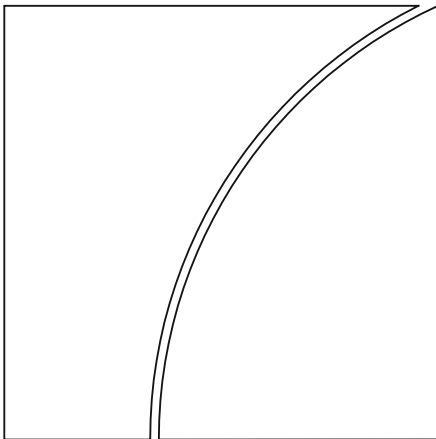


Committee on
Payments and Market
Infrastructures

Board of the International
Organization of Securities
Commissions



Public quantitative
disclosure standards for
central counterparties

February 2015

Revised May 2026 (update for consultation)



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Introduction

The CPSS-IOSCO *Principles for financial market infrastructures* (PFMI)¹ states that financial market infrastructures (FMIs) should provide relevant information to participants, relevant authorities and the broader public. Quantitative data are important components of the set of public disclosures that is expected of FMIs as part of satisfying the PFMI. This document sets out the public quantitative disclosure standards that central counterparties (CCPs) are expected to meet. These standards complement the *Disclosure framework* published by CPSS and IOSCO in December 2012.

These quantitative disclosures, together with the *Disclosure framework*, form the minimum disclosures expected of CCPs under Principle 23, Key Consideration 5, of the PFMI. CCPs are encouraged to complete this minimum set of disclosures as soon as practicable, and by 1 January 2016 at the latest, and to update in accordance with the frequencies set out in the matrix below.

CCPs should work with the relevant authorities on the preparation of the disclosures. CPMI² and IOSCO will review the consistency of the disclosures as part of their wider work on monitoring implementation of the PFMI.

Purpose of the disclosures

The disclosures are intended to support the objectives of enabling stakeholders, including authorities, participants (direct, indirect and prospective) and the public, to:

- compare CCP risk controls, including their financial condition and financial resources to withstand potential losses;
- have a clear, accurate and full understanding of the risks associated with a CCP (in accordance with Principle 23, Key Consideration 5);
- understand and assess a CCP's systemic importance and its impact on systemic risk in all jurisdictions and currency areas for which it provides services, from which it has material membership or in which there are linked infrastructures; and
- understand and assess the risks of participating in CCPs (directly, and, to the extent relevant, indirectly).

Principle 23 states that FMIs should, at a minimum, disclose "basic data" on transaction volumes and values. Principle 23 also states that FMIs should disclose data on their financial condition, their financial resources to withstand potential losses, the timeliness of settlements, and other performance statistics. They should disclose sufficient information for participants and prospective participants to understand fully the risks of participating in the system. This disclosure is expected to be to the public rather than restricted to participants or members. The *Public quantitative disclosure standards for central counterparties* establish a common set of such "basic data" on transaction volumes and values, and a common minimum set of quantitative information on the financial condition, financial resources and performance of a CCP.

The quantitative disclosures should be seen and interpreted as a part of the overall disclosures made by CCPs to satisfy Principle 23 and the *Disclosure framework*. Given the differences between the markets and products cleared by CCPs, and differences in CCP structure, it is likely to be important for CCPs to complement the minimum quantitative disclosures with appropriate explanatory notes, and links to other qualitative disclosures, so that recipients can understand the data correctly.

¹ CPSS-IOSCO *Principles for financial market infrastructures* (April 2012).

² The Committee on Payment and Settlement Systems (CPSS) changed its name to the Committee on Payments and Market Infrastructures (CPMI) in September 2014.

In the context of understanding and assessing the risks of participating in CCPs, the objective of CPMI and IOSCO is not to provide policy guidance on a set of information that is sufficient for counterparty due diligence reviews, notwithstanding that the proposed metrics would be supportive of such reviews. To complete such due diligence reviews, CCP participants may have legitimate requirements for additional information from CCPs.

In preparing these quantitative disclosure standards CPMI and IOSCO have had regard to comments provided by CCPs and CCP participants during the consultation period. CPMI and IOSCO have also sought to avoid imposing unreasonable or disproportionate additional burden on CCPs and have therefore endeavoured to focus on data that most or all CCPs would generally collect and maintain as part of day-to-day business and risk management. CCPs have indicated that making information available to all in a standardised format would potentially be less burdensome to CCPs than meeting multiple separate requests for information from different parties. The data are almost all anonymised and aggregated, and the degree of granularity has been set so as to avoid revealing sensitive information about the positions of individual CCP participants. Overall, therefore, the standards attempt to reflect the feedback received from CCPs and other respondents on the benefits and costs of publishing the information.

Frequency and type of disclosure

The matrix below follows the structure of the PFMI. When completing and reading the disclosure matrix, CCPs and readers should do so in conjunction with the explanatory notes at the end of the matrix.

To serve their purpose in allowing evaluation and comparison of CCPs, most of these quantitative disclosures will need to be updated more frequently than the *Disclosure framework* (which should be updated on at least a biennial basis). Updates to the quantitative disclosures should be in accordance with the frequencies set out in the matrix.

CPMI and IOSCO expect CCPs to use a common template within which to publish their quantitative disclosures. There was strong demand from respondents in the public consultation for such a common approach as it will help to enable all CCPs to disclose comprehensive and objective information in a similar structure to facilitate comparability across CCPs.³ CPMI and IOSCO encourage CCPs, their representative bodies and their participants to work together to develop such a common template, and to consult CPMI and IOSCO on their proposed solution.

A completed version of the matrix should be provided on the CCP's website in an accessible format. Previous reports should remain available and CCPs should consider making data available as a time series.

