

COMMISSION DELEGATED REGULATION (EU) 2023/1616**of 3 May 2023**

supplementing Regulation (EU) 2021/23 of the European Parliament and of the Council with regard to regulatory technical standards specifying the circumstances in which a person is deemed to be independent from the resolution authority and from the central counterparty, the methodology for assessing the value of assets and liabilities of a central counterparty, the separation of the valuations, the methodology for calculating the buffer for additional losses to be included in provisional valuations, and the methodology for carrying out the valuation for the application of the ‘no creditor worse off’ principle

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to 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⁾, and in particular Article 25(6), third subparagraph, Article 26(4), third subparagraph, and Article 61(5), third subparagraph, thereof,

Whereas:

- (1) Article 25(1) and Article 61(1) of Regulation (EU) 2021/23 require the person carrying out the valuation referred to in Articles 24 and 61 of that Regulation (‘the valuer’) to be independent from any public authority and from the central counterparty (‘CCP’) under valuation. Accordingly, uniform rules should apply to determine the circumstances in which a person shall be considered independent both from the relevant public authorities, including the resolution authority, and from the CCP for the purposes of Article 25(1) of Regulation (EU) 2021/23. Those rules should include requirements ensuring the absence of material common or conflicting interest of that person with the resolution authority or the CCP; requirements concerning the qualifications, experience, ability, knowledge and resources of that person and their ability to carry out the valuation effectively without undue reliance on any relevant public authority or the CCP, and requirements concerning the structural separation between the person and both the relevant public authorities and the CCP.
- (2) To address threats to independence such as self-review, self-interest, advocacy, familiarity, trust or intimidation, it is necessary to ensure that the valuer does not have any material interest in common or in conflict with any relevant public authority, including the resolution authority, or with the CCP, including its senior management, controlling shareholders or group entities. In addition, a valuer should not be considered as independent where the valuer has material interests in common or in conflict with any significant clearing member, client or creditor which would be materially affected by a resolution action or which has significantly contributed to the situation that led to the CCP’s resolution. Similarly, personal relationships could represent a material interest. Accordingly, the resolution authority should assess whether any material common or conflicting interests are present.
- (3) To enable the resolution authority to assess whether any material common or conflicting interests are present, the valuer should notify the resolution authority of any actual or potential interest which the valuer considers could, in the assessment of that authority, amount to a material interest and should provide any information that the resolution authority could reasonably request. Following their appointment, the valuer should maintain policies and

⁽¹⁾ OJ L 22, 22.1.2021, p. 1.

procedures in accordance with the applicable codes of ethics and professional standards to identify any actual or potential interest which the valuer considers could amount to a material common or conflicting interest. The resolution authority should be notified immediately of any actual or potential interests identified and should consider whether those amount to a material interest, in which case the valuer's appointment should be terminated and a new valuer appointed.

- (4) Structural separation arrangements constitute safeguards that mitigate the risks of conflicts of interest. As such, their existence should be taken into account in the assessment of a potential valuer. Thus, in the case of legal persons, the independence of a valuer should be assessed by reference to the company or partnership as a whole but taking account of any structural separation and other arrangements that have possibly been put in place to differentiate between those staff members who could be involved in the valuation and other staff members. If the significance of those threats compared to the safeguards applied is such that the independence of the company or partnership applying to be a valuer is compromised, that company or partnership should not be retained as a valuer.
- (5) In order to avoid threats to independence from self-review, a statutory auditor who has completed an audit of the CCP in the year preceding their assessment for eligibility to act as valuer should not be regarded as independent under any circumstances. As regards other audit or valuation services provided to the CCP concerned in the years immediately preceding the date on which independence is to be assessed, those services should also be assumed to present a material common or conflicting interest.
- (6) Independence of the valuer can be reinforced by conditions ensuring that the expertise and resources of the valuer are sufficient and appropriate. It is therefore necessary to ensure that the valuer possesses the necessary qualifications, experience, ability and knowledge in all relevant subjects, including the valuations of the financial instruments cleared by the CCP, the applicable CCP requirements under Regulation (EU) No 648/2012 of the European Parliament and of the Council^(?), existing CCP recovery plans and rulebooks, and applicable resolution tools under Regulation (EU) 2021/23.
- (7) In order for the valuer to be able to carry out the valuation effectively, it should also be ensured that the valuer holds, or has access to, sufficient human and technical resources to carry out the valuation.
- (8) In order to ensure their independence and to avoid undue interference with their duties, the valuer should be capable of carrying out the valuation effectively without undue reliance on any relevant public authority, including the resolution authority, or on the CCP. However, the provision of instructions or guidance necessary to support the conduct of the valuation, for example in relation to the methodology provided pursuant to Union legislation in the field of valuation for purposes relating to resolution, should not be seen as constituting undue reliance where such instructions are, or such guidance is, considered necessary to support the conduct of the valuation. In addition, the provision of assistance, such as the provision by the CCP concerned of systems, financial statements, regulatory reports, market data, other records or other assistance to the valuer should not be prevented where, in the assessment of resolution authority, this is considered necessary to support the conduct of the valuation. In accordance with any procedures which have possibly been put in place, the provision of instructions, guidance and other forms of support should be agreed on a case-by-case or pooled basis.
- (9) Independence risks being endangered if a valuation is performed by a person that is employed by or affiliated to any relevant public authority, including the resolution authority, and to the CCP, even in cases where full structural separation has been established within a legal person. It is therefore necessary to ensure that the valuer is not an employee or contractor of any relevant public authority, including the resolution authority, or of the CCP, and does not belong to the same group of companies as the CCP.

^(?) Regulation (EU) No 648/2012 of the European Parliament and of the Council of 4 July 2012 on OTC derivatives, central counterparties and trade repositories (OJ L 201, 27.7.2012, p. 1).

