



European Securities and
Markets Authority

Consultation Paper

Draft Guidelines on CCP recovery plan scenarios (Article 9(12) CCPRRR)



Responding to this paper

ESMA invites comments on all matters in this paper and in particular on the specific questions summarised in Annex III. Comments are most helpful if they:

- respond to the question stated;
- indicate the specific question to which the comment relates;
- contain a clear rationale; and
- describe any alternatives ESMA should consider.

ESMA will consider all comments received by 20 September 2021.

All contributions should be submitted online at www.esma.europa.eu under the heading 'Your input - Consultations'.

Publication of responses

All contributions received will be published following the close of the consultation, unless you request otherwise. Please clearly and prominently indicate in your submission any part you do not wish to be publicly disclosed. A standard confidentiality statement in an email message will not be treated as a request for non-disclosure. A confidential response may be requested from us in accordance with ESMA's rules on access to documents. We may consult you if we receive such a request. Any decision we make not to disclose the response is reviewable by ESMA's Board of Appeal and the European Ombudsman.

The collection of confidential responses is without prejudice to the scope of Regulation (EC) No 1049/2001. Possible requests for access to documents will be dealt in compliance with the requirements and obligations laid down in Regulation (EC) No 1049/2001.

Data protection

Information on data protection can be found at <https://www.esma.europa.eu/data-protection> under the heading Data Protection.

Who should read this paper?

All interested stakeholders are invited to respond to this consultation. In particular, this paper may be specifically of interest for EU central counterparties, clearing members and clients of clearing members.

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1 Executive Summary

Reasons for publication

Article 9(1) of Regulation (EU) 2021/23 ('CCPRRR') sets out an obligation for central counterparties (CCPs) to draw up and maintain a recovery plan providing for measures to be taken in the case of both default and non-default events and combinations of both, in order to restore their financial soundness, without any extraordinary public financial support, and allow them to continue to provide critical functions following a significant deterioration of their financial situation or a risk of breaching their capital and prudential requirements under Regulation (EU) No 648/2012 ('EMIR').

Article 10(2) of CCPRRR then sets out an obligation for the CCP's competent authority to review the recovery plan and assess the extent to which it satisfies the requirements set out in Article 9 of CCPRRR, in coordination with the supervisory college in accordance with the procedure in Article 11 of CCPRRR.

Article 9(12) of CCPRRR mandates ESMA, in cooperation with the ESRB, to issue guidelines in accordance with Article 16 of Regulation (EU) No 1095/2010 ('ESMA Regulation') to further specify the range of scenarios to be considered for the purposes of Article 9(1) of CCPRRR. The mandate further provides that in issuing such guidelines, ESMA should take into account, where appropriate, supervisory stress testing exercises.

The purpose of this consultation paper is to seek views from all interested stakeholders on these draft guidelines aiming at establishing the range of scenarios to be considered for the purposes of CCP recovery plans.

Contents

Sections 2 and 3 set out the definitions, background and mandate for the guidelines. Section 4 provides the summary and objectives of the proposed guidelines.

Section 5 outlines the approach ESMA suggests to adopt with regard to specifying the range of CCP recovery plan scenarios. In particular, ESMA proposes that each CCP includes in its recovery plan at least one scenario for each of the seven types of scenarios (as described in the Guidelines). However, CCPs can design or build each scenario in a way that best fits their specific characteristics and level of complexity. ESMA also proposes that CCPs should assess, based on the factors provided, whether it is necessary to create additional scenarios. Overall, the range of recovery plan scenarios of a CCP should provide a comprehensive coverage of all types and sources of risk that may severely affect the financial soundness or operational viability of the CCP and create extreme stress situations, while remaining plausible, that would exceed the CCP's risk mitigation measures required under EMIR and may put at risk the CCP's ability to perform its critical functions.

Finally, section 6 contains all relevant annexes. Annex I sets out the legislative mandate for developing the guidelines. Annex II includes the cost and benefit analysis for the guidelines. Annex III provides a summary of the consultation questions. Annex IV contains the proposed guidelines.

Next Steps

The consultation will be open until 20 September 2021. ESMA will consider the feedback received to the consultation in Q3 2021 and expects to publish the guidelines and the final report by Q1 2022.



2 Legislative References, Abbreviations and Definitions

The following legislative references are used in this consultation paper:

CCPRRR	Regulation (EU) 2021/23 of the European Parliament and of the Council of 16 December 2020 on a framework for the recovery and resolution of central counterparties and amending Regulations (EU) No 1095/2010, (EU) No 648/2012, (EU) No 600/2014, (EU) No 806/2014 and (EU) 2015/2365 and Directives 2002/47/EC, 2004/25/EC, 2007/36/EC, 2014/59/EU and (EU) 2017/1132 ¹
EMIR	Regulation (EU) 648/2012 of 4 July 2012 of the European Parliament and Council on OTC derivatives, central counterparties and trade repositories ²
ESMA Regulation	Regulation (EU) No 1095/2010 of the European Parliament and of the Council of 24 November 2010 establishing a European Supervisory Authority (European Securities and Markets Authority), amending Decision No 716/2009/EC and repealing Commission Decision 2009/77/EC ³
RTS 152/2013	Commission Delegated Regulation (EU) No 152/2013 of 19 December 2012 on capital requirements for central counterparties ⁴
RTS 153/2013	Commission Delegated Regulation (EU) No 153/2013 of 19 December 2012 on requirements for central counterparties ⁵

The following abbreviations are used in this consultation paper:

<i>CCP</i>	Central Counterparty
<i>CP</i>	Consultation Paper
<i>EC</i>	European Commission
<i>EEA</i>	European Economic Area

¹ OJ L 22, 22.1.2021, p. 1–102

² OJ L 201, 27.7.2012, p.1

³ OJ L 331, 15.12.2010, p. 84

⁴ OJ L 52, 23.2.2013, p. 37

⁵ OJ L 52, 23.2.2013, p. 41



<i>ESFS</i>	European System of Financial Supervision
<i>ESMA</i>	European Securities and Markets Authority
<i>ESRB</i>	European Systemic Risk Board
<i>EU</i>	European Union

Unless otherwise specified, the terms used in this consultation paper have the same meaning as in CCPRRR, EMIR and the RTS 152/2013 and 153/2013.

3 Background and Mandate

1. ESMA is mandated to foster sound and effective supervision and to drive supervisory convergence across the EU under its founding regulation (ESMA Regulation).
2. CCPRRR was published in the Official Journal on 22 January 2021 and entered into force on 12 February 2021. CCPRRR puts into place a recovery and resolution framework for CCPs which are systemically important for the financial system. This aims at ensuring that the critical functions of CCPs are preserved while maintaining financial stability and helping to avoid the costs associated with the restructuring and the resolution of failing CCPs from falling on taxpayers. CCPRRR therefore establishes a minimum standard as regards the contents and information to be included in recovery plans to ensure that all CCPs have sufficiently detailed recovery plans should they face financial distress.
3. As regards recovery planning, Article 9(1) of CCPRRR places an obligation on CCPs to draw up and maintain a recovery plan providing for measures to be taken in the case of both default and non-default events and combinations of both, in order to restore their financial soundness, without any extraordinary public financial support, and allow them to continue to provide critical functions following a significant deterioration of their financial situation or a risk of breaching their capital and prudential requirements under EMIR.
4. Article 10(2) of CCPRRR then sets out an obligation for the CCP's competent authority to review the recovery plan and assess the extent to which it satisfies the requirements set out in Article 9 of CCPRRR within six months of the submission of the plan and in coordination with the supervisory college in accordance with the procedure in Article 11 of CCPRRR.
5. CCPRRR contains various tasks ascribed to ESMA. In particular, Article 9(12) of CCPRRR contains a mandate for ESMA, in cooperation with the ESRB, by 12 February 2022 to issue guidelines in accordance with Article 16 of the ESMA Regulation to further specify the range of scenarios to be considered for the purposes of Article 9(1) of CCPRRR. The mandate further provides that in issuing such guidelines, ESMA should take into account, where appropriate, supervisory stress testing exercises.
6. The objective of the guidelines is therefore to specify a range of recovery plan scenarios to be considered by CCPs when drawing up and maintaining their recovery plans and by competent authorities when assessing those recovery plans.
7. CCPRRR stipulates requirements regarding the range and nature of the recovery plan scenarios. ESMA notes that the Annex (Section A) of CCPRRR states that a recovery plan should include:

“(21) taking into account Article 49(1) of Regulation (EU) No 648/2012, a range of scenarios that would severely affect the financial soundness or operational viability of

the CCP and be relevant to the CCP's specific conditions such as its product mix, business model and liquidity and risk governance framework, including scenarios involving system-wide events or events specific to the legal entity and any group to which it belongs and specific stress to the individual clearing members of the CCP or, where appropriate, a linked FMI;”

“(22) taking into account Article 34, and Article 49(1), of Regulation (EU) No 648/2012, a range of scenarios that would severely affect the financial soundness or operational viability of the CCP and result both from the stress or default of one or more of its members, including scenarios going beyond the stress or default of at least the two clearing members to which the CCP has the largest exposures under extreme but plausible market conditions, and from other reasons including losses from the CCP's investment activities or from operational problems, including severe external threats to a CCP's operations due to an external disruption, shock or cyber-related incident.”

