including operational and cyber incidents, legal and regulatory actions, investment risks, as well as other routine management decisions. Participants generally have limited transparency regarding how FMIs manage these areas and are unable to effectively influence the handling of GBLs, including their likelihood or potential impact. Assigning GBLs to participants would create misaligned incentives and diminish the accountability of FMI owners and management for maintaining strong and dedicated internal controls.

We welcome that the consultative report “[FMI's management of general business risks and general business losses: Further guidance to the PFMI](#)” (the Consultation) requires FMIs to maintain sufficient resources to be able to bear GBL they are solely responsible for.

FMIs also need to be transparent about their GBL risk management framework, including the scenario analysis and resources reserved for such losses.

While usually principle based regulation is preferable, in 2023, CPMI-IOSCO already published an updated document entitled “[Report on current central counterparty practices to address non-default losses](#)”, which found that “*Although certain practices appeared to be well developed, these practices were not equally widespread. A few other practices appeared less well developed, including some that were potentially inconsistent with the PFMI.*” The report “[Implementation monitoring of the PFMI: Level 3 assessment on general business risks](#)” (the L3 Assessment), that was published at the same time as the Consultation, found six issues of concern around GBLs, with more than half of surveyed FMIs being affected by at least one issue of concern or serious issue of concern. Nearly a quarter of FMIs were affected by three or more issues of concern or serious issue of concern. We therefore

welcome more prescriptive guidelines to support effectively a more equal implementation of the principles around GBL.

We also propose that CPMI–IOSCO could consider a post-guidance assessment (similar to Level 3) to report on good practices and support proportionate, scenario-driven adoption, especially in smaller jurisdictions. We also propose for this review to revisit whether the issues identified in the latest L 3 Assessment have been addressed. Such an approach would provide transparency, facilitate knowledge-sharing, and encourage convergence over time without being prescriptive.

Recent notable GBL incidents, such as the LME lawsuits in 2022 and the CME outage at Thanksgiving 2025, highlight the ongoing importance of effective GBL management, including adequate resourcing and funding, for the industry.

In 2025, we have introduced a [capital framework proposal](#) for central counterparties (CCPs). As CCPs are as critical as banks, they too should maintain an equally strong capital buffer.

We appreciate the Consultation, even if CPMI–IOSCO’s recommendations do not fully endorse a capital framework:

- We endorse CPMI–IOSCO’s LNAFE approach, clarifying that six-month operating expense is only a minimum. We also propose to increase this to 12 months.
- FMIs must calculate separately LNAFE under different scenarios and ought to hold additional LNAFE if scenario analysis suggests higher recovery or orderly wind-down costs than the six-month operating expense.
- FMIs must reserve both liquid assets and equity equivalent to the LNAFE requirement and sustain a documented, actionable plan for obtaining more equity if necessary.
- We also support the recommendation that FMIs transparently document their risk assessments and underlying assumption and involve relevant stakeholders in their comprehensive general business risk management process.

We urge members of CPMI and IOSCO to implement these new guidelines, once agreed, in a globally consistent fashion that avoids conflicts of law across jurisdictions, and ensure consistent implementation of GBL risk management by FMIs, especially regarding the resources they reserve for these risks.

Additionally, our response urges CPMI–IOSCO to clarify key aspects of the framework. These include the severity of loss scenarios, the treatment of multiple or connected GBL events, and whether GBLs always trigger recovery processes.

Our response also proposes a minimum set of GBL scenarios that all FMIs should incorporate into their risk frameworks to promote comparability, as well as enhanced transparency on LNAFE sizing, insurance coverage, scenario assumptions, and resources held. To strengthen global convergence, the Associations recommend common stress scenarios, minimum disclosure standards, and optional post-guidance assessments similar to PFMI Level 3 reviews.

Finally, the response reiterates that VMGH should not be used to allocate GBLs, as it is not designed for this purpose and would create arbitrary and potentially destabilising impacts on participants.

Overall, ISDA and FIA support the CPMI–IOSCO initiative and encourage globally consistent, transparent, and proportionate implementation that strengthens accountability, improves comparability across FMIs, and ultimately enhances the resilience of the clearing ecosystem.

In this response we focus on CCPs. However, many or all of our comments are also applicable to other types of FMI. Statements referencing FMIs are intended to apply broadly to all types of FMIs, while statements specifically pertaining to CCPs are relevant only to CCPs.

This paper covers the positions of our members on the buy-side and sell-side. The paper does not reflect the views of many CCPs, and many of the CCPs are in disagreement with the views.

