

# CCP resolution briefing

**On the operationalisation of resolution cash calls**



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## 1 Executive Summary

National Resolution Authorities ('NRA') are provided by 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<sup>1</sup>, also known as 'CCPRRR', with a toolkit of resolution tools, to use in order to achieve the resolution objectives. Articles 27 and 31 of CCPRRR provides to NRAs the possibility to use a resolution cash call, to manage losses and maintain liquidity during a resolution event, as well as to recapitalise, thereby ensuring the stability and continuity of the CCP.

The ESMA Resolution Committee ('CCP ResCo') has included in its workplan priorities the operationalisation of the resolution cash calls, given the wide range of applicability of this resolution tool. This CCP resolution briefing is issued under Article 25 of the ESMA Regulation and Article 5 of the CCPRRR. The objective of the CCP resolution briefing is to provide a methodology to be considered by NRAs when drawing resolution plans for CCPs. The content of this CCP resolution briefing is not subject to any 'comply or explain' mechanism for NRAs and is non-binding.

The CCP resolution briefing focuses on the operational considerations for NRAs when including the resolution cash call in the toolkit of the resolution tools in the resolution plan. Firstly, the NRA should define and receive the relevant data from the CCP, which will enable to calibrate the available amount of resources available through a cash call. The NRA should also take into account the impact on the relevant stakeholders, such as clearing members, financial markets and linked FMIs. Finally, the NRA should ensure the appropriate implementation of the resolution cash call.

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<sup>1</sup> OJ L 22, 22.1.2021, p. 1–102.

## 2 Introduction and Background

1. In accordance with Article 25 of the Regulation (EU) No 1095/2010 of the European Parliament and of the Council of 24 November 2010 establishing the European Supervisory Authority (European Securities and Markets Authority)<sup>2</sup>, also known as ‘ESMA Regulation’, ESMA is mandated to play an active role in the development and coordination of effective and consistent recovery and resolution plans.
2. Furthermore, in accordance with Article 5 of CCPRRR CCP ResCo shall promote the drawing up and coordination of resolution plans and develop methods for resolution of failing CCPs<sup>3</sup>.
3. Article 27 of CCPRRR describes what tools the NRA has the power to use in resolution. One of the tools is the resolution cash call tool, which is used to address any outstanding losses of, and also recapitalise, the CCP.
4. Carrying out a resolution cash call would first require gathering relevant data from the CCP and potentially other sources, in order to perform an impact assessment (to ensure its benefits outweigh the drawbacks) and then calibrate the amount of this resolution cash call, before its operational implementation.
5. Before entering the resolution phase, the CCP will, in principle, go through a recovery phase, during which it has a number of available tools to apply in order to rematch its books and allocate any losses. If all available recovery measures are exhausted and/or the NRA or national competent authority (NCA) deems that the CCP is not viable or that continuing the recovery phase could endanger financial stability, the CCP would be declared failing or likely to fail, and subsequently be placed in resolution (if the other resolution conditions are met).
6. A cash call is a financial mechanism used by CCPs to request additional funds from their clearing members during times of financial distress. Depending on each NRA resolution strategy, this tool is crucial for managing losses and maintaining liquidity during a resolution event, thereby ensuring the stability and continuity of the CCP. Furthermore, it was identified by the CCP Resolution Committee members as a tool to investigate as a priority, due to it being part of almost every resolution strategy defined by NRAs so far. CCPRRR, specifically Article 31, outlines the framework for such cash calls in resolution. The goal of

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<sup>2</sup> OJ L 331, 15.12.2010, p. 84–119.

<sup>3</sup> The CCP ResCo is a permanent internal committee, according to Article 41 of the ESMA Regulation.

this CCP resolution briefing is to establish a common approach among CCP resolution authorities for the operationalisation of this resolution tool. The focus of this briefing is on the operationalisation considerations for the resolution cash call: other related subject to this resolution tool, such as the application of the non-creditor worse off principle are not part of the scope.

7. For this purpose, this CCP resolution briefing discusses how authorities could gain access to the relevant data and calibrate a resolution cash call (section 3.1), how they could carry out the required impact assessment during the planning and testing phase, as well as execution (i.e. resolution), if applicable (section 3.2), and how they could implement a resolution cash call (section 3.3).
8. This CCP resolution briefing is issued under Article 25 of the ESMA Regulation and Article 5 of the CCPRRR. The objective of the CCP resolution briefing is to provide a methodology to be considered by NRAs when drawing resolution plans for CCPs. The content of this CCP resolution briefing is not subject to any 'comply or explain' mechanism for NRAs and is non-binding.

### **3 CCP resolution briefing on the operationalisation of resolution cash calls**

#### **3.1 Access to relevant data and calibration of resolution cash calls**

##### **3.1.1 Access to relevant data**

9. Access to data by the NRA as well as data sharing and collection capacities are pivotal, in particular in crisis periods, as a prerequisite to calibrate resolution tools. Thus, CCPs must be able to provide the necessary data points promptly. Some of this information might already be available in the Management Information Systems (MIS) used in Business as Usual, while other data may require the development of specialised MIS during the resolution planning phase. Collecting relevant, reliable, and complete data is crucial in order for NRAs to draw up resolution plans, substantiate their resolvability assessment and their resolution strategy, and calibrate the relevant resolution tools.

##### **3.1.1.1 Data Provision**

10. This CCP resolution briefing aims to promote the harmonisation of resolution cash calls data reporting by proposing a minimum data set that an NRA could request in the event of resolution of a CCP to calibrate the resolution cash calls. This CCP resolution briefing also identifies the additional data points that could be of interest for an NRA for the purpose of

analysing the impact of resolution cash calls. Whether in the case of the proposed minimum data set or proposed additional data points, the NRA shall rely as much as possible on existing (supervisory) reporting in order to avoid any duplication of data collection.