8. Furthermore, Recital 18 of CCPRRR clarifies that a recovery plan should contemplate an appropriate range of scenarios, envisaging both systemic and specific stresses to the CCP, that would endanger its viability, also taking into account the potential impact of contagion in a crisis, both domestic and cross-border. The scenarios should be more severe than those used for the purposes of regular stress testing pursuant to Article 49 of EMIR, while remaining plausible. The recovery plan should cover a broad range of scenarios including scenarios resulting from default events, non-default events and a combination of both. Recovery plans should also distinguish between different types of non-default events.

Recital 18

In order to deal in an efficient manner with failing CCPs, competent authorities should have the power to impose preparatory measures on CCPs. A minimum standard should be established as regards the contents and information to be included in recovery plans to ensure that all CCPs in the Union have sufficiently detailed recovery plans should they face financial distress. Such recovery plan should contemplate an appropriate range of scenarios, envisaging both systemic and specific stresses to the CCP, that would endanger its viability, also taking into account the potential impact of contagion in a crisis, both domestic and cross-border. The scenarios should be more severe than those used for the purposes of regular stress testing pursuant to Article 49 of Regulation (EU) No 648/2012, while remaining plausible. The recovery plan should cover a broad range of scenarios including scenarios resulting from default events, non-default events and a combination of both; and should include comprehensive arrangements for the re-establishment of a matched book, for the full allocation of losses arising from clearing member default, and adequate absorbency for all other types of losses. Recovery plans should distinguish between different types of non-default events. The recovery plan should form part of the operating rules of the CCP agreed contractually with clearing members. Those operating rules should further contain provisions to ensure the enforceability of recovery measures outlined in the recovery plan in all scenarios. Recovery plans should not assume access to extraordinary public financial support or expose taxpayers to the risk of loss.

Article 9(1)

1. CCPs shall draw up and maintain a recovery plan providing for measures to be taken in the case of both default and non-default events and combinations of both, in order to restore their financial soundness, without any extraordinary public financial support, and allow them to continue to provide critical functions

following a significant deterioration of their financial situation or a risk of breaching their capital and prudential requirements under Regulation (EU) No 648/2012.

Article 9(12)

12. ESMA shall, in cooperation with the ESRB, by 12 February 2022 issue guidelines in accordance with Article 16 of Regulation (EU) No 1095/2010 further specifying the range of scenarios to be considered for the purposes of paragraph 1 of this Article. In issuing such guidelines, ESMA shall take into account, where appropriate, supervisory stress testing exercises.

Annex (Section A)

(21) taking into account Article 49(1) of Regulation (EU) No 648/2012, a range of scenarios that would severely affect the financial soundness or operational viability of the CCP and be relevant to the CCP's specific conditions such as its product mix, business model and liquidity and risk governance framework, including scenarios involving system-wide events or events specific to the legal entity and any group to which it belongs and specific stress to the individual clearing members of the CCP or, where appropriate, a linked FMI;

(22) taking into account Article 34, and Article 49(1), of Regulation (EU) No 648/2012, a range of scenarios that would severely affect the financial soundness or operational viability of the CCP and result both from the stress or default of one or more of its members, including scenarios going beyond the stress or default of at least the two clearing members to which the CCP has the largest exposures under extreme but plausible market conditions, and from other reasons including losses from the CCP's investment activities or from operational problems, including severe external threats to a CCP's operations due to an external disruption, shock or cyber-related incident.

9. In summary, based on the CCPRRR requirements, the scenarios should:

- include default events, non-default events and a combination of both;
- include both system-wide events and events specific to the CCP and any group to which it belongs and specific stress to the individual clearing members of the CCP or, where appropriate, a linked FMI;
- take into account the potential impact of contagion in a crisis, both domestic and cross-border;
- severely affect the financial soundness or operational viability of the CCP;
- go beyond the stress or default of at least the two clearing members to which the CCP has the largest exposures under extreme but plausible market conditions;
- be more severe than those used for the purposes of regular stress testing pursuant to Article 49 of EMIR, while remaining plausible;
- include stresses or threats resulting from other reasons including losses from the CCP's investment activities or from operational problems, including severe external threats to a CCP's operations due to an external disruption, shock or cyber-related incident; and
- be relevant to the CCP's specific conditions such as its product mix, business model and liquidity and risk governance framework.

4 Designing and maintaining CCP recovery plan scenarios

10. The objective of preparing scenarios of severe distress is to specify a set of hypothetical events against which the effectiveness of recovery plan measures and the adequacy of indicators contained in the recovery plan shall be tested. The objective of the recovery plan is then to identify the options and measures that might be available to counter the scenarios of severe distress and to assess whether they are sufficiently robust and if their nature is sufficiently varied to cope with a wide range of shocks of different natures that a CCP may face.
11. Therefore, the recovery plan scenarios should be designed in a way that they would capture events that could severely affect the financial soundness or operational viability of the CCP if recovery measures were not implemented in a timely manner.
12. In order to fulfil the mandate in Article 9(12) of CCPRRR, ESMA proposes five guidelines that should be followed by CCPs when designing and maintaining their recovery plan scenarios. In order to establish and maintain a suitable range of scenarios, a CCP should consider all the guidelines as they cover different aspects of the process of designing and maintaining the suitable scenarios for the CCP, for example, establishing the appropriate number of scenarios, identifying the relevant types and sources of risk to be covered by the scenarios, determining the magnitude of the scenarios and how to provide information on the relevance and suitability of the scenarios to the CCP.

4.1 Designing CCP recovery plan scenarios

13. In the draft guidelines (Guideline 1) presented in this CP, and based on the requirements regarding recovery plans and recovery plan scenarios set out in CCPRRR, ESMA proposes that each CCP includes in its recovery plan at least one scenario for each of the seven types of scenarios, as set out in Table 1, below. However, CCPs should design or build each scenario in a way that best fits their specific characteristics and level of complexity.
14. ESMA also proposes that CCPs should assess whether it is necessary to create additional scenarios to accommodate for further granularity due to the specificities of the CCP beside the one scenario required for each type of scenario. A set of factors is provided for each type of scenario to evaluate the need for such additional scenarios.
15. CCPs should also be able to create further scenarios, not specified in the Guidelines, tailored to the specificities and operations of the CCP, if they consider it appropriate.
16. The draft guidelines (Guideline 2) also specify what types and sources of risk CCPs need to take into consideration when building their recovery plan scenarios.

17. The overall objective is for the range of recovery plan scenarios of a CCP to provide a comprehensive coverage of all types and sources of risk (and their most plausible combinations) that may severely affect the financial soundness or operational viability of the CCP and create extreme stress situations, while remaining plausible, that would exceed the CCP's risk mitigation measures required under EMIR (i.e. 'business as usual' risk management tools) and may put at risk the CCP's ability to perform its critical functions.
18. In addition, the draft guidelines (Guideline 3) provide the principles for determining the magnitude of CCP recovery plan scenarios, with reference to the relevant requirements under EMIR and RTS 152/2013 and RTS 153/2013. This should ensure that the recovery plan scenarios are of such a magnitude that they could severely affect the financial soundness or operational viability of the CCP.
19. Finally, the draft guidelines (Guideline 4) provide guidance on what information should be included to describe the recovery plan scenarios, such as how the circumstances that pose risk to the CCP could materialise, the relevant types and sources of risk, the types of impact, etc. This should aid the CCP, as well as the NCA and college when assessing the recovery plan, in ensuring that the recovery plan scenarios are suitable for the particular CCP.

4.2 Maintenance of CCP recovery plan scenarios

20. ESMA notes that the CCP shall draw up but also maintain a recovery plan providing for measures to be taken in the case of both default and non-default events and combinations of both. Hence, in addition, the draft guidelines (Guideline 5) will also capture the obligation for CCPs to review and where necessary update their scenarios, following Guidelines 1 – 4, every time they review their recovery plans in accordance with Article 9(9) of CCPRRR.

4.3 Conclusions

21. The aim of the proposed approach is to establish as consistent, efficient and effective supervisory practices as possible regarding the range of CCP recovery plan scenarios, while providing some flexibility to CCPs to design or build their range of recovery plans scenarios that best fits their specific characteristics, level of complexity and the amount, sources and types of risks they may face, as well as the CCP's specific conditions such as its product mix, business model and liquidity and risk governance framework.
22. With this consultation paper ESMA seeks input and views of the stakeholders on each of these draft guidelines: (i) establishing the appropriate number of scenarios to be included in CCP recovery plans, (ii) types and sources of risk to be covered by CCP recovery plan scenarios, (iii) principles for determining the magnitude of CCP recovery plan scenarios, (iv) information to be included in the description of CCP recovery plan scenarios, and (v) maintenance of CCP recovery plan scenarios.

