ISDA Initial Margin Dispute Processing Suggested Operational Practice

Document Version: 1.0

This document should be considered a working document based on the industry’s interpretation of the final document published by the BCBS-IOSCO on Margin Requirements for Non-Centrally Cleared Derivatives in September, 2013 and the subsequent final rules issued by the European Supervisory Authorities (ESAs), the U.S. Commodities Futures Trading Commission (CFTC) and U.S Prudential Regulators.

Important note and Disclaimer,

This document does not constitute legal, accounting, or financial advice and describes the potential market consensus among swap market participants (including both dealer and buy-side firms) who participated in the Working Group. As with other guidance and market practice statements that ISDA disseminates, parties are free to choose alternate means of addressing the specific facts of their situation. Nothing in the document is contractually binding of any parties or amends any ISDA Master Agreement or ISDA Credit Support Documents.

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1 Introduction

Executive Summary

The International Swaps and Derivatives Association, Inc. (ISDA) utilized the ISDA Initial Margin Disputes Processing sub-working group to explore current processes for approaching initial margin differences and disputes within the requirements put forward by BCBS-IOSCO, keeping within the regulatory framework.

The working groups’ objectives were to first determine processes currently in place for in-scope organisations. The group then developed a suggested operational practice for standards which may prove beneficial as guidance for those wishing to improve current procedures and those applying new processes as part of implementation projects for Phases 5 and 6 of the Uncleared Margin Rules (“UMR”).

The purpose of this document is to define recommended business and technology considerations associated with initial margin (“IM”) reconciliation and disputes, and to suggest governance structure, escalation, reporting policies, and operational procedures for initial margin dispute management.

According to feedback from industry participants the frequency, size and longevity of disputed collateral calls generally increases during periods of volatility such as the beginning of the COVID-19 crisis. Small disparities driven by proprietary valuation model differences between parties can accumulate and result in margin disputes.

ISDA notes that the efficient functioning of the derivatives market and the effective management of risk are both well-served if counterparties can identify differences, determine root causes of disputes, and then rectify the disputes and subsequently settle collateral movements promptly.

The guidance below reflects a set of suggested operational practices that provides a practical approach of considerations to enable effective management of IM disputes within a reasonable timeframe. These suggested operational practices may be a significant ‘stretch’ for some market participants who are establishing new IM processes related to the later phases of UMR, but their consistent accomplishment across the market professional community would lead to a material improvement over current operational and risk management practices in the collateral management area and should form a basis for further advances in the future.

Within the document, various ways of verifying IM calculations are demonstrated, identifying dispute types, prioritising issues, internal escalation recommendations and timeframe management. However, throughout the process it is recommended to centralize collateral management procedures and manage consistent messaging with counterparties from the outset of a margin call disagreement; this would encompass regular documented updates on the resolution investigation process from both parties throughout the lifetime of the outstanding dispute. When resolutions cannot be reached, it is recommended to monitor such disputes and communicate regularly with counterparties.

Regulatory Overview

The baseline regulatory references for the development of this document include the final policy published by BCBS-IOSCO on Margin Requirements for Non-Centrally Cleared Derivatives and the rules of various jurisdictions.
BCBS-IOSCO states the following in relation to disputes under requirement 3 – Initial margin (3.12)

*Parties to derivatives contracts should have rigorous and robust dispute resolution procedures in place with their counterparty before the onset of a transaction. In particular, the amount of initial margin to be collected from one party by another will be the result of either an approved model calculation or the standardised schedule. The specific method and parameters that will be used by each party to calculate initial margin should be agreed and recorded at the onset of the transaction to reduce potential disputes. Moreover, parties may agree to use a single model for the purposes of such margin model calculations subject to bilateral agreement and appropriate regulatory approval. In the event that a margin dispute arises, both parties should make all necessary and appropriate efforts, including timely initiation of dispute resolution protocols, to resolve the dispute and exchange the required amount of initial margin in a timely fashion.*

As an example under bilaterally agreed credit support documentation, the dispute resolution process stipulates the following step by step procedure *(summary from ISDA 2018 Initial Margin English Law CSD (the “CSD”) (similar provisions apply in the ISDA 2018 Initial Margin New York Law CSA) these can be located in the ISDA bookstore online library):*

1. If one party disputes the other party’s calculation of the delivery or return amount of IM, then the disputing party will notify the other party (and the Calculation Agent (IM) if the Calculation Agent (IM) is not the other party) no later than the close of business the day of the transfer.
2. If one party disputes the value of the transfer of the IM amount, the disputing party will notify the other party (and the Calculation Agent (IM) if the Calculation Agent (IM) is not the other party) by the local business day following the date of the transfer.
3. Notwithstanding certain conditions precedent, if the IM amount cannot be agreed in full, the appropriate party will transfer the undisputed amount to the other party.
4. The parties will consult each other in an attempt to resolve the dispute.
5. If the parties fail to resolve the dispute by the resolution time (specified time one local business day after notice of dispute given), they will recalculate the IM amount or transfer value on the Recalculation Date (as defined in the CSD).