Responses to questions

1) Scope and interaction with other PFMI principles

a) Is the guidance provided on the scope of general business risk and interaction with other PFMI principles clear and sufficient? If not, how should it be amended?

We find the guidance clear and sufficient, and value the Consultation's clarification of relevant principles for GBLs.

We believe that FMIs should consider all risks beyond member defaults that could lead to losses not covered by normal business processes. A broader risk assessment will help FMIs better prepare for non-traditional loss events, enhancing resilience and stability.

2) Identifying, monitoring, and managing general business risks

a) Is the guidance provided on identifying, monitoring and managing general business risks clear and sufficient? If not, how should it be amended?

Overall, we believe the guidance is clear and sufficient.

We welcome the statement that the presence of risk mitigants do not mean zero GBL risks.

Furthermore, while we appreciate that the guidance is designed to be flexible and applicable to a wide range of FMIs, recognising the diversity in risk profiles and operational structures, we propose for CPMI–IOSCO to consider specifying a minimum set of GBL scenarios that all FMIs should address in their risk assessments, to promote consistency and ensure that key vulnerabilities are not overlooked across the sector. The list might contain additional scenarios for certain types of FMIs.

For CCPs, we propose to at least include the following scenarios (scenarios in blue should be applicable to all types of FMIs):

GBL Scenario	Description
Investment activities unrelated to member defaults (member funds)	CCP takes losses from investment of IM or DF, that has not been directed by members
Investment losses (FMI own funds)	An FMI takes losses from investment of its own funds
Failures of settlement banks unrelated to member defaults	A settlement bank defaults and all cash in its accounts are lost, unless the clearing member selects its settlement bank from a sufficiently large choice of available settlement banks.
Failures of custodians unrelated to member defaults	Failure/operational issue at a custodian makes collateral inaccessible (CCPs will have exculpatory language in their rulebooks).
Theft, fraud, or other malicious acts	Any malicious acts by internal or external actors lead to losses from stolen asset.
Operational or systems failure	Operational or systems failure makes the FMI inaccessible.
Outsourcing	Same as operational or systems failures.
Cyber-attacks – unavailability of FMI	Same as operational issues, plus potential ransom demands.
Cyber-attacks – stolen assets	Similar to theft, fraud, or other malicious acts.
Legal claims against actions by FMI management	An FMI is sued by a third party (a clearing member, client or outside party) and is ordered to make a payment.
Regulatory fine	An FMI has to pay a regulatory fine.
Other general business failures	Any other losses not listed above.
Business model not working out	The FMI's business model does not enable it to continue providing critical services.

b) Are there other approaches and tools, in addition to or instead of those mentioned in the report, that would help FMIs to identify general business risks and estimate the size and timing of general business losses? If so, please describe the approaches or tools.

Fortunately, there have not been significant GBL events at FMIs in the past. We are unaware of any available GBL loss data that could be used to construct historical loss distributions or calibrate models. While we do not believe, however, that methods relying on historical data,

or models calibrated with such data, would be effective or would result in realistic outcomes, this data could serve as additional context to the analysis.

Another dataset helpful to FMIs could be an aggregated, anonymised summary of incident reports that FMIs are required to share with regulators after operational incidents.

We consider scenario analysis, combined with expert judgment, to be the only practical approach at this time. Sensitivity analysis could also be useful to better assess the effects of expert input.

The current and the proposed frameworks place emphasis on process-based expectations but does not prescribe standardised quantitative metrics or disclosure formats. This creates challenges for participants and supervisors in assessing and benchmarking resilience.

- FMIs retain discretion over scenario assumptions, severity calibration and LNAFE sizing, leading to inconsistent outcomes.
- Disclosure requirements are largely qualitative, making it difficult for clearing members to compare exposures across CCPs or jurisdictions.
- Jurisdictional implementation may diverge, further fragmenting standards globally.

It is very likely that two similar FMIs with similar GBL risk profile will determine very different levels of LNAFE, especially if these FMIs are in different jurisdictions.

In particular, we have concerns about the proposed framework's clarity regarding what level of loss severity an FMI should incorporate into its scenarios. Should FMIs assume a maximum potential loss, or rather an amount they deem more probable? In the case of cyber theft, for example, should the scenario assume that all payments over a settlement account within an entire day are lost¹, just the largest payment run during a certain period, or some other assumption defined by the FMI? This ambiguity risks future inconsistencies in how FMIs prepare and resource for GBL, which is particularly important because the determination of LNAFE implicitly marks the boundary between the resources reserved for recovery and the point at which resolution begins.