23. This consultation paper should be read and considered in conjunction with the ESMA consultation paper on draft guidelines on CCP recovery plan indicators (ESMA70-151-3421).

5 CCP Recovery Plan Scenarios

5.1 The process of designing and maintaining CCP recovery plan scenarios

24. The CCP should in designing and maintaining its scenarios follow the Guidelines 1-5 as specified below. In order to establish a suitable range of scenarios all the Guidelines have to be considered as they cover different aspects of the process of designing and maintaining the suitable scenarios, for example establishing the appropriate number of scenarios, identifying the relevant types and sources of risk to be covered by the scenarios, how to determine the magnitude and severeness of the scenarios, and how to provide information on the relevance and suitability of the scenarios to the CCP.
25. The seven types of scenarios establish the basis for the establishment of a range of recovery plan scenarios of a CCP, hence each type of scenario may create one or more scenarios depending on the circumstances of the CCP. For the CCP to identify the suitable number of scenarios the CCP should assess the “Factors to evaluate the creation of additional scenarios” for each type of scenario. ESMA proposes that the CCP should create at least one scenario for each type of scenario. In its process to establish the appropriate number of scenarios the CCP should also ensure that the proposed recovery plan scenarios cover all types and sources of risk (and their most plausible combinations) that may severely affect the financial soundness or operational viability of the CCP and create extreme stress situations, while remaining plausible, that would exceed the CCP’s risk mitigation measures required under EMIR (i.e. ‘business as usual’ risk management tools). Furthermore, CCPs can create further scenarios not specified in the Guidelines.

5.2 Guideline 1: Establishing the appropriate number of scenarios to be included in CCP recovery plans

26. In order to provide for a comprehensive range of scenarios each CCP should include in its recovery plan and in order to fulfil all the requirements in this regard set out in CCPRRR, ESMA proposes that every CCP should include in its recovery plan at least one scenario for each of the seven types of scenarios, as set out in Table 1, below. However, in order to provide for a degree of flexibility and to take into account the specificities of each CCP, a CCP should build each of these scenarios in a way that best fits its specific characteristics and level of complexity. When building these scenarios, a CCP should consider inter alia the list of ‘*issues and aspects to consider when building the scenario*’ (as set out in Table 1, below).

27. ESMA also proposes that CCPs should further assess, whether it is necessary to create additional (more granular) scenarios for each type of scenario, for instance where the loss allocation rules are different depending on the specific origin of the loss (e.g. a different waterfall depending on the service considered, a different loss allocation depending on the origin or on the magnitude of an investment loss, etc.). A set of factors (as set out in Table 1, below) is provided for each type of scenario to evaluate the need for additional scenarios. The general rule to interpret the factors when evaluating the need to create the additional scenarios should be:

- The applicability of any of the factors to the CCP's characteristics leading to a material difference in the:
 - Availability or usage of recovery measures;
 - Order of usage of the recovery measures;
 - Path of loss propagation (e.g from the CCP to the members), which will greatly depend on the rules of loss allocation, which may be different depending on the origin of the loss;
 - Impact to stakeholders;
- The existence of subset(s) of entities that due to their material impact should be addressed with an individualised scenario.

28. In addition, when evaluating the need to create the additional scenarios, CCPs should also bear in mind that, as provided for in Guideline 2, the range of recovery plan scenarios of a CCP should provide a comprehensive coverage of all relevant types and sources of risk (as described in Guideline 2).

29. ESMA further proposes to include quantitative assessment tools (as set out in Table 1, below) for each type of scenario that may be used to produce quantitative impacts for the scenarios in order to test the related recovery measures.

30. Furthermore, ESMA is of the view that CCPs should be able to include in their recovery plans further scenarios not specified in the draft Guidelines tailored to the specificities and operations of the CCP.

Table 1: Matrix for building the range of CCP recovery plan scenarios

Types of Scenarios	Issues and aspects to consider when building the scenario	Factors to evaluate the creation of additional scenarios	Quantitative assessment tools
<p>1. Default event causing financial losses that propagate through the CCP's default waterfall with return to a matched book through voluntary, market-based tools</p> <p><i>(This scenario should cover the situation of the CCP having to absorb losses through its waterfall due to clearing members and/or interoperable CCPs defaulting on their payments.)</i></p>	<ul style="list-style-type: none"> • The need for the CCP to absorb losses in excess of the prefunded resources calibrated with extreme but plausible scenarios through their stress testing framework, either due to a higher number of defaults than the cover-2 requirement, shocks higher than modelled or liquidation costs of defaulter's portfolios higher than modelled, or resources depleted by a previous event which have not yet been replenished. • The need for the CCP to replenish prefunded resources. • Any cost incurred during the process, including the default management process or any costs from managing liquidity needs. 	<ul style="list-style-type: none"> • The existence of characteristics regarding the default fund structure, rules of the waterfall or applicable ring-fencing rules that would lead to different paths of loss propagation. • Where the effect of defaults happening at different time intervals could affect differently the CCP in light of the CCP's operational rules and possible behaviors of non-defaulting clearing members. • The possibility of market-wide liquidity strains impacting the prompt availability of voluntary, market-based tools. 	<ul style="list-style-type: none"> • CCPs should use as a starting point the existing framework of stress test scenarios, as it should already be adapted to the products cleared by the entity and should cover comprehensively idiosyncratic and systemic market shocks that could be sources of stress. • Using the existing set of CCP's stress test scenarios, the CCP should use a reverse stress testing methodology to scale up the scenarios, quantify potential losses and assess the possible outcomes). • Reverse stress testing may take into account: <ul style="list-style-type: none"> ○ Higher number of defaults than two and a broader array of defaulting entities; ○ More severe shocks than specified in the existing set of stress test scenarios; ○ Increased costs from the liquidation of portfolios, either due to higher impact from market liquidation or due to difficulties in allocating positions during the default management process; ○ Increases in severity of other assumptions on which the stress scenarios rely, such as decorrelation risk.

Types of Scenarios	Issues and aspects to consider when building the scenario	Factors to evaluate the creation of additional scenarios	Quantitative assessment tools
<p>2. Default event causing financial losses with a default management process that requires mandatory, rules-based arrangements in order to re-establish a matched book</p> <p><i>(This scenario addresses the situation in which a CCP is not able to re-establish a matched book through voluntary, market-based tools and requires mandatory, rules-based arrangements such as cash calls, variation margin haircutting, forced allocation or tear-up of contracts.)</i></p>	<ul style="list-style-type: none"> • Potential events that could affect the default management process leading to difficulties reestablishing a matched book or increasing the costs of doing so. It should take into account: <ul style="list-style-type: none"> ○ Obligations of clearing members with regard to the default management process; ○ potential lack of risk appetite in the market for auctioned portfolios; ○ Possible difficulty to access the market (e.g. due to the liquidity of the market) either for the cleared positions or the collateral, or both. 	<ul style="list-style-type: none"> • Where depending on the source or circumstances of the issues there is a material difference in the available recovery measures, order of usage, path of loss propagation or impact to stakeholders. • Potential operational risk events that could affect the default management process. 	<ul style="list-style-type: none"> • Same as the type of scenario 1, but modelling the impact of the mandatory, rules-based arrangements.
<p>3. Non-default event preventing the CCP from performing its critical functions</p> <p><i>(This scenario addresses the situation of a non-default event preventing the CCP)</i></p>	<ul style="list-style-type: none"> • Operational or other events that could impair: <ul style="list-style-type: none"> ○ clearing activities (e.g. affecting trade novation); ○ Collateral management (e.g. receiving or returning collateral). 	<ul style="list-style-type: none"> • How these would be mitigated by back-up solutions. • How members or other connected FMIs could be impacted. 	<ul style="list-style-type: none"> • Using expert judgment to assess the length of time of the disruption and the impact of other FMIs. • Assessing if the return to normal is possible in full after a period of non-availability. • Effectiveness of mitigants such as back-up payment systems.