- (10) In order to ensure the availability of a sufficient number of persons that could be readily available to act as valuer when a resolution process starts, the resolution authority should maintain a provisional list of potential valuers and should revise this list on a regular basis.
- (11) Article 24 of Regulation (EU) 2021/23 distinguishes two valuations over the course of a CCP resolution process: an initial valuation assessing whether the conditions for resolution have been met, and a second valuation which forms the basis for the resolution authority's decision to apply one or more resolution tools. For the purpose of the initial valuation, it is appropriate to ensure that when determining whether the conditions for resolution are met, a fair, prudent and realistic valuation of the CCP's assets and liabilities is conducted. For the second valuation, the purpose of which is to inform resolution actions, it is important to ensure that the valuation of the assets and liabilities of the CCP is based on fair, prudent and realistic assumptions.
- (12) In order to accurately reflect the CCP's circumstances and prevailing market conditions, the valuations set out in Regulation (EU) 2021/23 should be performed as close as possible to the resolution decision date.
- (13) In order to effectively and efficiently perform the valuations set out in Regulation (EU) 2021/23, the valuer should have access to any sources of relevant information and expertise, such as the internal records, systems and models of the CCP. The valuer should also rely on information provided directly by the CCP's staff, management and auditors, as well as, where relevant, publicly available information on the market structure.
- (14) Where the CCP belongs to a group, considering that contractual intra-group support arrangements may provide additional financial support to the CCP in resolution and influence the resolution strategy, the valuer should consider the effect of those contracts where it is probable that such arrangements will be put into effect. The valuer should consider other formal or informal support arrangements within the group where it is probable that they will remain in place in stressed financial conditions or in resolution. Similarly, the valuer should carefully consider the risk that the CCP's financial resources could be used to cover for the losses of other group entities, as this could further reduce the value of the CCP's assets.
- (15) Since interoperability arrangements result in financial interdependencies capable of affecting the valuation, where the CCP has entered into interoperability arrangements with other Union CCPs, the valuer should consider all contractual arrangements linked to the interoperability arrangement, including where the service closure of the link may draw liquidity from the CCP.
- (16) Since the valuation process has the objective of supporting the decisions made by the resolution authority before the start of resolution and where implementing the resolution strategy, the valuer should report to the resolution authority. The valuer should therefore summarise the assumptions, methodologies and outcome of the valuation in a report to the resolution authority. The report should include any information that is deemed relevant to assist the resolution authority.
- (17) To ensure a fair, prudent and realistic valuation, the valuer should assess the impact on the valuation of each resolution action that the resolution authority is likely to adopt, and should in case necessary consult with the resolution authority in order to take those into account. The valuer should further be able to consult with the resolution authority to identify the range of resolution actions being considered. If necessary, the valuer should be able to present separate valuations that reflect the impact of a sufficiently diverse range of resolution actions.
- (18) For the same reasons, valuations for the purpose of informing the determination by the competent authority or the resolution authority of whether the conditions for resolution are met should be consistent with the applicable accounting and prudential framework. However, the valuer should be able to depart from the assumptions made by the CCP's management under which the financial statements are prepared to the extent that such departure is consistent with the applicable accounting and prudential framework.

- (19) It is appropriate to have rules that ensure that the valuation for the purpose of informing the choice of resolution actions are fair, prudent and realistic, in order to ensure that all losses are fully recognised at the moment the resolution tools are applied. The choice of the most appropriate measurement basis should be made for the particular resolution actions being considered by the resolution authority.
- (20) Valuations for the purpose of informing the choice and design of resolution actions should assess the economic value of the CCP and not its accounting value. Those valuations should consider the present value of cash flows that the CCP can reasonably expect, even where this requires departing from the accounting or prudential valuation framework. Such valuations should also consider that cash flows could arise from continuing to hold the assets, yet should take into account the potential effects of the resolution on future cash flows. Alternatively, where the CCP lacks the ability to hold the assets or their disposal is considered necessary or appropriate to achieve the resolution objectives, the valuation should reflect that those cash flows could arise from the disposal of assets, liabilities or business lines, assessed over a defined disposal period.
- (21) The disposal value should generally be understood as equivalent to the observable market price that could be obtained on the market for a particular asset or group of assets and might reflect a discount that is appropriate in view of the amount of assets being transferred. However, the valuer should be able, where appropriate, having regards to the actions to be taken under the resolution scheme, to determine the disposal value by applying a discount to such observable market price for a potential accelerated sale. Where the assets do not have a liquid market, the disposal value should be determined by reference to the observable prices on markets where similar assets are traded or to model calculations using observable market parameters with discounts for illiquidity reflected as appropriate. Where the use of the sale of business tool or the bridge CCP tool is contemplated, it should be possible to take into account reasonable expectations for franchise value when determining the disposal value.
- (22) For the purpose of ensuring consistency between the calculation of the estimate of the treatment that each class of shareholders and creditors would have been expected to receive had the institution or entity been wound up under normal insolvency proceedings, required by Article 25(5) of Regulation (EU) 2021/23, and the valuation following resolution pursuant to Article 61 of that Regulation, it is important that the valuer use the criteria set out for the latter valuation where appropriate.
- (23) A provisional valuation pursuant to Article 26 of Regulation (EU) 2021/23 that forms the basis of the decision on the taking of the appropriate resolution action is to include a buffer aimed at approximating the amount of additional losses. That buffer should be based on a fair, prudent and realistic assessment of those additional losses. The decisions and assumptions supporting the calculation of the buffer should be fully explained and substantiated in the valuation report.
- (24) The buffer should not bias the assessment to be made by the resolution authority, including whether the conditions for resolution laid down in Article 22 of Regulation (EU) 2021/23 are met, as well as when making an informed decision on the appropriate resolution actions to be taken.
- (25) The valuation under Article 61 of Regulation (EU) 2021/23 is to be carried out by a valuer meeting the conditions set out in Article 25 of that Regulation as soon as possible after the resolution action or actions have been effected, even though its completion could take some time. That valuation should be based on available information relevant to the date when the decision to resolve a CCP is adopted in order to appropriately reflect specific circumstances, such as distressed market conditions, existing at that resolution decision date. Information obtained after the resolution decision date should only be used where it could reasonably have been known at that date.
- (26) In order to ensure that a comprehensive and credible valuation is carried out, the valuer should have access to any appropriate legal documentation, including a list of all identifiable assets, claims, contingent assets and contingent claims against the entity classified according to their priority under normal insolvency proceedings. The valuer should be allowed to enter into arrangements to obtain specialist advice or expertise as required by the circumstances.