11. The CCP is expected to provide the NRA with the amount of the contributions of its clearing members to all relevant default funds, as this is the metric referred to in Article 31(1) of CCPRRR to calibrate a resolution cash call. The proposed minimum data set needed for the calibration of a resolution cash call would, therefore, at least refer to the number of default funds of the CCP, their respective size (total amount) as well as the contribution of each clearing member to each default fund concerned (see Annex 1 – Proposed minimum data set for calibrating a resolution cash call).
12. In addition, the CCP and, if necessary, the relevant authorities are expected to, upon request of the NRA, provide the NRA with all data in their possession that the NRA deems (potentially) useful for carrying out the impact assessment of the resolution cash call on clearing members (see section 3.2 for further details on this assessment). The CCP has data on the financial health of its members, which it may use to carry out its own impact assessment of the recovery cash call. However, it is reasonable to assume that the CCP does not have a full picture of clearing members' financial situation, but only targeted data that could be insufficient to perform a reliable assessment. Data referred to in the default waterfall (such as Initial Margin, Skin in the Game (SITG), Second Skin in the Game (SSITG)) could also be useful to understand the impact of resolution cash calls on clearing members (see Annex 2 – Non-exhaustive list of potential additional data points that could be collected). These data would allow the NRA to better grasp, for each clearing member, the total amount of resources that would have already been used to absorb losses during the recovery phase.

### **Box 1: Provision of data for the impact assessment by stakeholders other than the CCP**

NRAs should retrieve the information not provided by/available to the CCP under the situation of non-defaulting clearing members through specific interactions with their respective supervisory and resolution authorities. Since supervisory and resolution authorities of the most relevant clearing members participate in the resolution college, cooperation and exchange of information within the resolution college would be key to perform the impact assessment. These authorities may indeed be in a position to provide information on the situation of the most relevant clearing members and on the risk of contagion.

In any case, the cooperation and exchange of information within the resolution college may, under certain circumstances, prove insufficient to perform a sufficiently detailed impact assessment. Even if the data available via the resolution college could be collected in a sufficiently quick and reliable way, such data may not be available for clearing members established in countries not represented in the resolution college. Moreover, data on non-banking clearing members could be more difficult to retrieve, given that no standardised reporting framework applies.

#### 3.1.1.2 Timeliness

13. The timeframe for data submission constitutes a key aspect of the data collection process, as the NRA should have access to the requested data points within a few hours to enable prompt decision-making during a crisis episode.
14. The below timeframe could be adjusted per CCP to take into account individual specificities. In this respect, key features can be identified, the timeframe depending on:
  - the CCP's recovery cash call timeframe, which should be an integral part of the default management process specified in the rulebook of the CCP;
  - whether the NRA assumes that a CCP's resolution, like a bank's, could take place over a week-end or not (see section 3.3 for further considerations on this point):
    - if it takes place over a week-end, the CCP could benefit from a longer timeframe, *a priori* up to 12 hours,
    - if resolution takes place overnight or within 24 hours during the week, this timeframe will have to be much shorter, probably less than 3 hours.



15. CCPs are expected to be able to provide up-to-date data for most data points of the default waterfall within the applicable deadline, as clearing members' margin requirements are calculated on an intraday basis and default fund contributions are often determined largely on the basis of historical margin data.
16. Regarding data that would be provided by other authorities, the timely availability of updated data and the swift cooperation between authorities are crucial to perform the impact assessment. Possible avenues for facilitating the impact assessment would need to be considered in the future, including the possible establishment of a centralised database for CCP-membership and interconnectedness of clearing members; however, potential issues in terms of treatment and sharing of confidential data would still need to be more thoroughly investigated.

#### 3.1.1.3 Formats

17. To ensure an efficient data collection process, the NRA would benefit from relying on a commonly used/generally accepted format, in order to ensure clarity, completeness, accuracy, as well as readability of the data. To this end, the data points shall be provided by the CCP in a single, standardised, and exportable format, to allow compatibility with various analytical tools, as well as to facilitate the management of potentially large amounts of data. Such data format would reflect the following key characteristics:
- The format is structured: it is expected that the CCP provides structured data based on widespread standards or languages, such as XML (Extensible Markup Language), Excel or CSV, in order to facilitate data import and processing for data analysis as well as, more broadly, automated processing.
  - The format relies on a standardised scheme: such scheme aims at allowing the NRA and the CCP to share a common understanding of the data collected and enable a robust data analysis process. It can rely on tools already developed by the industry or by regulators (e.g. data dictionaries, taxonomies, data-point models). Such approach could foster consistency across CCPs and would simplify data interpretation for authorities.
  - Clear and concise data labels are used: adequate data labels allow to reflect accurately the data provided, contributing to the good understanding of the information collected without requiring extensive interpretation, thus avoiding reporting mistakes, misinterpretations or delays in decision making.
  - Data validation checks are in place: the implementation of data validation checks by the CCP ensures the correctness and completeness of the information provided before its submission. The NRA should encourage the CCP to develop such checks with regard to the data points relevant for the operationalisation of the resolution cash call.

The NRA should assess the relevance, comprehensiveness and effectiveness of such data checks. This work would be addressed as part of the objective to further operationalise the resolution of CCPs, the resolution planning cycle being expected to take into account testing aspects across time, through a progressive approach (for instance through dry-runs and the integration of resolution needs in fire-drill scenarios).

- The features of the data set are clearly documented: CCPs should provide accompanying documentation that details the characteristics of the information provided (in particular the format and definitions used, as well as any relevant assumptions).
- The format remains flexible: the format should be flexible enough to accommodate future changes in data requirements or regulatory requirements.

18. Based on these key characteristics, the format selected should: (i) fit the NRA needs; (ii) be easily exchangeable between CCP and relevant authorities (including onward sharing to members of the resolution college, if necessary), (iii) take into account as much as possible the capabilities of the CCP and future (mandatory) developments; and (iv) be derived at first from the proposed minimum data set. In case of interoperable CCPs, the respective CCPs and NRAs could consider the benefits of aligning the formats selected. A similarly standardised approach to collect data for the impact assessment from relevant authorities could be helpful.

### 3.1.2 Calibration of Resolution Cash Calls

19. The calibration of resolution cash calls is a necessary step for the effective implementation of this resolution tool. The requirements for this calibration are defined in Article 31 of CCPRRR and vary depending on the type of scenario (either default [DL] or non-default losses [NDL]).

#### 3.1.2.1 Calibration for DL/NDL Scenarios

20. Resolution cash calls can be used in both DL and NDL scenarios. A DL scenario occurs when the CCP has declared one or more clearing members (or interoperable CCP) in default. In such a scenario, if the CCP operates multiple default funds, the amount that can be required from non-defaulting clearing members is calibrated based on their contribution to the default fund of the clearing service or asset class affected by the default event. A NDL scenario occurs when the CCP incurs losses for any other reason, for example operational failures, such as cyberattacks or IT system failures. In such a scenario, if the CCP operates multiple default funds, the amount that can be required from clearing members is calibrated based on the sum of their contributions to all default funds. The calibration of cash calls is thus dependant on the type of scenario, although in both DL and NDL scenarios, the CCPRRR caps the resolution cash call to twice the amount of a clearing

member's contributions to the relevant default fund(s). Also in a combined DL and NDL scenario the cap to the resolution cash call amounts to twice a non-defaulting clearing member's contribution to all the default funds, regardless of whether a non-defaulting clearing member contributes to the default fund of the clearing service or asset class affected by the default event. However, in case a resolution authority requires less than twice the contribution to the default funds, a non-defaulting clearing member that contributes to the affected default fund will proportionately contribute more than a non-defaulting clearing member that does not contribute to the affected default fund, because the former clearing member will contribute for both the DL as well as the NDL.