Types of Scenarios	Issues and aspects to consider when building the scenario	Factors to evaluate the creation of additional scenarios	Quantitative assessment tools
<p><i>from continuing to perform services.)</i></p>			
<p>4. Non-default event causing financial losses</p> <p><i>(This scenario addresses the situation of a non-default event causing financial losses that is likely to deplete a significant proportion of the CCP's capital resources.)</i></p>	<ul style="list-style-type: none"> • Financial losses that may have immediate or deferred impact towards the CCP or its participants due to any: <ul style="list-style-type: none"> ○ Investment losses; ○ Losses arising from failures of securities custodians or settlement banks; ○ Losses caused by fraud, theft or other misconduct of employees and/or third parties; ○ Losses resulting from cyber-attacks; ○ Losses from operational or systems failure; ○ General business risks; ○ Any other non-default loss applicable to the CCP. 	<ul style="list-style-type: none"> • Where depending on the source or circumstances of the loss there is a material difference in the available recovery measures, order of usage, path of loss propagation or impact to stakeholders. • Where there is a group structure with respect to the layers of capital or tools available to absorb losses, specific scenarios contemplating potential failures in the execution of group agreements, contractual commitments, parental guarantees or other relevant provisions should be created (in accordance with Article 9(13) of CCPRRR). • Where applicable, obligations of clearing members in terms of loss allocation for specific types of NDL risks. • Any other type of third party funding (e.g. insurance), contemplating potential funding gaps, delays or failures in pay-outs. • Market-based tools to recapitalise the CCP, and their prospective reliability in extreme stress situations. 	<ul style="list-style-type: none"> • The various sources of non-default losses are very differentiated and may warrant different approaches. • CCP's may use scenario analysis with expert judgment to estimate potential non-default losses under extreme but plausible scenarios derived from the different sources of risk. • CCPs may wish to use crisis simulation and stress-testing exercise to assess whether their suggested approaches to fully absorb NDL and recapitalise the CCP would be comprehensive and credible.

Types of Scenarios	Issues and aspects to consider when building the scenario	Factors to evaluate the creation of additional scenarios	Quantitative assessment tools
<p>5. Default event causing a liquidity shortfall</p> <p><i>(This scenario addresses the situation in which there is a default event that creates a liquidity shortfall exceeding the business as usual liquidity management measures.)</i></p>	<ul style="list-style-type: none"> Liquidity shortfalls that may result from a higher number of member defaults than two, market shocks higher than modelled by the CCP's stress testing framework or liquidation costs of defaulter's portfolios higher than modelled. Operational funding liquidity needs and potential increases in these needs due to member defaults. 	<ul style="list-style-type: none"> The existence of tools used as part of the Business as Usual liquidity framework whose availability depends on third parties, group entities or general access to financial markets and whose failure would have a material impact to the liquidity management capabilities of the CCP. 	<ul style="list-style-type: none"> Liquidity reverse stress testing using similar principles as described in the quantitative tools of the type of scenario 1 for the calculation of potential liquidity needs. Scenario analysis to assess the impact from the failure of liquidity tools used in the liquidity risk management framework that depend on third parties, group entities or general access to financial markets. Risk assessment and scenario analysis of FMIs, service providers and interconnected entities.
<p>6. Non-default event causing a liquidity shortfall</p> <p><i>(This scenario addresses the situation in which there is a non-default event that creates a liquidity shortfall exceeding the business as usual liquidity management measures.)</i></p>	<ul style="list-style-type: none"> Liquidity shortfalls generated as a result of an entity that could fail due to financial or operational reasons from the list provided in Guideline 2 generating as a result a liquidity shock to the CCP. Operational funding liquidity needs and potential increases in these needs due to failures of entities provided in Guideline 2. 	<ul style="list-style-type: none"> The existence of multiple entities from the list provided in Guideline 2 whose operational failure would cause a material liquidity impact to the CCP. The existence of tools used as part of the Business as Usual liquidity framework whose availability depends on third parties, group entities or general access to financial markets and whose failure would have a material impact to the liquidity management capabilities of the CCP. Differences in the available recovery measures, order of usage or impact on stakeholders that depend on the type of entity or event generating the liquidity shortfall. 	<ul style="list-style-type: none"> Liquidity reverse stress testing using similar principles as described in the quantitative tools of the type of scenario 1 (with the exception of the elements of the reverse stress tests describing defaulting clearing members) for the calculation of potential liquidity needs. Scenario analysis to assess the impact from the failure of liquidity tools used in the liquidity risk management framework that depend on third parties, group entities or general access to financial markets. Risk assessment and scenario analysis of FMIs, service providers and interconnected entities.

Types of Scenarios	Issues and aspects to consider when building the scenario	Factors to evaluate the creation of additional scenarios	Quantitative assessment tools
<p>7. Event(s) causing simultaneous default and non-default losses</p> <p><i>(This scenario addresses the situation in which there are concurrent default and non-default losses as a result of a single event or as a result of multiple events that occur in a reduced time span.)</i></p>	<ul style="list-style-type: none"> • How the two paths of loss propagation (through the waterfall for default losses and through CCP's capital for non-default losses) would behave and potentially converge. 	<ul style="list-style-type: none"> • Where there are specific entities that are material sources of both default and non-default losses, specific scenarios analysing the effects of default events affecting these entities may be relevant; • Where non-default losses would be borne by clearing members affecting the path of loss propagation. • Where there are material differences between different combinations of default and non-default events with respect to the available tools, usage of tools, paths of losses or impact on stakeholders. 	<ul style="list-style-type: none"> • Combinations of tools from types of scenarios 1, 2, 3 and 4.

Guideline 1 Questions:

Question 1: Do you agree that each CCP should include, in its recovery plan, at least one scenario for each of the seven types of scenarios?

Question 2: Do you agree with the proposed list of the types of scenarios? Would you propose any additional types of scenarios?

Question 3: Do you agree that CCPs should further assess, based on the factors provided, whether it is necessary to create additional scenarios for each type of scenario?

5.3 Guideline 2: Types and sources of risk to be covered by CCP recovery plan scenarios

31. As proposed in Guideline 1 (section 5.2 above), every CCP should include in its recovery plans at least one scenario for each of the seven types of scenarios; in addition, it is proposed that CCPs should further evaluate whether it is necessary to create additional scenarios for each type of scenario. ESMA is of the view that overall, the range of recovery plan scenarios of a CCP should provide a comprehensive coverage of all 'relevant types and sources of risk'. 'Relevant types and sources of risk', for the purposes of these Guidelines, should be understood as types and sources of risk (and their most plausible combinations) that may severely affect the financial soundness or operational viability of the CCP and create extreme stress situations, while remaining plausible, that would exceed the CCP's risk mitigation measures required under EMIR (i.e. 'business as usual' risk management tools, such as changes in risk parameters, increase of guarantees, trading limits, etc.), and may put at risk the CCP's ability to perform its critical functions.

32. Therefore, ESMA proposes that when building its range of recovery plan scenarios:

- A CCP should ensure that, as already required by CCPRRR, its range of recovery plan scenarios covers both:
 - Default and non-default events, and a combination of both; and
 - Idiosyncratic and systemic sources of risk.

- A CCP should ensure that its range of recovery plan scenarios covers all of the types and sources of risk, from the list below, that the CCP assesses as 'relevant types and sources of risk' to that CCP:
 - Legal risk;
 - Credit risk;
 - Liquidity risk;
 - General business risk;
 - Custody risk;
 - Settlement risk;
 - Investment risk;
 - Operational risk (including fraud and cyber risk);
 - Systemic risk;

- Environmental and Climate risk;
- Market risk:
 - linked to market movements;
 - linked to the reduction of market availability (tradable volumes, availability and willingness to trade of market counterparties).
- Any interconnected entity or service provider (in isolation or in combination), including:
 - Clearing members and clients, both direct and indirect;
 - Issuers of collateral or investment assets;
 - Interoperable CCPs ;
 - CSDs;
 - Payments systems;
 - Securities settlement systems;
 - Nostro agents;
 - Custodian banks;
 - Settlement banks;
 - Concentration banks;
 - Payment banks;
 - Liquidity providers;
 - Group entities;
 - Other service providers required to perform critical functions during business as usual or default management situations.

Guideline 2 Question:

Question 4: Do you agree with the proposed Guideline 2 and the list of relevant types and sources of risk that CCPs should cover when building their range of recovery plans scenarios?

5.4 Guideline 3: Principles for determining the magnitude of CCP recovery plan scenarios

33. Considering the requirements regarding recovery plan scenarios and recovery plans stipulated in CCPRRR, as well as the overall purpose of CCP recovery plans, the recovery plan scenarios should cover the situations that due to their severity would exceed the CCP's risk mitigation measures required under EMIR (i.e. 'business as usual' risk management tools) and put at risk the viability of the CCP if no recovery actions are taken. Therefore, ESMA believes it is important to specify the magnitude of the recovery plan scenarios with reference to the overall risk management framework of the CCP as required by EMIR and the relevant RTSs. ESMA notes that this is also consistent with Article 9(19) of CCPRRR which requires recovery plans to be integrated in the corporate governance and the overall risk management framework of the CCP.