- (27) For the purpose of determining the treatment that shareholders, clearing members and other creditors would have received had the CCP been wound up under normal insolvency proceedings, the valuer should assess the discounted amount of expected cash flows that each shareholder, clearing member and other creditor would have received under normal insolvency proceedings, following the full application of the applicable contractual obligations and other arrangements in the CCP's operating rules. The valuer should disregard any provision of extraordinary public financial support to the CCP or central bank liquidity assistance provided under non-standard collateralisation, tenor and interest terms.
- (28) The valuer should also take into account a commercially reasonable estimate of the direct replacement costs incurred by clearing members under normal insolvency proceedings. Such costs should cover the cost incurred when replacing transactions open at the CCP prior to insolvency, including credit, liquidity and transaction costs, as well as operating costs associated with new connections with a different counterparty, and any material cost of funding for the new collateral requirements associated with those transactions.
- (29) The provisions in this Regulation are closely linked to each other, since they deal with the circumstances and methodology for the valuation of assets and liabilities in the context of the resolution of a CCP. To ensure coherence between those provisions, which should enter into force simultaneously, and to facilitate the resolution process, there is a need for CCPs, clearing members, their clients, authorities and market participants, including investors that are non-Union residents, to have a comprehensive view and compact access to their obligations and rights. It is therefore appropriate to include the relevant regulatory technical standards required by Articles 25(6), 26(4) and 61(5) of Regulation (EU) 2021/23 in a single Regulation.
- (30) This Regulation is based on the draft regulatory technical standards submitted to the Commission by the European Securities and Markets Authority.
- (31) The European Securities and Markets Authority has conducted open public consultations on the draft regulatory technical standards on which this Regulation is based, analysed the potential related costs and benefits and requested the advice of the Securities and Markets Stakeholder Group established in accordance with Article 37 of Regulation (EU) No 1095/2010 of the European Parliament and of the Council ⁽³⁾,

HAS ADOPTED THIS REGULATION:

CHAPTER I

General provisions

Article 1

Definitions

For the purposes of this Regulation, the following definitions apply:

1. 'relevant public authority' means:

- (a) the resolution authority designated in accordance with Article 3 of Regulation (EU) 2021/23;
- (b) the competent authority for the central counterparty (CCP) under resolution designated in accordance with Article 22 of Regulation (EU) No 648/2012;
- (c) the members and observers of the resolution college referred to in Article 4(2) and (4) of Regulation (EU) 2021/23;

⁽³⁾ 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 (OJ L 331, 15.12.2010, p. 84).

- (d) the members of the college referred to in Article 18(2) of Regulation (EU) No 648/2012;
 - (e) the competent authority for any entity within the same group as the CCP under resolution;
 - (f) the deposit guarantee scheme to which the CCP under resolution is affiliated, where such CCP is also authorised as a credit institution in accordance with Directive 2013/36/EU of the European Parliament and of the Council (*);
 - (g) the body in charge of the resolution financing arrangements where the CCP is also authorised as a credit institution in accordance with Directive 2013/36/EU;
 - (h) where applicable, the resolution authority of the group to which the CCP belongs, and the resolution authority of any entity within the same group as the CCP;
 - (i) the competent ministry designated pursuant to Article 3(8) of Regulation (EU) 2021/23;
 - (j) any other public authority involved in the resolution process of a CCP;
2. 'valuer' means a legal or natural person appointed to carry out the valuations referred to in Articles 24, 26(1) and 61 of Regulation (EU) 2021/23;
 3. 'fair value' means the price that would be received for the sale of an asset or paid to transfer a liability in an orderly transaction between market participants at the valuation date, as defined in the relevant accounting framework;
 4. 'hold value' means the present value, discounted at an appropriate rate, of cash flows that the CCP can reasonably expect under fair, prudent and realistic assumptions from retaining particular assets and liabilities, considering factors affecting customer or counterparty behaviour or other valuation parameters in the context of resolution;
 5. 'disposal value' means the value calculated in accordance with Article 17(5);
 6. 'franchise value' means the net present value of cash flows, higher or lower than the value arising from the contractual terms and conditions of assets and liabilities existing at the valuation date, that can reasonably be expected to result from the maintenance and renewal of assets and liabilities or businesses and which includes the impact of any business opportunities, as relevant, including those stemming from the different resolution actions that are assessed by the valuer;
 7. 'equity value' means an estimated market price for transferred or issued shares that results from the application of generally accepted valuation methodologies and that, depending on the nature of the assets or business, could comprise franchise value;
 8. 'measurement basis' means the approach for determining the monetary amounts at which assets or liabilities are presented by the valuer;
 9. 'resolution decision date' means the date of the decision of the resolution authority to take resolution action in relation to a CCP in accordance with Article 71 of Regulation (EU) 2021/23.

CHAPTER II

Independence of valuers

Article 2

Elements of independence

1. The valuer shall be deemed to be independent from any relevant public authority and from the CCP where all the following conditions are met at the time of their appointment and during the valuation of the assets and liabilities of the CCP referred to in Article 24, Article 26(1) and Article 61 of Regulation (EU) 2021/23:

(*) Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions, amending Directive 2002/87/EC and repealing Directives 2006/48/EC and 2006/49/EC (OJ L 176, 27.6.2013, p. 338).

- (a) the valuer has no material common or conflicting interest within the meaning of Article 3 of this Regulation;
 - (b) the valuer possesses the necessary qualifications, experience, ability, knowledge and resources required under Article 4 of this Regulation to be able to effectively carry out the valuations referred to in Article 24, Article 26(1) and Article 61 of Regulation (EU) 2021/23;
 - (c) the valuer is separate from the relevant public authorities and from the CCP in accordance with Article 5 of this Regulation.
2. The resolution authority shall establish a list of potential valuers that meet the requirements laid down in this Article. That list shall be reviewed on a regular basis.

Article 3

Material common or conflicting interests

1. The valuer shall not have any actual or potential material interest in common or in conflict with any relevant public authority or with the CCP.
2. For the purposes of paragraph 1, the resolution authority shall consider an actual or potential interest to be material where it considers that such interest is likely to influence, or is likely to be perceived by external stakeholders as influencing the valuer's judgement in carrying out the valuations referred to in Article 24, Article 26(1) and Article 61 of Regulation (EU) 2021/23.

For the purposes of the first subparagraph, the resolution authority shall consider the following:

- (a) the past or present provision of services by the applicant valuer to the CCP or a relevant public authority;
 - (b) any personal and financial relationships between the applicant valuer and the CCP or a relevant public authority.
3. For the purposes of paragraph 1, the resolution authority shall consider interests in common or in conflict with the following parties to be relevant:
- (a) the senior management and the members of the management body of the CCP and any group company of the CCP as referred to in Article 2, point (28), of Regulation (EU) 2021/23;
 - (b) the legal or natural persons that control or have a qualifying holding in the CCP;
 - (c) the creditors identified by the resolution authority as being significant on the basis of the information available to the resolution authority;
 - (d) the clearing members of the CCP as defined in Article 2, point (12), of Regulation (EU) 2021/23; clients of the CCP as defined in Article 2, point (18), of that Regulation; and indirect clients of the CCP as defined in Article 2, point (20), of that Regulation;
 - (e) interoperable CCPs as defined in Article 2, point (21), of Regulation (EU) 2021/23.
4. The resolution authority shall deem a valuer to have an actual material interest in common or in conflict with the CCP where:
- (a) in the year preceding the date on which the valuer's eligibility is assessed, the valuer has completed a statutory audit of the CCP pursuant to Directive 2006/43/EC of the European Parliament and of the Council ⁽⁵⁾;
 - (b) the valuer has been employed by the CCP or a relevant public authority during the period of 3 years preceding the assessment of its independence.