In order for the objectives of disclosure to be achieved, it is essential that reporting is accurate. CCPs should ensure their disclosures are subject to appropriate quality control.

In some cases specific features of a CCP's operations or business model will mean that some of the listed quantitative data are not relevant or, more rarely, that data would be relevant but are not available. Where this is the case, CCPs should explain the reasons for this in their disclosure. If a particular data item is considered by the CCP to reveal confidential information about a CCP participant, the CCP should explain to its supervisory authorities its proposal to exclude the particular data item from the published disclosures. It is envisaged, however, that such exclusions will be exceptional and, where the elapse of time means there is no longer material sensitivity to the data, temporary.

More generally, CCPs are encouraged to add explanatory notes wherever they consider this will aid understanding, where there may otherwise be a risk of misinterpretation or where this will increase the usefulness and comparability of the data.

³ The consultation version of *Public quantitative disclosure standards for central counterparties* was published in October 2013.

[XXX] 2026 update and additional margin-related disclosures

This document, originally published in February 2015, was updated in [XXX] 2026 to include additional disclosures further to two policy proposals contained in the BCBS-CPMI-IOSCO final report *Transparency and responsiveness of initial margin in centrally cleared markets*, published in January 2025.⁴ This report builds on the BCBS-CPMI-IOSCO report *Review of margining practices* published in September 2022 that recommended international policy work aimed at, among other things, evaluating the responsiveness of initial margin models and enhancing the transparency of margin requirements in centrally cleared markets.⁵ The additional content is set out in section 6 of the matrix and in Annex 1.

⁴ BCBS-CPMI-IOSCO, *Final report on Transparency and responsiveness of initial margin in centrally cleared margin: review and policy proposals*, January 2025, www.bis.org/bcbs/publ/d590.htm and www.iosco.org/library/pubdocs/pdf/IOSCOPD783.pdf

⁵ BCBS-CPMI-IOSCO, *Review of margining practices*, September 2022, www.bis.org/bcbs/publ/d537.htm and www.iosco.org/library/pubdocs/pdf/IOSCOPD714.pdf

Matrix

See the explanatory notes after the matrix for more information about the data required.

There are no quantitative disclosure requirements in the matrix relating to PFMI Principles 1-3, 8-11, 21, 22 and 24.

	Disclosure	Frequency and type of data
4. Credit risk (Principle 4)		
4.1	<p>Total value of default resources (excluding initial and retained variation margin), split by clearing service if default funds are segregated by clearing service [see explanatory notes], split by:</p> <p>(a) pre-funded</p> <ol style="list-style-type: none"> i. own capital that forms part of the default waterfall (further split by whether used before, alongside, or after, member contributions) ii. aggregate participant contributions (both amount required and post-haircut amount posted, where different) iii. other <p>(b) committed</p> <ol style="list-style-type: none"> i. own/parent funds that are committed to address a participant default (or round of participant defaults) ii. aggregate participant commitments to address an initial participant default (or initial round of participant defaults) iii. aggregate participant commitments to replenish the default fund to deal with a subsequent participant default (or round of participant defaults) after the initial participant default (or round of participant defaults) has been addressed iv. other <p>[see explanatory notes]</p>	<p>Quarterly</p> <p>As at quarter end</p>
4.2	<p>KCCP</p> <p><i>Kccp need only be reported by those CCPs which are, or seek to be, a "qualifying CCP" under relevant law.</i></p> <p>[see explanatory notes]</p>	<p>Quarterly</p>
4.3	<p>Value of pre-funded default resources (excluding initial and retained variation margin) held for each clearing service, in total and split by:</p> <ul style="list-style-type: none"> • Cash deposited at a central bank of issue of the currency concerned • Cash deposited at other central banks • Secured cash deposited at commercial banks (including reverse repo) • Unsecured cash deposited at commercial banks • Non-cash <ul style="list-style-type: none"> o sovereign government bonds <ul style="list-style-type: none"> <input type="checkbox"/> domestic <input type="checkbox"/> other o agency bonds o state/municipal bonds o corporate bonds o equities o commodities <ul style="list-style-type: none"> <input type="checkbox"/> gold <input type="checkbox"/> other (please describe) o mutual funds / UCITs o other (please provide explanation of type of asset) <p>Amounts should be reported both pre-haircut (ie at market value) and at post-haircut value.</p>	<p>Quarterly</p> <p>As at quarter end [though see explanatory notes]</p>

4.4	<p>State whether the CCP is subject to a minimum “Cover 1” or “Cover 2” requirement in relation to total pre-funded default resources.</p> <p>For each clearing service, state the number of business days within which the CCP assumes it will close out the default when calculating credit exposures that would potentially need to be covered by the default fund.</p> <p>For each clearing service, what is the estimated largest aggregate stress loss (in excess of initial margin) that would be caused by the default of any single participant and its affiliates (including transactions cleared for indirect participants) in extreme but plausible market conditions?</p> <p>Report the number of business days, if any, on which the above amount exceeded actual pre-funded default resources (in excess of initial margin) and by how much.</p> <p>For each clearing service, what was the actual largest aggregate credit exposure (in excess of initial margin) to any single participant and its affiliates (including transactions cleared for indirect participants)?</p> <p>For each clearing service, what is the estimated largest aggregate stress loss (in excess of initial margin) that would be caused by the default of any two participants and their affiliates (including transactions cleared for indirect participants) in extreme but plausible market conditions?</p> <p>Report the number of business days, if any, on which the above amount exceeded actual pre-funded default resources (in excess of initial margin) and by how much.</p> <p>For each clearing service, what was the actual largest aggregate credit exposure (in excess of initial margin) to any two participants and their affiliates (including transactions cleared for indirect participants)?</p> <p>[see explanatory notes]</p>	<p>All disclosures to be quarterly</p> <p>Peak day amount in previous twelve months, and mean average over previous twelve months.</p> <p>No. of days in quarter, and amount of excess on each day.</p> <p>Peak day amount in previous twelve months, and mean average over previous twelve months.</p> <p>Peak day amount in previous twelve months, and mean average over previous twelve months.</p> <p>No. of days in quarter, and amount of excess on each day.</p> <p>Peak day amount in previous twelve months, and mean average over previous twelve months.</p>
5. Collateral (Principle 5)		
5.1	<p>Assets eligible as initial margin, and the respective haircuts applied</p> <p>[see explanatory notes]</p>	Update as changes are made
5.2	<p>Assets eligible for pre-funded participant contributions to the default resources, and the respective haircuts applied (if different from 5.1)</p>	Update as changes are made
5.3	<p>Results of testing of haircuts – please state the:</p> <ul style="list-style-type: none"> • confidence interval targeted through the calculation of haircuts • assumed holding/liquidation period for the assets accepted, • look-back period used for testing the haircuts, • the number of days during the look-back period on which the fall in value during the assumed holding/liquidation period exceeded the haircut on an asset. <p>[see explanatory notes]</p>	Quarterly