### 3.1.2.2 Overview of the proposed main stages in calibrating a resolution cash call

21. The calibration of the resolution cash call by the NRA could follow the following operational steps:

*Step 1:* Determine the total amount of losses to be absorbed (this amount is determined as part of the valuation carried out either by the independent valuer or provisionally by the NRA) and/or the amount of recapitalisation needed.

*Step 2:* Determine the scenario that led to the entry into resolution (DL, NDL, combined scenario) and, in the case of a combined scenario, determine the total amount of losses attributable to the DL and the NDL.

*Step 3:* On the basis of the scenario identified and the resolution strategy chosen by the NRA, determine the total amount of the cash call to be paid by non-defaulting clearing members.

By construction, in resolution, the cash call could be used to (i) cover the amount of losses remaining to be absorbed after any implementation of other resolution tools mentioned by Article 27 of CCPRRR (notably the write-down and conversion of instruments), (ii) recapitalise the CCP so that it complies with the prudential requirements set by the European Market Infrastructure Regulation (EMIR) and, for CCPs with a banking licence, the Capital Requirements Regulation (CRR) and, ultimately, (iii) replenish pre-funded resources. The following situations can therefore be envisaged:

- Situation n°1: the maximum amount of the cash call that can be required from the non-defaulting clearing members in accordance with the provisions of Article 31(1) of CCPRRR is higher than the sum of amounts (i) and (ii).

The implemented cash call then amounts to the latter sum or can be increased up to the maximum amount to replenish the pre-funded resources.

- Situation n°2: the maximum amount of the cash call that can be required from the non-defaulting clearing members in accordance with the provisions of Article 31(1) of CCPRRR is equal or lower than the sum of amounts (i) and (ii).

The implemented cash call then amounts to the maximum amount that can be required from the non-defaulting clearing members. In such a situation, it may be necessary to use another tool to absorb the remaining losses not covered by the resolution cash call or raise the capital needed, depending on the specific circumstances and the resolution strategy chosen by the NRA.

*Step 4:* Determine the amount of the resolution cash call to be paid by each non-defaulting clearing member in proportion to its contribution to the default fund up to the limit referred in Article 31(1) of CCPRRR as explained in section 3.1.2.1.

As a result, in principle, the cash call to be paid by each non-defaulting clearing member is equal to the non-defaulting clearing member's share of the default fund<sup>4</sup> multiplied by the total amount of the cash call determined in step 3. However, based on the results of the impact assessment, the NRA could decide, if justified and proportionate, to adjust this amount in order to avoid significant negative impact on individual non-defaulting clearing members or on the financial stability of Member States.

## 3.2 Impact assessment of resolution cash calls

### 3.2.1 Legal basis and approach adopted

22. Article 12(3)(b) of CCPRRR requires that CCP resolution plans take into consideration the impact that the implementation of the resolution plan would have on:

- the clearing members, and to the extent the information is available, their clients and indirect clients, including where they have been designated as Other Systemically Important Institutions (O-SIIs) and those likely to be subject to recovery measures or resolution actions in accordance with Directive 2014/59/EU;
- any linked FMIs;
- financial markets, including trading venues, served by the CCP; and
- the financial system in any Member State or the Union as a whole, and, to the extent possible, in third countries where it provides services.

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<sup>4</sup> In a NDL scenario where the CCP operates multiple default funds, it is necessary to consider the non-defaulting clearing member's share of the sum of default funds (i.e. the sum of the contributions of the non-defaulting clearing member to all default funds of the CCP / divided by the sum of all default funds of the CCP).

23. As envisaged by Article 31(1) of CCPRRR, where the NRA requires non-defaulting clearing members to pay resolution cash calls for an amount in excess of their respective contributions to the default fund, it must assess the impact of this tool on non-defaulting clearing members and on the financial stability of Member States, in cooperation with the resolution authorities of non-defaulting clearing members.
24. In order for the NRA to fulfil these requirements, the goal of this section is to design a pragmatic, flexible and proportionate approach allowing authorities to perform their impact assessment in a way that is appropriate to the specific characteristics of the CCP under their remit and can be performed both in the planning and the execution phase.
25. The objective is therefore not to prescribe a fully-fledged methodology, but to provide CCP NRAs with a preliminary list of factors and considerations that they could take into account in their assessment of the impact of a resolution cash call.
26. The proposed approach aims at providing guidance and fostering a higher level of convergence across authorities in CCP resolution plans and could be further refined and complemented in the coming years by incorporating the insights gained during the first iterations of resolution planning.
27. The elaboration of a more structured framework for assessing the impact of resolution cash calls could eventually be considered in the future, once a more robust experience on resolution planning activities for CCP is built.

### 3.2.2 Impact assessment framework

#### 3.2.2.1 General criteria

28. The present section aims at defining the general criteria that the framework for assessing the impact of resolution cash calls could present, including:
- The adaptability of the framework to both resolution planning and actual crisis management. It is noted that authorities may face challenges in collecting and assessing the relevant data for the impact assessment within the short timelines during a resolution scenario. Taking into account such potential challenges, authorities should design a framework that can be used in both resolution planning, testing and an actual crisis scenario. Such a framework should allow them to prepare an impact assessment in the resolution planning phase that could be quickly updated within the timelines of a fast-moving resolution scenario to inform the decisions.
  - The consideration of the impacts of applying cash calls versus other resolution tools. In principle, when assessing the impact of requesting a resolution cash call to non-

defaulting clearing members to absorb the losses and recapitalise the CCP, authorities should also weigh – under a differential perspective – the impact of not applying a resolution cash call and relying on alternative resolution tools/strategies.

- The differentiation between DL and NDL scenarios. The framework for assessing the impact of a resolution cash call should envisage the consideration of the circumstances in which the CCP fails (idiosyncratic or systemic) and the differentiation between DL and NDL scenarios.