⁽⁵⁾ Directive 2006/43/EC of the European Parliament and of the Council of 17 May 2006 on statutory audits of annual accounts and consolidated accounts, amending Council Directives 78/660/EEC and 83/349/EEC and repealing Council Directive 84/253/EEC (OJ L 157, 9.6.2006, p. 87).

5. A person appointed as a valuer shall:
- (a) maintain, in accordance with any applicable codes of ethics and professional standards, policies and procedures to identify any actual or potential interest which may be considered to constitute a material interest;
 - (b) notify the resolution authority without delay of any actual or potential interest in common or in conflict with any relevant public authority or with the CCP which the valuer considers may, in the assessment of the resolution authority, be considered to amount to a material interest;
 - (c) take appropriate steps to ensure that none of the staff or other persons involved in carrying out the valuation has any material interest in common or in conflict with any relevant public authority or with the CCP;
 - (d) notify the resolution authority of any material investments or other material financial interests and confirm that they are not conflicting with its position as a valuer;
 - (e) where that person is a legal person, provide evidence of efficient structural separation or other arrangements that have been put in place or are to be put in place to address any threats to independence such as self-review, self-interest, advocacy, familiarity, trust or intimidation, including arrangements to differentiate between those staff members who may be involved in the valuation and other staff members;
 - (f) where the person is a statutory auditor, ensure the auditor is duly covered by internal rules to manage any conflict of interest;
 - (g) notify the resolution authority of their activities relevant to the appointment for the period of 3 years preceding the assessment of the valuer's independence;
 - (h) not seek or accept financial or other advantages from any relevant public authority or from the CCP, without prejudice to the payment to the valuer of remuneration and expenses that are reasonable in connection with the conduct of the valuation.

Article 4

Qualifications, experience, ability, knowledge and resources

1. The valuer shall possess the necessary qualifications, experience, ability and knowledge and hold or have access to sufficient human and technical resources to be able to carry out the valuation effectively and to independently assess the valuation without undue reliance on any relevant public authority or on the CCP.
2. The valuer shall be qualified as a statutory auditor or audit firm as defined in Article 2, points (2) and (3) of Directive 2006/43/EC.
3. For the purposes of paragraph 1, a person considered for the position of valuer shall provide evidence or confirmation in writing of the following necessary experience, ability and knowledge:
 - (a) of the valuations made of financial instruments, of valuation in post-trading, and in particular of the instruments cleared by the CCP;
 - (b) of Regulation (EU) 2021/23 and Regulation (EU) No 648/2012;
 - (c) to apply and understand the recovery plans and rulebooks of the CCP;
 - (d) to apply and understand the resolution plan of the CCP and applicable resolution tools under Regulation (EU) 2021/23.
4. The valuer shall be able to apply their competence and experience in an independent manner and shall not need to seek or take any instructions or guidance from any relevant public authority or from the CCP.

5. Paragraph 4 shall not prevent the provision of instructions, guidance, premises, technical equipment or other forms of support where the resolution authority considers that it is necessary and that it does not affect the valuer's judgement in carrying out the valuation referred to in Article 24 of Regulation (EU) 2021/23.

Article 5

Structural separation

1. The valuer shall be legally, structurally, operationally and effectively separate from any relevant public authority and from the CCP.
2. For the purposes of paragraph 1, the following requirements shall apply:
 - (a) where the valuer is a natural person, the valuer shall not be an employee or contractor of any relevant public authority or of the CCP;
 - (b) where the valuer is a legal person, the valuer shall not belong to the same group of companies as the CCP.

CHAPTER III

Methodology for assessing the value of the assets and liabilities of the CCP before and after resolution

Section 1

General provisions applicable to valuations under Article 24 and Article 26(1) of Regulation (EU) 2021/23

Article 6

General criteria

1. When performing the valuations referred to in Article 24 and Article 26(1) of Regulation (EU) 2021/23, the valuer, or the resolution authority where conducting a provisional valuation pursuant to Article 26(1) of Regulation (EU) 2021/23, shall consider circumstances affecting the expected cash flows of and discount rates applicable to a CCP's assets and liabilities stemming from the failure of the CCP's clearing members or non-default events.

The valuer, or the resolution authority where conducting a provisional valuation pursuant to Article 26(1) of Regulation (EU) 2021/23, shall aim to fairly represent the CCP's financial position in the context of the opportunities and risks it deals with.

2. The valuer, or the resolution authority where conducting a provisional valuation pursuant to Article 26(1) of Regulation (EU) 2021/23, shall disclose and justify the key assumptions used in the valuation.

Any significant deviation in the valuation from the assumptions or rules used by the CCP's management in the preparation of financial statements and in the calculation of the CCP's regulatory capital and capital requirements shall be supported by the best available information.

3. The valuer, or the resolution authority where conducting a provisional valuation pursuant to Article 26(1) of Regulation (EU) 2021/23, shall provide the best point estimate of the value of a given asset, liability, or combinations thereof.

Where appropriate, the results of the valuation shall also be provided in the form of value ranges.

4. Criteria laid down in this Regulation for the measurement of individual assets and liabilities of a CCP shall also apply to the measurement of portfolios or groups of assets or combined assets and liabilities, businesses, or the CCP considered as a whole, as the circumstances require.

5. The valuation shall subdivide creditors into classes according to their priority ranking under the applicable insolvency law, and shall include the following estimates:

- (a) the value of claims of each class under the applicable insolvency law and, where relevant and feasible, according to the contractual rights conferred on claimants;
- (b) the proceeds each class would receive if the CCP were wound up under normal insolvency proceedings.

When calculating the estimates pursuant to points (a) and (b), the valuer may follow the methodology set out in Article 22 of this Regulation.

6. Where appropriate and feasible, taking into account the timing and credibility of the valuation, the resolution authority may request several valuations. In that case, the resolution authority shall establish the criteria to determine how those valuations shall be used for the objectives set out in Article 24 of Regulation (EU) 2021/23.

Article 7

Valuation date

The valuation date shall be one of the following dates:

- (a) a reference date as determined by the valuer, or the resolution authority where conducting a provisional valuation pursuant to Article 26(1) of Regulation (EU) 2021/23, and set as close as possible before the expected date of a decision by the resolution authority to take resolution action in relation to the CCP in accordance with Article 71 of Regulation (EU) 2021/23 or to exercise the power to write down or convert instruments of ownership and debt instruments or other unsecured liabilities set out in Article 33 of that Regulation;
- (b) where a definitive valuation required by Article 26(2) of Regulation (EU) 2021/23 is conducted, the resolution decision date;
- (c) in relation to liabilities arising from contracts referred to in Article 29(1) of Regulation (EU) 2021/23, the date on which those contracts are terminated.