6. Margin (Principle 6) [see explanatory notes]

Initial margin

6.1	<p>For each clearing service, total initial margin required, split by house and client (or combined total if not segregated)</p> <p>For each clearing service, total initial margin required, split between core initial margin and margin add-ons.</p> <p>For each clearing service, state whether initial margin for the positions of indirect participants must be provided for each indirect participant's own position (gross), or for the net position of a group of indirect participants ("net" or "net omnibus")</p> <p>[see explanatory notes]</p>	<p>Quarterly</p> <p>As at quarter end [though see explanatory notes]</p> <p>Quarterly</p> <p>Quarterly</p>
6.2	<p>For each clearing service, total initial margin held, split by house and client (if segregated).</p> <p>For each of the overall house and client totals (or for just the overall total posted, if house and client are not segregated), the amounts of:</p> <ul style="list-style-type: none"> • Cash deposited at a central bank of issue of the currency concerned • Cash deposited at other central banks • Secured cash deposited at commercial banks (including reverse repo) • Unsecured cash deposited at commercial banks • Non-cash <ul style="list-style-type: none"> ◦ sovereign government bonds <ul style="list-style-type: none"> □ domestic □ other ◦ agency bonds ◦ state/municipal bonds ◦ corporate bonds ◦ equities ◦ commodities <ul style="list-style-type: none"> □ gold □ other ◦ mutual funds / UCITs ◦ other (please provide explanation of type of asset) <p>Amounts should be reported both pre-haircut (ie at market value) and at post-haircut value.</p> <p>[see explanatory notes]</p>	<p>Quarterly</p> <p>As at quarter end [though see explanatory notes]</p>
6.3	<p>Initial margin rates on individual contracts, where the CCP sets such rates</p> <p>[see explanatory notes]</p>	<p>Update as changes are made</p>

12.1	Percentage of settlements by value effected using a DvP, DvD or PVP settlement mechanism [see explanatory notes]	Quarterly
12.2	Percentage of settlements by volume effected using a DvP, DvD or PVP settlement mechanism [see explanatory notes]	Quarterly
13. Default rules and procedures (Principle 13)		
13.1	CCPs are encouraged, subject to legal constraints on timing and content, to disclose as soon as practicable quantitative information related to defaults, such as: <ul style="list-style-type: none"> • Amount of loss versus amount of initial margin • Amount of other financial resources used to cover losses • Proportion of client positions closed-out/porting Appropriate references to other published material related to the defaults may also be helpful.	Ad-hoc [see explanatory notes]
14. Segregation and portability (Principle 14)		
14.1	Split, by clearing service, of total client positions held in: <ul style="list-style-type: none"> (a) individually segregated accounts; (b) omnibus client-only accounts, other than LSOC accounts (see below); (c) legally segregated but operationally comingled (LSOC) accounts; (d) comingled house and client accounts; as a share of notional values cleared or of the settlement value of securities transactions. [see explanatory notes]	Quarterly As at quarter end
15. General business risk (Principle 15) [see explanatory notes]		
15.1	(a) Value of liquid net assets funded by equity (b) Six months of current operating expenses [see explanatory notes]	Annual
15.2	Financial disclosures: including, but not limited to, <ul style="list-style-type: none"> • total revenue, • total expenditure, • profits, • total assets, • total liabilities. Explain if collateral posted by clearing participants is held on or off the CCP's balance sheet.	Annual Annual
15.3	Income breakdowns: <ul style="list-style-type: none"> • percentage of total income that comes from fees related to provision of clearing services; • percentage of total income that comes from the reinvestment (or rehypothecation) of assets provided by clearing participants. 	Annual
16. Custody and investment risks (Principle 16)		
16.1	Total cash (but not securities) received from participants, regardless of the form in which it is held, deposited or invested, split by whether it was received as initial margin or default fund contribution	Quarterly As at quarter end [though see explanatory notes]