Indeed, the type of scenario might have an impact on the calibration of a resolution cash call, as explained in section 3.1. When the CCP operates multiple default funds and the tool is applied to address a DL, the cash call shall refer to the contribution of the non-defaulting clearing members to the default fund of the affected clearing service or asset class. By contrast, when the tool is applied in an NDL scenario, the resolution cash call that can be requested by authorities could be higher as it shall refer to the sum of the contributions of clearing members to all default funds of the CCP.

On the other hand, it could be considered that a DL is more likely to occur in a period of stress, as a result of which the default fund contributions are likely to have increased in the period leading up to the failure of the CCP. Therefore, the amount and impact of a resolution cash call based on the default fund contributions in a DL may be higher than those in an idiosyncratic NDL scenario.

Moreover, a DL or combined scenario is more likely to be the result of a systemic crisis in which the resilience of non-defaulting clearing members is already diminished. This could be due to stressed market conditions in general, as well as specific factors such as default management from the same CCP prior to resolution or possibly simultaneous default management procedures at other CCPs where the non-defaulting clearing members are also clearing members.

### 3.2.2.2 Assessment of impact on non-defaulting clearing members

29. According to the mentioned provisions of Article 31(1) of CCPRRR, NRAs must assess the impact of a resolution cash call on non-defaulting clearing members, in cooperation with the resolution authorities of these members. A preliminary and general framework for conducting such assessment can be articulated under the following steps:

- (i) A list of all clearing members with the indication of their contribution to each default fund operated by the CCP is the needed starting point to calculate the maximum resolution cash call that each non-defaulting clearing member might be requested to pay, based on the most severe scenario (*i.e.* twice the amount equivalent to the contribution to all default funds). As an additional consideration, the authorities could, for example, also take into account the maximum contributions that the CCP

might have recently required non-defaulting clearing members to pay in the recovery phase according to the relevant provisions of its rulebook and the future need to replenish the pre-funded resources of the CCP.

- (ii) After having computed the maximum amount that each non-defaulting clearing member might be requested to pay, authorities could attempt to estimate the impact of a resolution cash call on the ability of non-defaulting clearing members to continue meeting their minimum capital and liquidity requirements, to the extent that the clearing members are financial institutions subject to such requirements. Authorities could assess whether payment could cause a breach of the related regulatory ratios. For the sake of this assessment, the resolution cash call could be seen as a loss in the income statement of the non-defaulting clearing members with a consequent negative impact on capital, as well as a cash outflow reducing their liquidity buffers.

The impact of cash calls on clearing members could be calculated at least on their:

- Core Equity Tier 1 (CET1) ratio;
- Liquidity Coverage Ratio (LCR).

The impact on all capital adequacy ratios, including the Total Capital Ratio (TCR), could also be considered.

Finally, the assessment could eventually be enriched through the consideration of impact on:

- Minimum Requirement for own funds and Eligible Liabilities (MREL);
- gross and net results;
- High Quality Liquid Assets (HQLA);
- Net Stable Funding Ratio (NSFR).

Authorities should aim to use the most recent data available to perform the assessment to ensure that it most accurately reflects the available resources and ratios of the non-defaulting clearing members at the moment of the resolution cash call. Using the most recent data should ensure that, automatically, all the other costs or losses, including but not limited to recovery cash calls, the clearing member has already faced prior to the resolution cash call and what capacity for further loss allocation it would still have are considered. As a starting point in the planning phase, the most recent available ratios could be used for the assessment, under an “as-is” perspective, which can be retrieved from, for example, published Pillar 3 reports.



- (iii) Based on the evidence emerging from the previous indicators, authorities should draw a first conclusion of the impact of cash calls on non-defaulting clearing members. The conclusion should ideally present an indication on the number of non-defaulting clearing members who could breach the minimum regulatory requirements due to the resolution cash call disbursement.

30. With the aim to further strengthen the robustness of their conclusions, authorities could also take into account, under a qualitative perspective, a series of additional elements. A non-exhaustive list of considerations aimed at addressing possible limitations of the framework and/or at further enhancing the robustness of the analysis is summarised below:

- The usage of the most recent data, under an “as-is” perspective, could lead to an overall underestimation of the impact of the resolution cash call. Indeed, in a crisis situation, the exposure of a non-defaulting clearing member to the CCP might significantly differ from its level under normal circumstances; this is also true for the non-defaulting clearing members’ levels of capital and liquidity, which might be already deteriorated in a stressed scenario. In order to overcome this issue, authorities could, to the extent possible, strive to use in a resolution scenario data from as close to the moment of the resolution decision as possible, and in the planning phase, the results of stress tests, which could represent a scenario closer to the one of an actual crisis for the CCP. In any case, even if stress scenarios are used to calculate the hypothetical impact, the actual situation in which the CCP is failing or likely to fail could be significantly different and the exact circumstances could be difficult to predict. In the light of this, it is crucial that the framework elaborated by the authorities for assessing the impact of cash calls can be quickly replicated in the actual crisis scenario.
- Other elements that might be considered under a qualitative perspective pertain to the nature of the impacted non-defaulting clearing members, with particular reference to the eventual determination of systemic relevance by the macro-prudential authorities and to their potential role of paying agents for other non-defaulting clearing members, since this could temporarily trigger higher liquidity needs. To the extent relevant, non-defaulting clearing members could be classified at least under the categories of Significant Institutions and Less Significant Institutions, as referred to in Article 6(4) of Regulation 1024/2013, and investment firms.
- The impact of the cash calls on clearing members which are not financial institutions could be an additional element to be considered under a qualitative perspective; in this respect, a possible concern is constituted by the lack of minimum regulatory requirements against which to measure the impact as described under (ii) above, as well as by a lack of relevant data and by the unavailability of harmonised reporting. The potential impact of the cash calls for the clients of non-defaulting clearing members could be another relevant topic for qualitative considerations: in particular, it could be assessed whether it would be possible for non-defaulting clearing members to partially



assign the cash contributions to their clients and how this would affect the magnitude and scope of the impact.

- In addition to the above, authorities could take into account effects on confidence of market participants in the CCP's business model or clearing in general if cash calls rather than other resolution tools are applied.

### 3.2.2.3 Assessment of impact on financial stability of Member States

31. Article 31(1) of CCPRRR requests NRAs to assess the impact of a resolution cash call on the financial stability of Member States in cooperation with the resolution authorities of non-defaulting clearing members.