34. In this respect, ESMA proposes that:

- The recovery plan scenarios should be focused on:
 - Scenarios of financial losses due to default events of a magnitude that would consume resources through the waterfall exceeding the prefunded resources calculated in accordance with Article 43(2) of RTS 153/2013 or involving failures in the execution of business as usual risk management tools;
 - Scenarios generating liquidity needs in excess of the amounts calculated in accordance with Article 44(1) or RTS 153/2013, involving failures in the execution of business as usual risk management tools or using different assumptions with regards to liquidity needs or availability of resources than generate as a result higher levels of stress;
 - Scenarios of financial losses due to non-default events of a magnitude that is likely to deplete a significant proportion of the amount of required capital to cover non-default losses as calculated in line with RTS 152/2013.
- With respect to operational risk:
 - The recovery plan scenarios should not cover the scenarios of operational resiliency already covered by the relevant policies and procedures required by Article 34 of EMIR (Business Continuity Policy, Disaster Recovery Plan, Business Impact Analysis, Crisis Management). The recovery plan scenarios should however include, if deemed relevant, scenarios in which all resiliency measures that form part of the policies and procedures required by Article 34 of EMIR are surpassed, leading to a failure in one or more critical functions of the CCP that exceed the legal requirement set out in Article 17(6) of RTS 153/2013;
 - Furthermore, the recovery plan scenarios should cover the systemic risk effects caused by operational risk events affecting entities which are service providers to the CCP.

Guideline 3 Questions:

Question 5: Do you agree with the proposed Guideline 3 and the principles for determining the magnitude of the recovery plan scenarios (with reference to the overall risk management framework of the CCP as required by EMIR and the relevant RTSs)?

Question 6: As regards operational risk, do you agree the recovery plan scenarios should include, if deemed relevant, scenarios in which all resiliency measures that form part of the policies and procedures required by Article 34 of EMIR are surpassed, leading to a failure in one or more critical functions of the CCP that exceed the legal requirement set out in article 17(6) of RTS 153/2013?

5.5 Guideline 4: Information to be included in the description of CCP recovery plan scenarios

35. In ESMA's view the recovery plan scenarios should allow for a comprehensive understanding, by all stakeholders, of all relevant types and sources of risk (as explained in Guideline 2) that may affect the CCP and how any default or non-default event or combination of both could generate situations that would put at risk the CCP's ability to perform its critical functions. This should aid the CCP, as well as the NCA and college when assessing the recovery plan, in ensuring that the recovery plan scenarios are suitable for the particular CCP (i.e. that an appropriate number of scenarios has been established, that the scenarios reflect all relevant types and sources of risk faced by the CCP, that the magnitude of the scenarios is appropriate for that particular CCP, etc.) and that the recovery plan is overall effective and fit for purpose. Therefore, ESMA proposes that the recovery plan scenarios should aim at including the necessary information to describe the circumstances and the relevant types and sources of risk that could put at risk the CCP's ability to perform its critical functions. It is proposed that the following information may be included when describing the scenarios:

- The types and sources of risk relevant to the scenario; This includes secondary effects of the scenario that could materialise as long as the risk is relevant (e.g. a series of default events due to market stress is likely to depreciate the value of posted collateral);
- If multiple types of entities are sources, how they are identified and how they could combine or interact;
- Types of impact: financial loss, liquidity shortfall, threat to operational viability;
- The specific circumstances that could materialise and pose risk to the CCP; The scenario should not just identify the types and sources of risk but also aim to specify how the risks could materialise;
- Any specific particularities of the scenario regarding the path of loss propagation with respect to the CCP or affected stakeholders derived from segregation, ring-fencing or any operational rule that affects the path of loss propagation;
- Any other specific clauses or legal aspects from the operational rules of the CCP or the national legal framework that needs to be taken into account for the scenario;
- Any obstacles or circumstances that could create substantial practical impediments to implementing recovery measures.

Guideline 4 Question:

Question 7: Do you agree with the proposed Guideline 4 and the information to be included when describing the recovery plan scenarios?



5.6 Guideline 5: Maintenance of CCP recovery plan scenarios

36. According to Article 9(1) of CCPRRR, CCPs shall draw up but also maintain a recovery plan providing for measures to be taken in the case of both default and non-default events and combinations of both. Hence, in addition, the CCPs should review and where necessary update their scenarios, following Guidelines 1 – 4, every time they review their recovery plans in accordance with Article 9(9) of CCPRRR.

Guideline 5 Question:

Question 8: Do you agree with the proposed Guideline 5?



6 Annexes

Annex I: Legislative mandate to develop the Guidelines

Article 9 of the CCPRRR provides that:

“1. CCPs shall draw up and maintain a recovery plan providing for measures to be taken in the case of both default and non-default events and combinations of both, in order to restore their financial soundness, without any extraordinary public financial support, and allow them to continue to provide critical functions following a significant deterioration of their financial situation or a risk of breaching their capital and prudential requirements under Regulation (EU) No 648/2012.

(...) 12. ESMA shall, in cooperation with the ESRB, by 12 February 2022 issue guidelines in accordance with Article 16 of Regulation (EU) No 1095/2010 further specifying the range of scenarios to be considered for the purposes of paragraph 1 of this Article. In issuing such guidelines, ESMA shall take into account, where appropriate, supervisory stress testing exercises.”



Annex II: Cost and benefit analysis

Introduction

Pursuant to the Article 9(12) of CCPRRR, ESMA shall, in cooperation with the ESRB, by 12 February 2022, issue Guidelines in accordance with Article 16 of Regulation (EU) No 1095/2010 to further specify the range of scenarios to be considered for the purposes of Article 9(1) of CCPRRR. The objective of the guidelines is therefore to specify a range of recovery plan scenarios to be considered by CCPs when drawing up and maintaining their recovery plans and by competent authorities when assessing those recovery plans.

Article 16 of the ESMA Regulation requires ESMA, where appropriate, to analyse the potential costs and benefits relating to proposed guidelines. It also states that cost-benefit analyses must be proportionate in relation to the scope, nature and impact of the proposed guidelines.

The objective of performing a cost-benefit analysis is to assess the costs and benefits of the various policy or technical options which were analysed during the process of drafting the guidelines.

The guidelines included in this CP are of a mandatory nature, i.e. they are envisaged in CCPRRR in order to ensure uniform, consistent and coherent application of Union Law.

In carrying out a cost-benefit analysis on the Guidelines it should be noted that the main policy decisions have already been taken under the primary legislation (CCPRRR) and the impact of such policy decisions have already been analysed to some extent by the Impact Assessment by the European Commission⁶.

Cost and benefit analysis

Below are detailed the different corresponding policy options on how to promote the consistent application of Article 9(1) of CCPRRR regarding the range of CCP recovery plan scenarios.

Specific objective	The objective of the Guidelines is to further specify the range of scenarios of severe distress for the purposes of CCP recovery plans.
Policy option 1	To specify highly prescriptive recovery plan scenarios that every CCP should include in its recovery plan without providing much flexibility for the CCP to customise each scenario, as well as the

⁶ <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=SWD%3A2016%3A0368%3AFIN>

	<p>overall range of its recovery plan scenarios, based on the specificities and characteristics of the CCP.</p>
<p>How would this option achieve the objective?</p>	<p>This option would create a high level of convergence as the scenarios would be prescribed in detail by the Guidelines and each CCP would apply the same scenarios.</p> <p>However, this option would not provide much flexibility for a CCP to customise each scenario, as well as the overall range of its recovery plan scenarios, based on the specificities and characteristics of the CCP. It would therefore mean the scenarios may not be particularly relevant for the given CCP, may not accurately reflect the risk profile of the CCP or its complexity and characteristics etc, which could negatively affect the effectiveness of the whole recovery plan.</p> <p>Therefore, it is questionable whether this option would meet i) the legal mandate as CCPRRR stipulates that the scenarios should be relevant to the CCP's specific conditions and ii) the overall objectives regarding recovery planning.</p>
<p>Policy option 2</p>	<p>To specify a minimum high-level list of recovery plan scenarios (without providing any factors/criteria/further guidance that CCPs should consider when creating the scenarios) allowing each CCP much flexibility to customise each scenario, as well as the overall range of its recovery plan scenarios, based on the specificities and characteristics of the CCP.</p>
<p>How would this option achieve the objective?</p>	<p>This option would meet the mandate as it would specify the minimum range of recovery plan scenarios. It would also allow every CCP to customise each scenario and the overall range of its recovery plan scenarios based on the characteristics of the CCP.</p> <p>However, this option would create a low level of convergence across CCPs, and may result in some recovery plans being less detailed than others and therefore also less effective.</p> <p>Therefore, it is questionable whether this option would meet the overall objectives regarding recovery planning.</p>
<p>Policy option 3</p>	<p>To specify a minimum list of recovery plan scenarios that each CCP should include in its recovery plan and provide a set of factors/criteria/further guidance that the CCP should use when creating each scenario as well as the overall range of its recovery plan scenarios.</p>