16.2	<p>How the total cash received from participants (ie the combined total of initial margin and default fund contributions in 16.1) is held/deposited/invested, including:</p> <ul style="list-style-type: none"> • percentage of this total participant cash held as cash deposits (including through reverse repo); further split into: <ul style="list-style-type: none"> – percentage held: <ul style="list-style-type: none"> o as cash deposits at central banks of issue of the currency deposited; o as cash deposits at other central banks; o as cash deposits at commercial banks; of which: <ul style="list-style-type: none"> <input type="checkbox"/> percentage secured (including through reverse repo); <input type="checkbox"/> percentage unsecured; o in money market funds; o in other forms (please specify). – percentage split by currency of these cash deposits (including reverse repo) and money market funds - local currency, USD, EUR, other <p>Also:</p> <ul style="list-style-type: none"> – weighted average maturity of these cash deposits (including reverse repo) and money market funds • percentage of this total participant cash invested in securities; further split into: <ul style="list-style-type: none"> – percentage invested in <ul style="list-style-type: none"> o sovereign government bonds; of which: <ul style="list-style-type: none"> <input type="checkbox"/> domestic; <input type="checkbox"/> other; o agency bonds; o state/municipal bonds; o other instruments (please describe); – percentage split by currency of these securities - local currency, USD, EUR, other. <p>Also:</p> <ul style="list-style-type: none"> – weighted average maturity of these securities <p>Provide an estimate of the risk on the investment portfolio (excluding central bank and commercial bank deposits) (99% one-day VaR, or equivalent)</p> <p>State if the CCP investment policy sets a limit on the proportion of the investment portfolio that may be allocated to a single counterparty, and the size of that limit.</p> <p>State the number of times over the previous quarter in which this limit has been exceeded.</p>	<p>Quarterly</p> <p>As at quarter end [though see explanatory notes]</p>
16.3	<p>Rehypothecation of participant assets (ie non-cash) by the CCP where allowed, split by initial margin and default fund:</p> <ul style="list-style-type: none"> • total value of participant non-cash rehypothecated; • maturities (overnight/one day; over one day and up to one week; over one week and up to one month; over one month and up to one year; over one year and up to two years; over two years); 	<p>Quarterly</p> <p>As at quarter end [though see explanatory notes]</p>
17. Operational risk (Principle 17)		
17.1	<p>Operational availability target for the core system(s) involved in clearing (whether or not outsourced) over specified period for the system (e.g. 99.99% over a twelve-month period)</p> <p>[see explanatory notes]</p>	<p>Quarterly</p>
17.2	<p>Actual availability of the core system(s) over the previous twelve month period.</p>	<p>Quarterly</p>
17.3	<p>Total number and duration of failures affecting the core system(s) involved in clearing over the previous twelve month period</p>	<p>Quarterly</p>

17.4	Recovery time objective(s) (e.g. within two hours)	Quarterly
18. Access and participation requirements (Principle 18)		
18.1	<p>Number of clearing members, by clearing service, split by:</p> <ul style="list-style-type: none"> category of membership (e.g. direct clearing member, general clearing member [see explanatory notes]); type of participant (central bank, CCP, bank, other); and domestic or foreign participants. <p>[see explanatory notes]</p>	<p>Quarterly</p> <p>As at quarter end</p>
18.2	<p>For each clearing service with ten or more members, but fewer than 25 members:</p> <ul style="list-style-type: none"> Percentage of open positions held by the largest five clearing members, including both house and client, in aggregate <p>For each clearing service with 25 or more members:</p> <ul style="list-style-type: none"> Percentage of open positions held by the largest five and ten clearing members, including both house and client, in aggregate <p>[see explanatory notes]</p>	Average and peak end-of-day value in previous quarter
18.3	<p>For each clearing service with ten or more members, but fewer than 25 members:</p> <ul style="list-style-type: none"> Percentage of initial margin posted by the largest five clearing members, including both house and client, in aggregate <p>For each clearing service with 25 or more members:</p> <ul style="list-style-type: none"> Percentage of initial margin posted by the largest five and ten clearing members, including both house and client, in aggregate <p>[see explanatory notes]</p>	Average and peak end-of-day value in previous quarter
18.4	<p>For each segregated default fund with ten or more members, but fewer than 25 members:</p> <ul style="list-style-type: none"> Percentage of participant contributions to the default fund contributed by largest five clearing members in aggregate <p>For each segregated default fund with 25 or more members:</p> <ul style="list-style-type: none"> Percentage of participant contributions to the default fund contributed by largest five and ten clearing members in aggregate <p>[see explanatory notes]</p>	Quarterly (end of quarter value)
19. Tiered participation arrangements (Principle 19)		
19.1	<p>Measures of concentration of client clearing:</p> <p>Number of clients (if known)</p> <p>Number of direct members that clear for clients</p> <p>Per cent of client transactions by clearing service (by total gross notional for derivatives or total cleared value of securities transactions or similar) attributable to the top five clearing members (if the CCP has ten or more clearing members) and top ten clearing members (if the CCP has 25 or more clearing members)</p> <p>[see explanatory notes]</p>	<p>Quarterly</p> <p>As at quarter end</p>
20. FMI Links (Principle 20)		
<i>Interoperability</i>		
20.1	<p>Value of trades cleared through each link, by clearing service – as a share of total trade values/total notional values cleared in that service</p> <p>[see explanatory notes]</p>	Quarterly