While we appreciate that the Consultation aims to provide a flexible framework applicable to all FMIs, we refer to our own proposals regarding capital requirements for CCPs in relation to NDL - see our papers on sizing of capital requirements for CCP's non-default losses with worked examples. Our framework suggests several approaches for sizing capital requirements without obligating each CCP to define the severity of scenarios independently, thereby supporting comparability of capital levels across CCPs.

We welcome the proposal that an FMI should "*clearly document both its conclusions and the methodologies used as part of its process for estimating general business losses*", and that this documentation could be shared with stakeholders. Stakeholders might also provide feedback and insights into the FMI's analysis.

¹ This was the scenario used in the FSB report Central Counterparty Financial Resources for Recovery and Resolution.

c) Are there other approaches and tools, in addition to or instead of those mentioned in the report, that would help FMIs to minimise and mitigate the sources of general business risk and manage residual risk? If so, please describe the approaches or tools.

The list in the consultation appears comprehensive (covering actions like not engaging in an activity, strengthening control, improving processes, or addressing insurance or indemnity agreements), as does the list of potential issues that could make these tools less effective than anticipated.

We support the sentence "*Furthermore, while an FMI should take actions to reduce the likelihood that general business risks occur, and it may be able to transfer some losses, it cannot fully eliminate the possibility that its expenses could exceed its revenues or that it will bear an unexpected loss that cannot be fully transferred.*" We however believe that incentives would be aligned if the amount of LNAFE would also factor in whether the FMI has implemented effective controls.

While it is our view, as previously discussed, that FMIs should assume responsibility for covering most, if not all, losses, in a situation where a CCP opts to allocate GBL, it should refrain from employing variation margin gains haircutting (VMGH) for this purpose. VMGH was not designed to address GBLs.

3) Determining the minimum amount of LNAFE

a) Is the guidance provided on determining the minimum amount of LNAFE clear and sufficient? If not, how should it be amended?

The consultation lacks specificity regarding whether FMIs must use the maximum loss for a given scenario or a likely loss estimate. Please refer to our sizing proposal provided in response to question 2(b).

We welcome the report's emphasis that six months of operational expenses is a minimum requirement, and that FMIs should calculate costs for recovery and orderly wind-down separately from business-as-usual (BAU) operating costs. We however believe that six months of operational expenses might not be sufficient. For instance, it took much longer for the CDS clearing segment of ICE Clear Europe to be wound down. We propose to use a full year of operational expenses as minimum.

We also appreciate the report's attention to timing issues, for instance the need for liquid assets to cover the time between the crystallisation of a loss and mitigants such as an insurance payout or capital increase becoming effective, the impact of recovery on expenses, and the recognition that an orderly wind-down could represent an additional phase requiring dedicated resources if recovery efforts are unsuccessful. LNAFE should include both phases if the possibility of recovery failing cannot be excluded.

It remains unclear whether LNAFE is required solely for recovery and orderly wind-down or if it also extends to GBL situations that may not result in recovery, or whether any GBL is considered a recovery event. For clarity, we assume all GBL covered by LNAFE is treated as recovery, as section 3.2.8 of the report suggests that an FMI might maintain additional financial resources for GBL without necessarily invoking a recovery plan.

We are also concerned that potential custody or investment losses fall outside the scope of LNAFE, which could lead more FMIs to allocate these types of losses to their members/users. Furthermore, we believe that the guidance should explicitly state that clearing members are to be consulted when the FMI determines the amount of LNAFE.

b) Are there other factors, in addition to or instead of those mentioned in the report, that an FMI should consider in its calculation of (i) the costs of implementing its recovery and orderly wind-down plans and (ii) the appropriate amount of LNAFE? If so, please describe the factors.

The report indicates that the LNAFE amount should equal the cost of the largest GBL scenario. We question whether this is adequate, or if multiple GBL events could occur at the same time. The guidance also notes that one type of GBL can trigger another type of GBL (for instance, a cyber-attack followed by litigation loss resulting from the incident).

We recommend that any connected type of GBLs should be viewed holistically when determining the amount of LNAFE.

4) Governance and transparency

a) Is the guidance provided on governance and transparency related to general business risk clear and sufficient? If not, how should it be amended?

Governance and transparency are important tools in aligning incentives and provide useful feedback loops: by sharing their plans, analysis and results with members, members will gain confidence in the FMI's risk management framework. In turn, members might provide feedback to the FMI which might improve the FMI's analysis and management of such risks.