32. Assessing the impacts on financial stability might prove to be a very complex issue that could require the implementation of advanced tools and methodologies; at this initial stage, the elaboration of complex econometric tools is considered to fall outside the scope of this CCP resolution briefing.

33. Nevertheless, some preliminary ideas on how to assess the impacts on financial stability are presented in this section.

34. A possible route would be to explore the second-round effects of the resolution cash call. When the resolution cash calls are activated and the disbursement of contributions causes the failure of some non-defaulting clearing members, the latter could trigger possible impacts on the financial stability of the Member States exposed, which could be assessed by looking at the following dimensions:

- Systemic relevance of failed clearing members: the determination of macro-prudential authorities could be used to assess the systemic relevance of non-defaulting clearing members failing due to the payment of a resolution cash call. In particular, the classification as Global Systemically Important Institution or O-SII could be taken into account, as well as the evidence emerging from the O-SII scores, in terms of size, complexity, importance and level of interconnections of the impacted non-defaulting clearing members.
- Direct contagion: authorities could assess the risk that the failure of one or more non-defaulting clearing members due to the payment of a resolution cash call could trigger as a direct effect of the failure of other financial institutions. This assessment could be performed through the analysis of the financial interconnections of the failed non-defaulting clearing member(s) with the rest of the financial system (amount of debt and equity exposures and eventual concentration). Additionally, authorities could take into account in particular the potential impact of the failed non-defaulting clearing

member(s) on the CCP in resolution itself, as their failure could trigger further losses that would need to be taken into account in the resolution strategy.

- Indirect contagion: authorities could assess the risk that the failure of non-defaulting clearing members due to the payment of a resolution cash call could indirectly expand its effects also to other financial institutions, due to similarities of the business models or the composition of the balance sheet, exposure to common risk factors, similar market perception or – more generally – loss of market confidence.
- Real economy impact: as a further element, authorities might consider the effects that the failure of non-defaulting clearing members could have on the real economy of the Member States where their main activity is based. The impact on real economy might be due, for instance, to the reduction of credit available to households and firms, which could result in a reduction of real economy outputs (such as GDP or value added) or of employment in the Member State.

### 3.3 Implementation of resolution cash calls

35. This CCP resolution briefing assumes that the NRA relies as much as possible on the existing processes of the recovery cash call and, as such, the execution of the cash call rests with the CCP<sup>5</sup>. To operationalise the resolution cash call, the CCP would execute the tool in accordance with the terms and conditions of the rulebook and other relevant contractual arrangements.

#### 3.3.1 Identification of relevant stakeholders

36. In the context of this CCP resolution briefing, stakeholders are defined as parties who need to be contacted by the NRA.

37. As was detailed in section 3.2, prior to the resolution cash call, the NRA will perform an impact assessment and consult relevant parties. Among these are the resolution college and resolution authorities of non-defaulting clearing members. In addition to these parties, there are a number of stakeholders in the period leading up to the execution of the resolution cash call, including the independent valuer who performs the valuation and other public authorities.

38. Following the impact assessment, and informed by an independent valuation, the NRA will decide on the extent, necessity, and timing of the resolution cash call. The implementation

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<sup>5</sup> Although the NRA may have taken control of the CCP (and thus be ultimately responsible as such) using the power provided for in Article 48(1)(b) of CCPRRR.

of the tool can vary depending on national preferences and the specific conditions related to the CCP.

39. The number of stakeholders in the execution phase, from the NRA point of view, is limited to the CCP itself and potentially the special management of the CCP (if the NRA has enforced this in line with Article 50 of CCPRRR). Assuming that the CCP executes the resolution cash call, it will have both internal and external stakeholders, in addition to those previously mentioned, with which the NRA would not have to interact.
40. Some NRAs may decide to perform the task of executing resolution cash calls (or at least part of it) themselves and, in this case, they could be in direct contact with more stakeholders, but this approach is not further discussed in this CCP resolution briefing.

### 3.3.2 Execution and timeframe of implementation

#### 3.3.2.1 Step-by-step description of the process for execution of cash calls

41. A necessary preliminary step for the implementation of the resolution cash call is the NRA's decision to use this tool as part of its strategy to resolve a CCP that meets the requirements of Article 22 of CCPRRR. In order to take this decision and calibrate the cash call amount, the NRA would need the output of the calibration approach described in section 3.1 as well as the conclusions of its impact assessment (see section 3.2 for further details).
42. Based on these elements, the NRA would take a resolution action providing for the use of this tool, which would then have to be implemented through the following high-level steps. These steps could be investigated further by NRAs in order to operationalise resolution cash calls at the level of their specific CCP(s), including by identifying mitigation actions or workarounds for the potential constraints and obstacles.

Step 1	Communication of the resolution action, detailing use of the resolution cash call tool, to the CCP
Responsible stakeholder	NRA
Required input	NRA's decision to use a resolution cash call
Required system	Fast and secure means of communication with the CCP (to be determined between NRAs and their CCPs)

Recipient	CCP's senior management or special management (if such special management has been appointed by the NRA)
Potential constraints and obstacles	Communication issues between NRA and CCP (e.g. preferred mean(s) of communication not available for either stakeholder)

43. The aim of this first step is to inform the CCP of the NRA's decision and to require its assistance in carrying out the resolution cash call. As explained above, most NRAs could consider relying as much as possible on the existing processes of the recovery cash call and, as such, the CCP's assistance would be critical for the next steps of the process.

Step 2	CCP's technical preparation (e.g. inputting the relevant amount in its treasury systems)
Responsible stakeholder	CCP's employees (under the direction of their senior management or special management)
Required input	NRA's decision to use a resolution cash call
Required system	CCP's usual IT tools (e.g. treasury system)
Recipient	Not applicable
Potential constraints and obstacles	Unavailability of the CCP's usual systems (e.g. in a cyberattack scenario)

44. This step covers any internal preparatory work that has to be carried out by the CCP in order to implement a cash call. For example, CCPs may need to input in their treasury system the amount that would be called from each individual non-defaulting clearing member. As it is CCP-specific, NRAs would have to investigate the particularities and constraints of their CCPs in order to clarify how and in what timeframe they would be able to carry out a resolution cash call.