20.2	Initial margin or equivalent financial resources provided to each linked CCP by the CCP to cover the potential future exposure of the linked CCP on contracts cleared across link	Quarterly As at quarter end [though see explanatory notes]
20.3	Initial margin or equivalent financial resources collected from each linked CCP to cover potential future exposure to the linked CCP on contracts cleared across link (at market value and post-haircut)	Quarterly As at quarter end [though see explanatory notes]
20.4	Results of back-testing of coverage of initial margin or equivalent financial resources on trades cleared through each link. At a minimum this should include: (a) Number of times over the past twelve months that coverage provided by margin and equivalent financial resources held against each linked CCP fell below the actual marked-to-market exposure to that linked CCP – based on daily back testing results* (b) Number of observations (i.e. number of accounts multiplied by number of days covered in the back test) (c) Achieved coverage level i.e. [(b) – (a)]/(b) *specify if measured intraday/continuously or only once a day. If once a day, specify at what time of day.	Quarterly
20.5	Additional pre-funded financial resources (if any) beyond initial margin and equivalent financial resources provided to each linked CCP, that are available to the linked CCP to cover exposures to the CCP and whether part of, additional to, or separate from the standard default fund (please specify)	Quarterly As at quarter end [though see explanatory notes]
20.6	Additional pre-funded financial resources (if any) beyond initial margin and equivalent financial resources collected from each linked CCP, that are available to the CCP to cover exposures to the linked CCP and whether part of, additional to, or separate from the standard default fund (please specify)	Quarterly As at quarter end [though see explanatory notes]
<i>Cross margining</i>		
20.7	(a) Value of trades subject to cross margining, by clearing service, as a percentage of total trade values/total notional values cleared (b) Reduction in total initial margin held by the CCP as a result of cross-margining, as a percentage of total initial margin that would otherwise have been held.	Quarterly Quarterly As at quarter end [though see explanatory notes]
23. Disclosure of rules, key procedures, and market data (Principle 23)		
23.1	Average daily volumes and notional values of new trades cleared, by instrument/asset class, by currency, and split by OTC or exchange-traded [see explanatory notes]	Quarterly Average per business day over the quarter
23.2	Gross notional outstanding/total settlement value of novated but not-yet-settled securities transactions per instrument/asset class and currency and split by OTC or exchange-traded [see explanatory notes]	Quarterly At end of quarter
23.3	Average daily volumes and notional contract values submitted by each execution facility or matching/confirmation venue [see explanatory notes]	Quarterly

Explanatory notes

These explanatory notes support the quantitative disclosure matrix for CCPs, providing: (i) general instructions for completing the matrix; and (ii) more detailed guidance regarding selected items in the

matrix. The quantitative disclosure matrix should also be read in conjunction with the CPSS-IOSCO *Principles for financial market infrastructures and the related Disclosure framework*.

General instructions

Confidential information: These standard disclosures are designed so that they do not reveal confidential information about individual clearing members, clients or other relevant stakeholders.

Frequency: Disclosures should be made with the frequency requested in the disclosure matrix (i.e. quarterly, annually, or as key metrics are changed). Certain items request quarterly disclosures 'over the past twelve months' – these disclosures should be made every quarter, covering the preceding twelve months.

Type of data: CCPs should provide mean values for disclosures requiring an 'average'. Certain items request data in the form of an 'Average per business day over the quarter' or a 'Maximum over the quarter' – these disclosures do not request a time series covering each day in the quarter, but rather a single number which is the average/maximum over all business days in the quarter.

Reporting lag: CPMI and IOSCO recognise that some reporting lag may be necessary, however, in order to ensure relevant information is made available, a reporting lag of between one and two months is expected. (If disclosure of some data items to this timetable would result in publication in advance of publication dates required under listing rules, the CCP should delay disclosure until the date set under the relevant listing rules.)

Disclosure 'by clearing service': Disclosure of certain items is requested 'for each clearing service', which is defined to mean products covered by a segregated default fund. CCPs are encouraged to provide more granularity where this would increase the usefulness of the data.

Clarifying comments: CCPs are encouraged to provide clarifying remarks alongside their disclosures where they consider this will aid understanding or that there may otherwise be a risk of misinterpretation. In some cases, specific features of a CCP's operations or business model will mean that some of the listed quantitative data are not relevant or, more rarely, that data would be relevant but are not available. Where this is the case, CCPs should explain the reasons for this in their disclosure.

Definition of client: Throughout this document the term 'client' is used to refer to a market participant who accesses the CCP indirectly, through a clearing member (also known as a customer or an indirect participant).

Principle-by-principle notes

Principle 4: Credit risk

Item 4.1: This item seeks disclosure of default resources that are available to cover a member default should the margin or equivalent (for example sums paid in by participants to cover their options liabilities) paid by participants to cover their own liabilities to the CCP prove insufficient.

4.1(a)(i) should be identical to DF_{CCP} as defined in BCBS 282.⁶ Where the CCP's own capital forms part of the default waterfall and potentially covers multiple clearing services with separate segregated default funds, the CCP will have to allocate its capital contribution to each of the segregated funds in proportion to the respective product-specific exposure at default in line with BCBS 282.

4.1(a)(ii) should be identical to DF_{CM} as defined in BCBS 282.

⁶ BCBS *Capital requirements for bank exposures to central counterparties* (April 2014).

Where commitments in section 4.1(b) are unlimited, state that these are unlimited. Commitments that are reserved to replenish the CCP's own capital or equity should not be included here, ie 4.1(b)(ii) and 4.1(b)(iii) seek disclosure of commitments to replenish the CCP's default fund, not the CCP's own capital or equity. Rules-based agreements to accept variation margin or other gains-based haircuts should not be disclosed as commitments, but CCPs should disclose details of such arrangements in line with the guidance on recovery planning (see CPMI-IOSCO *Recovery of financial market infrastructures*, October 2014).

Item 4.2: For a definition of K_{CCP} , see BCBS 282. K_{CCP} may be reported more frequently than quarterly if a CCP is required, under relevant law, to report it to supervisors of clearing members more frequently than quarterly.

Item 4.3: Disclosures should be based on the form in which default resources are held, not the form in which they were paid to the CCP. This item requests disclosures 'as at quarter end'. If a CCP does not consider the composition of collateral at quarter end to be representative, it is encouraged to provide explanatory notes outlining why this is the case, and to provide additional metrics such as quarterly averages, or maximums, minimums, and interquartile ranges. CCPs are also encouraged to disclose any limits on the amount of collateral of a particular type that the CCP will accept if this will assist in enabling a clear understanding of risks. For CCPs which do not specifically record whether asset holdings correspond to default fund contributions (whether provided by CCP participants or from the CCP's own funds) or to margin provided by participants, the CCP should provide an explanatory note to this effect, and explain its methodology for describing the form in which default fund contributions are held (for example by assuming the proportion of each asset accounted for by default fund is pro-rata to the proportion of total funding that comes from default fund contributions).