Article 8

Sources of information

The valuation shall be based on any information which is available at the valuation date and deemed relevant by the valuer, or the resolution authority where conducting a provisional valuation pursuant to Article 26(1) of Regulation (EU) 2021/23. In addition to the CCP's financial statements, valuation reports, related audit reports and regulatory reporting over a period ending as close as possible to the valuation date, that relevant information may include the following:

- (a) the updated financial statements and regulatory reporting prepared by the CCP as close as possible to the valuation date;
- (b) an explanation of the rules, key methodologies, assumptions and judgements used by the CCP to prepare the financial statements and regulatory reporting;
- (c) data contained in the records of the CCP;
- (d) relevant market data;
- (e) conclusions drawn by the valuer from discussions with management and auditors;
- (f) where available, supervisory assessments of the CCP's financial condition, including information acquired pursuant to Article 18(1), point (h), of Regulation (EU) 2021/23;

- (g) industry-wide assessments of asset quality, where relevant to the CCP's assets, as well as stress test results;
- (h) valuations of peers, adjusted where and as appropriate to capture the CCP's specific circumstances;
- (i) historical information, adjusted where and as appropriate to eliminate factors that are no longer relevant, and to incorporate other factors that did not affect the historical information; or
- (j) trend analyses, adjusted where and as appropriate to reflect the CCP's specific circumstances.

Article 9

Impact of group arrangements

1. Where the CCP forms part of a group, the valuer, or the resolution authority where conducting a provisional valuation pursuant to Article 26(1) of Regulation (EU) 2021/23, shall take into account the impact of the existing contractual intra-group support arrangements on the value of the assets and liabilities where, on the basis of the circumstances, it is probable that those arrangements will be put into effect.
2. The valuer, or the resolution authority where conducting a provisional valuation pursuant to Article 26(1) of Regulation (EU) 2021/23, shall only take into account the impact of other formal or informal support arrangements within the group where, on the basis of the circumstances, it is probable that those arrangements will remain in place in the context of a group's stressed financial condition or in resolution.
3. The valuer, or the resolution authority where conducting a provisional valuation pursuant to Article 26(1) of Regulation (EU) 2021/23, shall determine whether the resources of a CCP that is part of a group are available to meet the losses of other group entities.

Article 10

Impact of interoperability arrangements

Where the CCP has entered into interoperability arrangements in accordance with Article 54 of Regulation (EU) No 648/2012, the valuer, or the resolution authority where conducting a provisional valuation pursuant to Article 26(1) of Regulation (EU) 2021/23, shall take into account the potential impact of such arrangements on the value of the assets and liabilities of the CCP.

Article 11

Valuation report

The valuer shall prepare a valuation report for the resolution authority which shall include the following:

- (a) the information referred to in Article 25(4) of Regulation (EU) 2021/23, except in respect of provisional valuations as referred to in Article 26(1) of that Regulation;
- (b) the information referred to in Article 25(5) of Regulation (EU) 2021/23, except in respect of provisional valuations as referred to in Article 26(1) of that Regulation;
- (c) the valuation of the liabilities arising from contracts referred to in Article 29(1) of Regulation (EU) 2021/23;
- (d) a summary of the valuation including an explanation of best point estimate, value ranges and sources of valuation uncertainty;

- (e) an explanation of the key methodologies and assumptions used by the valuer when performing the valuation, together with an explanation of how sensitive the valuation is to the choices of those methodologies and assumptions, and, where feasible, an explanation of how those methodologies and assumptions differ from those used for other relevant valuations including where relevant any provisional resolution valuations;
- (f) any additional information which in the valuer's opinion would assist the resolution authority or competent authority for the purposes of Article 24(1), (2) and (3) and Article 26(1), (2) and (3) of Regulation (EU) 2021/23.

Section 2

Criteria for the carrying out of valuations for the purposes of Article 24(2) of Regulation (EU) 2021/23

Article 12

General principles

1. The valuations carried out for the purposes referred to in Article 24(2) of Regulation (EU) 2021/23 shall be based on fair, prudent and realistic assumptions and shall seek to ensure that losses under the appropriate scenario are fully recognised.

Where such valuation is available, it shall inform the assessment of the competent authority or of the resolution authority, as appropriate when determining that a CCP is 'failing or likely to fail' as referred to in Article 22(1), point (a), of Regulation (EU) 2021/23.

Based on existing supervisory guidance or other generally recognised sources setting out criteria for the fair and realistic measurement of different types of assets and liabilities, the valuer, or the resolution authority where conducting a provisional valuation pursuant to Article 26(1) of Regulation (EU) 2021/23, may challenge the rules, assumptions, data, methodologies and judgements on which the CCP based the valuations that it used for the fulfilment of its financial reporting obligations or for the calculation of its regulatory capital or of its capital requirements and disregard them for the purposes of their valuation.

2. The valuer, or the resolution authority where conducting a provisional valuation pursuant to Article 26(1) of Regulation (EU) 2021/23, shall determine the most appropriate valuation methodologies, which may rely on the CCP's internal models and rules where the valuer, or the resolution authority where conducting a provisional valuation pursuant to Article 26(1) of Regulation (EU) 2021/23, deems it appropriate taking into account the nature of the CCP's risk management framework and the quality of data and information available.

3. The valuations shall be consistent with the applicable accounting and prudential framework.

Article 13

Areas requiring particular attention in the valuation

The valuer, or the resolution authority where conducting a provisional valuation pursuant to Article 26(1) of Regulation (EU) 2021/23, shall particularly focus on areas subject to significant valuation uncertainty which have a significant impact on the overall valuation for the purpose of Article 24(2) of Regulation (EU) 2021/23.

For the areas referred to in the first subparagraph, the valuer, or the resolution authority where conducting a provisional valuation pursuant to Article 26(1) of Regulation (EU) 2021/23, shall provide the results of the valuation in the form of best point estimates and, where appropriate, value ranges, as set out in Article 6(3). Those areas shall include:

- (a) contracts referred to in Article 29(1) of Regulation (EU) 2021/23;
- (b) loans, the expected cash flows of which depend on a counterparty's ability, willingness or incentive to perform its obligations;

- (c) repossessed assets, the cash flows of which are affected by both the asset's fair value at the time the CCP forecloses on the related security or lien, and the expected evolution of such value after foreclosure;
- (d) any other instruments measured at fair value where the determination of that fair value in accordance with accounting or prudential requirements applying to their marking to market or marking to model is no longer applicable or valid taking into account the circumstances;
- (e) goodwill and intangibles, where the impairment test may depend on subjective judgement, including as regards the reasonably attainable cash flow stream, discount rates, and the perimeter of cash-generating units;
- (f) legal disputes and regulatory actions, the expected cash flows of which may be subject to varying degrees of uncertainty relating to their amount or timing;
- (g) items including pension assets and liabilities and deferred tax items.