We do not believe that the consultation of members in the design process will lead to conflicts of interest, as the FMI usually is the sole decision maker regarding implementation. With a consultation, the FMI is at least aware of the position of its members, and members are aware of the FMI's direction as to managing these risks.

It is crucial for the risk committee to remain actively involved throughout the process, providing thorough oversight and informed decision-making at each step. Their expertise can greatly assist FMI staff as they develop the GBL framework and determine the appropriate size for LNAFE.

We strongly support increased transparency of the analysed scenarios, sizing of LNAFE and resources earmarked to address these potential losses. This not only aids comprehensive due diligence but also enables members to understand the risks associated with participating in this FMI. In particular, with GBL, recovery can quickly turn into resolution if resources are not adequately sized, making it essential that members are fully aware of these risks.

Transparency is necessary, as the FMI members and partially also clients will suffer losses in resolution if recovery fails. Transparency is especially crucial when allocating GBL to members or even clients. FMIs must carefully evaluate and clearly communicate any potential impacts on users should losses be passed on, since these decisions may have major financial and operational consequences for members and clients. Clear disclosures help users understand their exposure and prepare for possible events.

In addition, we endorse the requirement for FMIs to establish both qualitative and quantitative triggers. These triggers will guide the management of GBL and ensure that assumptions used in designing GBL risk management processes and sizing LNAFE are consistent with the FMI's actions in the event of a GBL occurrence.

b) What particular information related to an FMI's process for managing general business risk would be useful for the FMI's participants so they can assess the risks they incur by participating in the FMI? Are there practical problems with providing such information, and if so, how can they be addressed?

FMI participants consistently seek full, appropriate transparency to adequately assess the risks associated with engaging in a particular FMI. It is essential that, when an FMI allocates specific GBL, transparent disclosure is provided. Without explicit provisions in the FMI's rulebook, such allocations may lack legal enforceability.

Transparency is also necessary if allocation occurs indirectly, for example, through the default fund.

As referred in our previous answer, transparency is critical for users' due diligence and risk assessments as well. GBLs can trigger resolution processes, which may result in further losses being allocated to participants; therefore, users must be able to evaluate the robustness of risk mitigants and understand the likelihood of a resolution scenario.

Furthermore, while a GBL may result in recovery procedures at one FMI, another FMI might proceed directly to an orderly wind-down, making it important that users are aware of these different contingency plans.

It should be noted that cyber risk may present an exception, as the effectiveness of certain mitigation measures could be compromised if they are widely disclosed. We however propose a standardised cyber assessment that does not reveal details about the FMI's defences but nevertheless provide comfort to the FMI users.

Lastly, FMIs should clearly outline the scenarios considered during their analysis as part of their overall disclosure practices.

To promote transparency and comparability, CPMI–IOSCO could:

- Define minimum levels of disclosure, including:
 - LNAFE requirement versus actual resources held.
 - Scenario assumptions and severity ranges.
 - Insurance coverage details and exclusions.
 - Length of wind-down period.
- Introduce common stress scenarios for calibration across FMIs.
- Encourage peer review and public implementation scorecards to drive convergence.

c) Are there other areas, in addition to or instead of those mentioned in the report, where an FMI should consider seeking stakeholder input on its process for managing general business risk?

FMIs should actively solicit user input regarding the overall framework.

If an FMI is able to cover all GBLs with its own resources, it may be argued that this represents the FMI's risk and therefore does not require transparency. However, even in such cases there should be a minimum level of transparency across the board given the risk to the members if resources are insufficient as they seem to be for a substantial number of CCPs today. FMI users remain at risk if recovery is unsuccessful and resolution becomes necessary.

As a result, FMI users require adequate transparency to verify that the FMI is indeed capable of covering all GBLs with its own resources.

5) Should the guidance distinguish between operating losses and non-operating losses in determining the minimum amount of LNAFE? If so:

a) Please explain why such a distinction would be helpful.

We do not see any benefit in classifying losses. It is more important that all losses are well understood by the FMI and included in the calculation of LNAFE.

For example, if a cyber theft leads to operational losses and subsequently triggers lawsuits, the additional losses arising from litigation may be classified as non-operating losses. The primary concern for FMI users is ensuring that the FMI possesses sufficient LNAFE to cover both types of losses, regardless of their classification.

b) How should the guidance do so?

See under question 5 a), we do not see how such a distinction would be helpful.

c) How should operating losses be defined? Are non-operating losses all losses other than operating losses and default losses?

See under question 5 a), we do not see how such a distinction would be helpful.

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