Item 4.4: This item is where the results of a CCP's stress-testing of its financial resources are expected to be disclosed. CCPs should specify in their supporting comments to the matrix whether they are subject to a "Cover 1" or "Cover 2" requirement in relation to their total pre-funded default resources, but should report both results so that both Cover 1 and Cover 2 metrics can be compared with actual default resources. These disclosures create no new regulatory obligation for CCPs subject to a Cover 1 requirement to also satisfy a Cover 2 requirement. The disclosures instead aim to support transparency between the CCP and its participants on how safety and efficiency considerations have been balanced in response to different stress scenarios and the decisions that have been made with regard to default fund coverage. Where a CCP is only required to meet a Cover 1 standard, providing disclosure also on its estimated cover 2 requirement may facilitate additional comparisons across CCPs. Nevertheless, because of certain factors, including the size of the market the CCP serves, the CCP's share of that market, and whether a small number of participants account for a disproportionate amount of the CCP's clearing activity, comparison between cover 1 and cover 2 metrics alone will still give an incomplete comparison of relative default fund coverage. Accordingly, CCPs should provide a comparison with default resources – as in item 4.3, market share data – in accordance with part 23 of the matrix, and other clarifying remarks, as appropriate, alongside their disclosure related to Cover 1 and Cover 2 metrics to further help the reader understand the default fund coverage.

In order to aid clearing members' modelling of their exposures to the CCP, the CCP should consider disclosing further information on its default fund stress-testing methodology (eg underlying model parameters and assumptions) insofar as the CCP, in discussion with its participants and regulators, agrees is appropriate without providing confidential information about individual participant positions.

Principle 5: Collateral

Item 5.1: CCPs are encouraged to explain where concentration limits or charges are also applied in addition to normal haircuts. Recognising that the CCP is requested to disclose changes to haircut values as they are applied, where CCPs already publish information on haircuts elsewhere on their public website, a link to the relevant pages will satisfy the disclosure expectation.

Item 5.3: CCPs should consider adding explanatory notes if this would help to understand reasons why the fall in value of assets exceeded haircuts.

Principle 6: Margin

Separate disclosures should be made for each clearing service in respect of items 6.1, 6.2, and 6.5, and each margin model used in that clearing service in respect of 6.3 and 6.4. Disclosures should be on the basis of the form in which the margin is held by the CCP rather than the form in which it was provided by the participants (if different).

Item 6.1: In this item, CCPs should report initial margin **required** – at least at the level of each clearing service. CPMI and IOSCO acknowledge that practices for calculating initial margin requirements vary across CCPs, and propose that CCPs include all types of margin including ‘base-line’ initial margin; ‘add-ons’; and ‘retained MTM/VM’ (where relevant). Items included under ‘add-ons’ should reflect any additions to margin required from base-line initial margin and routine scheduled collections – e.g. margin requested to cover specific risks (including, but not limited to liquidity risk, concentration risk, correlation risk, wrong-way risk) where these risks are not covered in the base-line calculation or margin requested on a ‘non-routine’ basis (e.g. ad-hoc intraday calls). Where add-ons to baseline initial margin are significant and variable, CCPs are encouraged to provide an explanatory note to this effect. CCPs are also encouraged to provide an explanatory note on the expiration period of products they clear where this would help to facilitate interpretation of the margin data, e.g. because margin is returned on or following particular contract expiration dates.

Item 6.2: Disclosures under this item should reflect the total value of initial margin actually **posted** by direct and indirect members and held by the CCP (as opposed to item 6.1, which asks for the total value of initial margin **required**). This should include initial margin provided through a security interest as well as through title transfer. For CCPs which do not specifically record whether asset holdings correspond to margin or default fund contributions fund (whether provided by CCP participants or from the CCP’s own funds), the CCP should provide an explanatory note to this effect, and explain its methodology for describing the form in which margin is held (for example by assuming the proportion of each asset accounted for by margin is pro-rata to the proportion of total funding from margin contributions).

Items 6.1 and 6.2: If a CCP does not consider disclosures at quarter end to be representative, it is encouraged to provide explanatory notes outlining why this is the case, and to provide additional metrics such as quarterly averages, or maximums, minimums, and interquartile ranges.

Items 6.3 and 6.4: CPMI and IOSCO recognise that models and approaches to margining may vary across CCPs. In order to help participants understand how they might be affected by margin calls, and/or where the items listed are not specifically relevant for a CCP, other key assumptions and parameters should be disclosed and the items listed should be used as a guide to the types of disclosures and level of details that is expected regarding initial margin assumptions and parameters.

Item 6.5: At a minimum, CCPs are expected to disclose the achieved margin coverage ratio for each clearing service and margin model and the value of any uncovered exposures. **Given differences in markets served by CCPs, the term ‘products’ should be understood to mean transactions, instruments, contracts, etc. depending on the market the CCP serves. The number of products that the CCP discloses should be commensurate with the size and scope of the CCP. An explanation of the choice of relevant products should be given by the CCP.**

Item 6.6: This disclosure is seeking information on the potential liquidity impact of changes in marked-to-market values. It is not seeking to provide information on changes in the level of initial margin that may be related to changes in the volatility of prices. CCPs are expected to disclose the total of variation margin called from participants each day (including for options CCPs, where variation margin is called but not paid out).

Item 6.9: CCPs are encouraged to provide explanation when the margin responsiveness measure is affected by other factors beyond the model's response to an increase in volatility (eg, contract roll effects). Technical details concerning the margin responsiveness metric are set out in Annex 1.

Principle 7: Liquidity Risk

'Relevant currencies' refers to currencies in which the CCP is obliged to make pay-outs.