2 Utilizing Existing Processes

Most institutions already exchanging variation margin ("VM") have processes and procedures in place for portfolio reconciliation and dispute resolution to satisfy each of their counterparty risk and regulatory requirements. In an ISDA survey conducted recently regarding portfolio reconciliation and dispute resolution, 82% of those surveyed currently utilise existing VM processes for IM dispute management. These VM dispute foundations could provide a starting point for determining an approach for determining the root cause of a dispute and then developing an IM dispute management process.

A summary of the CFTC and EMIR Portfolio Reconciliation Requirements is located in Appendix II.

Portfolio Reconciliation may be carried out today using an industry utility or in-house solution to verify the accuracy of an entity’s trade population. Such reconciliation compares the two counterparties’ bilateral OTC trades for a portfolio as of a given business date to identify and investigate trades driving a valuation difference and possibly a VM or IM dispute. The reconciliation process uses a minimum set of fields necessary to ensure accurate matching and, as standard practice, includes the mark-to-market value each party has assigned to each trade.

1 104 ISDA member firms participated in the survey.
Existing infrastructure and reconciliation platforms can perform similar functions for both trade matching and comparing valuations for IM. Similarly, current procedures and processes for VM can be adopted where possible and counterparties can agree to a reconciliation approach. Although counterparties are obliged to adhere to the regulatory requirements for VM and these do not apply to IM, parallels between the two may be achieved.

Please refer to the Collateralised Portfolio Reconciliation-Best Operational Practices document published by ISDA in 2010 which provides an overview on how best to establish the foundations for an efficient reconciliation process.

3 Various Dispute Drivers

Members of the ISDA Initial Margin Dispute Processing sub-working group identified common challenges currently experienced by parties exchanging IM under the UMR. Participants agreed that establishing a common understanding and suggested operational practices would need to be related to the main drivers of IM disputes and it is important to define the specifics of various types of disputes. These are outlined below:

**Calculation Discrepancies**

An IM call from Counterparty A that is not what is expected by Counterparty B may persist until both counterparties align to determine the root cause of the discrepancy. Such root causes can be a result of a difference in determined trade population, lack of sensitivity completeness, ISDA SIMM™ (“SIMM”) or Schedule (Grid) IM calculation input/output differences or differences in Mark-to-Market input.

For example, if Counterparty A utilises the Standardised preferred approach for the treatment of Equity indices in SIMM, where the entire Equity Delta is placed in a single bucket, and Counterparty B uses the Alternative approach (if bilaterally agreed), where the Equity Delta is allocated back to the individual equity buckets, then it is contractually known that both parties have different approaches when calculating SIMM and this can often lead to ‘calculation differences’ that have no immediate resolution until parties align their treatment of the risk sensitivities for equity indices. In this example, the calculation difference due to the different approaches will be the difference between an institution’s calculated regulator-required IM amount and the undisputed IM amount between the institution and its counterparty.

IM disputes are expected to be resolved between the two counterparties and may involve prior internal validation of certain elements of the calculation model. Resolution of the dispute may also include but not limited to price testing against market sources, moving trades from SIMM to Schedule (Grid) at the product level with mutual agreement, or clearing the trade in question of possible.

However, in some cases involving large trade populations, after investigation, the dispute may be contributed by accumulative minor disparities due to different valuation models. Once this is established, the dispute would need to be monitored to ensure the nature of such an unresolvable dispute does not change.

IM calculation discrepancies can fall into different categories that should be investigated by risk teams including differences in the:

- IM Model, where one party uses Schedule (Grid) while the other party uses SIMM
- Product Taxonomy, where the counterparties disagree on the product classification of trades.
Plurality in the treatment of Indices, where one party may decompose the indices while the other party does not

Risk Sensitivities, where counterparties may have risk differences due to market timing differences, different pricing models or assumptions, risk missing from one counterparty, risk allocated differently by counterparties.