<p>How would this option achieve the objective?</p>	<p>This option would meet the mandate as it would specify the minimum range of recovery plan scenarios as well as provide further guidance on how each scenario should be built, whether it is necessary to create additional scenarios, how to determine an appropriate range of recovery plan scenarios, etc.</p> <p>This option would also create a relatively high level of convergence while at the same time leaving the necessary flexibility to every CCP to create each scenario, as well as the overall range of its recovery plan scenarios, taking into account the CCP's characteristics, level of complexity, risk profile, etc. This should also ensure the overall effectiveness of the CCP's recovery plan and therefore achieve the overall objectives regarding recovery planning.</p>
<p>Which policy option is the preferred one?</p>	<p>Option 3, given that Option 1 could be seen as too prescriptive (without allowing much flexibility for a CCP to customise each scenario, as well as the overall range of its recovery plan scenarios, based on the specificities and characteristics of the CCP) and Option 2 could be seen as too vague and may fall short of the aim of ensuring convergence and that recovery plans are sufficiently detailed and overall effective.</p>
<p>Is the policy chosen within the sole responsibility of ESMA? If not, what other body is concerned / needs to be informed or consulted?</p>	<p>ESMA is responsible, in cooperation with the ESRB, for issuing the Guidelines and the mandate is of a mandatory nature, i.e. the Guidelines are envisaged in CCPRRR in order to ensure uniform, consistent and coherent application of Union Law.</p> <p>ESMA has cooperated with the ESRB in issuing the Guidelines.</p>

<p>Impacts of the proposed policies:</p>	
<p>Policy option 1</p>	
<p>Benefits</p>	<p>It will provide a high level of convergence as the scenarios would be prescribed in detail by the Guidelines and each CCP would apply the same scenarios. It would also result in lower maintenance costs.</p>
<p>Regulator's costs</p>	<p>The costs for competent authorities will be moderate, however already envisaged by CCPRRR due to the detailed requirements</p>

	regarding recovery plans and recovery plan scenarios and the Guidelines envisaged to further specify them.
Compliance costs	<p>The compliance costs for CCPs will be moderate, however already envisaged by CCPRRR due to the detailed requirements regarding recovery plans and recovery plan scenarios and the Guidelines envisaged to further specify them.</p> <p>While the maintenance costs for CCPs may be lower for this option than the other options, this option may result in less appropriate scenarios for the given CCP and in effect also a less effective recovery plan, which could ultimately lead to higher costs for the CCP.</p>
Policy option 2	
Benefits	It would provide a lot of flexibility to CCPs to customise each scenario and the overall range of their recovery plan scenarios based on the characteristics of each CCP.
Regulator's costs	The costs for competent authorities will be moderate, however already envisaged by CCPRRR due to the detailed requirements regarding recovery plans and recovery plan scenarios and the Guidelines envisaged to further specify them.
Compliance costs	The compliance costs for CCPs will be moderate, however already envisaged by CCPRRR due to the detailed requirements regarding recovery plans and recovery plan scenarios and the Guidelines envisaged to further specify them.
Policy option 3	
Benefits	It would provide a relatively high level of convergence while at the same time leaving the necessary flexibility to every CCP to create each scenario, as well as the overall range of its recovery plan scenarios, taking into account the CCP's characteristics, level of complexity, risk profile, etc. This should also ensure the overall effectiveness of the CCP's recovery plan.
Regulator's costs	The costs for competent authorities will be moderate, however already envisaged by CCPRRR due to the detailed requirements regarding recovery plans and recovery plan scenarios and the Guidelines envisaged to further specify them.
Compliance costs	The compliance costs for CCPs will be moderate, however already envisaged by CCPRRR due to the detailed requirements regarding



	recovery plans and recovery plan scenarios and the Guidelines envisaged to further specify them.
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Cost and Benefit Analysis Questions:

Question 9: Do you agree with the Option 3, if not please explain? Have you identified other benefits and costs not mentioned above associated to the proposed approach (Option 3)?

Question 10: If you advocated for a different approach, how would it impact the cost and benefit assessment? Please provide details.

Annex III: Summary of questions

Guideline 1 Questions:

Question 1: Do you agree that each CCP should include, in its recovery plan, at least one scenario for each of the seven types of scenarios?

Question 2: Do you agree with the proposed list of the types of scenarios? Would you propose any additional types of scenarios?

Question 3: Do you agree that CCPs should further assess, based on the factors provided, whether it is necessary to create additional scenarios for each type of scenario?

Guideline 2 Question:

Question 4: Do you agree with the proposed Guideline 2 and the list of relevant types and sources of risk that CCPs should cover when building their range of recovery plans scenarios?

Guideline 3 Questions:

Question 5: Do you agree with the proposed Guideline 3 and the principles for determining the magnitude of the recovery plan scenarios (with reference to the overall risk management framework of the CCP as required by EMIR and the relevant RTSs)?

Question 6: As regards operational risk, do you agree the recovery plan scenarios should include, if deemed relevant, scenarios in which all resiliency measures that form part of the policies and procedures required by Article 34 of EMIR are surpassed, leading to a failure in one or more critical functions of the CCP that exceed the legal requirement set out in article 17(6) of RTS 153/2013?

Guideline 4 Question:

Question 7: Do you agree with the proposed Guideline 4 and the information to be included when describing the recovery plan scenarios?

Guideline 5 Question:

Question 8: Do you agree with the proposed Guideline 5?

Cost and Benefit Analysis Questions:

Question 9: Do you agree with the Option 3, if not please explain? Have you identified other benefits and costs not mentioned above associated to the proposed approach (Option 3)?

Question 10: If you advocated for a different approach, how would it impact the cost and benefit assessment? Please provide details.



Annex IV: Proposed Guidelines (without explanatory notes)

1 Scope

Who?

1. These guidelines apply to competent authorities as defined in point (7) of Article 2 of CCPRRR and to CCPs authorised under Article 14 of EMIR.

What?

2. These guidelines apply in relation to Article 9(12) of CCPRRR, which mandates ESMA to further specify the range of recovery plan scenarios that should be considered for the purposes of CCP recovery plans.
3. These guidelines should be read in conjunction with the ESMA guidelines on CCP recovery plan indicators (ESMA70-151-3421).

When?

4. These guidelines apply from [dd month yyyy].



2 Legislative references, abbreviations and definitions

Legislative references

CCPRRR	Regulation (EU) 2021/23 of the European Parliament and of the Council of 16 December 2020 on a framework for the recovery and resolution of central counterparties and amending Regulations (EU) No 1095/2010, (EU) No 648/2012, (EU) No 600/2014, (EU) No 806/2014 and (EU) 2015/2365 and Directives 2002/47/EC, 2004/25/EC, 2007/36/EC, 2014/59/EU and (EU) 2017/1132 ⁷
EMIR	Regulation (EU) 648/2012 of 4 July 2012 of the European Parliament and Council on OTC derivatives, central counterparties and trade repositories ⁸
ESMA Regulation	Regulation (EU) No 1095/2010 of the European Parliament and of the Council of 24 November 2010 establishing a European Supervisory Authority (European Securities and Markets Authority), amending Decision No 716/2009/EC and repealing Commission Decision 2009/77/EC ⁹
RTS 152/2013	Commission Delegated Regulation (EU) No 152/2013 of 19 December 2012 on capital requirements for central counterparties ¹⁰
RTS 153/2013	Commission Delegated Regulation (EU) No 153/2013 of 19 December 2012 on requirements for central counterparties ¹¹

Abbreviations

<i>CCP</i>	Central Counterparty
<i>CP</i>	Consultation Paper
<i>EC</i>	European Commission
<i>EEA</i>	European Economic Area
<i>ESFS</i>	European System of Financial Supervision

⁷ OJ L 22, 22.1.2021, p. 1–102

⁸ OJ L 201, 27.7.2012, p. 1

⁹ OJ L 331, 15.12.2010, p. 84

¹⁰ OJ L 52, 23.2.2013, p. 37

¹¹ OJ L 52, 23.2.2013, p. 41



<i>ESMA</i>	European Securities and Markets Authority
<i>ESRB</i>	European Systemic Risk Board
<i>EU</i>	European Union

Definitions

5. Unless otherwise specified, the terms used in this consultation paper have the same meaning as in CCPRRR, EMIR and the RTS 152/2013 and 153/2013.



3 Purpose

6. These guidelines are based on Article 16(1) of the ESMA Regulation. The objectives of these guidelines are to establish consistent, efficient and effective supervisory practices within the ESFS and to ensure the common, uniform and consistent application of Article 9 and 10 of CCPRRR. They aim at specifying the range of recovery plan scenarios to be considered by CCPs when drawing up and maintaining their recovery plans and by competent authorities when assessing those recovery plans.

7. The objective of preparing the range of recovery plans scenarios is to identify a range of forward looking events of severe distress, a CCP may face, against which the effectiveness of recovery plan measures and the adequacy of indicators contained in the CCP recovery plan can be tested.

4 Compliance and reporting obligations

Status of the guidelines

8. In accordance with Article 16(3) of the ESMA Regulation, competent authorities and CCPs must make every effort to comply with these guidelines.
9. Competent authorities to which these guidelines apply should comply by incorporating them into their national legal and/or supervisory frameworks as appropriate, including where particular guidelines are directed primarily at CCPs. In this case, competent authorities should ensure through their supervision that CCPs comply with the guidelines.