If the CCP considers disclosures for 7.1 and 7.2 "as at quarter end" to be unrepresentative, it is encouraged to provide explanatory notes outlining why this is the case, and to provide additional metrics such as quarterly averages, or maximums, minimums, and interquartile ranges.

Items 7.1 and 7.2: CCPs should refer to paragraphs 3.7.10 and 3.7.11 of the PFMI for a definition of 'qualifying liquid resources' and 'supplementary liquidity risk resources'. CCPs are not asked to disclose the names of providers of liquidity resources or investment counterparties. CCPs should not double count assets: for example, assets should not be listed as qualifying under 7.1(e) to the extent that they are required to offer to liquidity providers under 7.1(c). CCPs should add explanatory notes to describe how the CCP decides which payment obligations to prioritize if a schedule does not exist or if otherwise this would help to understand the CCP's procedures.

Item 7.3: This item requests high-level disclosure of the results of a CCP's stress-testing of its liquid resources, both in aggregate and by currency.

Principle 12: Exchange-of-value settlement systems

Items 12.1 and 12.2: The requested percentages refer only to exchange-of-value settlements to which the CCP is a counterparty, and not, for example, to settlement of variation margin payment obligations, or collection and return of initial margin. Gross and net settlement models may qualify as DvP, Pvp or DvD, providing that the final settlement of one leg of the exchange occurs if and only if the final settlement of the other leg also occurs.

Principle 13: Default rules and procedures

Item 13.1: CCPs should disclose quantitative information related to defaults as soon as is practicable, subject to constraints on disclosure such as ongoing legal cases.

Principle 14: Segregation and portability

Item 14.1: Disclosures under item 14.1 give quantitative data on the degree of segregation of client assets. Although some CCPs may be unable to disclose particular items (eg CCPs may not know the number of clients covered by omnibus accounts), CCPs should complete this item with as much information as is available. For clearing services where fewer than five clients have individually segregated accounts, the CCP should not disclose information on individually segregated accounts.

Principle 15: General business risk

A CCP that discloses these items in a publicly available annual report would meet this standard, but should also include the data in the quantitative disclosure report so that it is readily available in a single place. This information may be disclosed at the level of the legal entity for which published accounts are prepared, even if clearing services are only one part of the entity's activities. The CCP should note the legal entity or activity to which the disclosure relates. The disclosure may be made at the same time as the annual accounts are released.

Item 15.1: The PFMI states that a CCP should hold liquid net assets funded by equity (such as common stock, disclosed reserves, or retained earnings) so that it can continue operations and services as a going concern if it incurs general business losses. Under this item a CCP should disclose the amount of liquid net assets funded by equity which can absorb general business losses. This should, at a minimum, equal at

least six months of current operating expenses in accordance with Principle 15. The CCP should not include in its disclosure for 15.1(a) such amount of its own capital as must be allocated or held for other purposes, such as “skin in the game” in the default waterfall, and is not therefore available to cover business risks.

Principle 16: Custody and investment risks

Items 16.1 to 16.3: These items request disclosures ‘as at quarter end’. If a CCP does not consider the composition of its investment portfolio at quarter end to be representative, it is encouraged to provide explanatory notes outlining why this is the case, and to provide additional metrics such as quarterly averages, or maximums, minimums, and interquartile ranges. This disclosure looks at the reinvestment of cash received from participants, and not at how the CCP’s own funds are held. If, however, participant cash is co-mingled with the CCP’s own funds in the investment portfolio, the CCP should clarify how this is reflected in the data published to satisfy this disclosure, for example by specifying the proportion of the investment portfolio that is funded from the CCP’s own funds.

Principle 17: Operational risk

Items 17.1, 17.2, 17.3 and 17.4: Core systems used in clearing are those that enable the acceptance and novation of trades, and enable the calculation of margin and settlement obligations. An incident that results in an interruption to the CCP’s ability to perform its own functions in relation to trade acceptance and novation, or calculation of margin and settlement obligations is considered a loss of availability. An incident that compromises the CCP’s ability to correctly perform the aforementioned functions is also considered a loss of availability, even if there is no actual outage. Successful failover to a back-up site without interruption to services would not count as a loss of availability. CCPs should make clear to which system or systems performance targets apply.

Principle 18: Access and participation

Item 18.1: It is assumed for the purposes of this disclosure that participants would be the legal entities with which the CCP has a counterparty relationship as a clearing member – CCPs should specify if they are using some other basis to define number of participants. Disclosures in this section would not therefore extend to clients. CCPs should report ‘category of membership’ as relevant to their business. Where relevant, CCPs should differentiate between clearing members that clear their own trades through a CCP and also offer access to the CCP to their clients (often referred to as ‘general clearing members’) and clearing members that only clear their own trades (often referred to as ‘direct clearing members’).

Item 18.2: Percentage of net open positions should be the percentage of gross notional for derivatives or the total cleared value for securities transactions or similar.

Items 18.2 to 18.4: For clearing services with fewer than ten members, this report does not make a disclosure recommendation.

Principle 19: Tiered participation arrangements

Item 19.1: For clearing services with fewer than ten members, this report does not make a disclosure recommendation.

Principle 20: FMI links

Items 20.1 to 20.5: These disclosures refer to arrangements in which trades clear over an interoperable link between CCPs, because clearing members are from different CCPs. CCPs should identify each link and cross-margining arrangement in their supporting comments so that quantitative disclosures can be tied to a specific link.

Items 20.2, 20.3, 20.5, 20.6 and 20.7(b): These items request disclosures ‘as at quarter end’. If a CCP does not consider disclosures at quarter end to be representative, it is encouraged to provide explanatory

notes outlining why this is the case, and to provide additional metrics such as quarterly averages, or maximums, minimums, and interquartile ranges.