Step 3 Notification of relevant stakeholders and request for payment	
Responsible stakeholder	CCP
Required input	NRA's decision to use a resolution cash call or its summary  If relevant, any template generated in the previous step by the CCP's systems
Required system	CCP's usual tool for communicating with the relevant stakeholders
Recipient	Depending on the CCP's practices: non-defaulting clearing members, their paying agents, national central bank as operator of the national component of T2 or of the local Real-Time Gross Settlement (RTGS) system, (International) Central Securities Depositories ((I)CSDs), etc. and potentially other stakeholders identified by the NRA
Potential constraints and obstacles	Unavailability of the CCP's usual systems (e.g. in a cyberattack scenario)

45. This step would inform all the other stakeholders involved in the implementation of a resolution cash call that some action on their part is required. The exact list of stakeholders is likely to be CCP-specific and may need to be investigated by NRAs as CCPs have different processes. There are potential differences from CCP to CCP on who they inform of their request, as some CCPs have the contact details of their non-defaulting clearing members' agents and thus inform the paying agents (who are involved in handling the funds) while others simply inform the non-defaulting clearing members, who have the contractual responsibility to pay, and let them spread this information to their agents. Another aspect that could differ between CCPs is how they expect to receive the funds, as some require a payment on their T2/RTGS account while others are more flexible and open to other options (e.g. their accounts at (I)CSDs) as long as the funds are made available to them.
46. The means of receiving the funds (i.e. through the RTGS, (I)CSDs, etc.) is an aspect on which some NRAs may consider diverging from the CCP's recovery practices (which would have potential operational drawbacks) if they determine that they want to be more flexible (e.g. to give non-defaulting clearing members various options to pay in a crisis situation) or more restrictive (e.g. to facilitate the management and steering of funds once they have

been received). This could also be influenced by the form the payment would take. It would most likely be the euro, or the CCP's national currency from non-Euro area Member States, but it is possible that in some cases other currencies (USD, GBP, etc.) or collateral could be used in business as usual practices. NRAs could decide to replicate such practices (e.g. it may be positive to receive another currency if part of the losses are denominated in this currency) or demand to receive only cash of the local currency. This topic must be investigated further depending on the provisions of each CCP's rulebook and NRA's approaches.

47. Before or in parallel to circulating this information to those who would be operationally involved in carrying out the resolution cash call, the NRA could also decide to inform any relevant stakeholders it did not consult in the decision-making stage, such as resolution authorities of non-defaulting clearing members. In particular, it shall inform the stakeholders listed in Article 72(1) of CCPRRR (including resolution college members that have not been directly involved in the impact assessment or implementation of the resolution cash call<sup>6</sup>). Besides those stakeholders whose notification is mandatory under CCPRRR, NRAs may however consider that the publication of their decision (as required by Article 72(3) of CCPRRR) is sufficient to disseminate information on the resolution cash call. The timing of this publication is to be determined as part of NRAs' communication strategy, which is outside of the scope of this CCP resolution briefing.

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<sup>6</sup> Resolution college members should have been informed beforehand of the NRA's intention to take a resolution action but they (as well as the other stakeholders listed in Article 72(1) of CCPRRR) must also be notified "as soon as practicable after taking a resolution action".

Step 4	Payment of the resolution cash call (transfer of the funds to the CCP)
Responsible stakeholder	<p>Non-defaulting clearing members from a contractual point of view</p> <p>Non-defaulting clearing members and/or other stakeholders mentioned in step 3 for the technical flow of the funds</p>
Required input	CCP's notification to the stakeholders, specifying the amount to be provided
Required system	<p>RTGS system</p> <p>Potentially systems used to manage accounts with the relevant (I)CSDs</p>
Recipient	CCP
Potential constraints and obstacles	<ul style="list-style-type: none"> <li>• One or more non-defaulting clearing members are not in the financial position to pay (insufficient liquidity)</li> <li>• Unavailability of the CCP's usual systems (e.g. in a cyberattack scenario)</li> <li>• Unavailability of the RTGS system (either only for the CCP, which may be prevented from receiving the funds, or for all participants, which may be prevented from transferring funds)</li> <li>• Unavailability of a relevant (I)CSD, paying agent, etc.</li> </ul>

48. This final step results in the CCP receiving the required amount.

49. The timing of this payment in relation to the notification of clearing members could vary depending on the CCP's processes and rules or market practices, in particular whether or not the CCP has power of attorney over its clearing members' accounts. It is important to take into account in this case the operating schedule of the different systems related to the payment of the cash call. In any case, CCPs usually give their members some time to provision their account. The NRA potentially has the power to set a different timing.

### Box 2: CCPs' power of attorney

Some CCPs have power of attorney over their clearing members' accounts and can thus debit the accounts without further intervention from members, which improves timeliness of execution of the cash call and reduces the risk of non-performance. In case this power is not available (e.g. a CCP does not have such a power, or it is capped to a certain amount, technical issues, the account has insufficient funds, etc.), members need to actively transfer the funds from their account to the CCP's.

50. It is essential to test this four-step process through dry-runs during resolution planning to ensure its smooth implementation in a concrete resolution scenario.

#### 3.3.2.2 Timeframe considerations

51. In order to develop an operational resolution strategy (as well as comply with the requirements of CCPRRR<sup>7</sup>), NRAs should be able to determine an estimated timeframe of implementation of a resolution cash call. However, it is not possible at this stage to define a common timeframe of implementation as it depends on each CCP's operational constraints and whether or not the NRA is considering carrying out a cash call over a resolution week-end or during the week.

##### 3.3.2.2.1 Operational constraints of the CCP

52. The timeframe of implementation of a resolution cash call is dependent on each CCP's operational capabilities and constraints. CCPs may face limitations related to the level of automation of their systems, the number of non-defaulting clearing members affected by a resolution cash call or specific deadlines in their daily schedule (for example potential cut-off times before which a certain step must have been carried out or information provided).

53. As a first step, NRAs may need to investigate these constraints with their CCPs in order to assess their specific timeframe for implementation of a resolution cash call. At a later stage, some NRAs may need to request that their CCPs improve their operational capabilities in order to shorten this timeframe, allowing for a swifter implementation of resolution cash calls (and of a resolution strategy relying on this tool), consistent with the time constrain in resolution.

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<sup>7</sup> In particular Article 12(7)(d) of CCPRRR.