Article 14

Factors affecting the valuation

1. The valuer, or the resolution authority where conducting a provisional valuation pursuant to Article 26(1) of Regulation (EU) 2021/23, shall take into account general factors that may affect the key assumptions on which the values of assets and liabilities in the areas referred to in Article 13 are based, including the following factors:

- (a) the economic and industry circumstances affecting the CCP, including default events, or non-default events and relevant market developments;
- (b) the CCP's business model and changes in its strategy;
- (c) the CCP's asset selection criteria;
- (d) circumstances and practices that are likely to lead to payment shocks;
- (e) circumstances affecting capital requirements;
- (f) the impact of the CCP's financial structure on the capacity of the CCP to retain assets and contracts for the expected holding period and the CCP's ability to generate predictable cash flows;
- (g) the CCP's operating rules and loss allocation;
- (h) general or CCP-specific liquidity or funding concerns.

2. The valuer, or the resolution authority where conducting a provisional valuation pursuant to Article 26(1) of Regulation (EU) 2021/23, shall clearly separate any material unrealised gains identified in the valuation process, to the extent that those gains have not been recognised in the valuation and shall provide appropriate information in the valuation report of the exceptional circumstances that have led to those gains.

Section 3

Criteria for the carrying out of valuations for the purposes of Article 24(3) and Article 26(1), second subparagraph, of Regulation (EU) 2021/23

Article 15

General principles

1. The valuer, or the resolution authority where conducting a provisional valuation pursuant to Article 26(1) of Regulation (EU) 2021/23, shall assess the impact on the valuation of each resolution action that the resolution authority is likely to adopt to inform the decisions referred to in Article 24(3) of Regulation (EU) 2021/23.

Without prejudice to the valuer's independence, the resolution authority may consult with the valuer in order to identify the range of resolution actions being considered by that authority, including actions contained in the resolution plan or, if different, any proposed resolution scheme.

2. The valuer in consultation with the resolution authority or the resolution authority where conducting a provisional valuation pursuant to Article 26(1) of Regulation (EU) 2021/23 shall, where appropriate, present separate valuations that reflect the impact of a sufficiently diverse range of resolution actions.

3. The valuer, or the resolution authority where conducting a provisional valuation pursuant to Article 26(1) of Regulation (EU) 2021/23, shall ensure that, when the resolution tools are applied or when the power to write down or convert instruments of ownership and debt instruments or other unsecured liabilities referred to in Article 32 of Regulation (EU) 2021/23 is exercised, any losses on the assets of the CCP are fully recognised under scenarios that are relevant to the range of resolution actions being considered.

4. Where the values in the valuation performed by the valuer, or the resolution authority where conducting a provisional valuation pursuant to Article 26(1) of Regulation (EU) 2021/23, diverge significantly from the values presented by the CCP in its financial statements, the valuer, or the resolution authority when conducting a provisional valuation pursuant to Article 26(1) of Regulation (EU) 2021/23, shall use the assumptions of their own valuation to inform the adjustments to the assumptions and the accounting policies necessary for the preparation of the updated balance sheet as required under Article 25(4), point (a), of Regulation (EU) 2021/23, in a way consistent with the applicable accounting framework.

The valuer, or the resolution authority where conducting a provisional valuation pursuant to Article 26(1) of Regulation (EU) 2021/23, shall specify the amount of losses that they have identified but which cannot be recognised in the updated balance sheet, describe the reasons underlying the determination of such losses and provide the likelihood and time horizon of their occurrence.

5. Where instruments of ownership and debt instruments or other unsecured liabilities are converted to equity, the valuation shall provide an estimate of the post-conversion equity value of the new shares transferred or issued as consideration to holders of converted capital instruments or other creditors. That estimate shall form the basis for the determination of the conversion rate or rates pursuant to Article 33(7), point (b), of Regulation (EU) 2021/23.

Article 16

Selection of the measurement basis

1. When selecting the most appropriate measurement basis or bases, the valuer, or the resolution authority where conducting a provisional valuation pursuant to Article 26(1) of Regulation (EU) 2021/23, shall take into account the range of resolution actions assessed in accordance with Article 15(1).

2. The valuer, or the resolution authority where conducting a provisional valuation pursuant to Article 26(1) of Regulation (EU) 2021/23, shall determine, on the basis of fair, prudent and realistic assumptions, the cash flows that the CCP can expect from its existing assets and liabilities following the adoption of the resolution action or actions identified and discount them at an appropriate rate determined in accordance with paragraph 6.

3. Cash flows shall be determined at the appropriate level of aggregation.

4. Where the resolution actions referred to in Article 15(1) require assets and liabilities to be retained by a CCP that continues to be a going concern entity, the valuer shall use the hold value as the appropriate measurement basis.

The hold value may, if considered fair, prudent and realistic by the valuer, or the resolution authority where conducting a provisional valuation pursuant to Article 26(1) of Regulation (EU) 2021/23, anticipate a normalisation of market conditions.

The hold value shall not be used as the measurement basis where assets are transferred to a bridge CCP pursuant to Article 42 of Regulation (EU) 2021/23, or where a sale of business tool pursuant to Article 40 of that Regulation is used.

5. Where the resolution actions referred to in Article 15(1) envisage the sale of assets, the expected cash flows shall correspond to the disposal values referred to in Article 17(5) envisaged for the expected disposal horizon.

6. The discount rates shall be determined having regard to the timing of cash flows, to the risk profile, financing costs and market conditions appropriate to the asset or liability being measured, to the disposal strategy considered and to the financial position of the CCP after resolution.

Article 17

Specific factors relating to the estimation and discounting of expected cash flows

1. When estimating cash flows, the valuer, or the resolution authority where conducting a provisional valuation pursuant to Article 26(1) of Regulation (EU) 2021/23, shall apply their expert judgement in determining key characteristics of the assets or liabilities being measured.

The valuer, or the resolution authority where conducting a provisional valuation pursuant to Article 26(1) of Regulation (EU) 2021/23, shall also apply their expert judgement in determining how the continuation, potential renewal or refinancing, run-off or disposal of those assets or liabilities, as envisaged in the resolution action referred to in Article 15(1) affect those cash flows.