Reporting requirements

10. Within two months of the date of publication of the guidelines on ESMA's website in all EU official languages, competent authorities to which these guidelines apply must notify ESMA whether they (i) comply, (ii) do not comply, but intend to comply, or (iii) do not comply and do not intend to comply with the guidelines.
11. In case of non-compliance, competent authorities must also notify ESMA within two months of the date of publication of the guidelines on ESMA's website in all EU official languages of their reasons for not complying with the guidelines.
12. A template for notifications is available on ESMA's website. Once the template has been filled in, it shall be transmitted to ESMA.
13. Within two months of the date of publication of the guidelines on ESMA's website in all EU official languages, CCPs to which these guidelines apply shall report to their competent authorities, in a clear and detailed way, whether they (i) comply, (ii) do not comply, but intend to comply, or (iii) do not comply and do not intend to comply with these guidelines. In case of non-compliance, CCPs must also report to their competent authorities their reasons for not complying with the guidelines. Competent authorities shall notify ESMA whether CCPs comply with the guidelines and of any reasons for not complying with the guidelines.

5 Guidelines on CCP recovery plans scenarios

5.1 Guideline 1: Establishing the appropriate number of scenarios to be included in CCP recovery plans

14. CCPs should include in their recovery plans at least one scenario for each of the seven types of scenarios (as set out in Table 1 in Annex). A CCP should build each of these scenarios in a way that best fits its specific characteristics and level of complexity. When building these scenarios, CCPs should consider *inter alia* the list of 'issues and aspects to consider when building the scenario' (as set out in Table 1 in Annex).
15. CCPs should further assess, based *inter alia* on the list of 'factors to evaluate the creation of additional sub-scenarios' (as set out in Table 1 in Annex), whether it is necessary to create additional scenarios for each type of scenario, for instance where the loss allocation rules are different depending on the specific origin of the loss (e.g. a different waterfall depending on the service considered, a different loss allocation depending on the origin or on the magnitude of an investment loss, etc.). The general rule to interpret the factors when evaluating the need to create the additional scenarios should be:
 - The applicability of any of the factors to the CCP's characteristics leading to a material difference in the:
 - Availability or usage of recovery measures;
 - Order of usage of the recovery measures;
 - Path of loss propagation (e.g from the CCP to the members), which will greatly depend on the rules of loss allocation, which may be different depending on the origin of the loss;
 - Impact to stakeholders;
 - The existence of subset(s) of entities that due to their material impact should be addressed with an individualised scenario.
16. In addition, when evaluating the need to create the additional scenarios, a CCP should ensure, as outlined in Guideline 2, that its range of recovery plan scenarios provides a comprehensive coverage of all relevant types and sources of risk.
17. CCPs may test the related recovery measures using *inter alia* the list of 'quantitative assessment tools' included for each type of scenario (as set out in Table 1 in Annex) to produce quantitative impacts for the scenarios.
18. CCPs may include in their recovery plans further scenarios not specified in these Guidelines tailored to the specificities and operations of the CCP.

5.2 Guideline 2: Types and sources of risk to be covered by CCP recovery plan scenarios

19. The range of recovery plan scenarios of a CCP should provide a comprehensive coverage of all 'relevant types and sources of risk'. 'Relevant types and sources of risk', for the purposes of these Guidelines, should be understood as types and sources of risk (and their most plausible combinations) that may severely affect the financial soundness or operational viability of the CCP and create extreme stress situations, while remaining plausible, that would exceed the CCP's risk mitigation measures required under EMIR (i.e. 'business as usual' risk management tools, such as changes in risk parameters, increase of guarantees, trading limits, etc.), and may put at risk the CCP's ability to perform its critical functions.

20. When building its range of recovery plan scenarios:

- A CCP should ensure that its range of recover plan scenarios covers both:
 - Default and non-default events, and a combination of both; and
 - Idiosyncratic and systemic sources of risk.
- A CCP should ensure that its range of recovery plan scenarios covers all of the types and sources of risk, from the list below, that the CCP assesses as 'relevant types and sources of risk' to that CCP:
 - Legal risk;
 - Credit risk;
 - Liquidity risk;
 - General business risk;
 - Custody risk;
 - Settlement risk;
 - Investment risk;
 - Operational risk (including fraud risk and cyber risk);
 - Systemic risk;
 - Environmental and Climate risk;
 - Market risk:
 - Linked to market movements;
 - Linked to the reduction of market availability (tradable volumes, availability and willingness to trade of market counterparties).
 - Any interconnected entity or service provider (in isolation or in combination), including:
 - Clearing members and clients, both direct and indirect;
 - Issuers of collateral or investment assets;
 - Interoperable CCPs;
 - CSDs;
 - Payments systems;
 - Securities settlement systems;
 - Nostro agents;

- Custodian banks;
- Settlement banks;
- Concentration banks;
- Payment banks;
- Liquidity providers;
- Group entities;
- Other service providers required to perform critical functions during business as usual or default management situations.

5.3 Guideline 3: Principles for determining the magnitude of CCP recovery plan scenarios

21. The recovery plan scenarios should cover the situations that due to their severity would exceed the CCP's risk mitigation measures required under EMIR (i.e. business as usual risk management tools) and put at risk the viability of the CCP if no recovery actions are taken.

22. In this respect, the scenarios should be focused on:

- Scenarios of financial losses due to default events of a magnitude that would consume resources through the waterfall exceeding the prefunded resources calculated in accordance with Article 43(2) of RTS 153/2013 or involving failures in the execution of business as usual risk management tools;
- Scenarios generating liquidity needs in excess of the amounts calculated in accordance with Article 44(1) or RTS 153/2013, involving failures in the execution of business as usual risk management tools or using different assumptions with regards to liquidity needs or availability of resources than generate as a result higher levels of stress;
- Scenarios of financial losses due to non-default events of a magnitude that is likely to deplete a significant proportion of the amount of required capital to cover non-default losses as calculated in line with RTS 152/2013.

23. With respect to operational risk:

- The recovery plan scenarios should not cover the scenarios of operational resiliency already covered by the relevant policies and procedures required by Article 34 of EMIR (Business Continuity Policy, Disaster Recovery Plan, Business Impact Analysis, Crisis Management). The recovery plan scenarios should however include, if deemed relevant, scenarios in which all resiliency measures that form part of the policies and procedures required by Article 34 of EMIR are surpassed, leading to a failure in one or more critical functions of the CCP that exceed the legal requirement set out in Article 17(6) of RTS 153/2013;

- Furthermore, the recovery plan scenarios should cover the systemic risk effects caused by operational risk events affecting entities which are service providers to the CCP.

5.4 Guideline 4: Information to be included in the description of CCP recovery plan scenarios

24. The recovery plan scenarios should aim at including the necessary information to describe the circumstances and the relevant types and sources of risk that could put at risk the CCP's ability to perform its critical functions. The following information may be included when describing the scenarios:

- The types and sources of risk relevant to the scenario; This includes secondary effects of the scenario that could materialise as long as the risk is relevant;
- If multiple types of entities are sources, how they are identified and how they could combine or interact;
- Type of impacts: financial loss, liquidity shortfall, threat to operational viability;
- The specific circumstances that could materialise and pose risk to the CCP; The scenario should not just identify the relevant types and sources of risk but also aim to specify how the risks could materialise;
- Any specific particularities of the scenario regarding the path of loss propagation with respect to the CCP or affected stakeholders derived from segregation, ring-fencing or any operational rule that affects the path of loss propagation;
- Any other specific clauses or legal aspects from the operational rules of the CCP or the national legal framework that needs to be taken into account for the scenario;
- Any obstacles or circumstances that could create substantial practical impediments to implementing recovery measures.

5.5 Guideline 5: Maintenance of CCP recovery plan scenarios

25. CCPs should review and where necessary update their scenarios, following Guidelines 1 – 4, every time they review their recovery plans in accordance with Article 9(9) of CCPRRR.