#### 3.3.2.2.2 Resolution week-end

54. For banking resolution, authorities usually use the concept of resolution week-end for their resolution planning. Performing resolution over a week-end allows to take advantage of the markets' closure to collect data from the institution in resolution, determine which strategy is best suited to the circumstances, adopt the resolution decision and communicate it to the institution and other key stakeholders. When markets re-open on Monday morning, authorities can provide them reassurance on the resolution of the crisis, thus limiting market disruptions.
55. However, this concept might not be as applicable to CCPs as it is to banks. DL scenarios, in particular, would be especially fast-moving. CCP NRAs may not always have the possibility to delay the resolution until the next week-end<sup>8</sup> and would thus need to be prepared to act overnight during the week (without ruling out the option of a resolution over the week-end if it is available).
56. The timing of resolution has consequences on the timeframe of implementation of any resolution tool, including the resolution cash call. It influences the capabilities that CCPs and NRAs may need to develop in order to be able to carry out a resolution cash call (as an overnight implementation would likely be more difficult to achieve than over the week-end). Moreover, there are technical constraints specific to the implementation of a resolution cash call over the week-end. Several software and systems run maintenance operations or updates at this time and may not be immediately available. In particular, the RTGS is usually closed during the week-end. In the case of T2 (which is used by the majority of EU CCPs), it re-opens at 2:30 a.m., on Monday, and, as a result, the actual payment of the resolution cash call would be delayed until at least this time, even if all other steps can be carried out well in advance. However, the cash call would still be legally binding as soon as the decision is published by the NRA. A specific case would be if a CCP were to request the payment before 2:30 a.m. on a Saturday. This payment could still be included in a limited settlement phase (with an accounting date on Monday) and become irrevocable. However, in order to benefit from this possibility, the NRA would no longer benefit from the longer timeframe of the weekend to prepare its decision.

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<sup>8</sup> They may eventually attempt to do so, for example through another round of auctions, but only for events happening near the end of the week and if the CCP is able to hedge the risk of open positions (i.e. in very limited circumstances).

### 3.3.3 Impact of recognition and involvement of third-country stakeholders

#### 3.3.3.1 Risks associated with third-country stakeholders

57. The issue of recognition of resolution proceedings in third-countries is relevant for all resolution tools that may negatively impact third-country stakeholders. The associated risk for NRAs is twofold: (i) at the time of resolution, the risk that the affected stakeholders do not contribute as they should (i.e. non-performance risk) and (ii) after resolution, the risk that they would take legal action against the NRA's decision. NRAs should address this issue in the resolution planning phase in order to mitigate those risks as much as possible.
58. In the case of resolution cash calls, the relevant stakeholders are the CCP's clearing members incorporated in third-country jurisdictions. Several (but not all) EU CCPs have such clearing members, with the most significant jurisdictions being the United Kingdom (UK), Switzerland, the United States (US) and, to a lesser extent, Japan, Singapore, Canada, and Australia.
59. In the case of resolution cash calls, the provisions of CCPRRR already provide some mitigation factors. From a financial perspective, clearing members have an incentive to pay the required amount as they may otherwise be put in default<sup>9</sup>. From a contractual perspective, CCPRRR requires that CCPs include in their rulebook references to the NRA's power to make a resolution cash call<sup>10</sup> and to the agreement by clearing members (and other stakeholders) to be bound by the actions taken by the NRA<sup>11</sup>. This ensures that, in addition to the legal obligation to contribute to the resolution cash calls under CCPRRR, clearing members are also bound by their contractual obligations with each CCP. Moreover, the CCP is required to ensure that its rulebook complies with applicable regulatory and supervisory requirements<sup>12</sup>.

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<sup>9</sup> Article 31(2) of CCPRRR.

<sup>10</sup> Article 31(1) of CCPRRR.

<sup>11</sup> Article 53(2) of CCPRRR.

<sup>12</sup> Article 5(2) of Commission Delegated Regulation (EU) No 153/2013.

### **Box 3: Compliance with the requirements of Article 53(2) of CCPRRR**

Article 53(2) of CCPRRR refers to the CCP's "contracts and other agreements with clearing members (...)"<sup>13</sup>. This may refer to the rulebook(s) as well as other types of contracts and agreements. Although an NRA may decide based on the specific contractual arrangements of its CCP with its clearing members that it is necessary to include the relevant provision for legal certainty, the rulebook generally forms an integral and central part of the contractual relationship between a CCP and its clearing members and inserting a provision in the rulebook could therefore be sufficient.

60. However, this does not fully eliminate the risks of non-performance (including but not limited to the risk that a third-country clearing member may be unable to pay because of contradictory requirements in its own jurisdiction's legal framework) and litigation. The NRAs concerned by this issue may need to investigate it further, especially as it could have an impact on the feasibility and credibility of applying the resolution cash call and thus on a CCP's resolvability. Indeed, matter 22 of Annex C requires NRAs to assess "the credibility of applying resolution tools in such a way which meets the resolution objectives, given (...) possible actions that third-country authorities may take."

#### **3.3.3.2 Possible approach for resolution authorities**

61. In order to address the risks associated with third-country stakeholders, several approaches could be considered by NRAs, including requesting legal opinions and engaging in proactive cooperation with the relevant third-country authorities. The choice to rely on either of these approaches, a combination of both or another one can vary based on the third-country jurisdiction considered, depending on factors such as the level of risk and the local legal CCP resolution framework of these third-countries. In any case, the approach should be proportionate and pragmatic, by prioritising certain means of investigating the issues and/or jurisdictions.

##### **3.3.3.2.1 Legal opinions**

62. NRAs could request from the CCPs to demonstrate that the provisions inserted in their rulebooks (and, if deemed relevant or necessary, other contracts and agreements with clearing members) in order to comply with Articles 31(1) and 53(2) of CCPRRR are

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<sup>13</sup> This provision also refers to "holders of instruments of ownership and debt instruments located in or governed by the law of third countries", which, unlike clearing members, are not covered by the CCP's rulebook(s).

enforceable and effective, both under the laws applicable to the rulebook<sup>14</sup> and the laws applicable to the relevant clearing member. This could be done by means of legal opinions.

63. Reviewing under both legal systems aims to avoid the opinion concluding that under the laws governing the rulebook a provision or arrangement is enforceable but failing to inform that under the laws applicable to the clearing member it may, for example, be prohibited from complying by the local supervisory authority or that this third-country is unlikely to recognise EU resolution proceedings.
64. Issues to consider when requesting a legal opinion include whether the addressee is the CCP or the NRA and the scope and assumptions of this opinion.