2. Where the resolution action referred to in Article 15(1) envisages a CCP holding an asset, maintaining a liability, or continuing a business, the valuer, or the resolution authority where conducting a provisional valuation pursuant to Article 26(1) of Regulation (EU) 2021/23, may take into account the following factors potentially affecting future cash flows:

- (a) changes in assumptions or expectations, as compared to those prevailing as of the valuation date, consistent with long-term historical trends and considered over a reasonable time horizon, consistent with the holding period envisaged for the assets or with the period envisaged for the recovery of the CCP;
- (b) additional or alternative valuation bases or methodologies that are considered appropriate by the valuer and consistent with this Regulation, including in the context of assessing the post-conversion equity value of shares.

3. As regards groups of assets and liabilities or businesses envisaged to be run off, the valuer, or the resolution authority where conducting a provisional valuation pursuant to Article 26(1) of Regulation (EU) 2021/23, shall take into account workout costs and benefits.

4. Where the situation of a CCP prevents it from holding an asset or continuing a business, or where a sale is otherwise considered necessary by the resolution authority to achieve the resolution objectives, the expected cash flows shall be valued at the disposal values expected within a given disposal period.

5. The disposal value shall be determined by the valuer, or the resolution authority where conducting a provisional valuation pursuant to Article 26(1) of Regulation (EU) 2021/23, on the basis of the cash flows, net of disposal costs and net of the expected value of any guarantees given, that the CCP can reasonably expect in the prevailing market conditions through an orderly sale or transfer of assets or liabilities.

Where appropriate, having regard to the actions to be taken under the resolution scheme, the valuer, or the resolution authority where conducting a provisional valuation pursuant to Article 26(1) of Regulation (EU) 2021/23, may determine the disposal value by applying a discount for a potential accelerated sale to the observable market price of that sale or transfer.

When determining the disposal value of assets which do not have a liquid market, the valuer, or the resolution authority where conducting a provisional valuation pursuant to Article 26(1) of Regulation (EU) 2021/23, shall consider observable prices on markets where similar assets are traded or model calculations using observable market parameters, with discounts for illiquidity reflected, as appropriate.

6. The valuer, or the resolution authority where conducting a provisional valuation pursuant to Article 26(1) of Regulation (EU) 2021/23, shall consider the following factors that might affect disposal values and disposal periods:

- (a) the disposal values and disposal periods observed in similar transactions, appropriately adjusted to take into account differences in the business model and in the financial structure of the parties to those transactions;
- (b) the advantages or disadvantages of a particular transaction that are specific to the parties involved or to a subset of market participants;
- (c) the particular attributes of an asset or business that may only be relevant to a specific potential purchaser, or to a subset of market participants;
- (d) the likely impact of expected sales on the CCP's franchise value.

7. When assessing the value of businesses for purposes of the use of the sale of business or of the bridge CCP tool, the valuer, or the resolution authority where conducting a provisional valuation pursuant to Article 26(1) of Regulation (EU) 2021/23, may take into account reasonable expectations of the franchise value. Such expectations of the franchise value shall include those resulting from a renewal of assets, from a refinancing of an open portfolio, or from a continuation or resumption of business in the context of the resolution actions.

8. A valuer, or a resolution authority where conducting a provisional valuation pursuant to Article 26(1) of Regulation (EU) 2021/23, that assesses that there is no realistic prospect for the disposal of an asset or business, shall not be required to determine the disposal value but shall estimate the related cash flows on the basis of the relevant prospects for continuation or run-off.

The first subparagraph shall not apply to the sale of business tool.

9. As regards parts of a group of assets or of a business that are likely to be liquidated under normal insolvency proceedings, the valuer, or the resolution authority where conducting a provisional valuation pursuant to Article 26(1) of Regulation (EU) 2021/23, may consider the disposal values and disposal periods observed in auctions involving assets of a similar nature and condition.

When determining the expected cash flows, the valuer, or the resolution authority where conducting a provisional valuation pursuant to Article 26(1) of Regulation (EU) 2021/23, shall take into account illiquidity, the absence of reliable inputs for the determination of disposal values, and the resulting need to rely on valuation methodologies based on unobservable inputs.

Article 18

Methodology for calculating and including a buffer for additional losses

1. The valuer, or the resolution authority where conducting a provisional valuation pursuant to Article 26(1) of Regulation (EU) 2021/23, shall include in the valuation a buffer that reflects facts and circumstances supporting the existence of additional losses of uncertain amount or timing.

The assumptions supporting the calculation of the buffer shall be sufficiently explained and substantiated by the valuer, or the resolution authority where conducting a provisional valuation pursuant to Article 26(1) of Regulation (EU) 2021/23.

2. When determining the amount of the buffer, the valuer, or the resolution authority where conducting a provisional valuation pursuant to Article 26(1) of Regulation (EU) 2021/23, shall identify factors that could affect expected cash flows as a result of resolution actions likely to be adopted.

CHAPTER IV

Separation of the valuation under resolution and valuation for the application of the 'no creditor worse off' principle and methodology for carrying out the valuation for the application of the 'no creditor worse off' principle

Article 19

General provisions

1. Where determining the treatment of shareholders and creditors under normal insolvency proceedings, the valuation shall only be based on information about facts and circumstances which existed and could reasonably have been known at the resolution decision date which, had they been known by the valuer, would have affected the measurement of the assets and liabilities of the CCP on that date.
2. Where determining the actual treatment of shareholders and creditors in resolution, the valuer shall rely on available information concerning facts and circumstances existing as of the date or dates on which shareholders and creditors receive compensation ('actual treatment date or dates').
3. The reference date of the valuation shall be the resolution decision date which may differ from the actual treatment date.

Where the valuer deems the impact of any discounting of the proceeds to be negligible, the undiscounted proceeds at the date the resolution action is taken may be directly compared with the discounted amount of hypothetical proceeds that shareholders and creditors would have received if the CCP entered into normal insolvency proceedings at the resolution decision date.

Article 20

Inventory of assets and claims

1. The valuer shall establish an inventory of all identifiable and contingent assets owned by the CCP.

That inventory shall include assets for which the existence of associated cash flows is demonstrated or can reasonably be expected.

2. The CCP shall make available to the valuer a list of all claims and contingent claims against the CCP.

That list shall categorise all claims and contingent claims according to their priority under normal insolvency proceedings. The valuer shall be allowed to enter into arrangements for specialist advice or expertise as regards the consistency of the ranking of claims with the applicable insolvency law.