6 Annexes

Table 1: Matrix for building the range of CCP recovery plan scenarios

Types of Scenarios	Issues and aspects to consider when building the scenario	Factors to evaluate the creation of additional scenarios	Quantitative assessment tools
<p>1. Default event causing financial losses that propagate through the CCP's default waterfall with return to a matched book through voluntary, market-based tools</p> <p><i>(This scenario should cover the situation of the CCP having to absorb losses through its waterfall due to clearing members and/or interoperable CCPs defaulting on their payments.)</i></p>	<ul style="list-style-type: none"> The need for the CCP to absorb losses in excess of the prefunded resources calibrated with extreme but plausible scenarios through their stress testing framework, either due to a higher number of defaults than the cover-2 requirement, shocks higher than modelled or liquidation costs of defaulter's portfolios higher than modelled, or resources depleted by a previous event which have not yet been replenished. The need for the CCP to replenish prefunded resources. Any cost incurred during the process, including the default management process or any costs from managing liquidity needs. 	<ul style="list-style-type: none"> The existence of characteristics regarding the default fund structure, rules of the waterfall or applicable ring-fencing rules that would lead to different paths of loss propagation. Where the effect of defaults happening at different time intervals could affect differently the CCP in light of the CCP's operational rules and possible behaviors of non-defaulting clearing members. The possibility of market-wide liquidity strains impacting the prompt availability of voluntary, market-based tools. 	<ul style="list-style-type: none"> CCPs should use as a starting point the existing framework of stress test scenarios, as it should already be adapted to the products cleared by the entity and should cover comprehensively idiosyncratic and systemic market shocks that could be sources of stress. Using the existing set of CCP's stress test scenarios, the CCP should use a reverse stress testing methodology to scale up the scenarios, quantify potential losses and assess the possible outcomes). Reverse stress testing may take into account: <ul style="list-style-type: none"> Higher number of defaults than two and a broader array of defaulting entities; More severe shocks than specified in the existing set of stress test scenarios; Increased costs from the liquidation of portfolios, either due to higher impact from market liquidation or due to difficulties in allocating positions during the default management process; Increases in severity of other assumptions on which the stress

Types of Scenarios	Issues and aspects to consider when building the scenario	Factors to evaluate the creation of additional scenarios	Quantitative assessment tools
<p>2. Default event causing financial losses with a default management process that requires mandatory, rules-based arrangements in order to re-establish a matched book</p> <p><i>(This scenario addresses the situation in which a CCP is not able to re-establish a matched book through voluntary, market-based tools and requires mandatory, rules-based arrangements such as cash calls, variation margin haircutting, forced allocation or tear-up of contracts.)</i></p>	<ul style="list-style-type: none"> • Potential events that could affect the default management process leading to difficulties reestablishing a matched book or increasing the costs of doing so. It should take into account: <ul style="list-style-type: none"> ○ Obligations of clearing members with regard to the default management process; ○ potential lack of risk appetite in the market for auctioned portfolios; ○ Possible difficulty to access the market (e.g. due to the liquidity of the market) either for the cleared positions or the collateral, or both. 	<ul style="list-style-type: none"> • Where depending on the source or circumstances of the issues there is a material difference in the available recovery measures, order of usage, path of loss propagation or impact to stakeholders. • Potential operational risk events that could affect the default management process. 	<p>scenarios rely, such as decorrelation risk.</p> <ul style="list-style-type: none"> • Same as the type of scenario 1, but modelling the impact of the mandatory, rules-based arrangements.
<p>3. Non-default event preventing the CCP from performing its critical functions</p> <p><i>(This scenario addresses the situation of a non-default</i></p>	<ul style="list-style-type: none"> • Operational or other events that could impair: <ul style="list-style-type: none"> ○ clearing activities (e.g. affecting trade novation); ○ Collateral management (e.g. receiving or returning collateral). 	<ul style="list-style-type: none"> • How these would be mitigated by back-up solutions. • How members or other connected FMIs could be impacted. 	<ul style="list-style-type: none"> • Using expert judgment to assess the length of time of the disruption and the impact of other FMIs. • Assessing if the return to normal is possible in full after a period of non-availability. • Effectiveness of mitigants such as back-up payment systems.

Types of Scenarios	Issues and aspects to consider when building the scenario	Factors to evaluate the creation of additional scenarios	Quantitative assessment tools
<p><i>event preventing the CCP from continuing to perform services.)</i></p>			
<p>4. Non-default event causing financial losses</p> <p><i>(This scenario addresses the situation of a non-default event causing financial losses that is likely to deplete a significant proportion of the CCP's capital resources.)</i></p>	<ul style="list-style-type: none"> • Financial losses that may have immediate or deferred impact towards the CCP or its participants due to any: <ul style="list-style-type: none"> ○ Investment losses; ○ Losses arising from failures of securities custodians or settlement banks; ○ Losses caused by fraud, theft or other misconduct of employees and/or third parties; ○ Losses resulting from cyber-attacks; ○ Losses from operational or systems failure; ○ General business risks; ○ Any other non-default loss applicable to the CCP. 	<ul style="list-style-type: none"> • Where depending on the source or circumstances of the loss there is a material difference in the available recovery measures, order of usage, path of loss propagation or impact to stakeholders. • Where there is a group structure with respect to the layers of capital or tools available to absorb losses, specific scenarios contemplating potential failures in the execution of group agreements, contractual commitments, parental guarantees or other relevant provisions should be created (in accordance with Article 9(13) of CCPRRR). • Where applicable, obligations of clearing members in terms of loss allocation for specific types of NDL risks. • Any other type of third party funding (e.g. insurance), contemplating potential funding gaps, delays or failures in pay-outs. • Market-based tools to recapitalise the CCP, and their prospective reliability in extreme stress situations. 	<ul style="list-style-type: none"> • The various sources of non-default losses are very differentiated and may warrant different approaches. • CCP's may use scenario analysis with expert judgment to estimate potential non-default losses under extreme but plausible scenarios derived from the different sources of risk. • CCPs may wish to use crisis simulation and stress-testing exercise to assess whether their suggested approaches to fully absorb NDL and recapitalise the CCP would be comprehensive and credible.

Types of Scenarios	Issues and aspects to consider when building the scenario	Factors to evaluate the creation of additional scenarios	Quantitative assessment tools
<p>5. Default event causing a liquidity shortfall</p> <p><i>(This scenario addresses the situation in which there is a default event that creates a liquidity shortfall exceeding the business as usual liquidity management measures.)</i></p>	<ul style="list-style-type: none"> Liquidity shortfalls that may result from a higher number of member defaults than two, market shocks higher than modelled by the CCP's stress testing framework or liquidation costs of defaulter's portfolios higher than modelled. Operational funding liquidity needs and potential increases in these needs due to member defaults. 	<ul style="list-style-type: none"> The existence of tools used as part of the Business as Usual liquidity framework whose availability depends on third parties, group entities or general access to financial markets and whose failure would have a material impact to the liquidity management capabilities of the CCP. 	<ul style="list-style-type: none"> Liquidity reverse stress testing using similar principles as described in the quantitative tools of the type of scenario 1 for the calculation of potential liquidity needs. Scenario analysis to assess the impact from the failure of liquidity tools used in the liquidity risk management framework that depend on third parties, group entities or general access to financial markets. Risk assessment and scenario analysis of FMIs, service providers and interconnected entities.
<p>6. Non-default event causing a liquidity shortfall</p> <p><i>(This scenario addresses the situation in which there is a non-default event that creates a liquidity shortfall exceeding the business as usual liquidity management measures.)</i></p>	<ul style="list-style-type: none"> Liquidity shortfalls generated as a result of an entity that could fail due to financial or operational reasons from the list provided in Guideline 2 generating as a result a liquidity shock to the CCP. Operational funding liquidity needs and potential increases in these needs due to failures of entities provided in Guideline 2. 	<ul style="list-style-type: none"> The existence of multiple entities from the list provided in Guideline 2 whose operational failure would cause a material liquidity impact to the CCP. The existence of tools used as part of the Business as Usual liquidity framework whose availability depends on third parties, group entities or general access to financial markets and whose failure would have a material impact to the liquidity management capabilities of the CCP. Differences in the available recovery measures, order of usage or impact on stakeholders that depend on the type of entity or event generating the liquidity shortfall. 	<ul style="list-style-type: none"> Liquidity reverse stress testing using similar principles as described in the quantitative tools of the type of scenario 1 (with the exception of the elements of the reverse stress tests describing defaulting clearing members) for the calculation of potential liquidity needs. Scenario analysis to assess the impact from the failure of liquidity tools used in the liquidity risk management framework that depend on third parties, group entities or general access to financial markets. Risk assessment and scenario analysis of FMIs, service providers and interconnected entities.

Types of Scenarios	Issues and aspects to consider when building the scenario	Factors to evaluate the creation of additional scenarios	Quantitative assessment tools
<p>7. Event(s) causing simultaneous default and non-default losses</p> <p><i>(This scenario addresses the situation in which there are concurrent default and non-default losses as a result of a single event or as a result of multiple events that occur in a reduced time span.)</i></p>	<ul style="list-style-type: none"> • How the two paths of loss propagation (through the waterfall for default losses and through CCP's capital for non-default losses) would behave and potentially converge. 	<ul style="list-style-type: none"> • Where there are specific entities that are material sources of both default and non-default losses, specific scenarios analysing the effects of default events affecting these entities may be relevant; • Where non-default losses would be borne by clearing members affecting the path of loss propagation. • Where there are material differences between different combinations of default and non-default events with respect to the available tools, usage of tools, paths of losses or impact on stakeholders. 	<ul style="list-style-type: none"> • Combinations of tools from types of scenarios 1, 2, 3 and 4.