#### 3.3.3.2.2 Engagement with third-country authorities

65. Recognition of resolution proceedings in third-countries can improve legal certainty for NRAs. CCPRRR includes provisions for the recognition and enforcement of third-country resolution proceeding by EU authorities<sup>15</sup> and third-country resolution frameworks may include similar arrangements. Thus, NRAs could consider reaching out to the resolution authorities of the third-country jurisdictions that are relevant for their CCPs in order to investigate their process for recognition of a CCP resolution decision (including but not limited to the use of a resolution cash call affecting clearing members incorporated in their jurisdiction). If an NRA determines that it may be necessary to request recognition in one or more jurisdictions, it is advisable to address this issue in the resolution planning phase, in order to identify and take into account any specificities and constraints (for example in terms of timing or information requirements).

#### **Box 4: Lessons learnt from ongoing work on recognition in the context of banking resolution**

The topic of recognition has already been discussed, in particular within the Financial Stability Board, in the context of bank resolution. Although the frameworks in each jurisdiction may differ between banks and CCPs (and their respective applicable resolution tools), this work can still provide useful points for consideration.

- A distinction must be made between administrative recognition (i.e. recognition is provided for by a decision of the local resolution authority) and judicial recognition (i.e. recognition is provided for by a ruling from a local court). For bank resolution,

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<sup>14</sup> Theoretically this is the local law, under which CCPRRR would be directly applicable, but NRAs should seek confirmation of this point with their CCPs.

<sup>15</sup> In particular, Article 77 of CCPRRR

the UK and Switzerland (like the EU) have an administrative recognition framework whereas the US and Japan have a judicial recognition framework.

- Administrative recognition usually entails extensive information requirements but could be readily obtainable with sufficient preparation during resolution planning.
- In comparison, judicial mechanisms have limitations and may pose greater challenges, as they are usually not tailored to the specificities of resolution. The assistance of a local counsel could be necessary. Moreover, in some jurisdictions it is not possible for NRAs to proactively request recognition and/or this decision does not have a general binding effect and only establishes a precedent.

66. More generally, NRAs could inquire with third-country NRAs and NCAs on their views on the implementation powers of CCPRRR in their jurisdiction and their potential reaction and/or assistance if clearing members are not willing to cooperate.

67. Such engagement can take place in different formats such as resolution colleges or CMGs (if the relevant third-country authorities are observers or members of these fora), through bilateral exchanges that may require concluding cooperation arrangements as provided for under Article 79 of CCPRRR or in a more centralised manner (in order to avoid duplication of efforts), where possible and feasible.

## 4 Annex

The Annex provides (1) the list of minimum data points needed to calibrate resolution cash calls as well as (2) the list of additional data points that it would be interesting to have to perform the impact analysis of the resolution cash calls.

### 4.1 Minimum data set for calibrating a resolution cash call

All monetary amounts shall be reported in euros for CCPs based in a Euro area Member State and national currency for other EU CCPs.

Generic information to be provided in the reporting at the level of the CCP:

Field Name	Field Description	Field Format	Example
CCP legal name	CCP legal name	Text	ABCCCP
CCP LEI	Legal Entity Identifier of the CCP	20-character, alpha-numeric (ISO 17442)	506700GE1G29325QX363
Type of scenario	DL, NDL or combined scenario	Prefilled text	NDL
Reference date	Date of the CCP resolution	Text using the format dd/mm/yy	22/05/2024
Business lines concerned	Business lines affected in case of DL and combined scenarios	Text	Equity, Derivatives
Default fund #1	Name of the default fund concerned	Text	Equity
Default fund #1 amount	Total DF #1 amount	Number	350000745
Default Fund #2	Name of the DF concerned	Text	Derivatives
Default fund #2 amount	Total DF #2 amount	Number	350000745
Etc.			

*DF total amounts could be deducted from the total of the contributions of each clearing member to a given DF. They could however be requested for data-check purpose.*

Individual information to be provided for each clearing member affected by the resolution action and each default fund concerned:

Field Name	Field Description	Field Format	Example
Clearing member legal name	Legal name of the clearing member	Text	ABCBank

Clearing member LEI	Legal identifier code of the clearing member	20-character, alpha-numeric (ISO 17442)	549300DTUYXVMJX ZNYXX
Default fund #1	Name of the default fund concerned	Text	Equity
Contribution to default fund #1	Contribution of the clearing member to the default fund #1	Number	350000745
Default fund #2	Name of the default fund concerned	Text	Derivatives
Contribution to default fund #2	Contribution of the clearing member to the default fund #2	Number	350000745
Etc.			

## 4.2 Non-exhaustive list of potential additional data points that could be collected

The NRA could choose to ask the CCP to provide additional information in order to further assess the impact of the measures taken, including in the recovery phase.

This can include in particular the resources related to the default waterfall and reflected in the CCP's rules, which can be used to manage the losses arising from any number of defaults, in addition to the STIG, i.e. committed prefunded resources invested in compliance with EMIR requirements and that do not include minimum capital requirements, part of SITG or any type of (parental) guarantees.

In case the CCP maintains additional committed and prefunded resources, which are available to cover any losses across all default funds in case of default and reflected in the rules of the CCP setting the applicable default waterfall, and which are invested in accordance with the investment policy requirements of EMIR, these need to be reported as the Other prefunded CCP level Resources. Other prefunded CCP level resources cannot include any type of (parental) guarantees.

Generic information to be provided in the reporting:

Field Name	Field Description	Field Format	Example
CCP legal name	CCP legal name	Text	ABCCCP
CCP LEI	Legal Entity Identifier of the CCP	20-character, alpha-numeric (ISO 17442)	506700GE1G29325Q X363
Other prefunded CCP level resources at the reference date	Additional prefunded resources that can be used for all members and all default funds	Number, integer (expressed in EUR amount)	0

Description of other prefunded CCP level resources	Description of additional prefunded resources that can be used for all members and all default funds if applicable	Text, max 100 characters	CCP cash that can be used across all default funds
SITG	CCP resources dedicated to default fund and to be used before non-defaulting clearing member contributions	Number, integer (expressed in EUR amount)	5000213
SSITG	CCP resources dedicated to default fund and to be used after non-defaulting clearing member contributions	Number, integer (expressed in EUR amount)	5000213
Other prefunded resources	Additional prefunded default fund level resources that can be used after non-defaulting members contributions	Number, integer (expressed in EUR amount)	50000000
Description of other prefunded default fund level resources	Description of additional prefunded default fund level resources if applicable	Text, max 100 characters	CCP cash dedicated to default fund
Recovery measures	Description of recovery tool used		
Updated statement of financial position (balance sheet)	Updated statement of financial position (balance sheet) showing effects of recovery tools used and all other changes in financial position since last available statement of financial position		