Principle 23: Disclosure of rules, key procedures, and market data

Item 23.1 and 23.2: This item is intended to capture the daily **flow** of clearing activity, while item 23.2 is intended to capture the stock of novated trades that have not yet been settled.

Item 23.3: This information is to be disclosed to facilitate an understanding of which markets might be affected by a CCP being unable to clear. This information should only be provided where the relevant execution facility is content for the CCP to disclose.

Annex 1: Principle 6 item 6.9 – New metrics related to initial margin responsiveness and volatility

Item 6.9 introduces a set of reporting lines in the public quantitative disclosures (PQDs) for central counterparties (CCPs) to disclose a measure of margin responsiveness alongside a measure of the associated volatility. Further detail is provided below and in Table 1.

Defining a measure of margin responsiveness and associated volatility

The standardised measure of initial margin (IM) responsiveness is based on two main components, a measure of the rate of change in IM and a measure of the rate of change in market conditions (the 'change in risk'), each derived from data taken from a pre-defined observation period.

The measure of IM change is computed by using a 'large call' metric, defined as the largest increase in margin over n business days, where n denotes the large call window parameter.

Expressed as a formula, the CCP should compute, for a product p :

$$LC_t^p(m) = \max_{d,w} \left[\frac{m_{t-w}^p - m_{t-w-d}^p}{m_{t-w-d}^p} \right] \forall \{1 \leq d \leq n, 0 \leq w \leq W\}$$

where m_t^p is the IM requirement⁷ for product p on day t , W is the time period over which large calls in IM are observed (the observation period). In practice, the large call at day t is the maximum relative IM increase over a period no longer than n days that has been observed between $t - W - n$ and t .

To compute the rate of change in market conditions, the volatility v_t^p for product p should be computed as the standard deviation⁸ of daily (ie one-business day) returns of the selected product⁹ over a three-month lookback period. The paired measure of changes in market conditions is then defined by applying the same formula adopted for the change in IM on the volatility, but restricted to the interval around the time at which the $LC_t^p(m)$ is at its maximum (to help ensure a causal relationship between the margin change and the associated volatility change). So, if t_*^p is the end date identified for the largest call in **IM**, the paired measure of changes in volatility should be computed as:

$$LC_{t_*^p}^p(v) = \max_{d,w} \left[\frac{v_{t_*^p-w}^p - v_{t_*^p-w-d}^p}{v_{t_*^p-w-d}^p} \right] \forall \{1 \leq d \leq n, -W_d \leq w \leq W_d\}$$

with W_d equal to 10 business days.¹⁰

For the most relevant products, at the end of each quarter, CCPs should compute and disclose:

- The largest one-business day large call for margin requirements with both a one-year observation period and a three-month observation period (ie, $LC_t^p(m)$ with $n = 1$ and W reflecting the number of business days in the previous year and, separately, with W reflecting the number of business days in the previous three months).

⁷ This should be the IM amount in the relevant currency, not the margin rate in per cent.

⁸ In exceptional cases, the standard deviation may be equal to zero (ie where the underlying price has not changed for three months). In this case, CCPs should report a zero value for the metric

⁹ Where there is more than one underlying associated with product p , this should be the returns of the main risk factor for that product.

¹⁰ For $v_{t_*^p-w}^p$, where the volatility data are unavailable for certain future dates these can be omitted from the calculation of $LC_{t_*^p}^p(v)$.

- For both observation periods, the end date associated with the one-business day largest call in IM as well as the value of IM on that day, i.e., t_*^p and $m_{t_*}^p$ identified in the computation of $LC_t^p(m)$ with $n = 1$ and W defined as above.
- For both observation periods, the largest one-business day large call for volatility, $LC_{t_*}^p(v)$, within $W_d (= 10)$ business days of the one-day IM large call, as defined above.
- The largest 20-business day large call for margin requirements with both a one-year observation period and a three-month observation period, i.e., $LC_t^p(m)$ with $n = 20$ and W reflecting the number of business days in the previous year and, separately, with W reflecting the number of business days in the previous three months.
- For both observation periods, the end date associated with the 20-business day largest call in IM as well as the value of IM on that day, i.e., t_*^p and $m_{t_*}^p$ identified in the computation of $LC_t^p(m)$ with $n = 20$ and W defined as above.
- For both observation periods, the largest 20-business day large call for volatility, $LC_{t_*}^p(v)$, within $W_d (= 10)$ business days of the 20-day IM large call, as defined above.

In case the price/value of the underlying is not publicly available, the CCP should also publish the price/value at the relevant dates (ie, start and end dates associated with the one-business day largest call in IM and start and end dates associated with the 20-business day largest call in IM) In some cases, the price or value of a contract can also be an important explanatory factor for significant changes in IM. Accordingly, where this may be the case, CCPs should ensure that daily prices are publicly available for these key contracts or should provide additional context for the metrics through qualitative disclosures.

Parameter inputs and selection				Table 1
	Parameter choices	Description	Option(s) chosen	
Responsiveness measure	Large call window	The time period over which we measure increase in margin	A large call window of one business day and large call window of 20-business days	
	Observation period	The time period over which large calls in IM are observed	A three-month period and a one-year period	
	Product vs portfolio	The risk metric could be applied at single product level or to synthetic or real portfolios where multiple contracts could net each other	Disclosure for the most relevant products	
Volatility risk metric	VaR or Vol	The risk metric applied to measure volatility	Standard deviation	
	Lookback period	The time period used to calibrate the volatility risk measure	A three-month period	
	Large call window	The time period over which we measure increase in volatility	A large call window of one business day and large call window of 20-business days	
	Observation period	The time period over which large calls in volatility are observed	A three-month period and a one-year period	
	Product vs portfolio		Disclosure for the most relevant products	