3. The valuer shall separately identify encumbered assets and claims secured by those assets.

Article 21

Steps of the valuation

When determining whether a difference in treatment as referred to in Article 61(2), point (c), of Regulation (EU) 2021/23 exists, the valuer shall assess the following:

- (a) the treatment that shareholders and creditors in respect of which resolution actions have been taken would have received had the CCP entered normal insolvency proceedings, following the full application of the applicable contractual obligations and other arrangements in its operating rules, at the resolution decision date, disregarding any provision of extraordinary public financial support;
- (b) the value of the restructured claims following the application of resolution powers and tools and the value of other proceeds received by shareholders and creditors as at the actual treatment date or dates, discounted back to the resolution decision date if deemed necessary to enable a fair comparison with the treatment referred to in point (a);
- (c) whether the treatment referred to in point (a) exceeds the treatment referred to in point (b) for each creditor in accordance with their order of priority under normal insolvency proceedings, as identified according to Article 20.

Article 22

Determination of the treatment of shareholders and creditors under normal insolvency proceedings

1. The method for conducting the valuation pursuant to Article 21, point (a), shall consist in determining the discounted amount of expected cash flows under normal insolvency proceedings.
2. Expected cash flows shall be discounted at the rate or rates reflecting, as appropriate, the timing associated with such expected cash flows, prevailing circumstances as of the resolution decision date, risk-free interest rates, risk premiums for similar financial instruments issued by similar entities, market conditions or discount rates applied by potential purchasers and other relevant characteristics of the element or elements being valued.
3. The methodology set out in paragraph 2 for the calculation of the discount rate shall not be used where particular discount rates relevant for the valuation are specified in applicable insolvency law or practice.
4. The valuer shall take the following into account in the determination of the discounted amount of expected cash flows under normal insolvency proceedings:
 - (a) applicable CCP operating rules, contractual arrangements, insolvency law and practice in the relevant jurisdiction which could influence the valuation;
 - (b) reasonably foreseeable administration, transaction, maintenance, disposal and other costs which would have been incurred by an administrator or insolvency practitioner, as well as financing costs;
 - (c) the information on recent insolvency cases of similar entities, where available and relevant;
 - (d) an estimate of the direct replacement costs incurred by clearing members, calculated in accordance with Article 23.
5. For assets traded on an active market, the valuer shall use the observed price, except where specific circumstances hamper the marketability of the assets of the CCP.

For assets not traded on an active market the valuer shall consider the following factors when determining the amount and timing of expected cash flows:

- (a) prices observed on active markets where similar assets are traded;
- (b) prices observed in normal insolvency proceedings or in otherwise distressed transactions involving assets of a similar nature and condition;
- (c) prices observed in transactions involving the sale of business or the transfer to a bridge CCP in a resolution context relating to similar entities;

- (d) the likelihood of an asset generating net cash inflows under normal insolvency proceedings;
 - (e) expected market conditions within a given disposal period, including market depth and the ability of the market to exchange the relevant volume of assets within that period; and
 - (f) the length of a given disposal period that reflects the implications of the applicable insolvency law.
6. The valuer shall consider whether the financial condition of the CCP would have affected the expected cash flows, including through restrictions on the administrator's ability to negotiate terms with potential purchasers.
7. Where possible, and subject to any applicable provision of the relevant insolvency framework, the cash flows shall reflect the contractual, statutory, or other legal rights of creditors or normal insolvency practices.
8. The hypothetical proceeds resulting from the valuation shall be allocated to shareholders and creditors in accordance with their order of priority under the applicable insolvency law, as identified in Article 20.

Article 23

Direct replacement costs incurred by the clearing members under normal insolvency proceedings

1. When calculating the costs referred to in Article 22(4), point (d), the valuer shall take into account a commercially reasonable estimate of the direct replacement costs incurred by clearing members to reopen, within an appropriate period, comparable net positions in the market, as set out in Article 61(3), first subparagraph, point (c), of Regulation (EU) 2021/23.
2. The valuer shall consider the following costs for clearing members:
- (a) the hypothetical credit exposures of the clearing members to the CCP at the time of reopening the comparable net positions, had those positions remained open at the CCP until that date;
 - (b) any liquidity and concentration costs incurred by clearing members when reopening the comparable net positions;
 - (c) any material unavoidable operating costs incurred by clearing members in relation to the new connections or transactions between clearing members and any counterparty or CCP, including membership, trading, clearing, payment, settlement and custody fees;
 - (d) any additional material funding cost stemming from the difference in applicable margin requirements and default fund contributions and associated with the reopening of net positions with any counterparty or CCP.

Article 24

Determination of the actual treatment of shareholders and creditors in resolution

1. The valuer shall identify all claims outstanding after the write-down or conversion of capital instruments and the application of any resolution actions and shall assign those claims to the legal and natural persons who were the CCP's shareholders and creditors at the resolution decision date.

The valuer shall determine the actual treatment of the legal and natural persons who were the CCP's shareholders and creditors at the resolution decision date in accordance with paragraphs 2, 3 and 4, except where those persons receive cash compensation as a result of the resolution.

2. Where the legal and natural persons who were the CCP's shareholders and creditors at the resolution decision date receive equity compensation as a result of the resolution, the valuer shall determine their actual treatment by providing an estimate of the overall value of the shares transferred or issued as consideration to the holders of the capital instruments, debt instruments or other unsecured liabilities that have been converted. That estimate may be based on an assessed market price resulting from generally accepted valuation methodologies.

3. Where the legal and natural persons who were the CCP's shareholders and creditors at the resolution decision date receive debt compensation as a result of the resolution, the valuer shall determine the actual treatment by taking into account the changes in contractual cash flows that result from the write-down or conversion, the application of other resolution actions and the relevant discount rate calculated in accordance with the methodology set out in Article 22(2) of this Regulation.

4. For any outstanding claim, the valuer may take into account, where available and together with the factors described in paragraphs 2 and 3, prices observed in active markets for the same or similar instruments issued by the CCP under resolution or other similar entities.

5. The valuer shall also consider the actual direct replacement costs incurred by clearing members and listed in Article 23(2) when comparing the actual treatment of shareholders and creditors in resolution with the valuation for the application of the 'no creditor worse off' principle.

Article 25

Valuation report

The valuer shall prepare a valuation report for the resolution authority which shall include the following elements:

- (a) a summary of the valuation, including a presentation of valuation ranges and sources of valuation uncertainty;
- (b) an explanation of the key methodologies and assumptions adopted and of how sensitive the valuation is to these choices;
- (c) an explanation, where feasible, of why the valuation differs from other relevant valuations, including the resolution valuations conducted in accordance with Regulation (EU) 2021/23 or other prudential or accounting valuations.

Article 26

Entry into force

This Regulation shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Union*.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels, 3 May 2023.

For the Commission
The President
Ursula VON DER LEYEN