Notional Add-ons

If a dispute is the result of different risk sensitivities being used by each of the two counterparties, sharing the details of this difference can be challenging. Although counterparties can bilaterally agree in some cases to share risk sensitivities to resolve IM disputes, this process has not become common practice due to the proprietary nature of the data. In some cases, internal procedures require internal authorizations before sensitivity data can be shared with the counterparty. Often, sharing the high-level view of the SIMM bucket breakdown can highlight where the different risk sensitivities may exist without the need for sharing the underlying sensitivities.

Operational Issues

There are two primary types of Operational Issues:

Unmatched Trades – The first step in examining IM disputes is to determine if it is the result of an unmatched trade. Counterparty A has a trade included in the IM calculation, but Counterparty B does not. The middle or back office team members of the respective counterparties can work together to ensure the trade is assigned the correct bucket for calculating IM.

Jurisdictional Differences and Trade Inclusion – One jurisdiction could define a trade to be in-scope for UMR and another jurisdiction can define that same trade as out of scope for UMR. These categorization differences can impact the IM calculation and can sometimes cause an escalation to be resolved with legal and compliance teams. It is necessary to ensure each counterparty correctly allocates all in scope trades under all-inclusive regimes of the IM agreement to the calculation.

Other factors contributing to operational issues are listed below:

- Independent amount percentage discrepancy
- Missing or failed collateral movements
- Collateral haircut discrepancy
- Misrepresentation of Credit Support Agreement (“CSA”) terminology or elections in downstream processes and applications. Examples of this are incorrect MTA or rounding amounts, umbrella agreement fund discrepancies or SIMM calculation criteria mismatches
- Treatment of in-transit collateral

Please Note: Market participants may use different terminology to distinguish between calculation discrepancies and operational dispute issues; some reference an operational-related variance to be a ‘difference.’ There are no industry standards that provide guidelines for what constitutes a material difference or discrepancy. Not all discrepancies will give rise to a formal dispute being reported internally, to a counterparty or to an external regulator. Each firm’s approach to determining what will constitute a dispute requiring escalation will be documented in their internal policies. Some suggested practices in this respect are outlined in sections 5 and 6 of this document.
All disagreements of an initial margin call are technically “disputes”, but the treatment and resolution path taken to monitor and resolve such disputes or determine them to be immaterial may be different based on the individual nature and root causes of the dispute.

4 Requirements for IM Calculations

Counterparties may find that they cannot agree an IM collateral call due to a disagreement in relation to the valuation of the calculated IM amount of the trade portfolio, using their agreed method whether that is SIMM or Schedule (Grid.) More details regarding the SIMM or Schedule (Grid) IM methodology can be found in Appendix I.

For both IM calculation methods, firms will need to identify in-scope transactions including new trades from the respective phase-in date and any legacy trades which could be brought into scope via a lifecycle event. Please refer to the following material available on the ISDA website Margin InfoHub which can assist in this exercise: In-Scope-Products-Chart and Trade Life Cycle Events Guidance.

The in-scope trades are then allocated to product classes according to the relevant regulatory requirements through each counterparties’ own best judgment. This includes the need to classify trades under the broad asset classes of interest rates and foreign exchange, credit, equity and commodity. You also need to determine the regulatory jurisdiction each trade is subject to.

Firms will need to agree with their counterparty on the use of SIMM or Schedule (Grid) for the calculation of the IM applicable for each product type.

Trades for each party may be subject to differing regulatory jurisdictions. When this happens IM calculations should be done for each regulator specified. The IM amount that is applicable will be the ‘strictest of’ margin amount (IM), the one that shows the highest IM exposure Please Note: Schedule (Grid) can present similar calculation challenges for trade categorization, but risk sensitivities differences would only apply to the SIMM model since Schedule (Grid) has common prescribed sensitivities.

ISDA published the Discussion Document – Uncleared Initial Margin Calculations and Processes Related to the ISDA WGMR SIMM Initiative. This provides information in relation to the following and additional details related to ISDA SIMM:

- Trade populations and portfolios
- Managing trade populations
- Mapping trades to risk factors and asset classes
- Calculation methodology

The ISDA Taxonomy 2.0, updated in September 2019, may also assist firms in mapping their trades to the standardized ISDA product taxonomy. This details all levels of product classification for Equity, Credit, FX and Interest Rate Derivatives. To avoid IM disputes, firms need to ensure they are using the same product taxonomy. This ISDA standard can help achieve a level of alignment and may reduce differences originating from trades incorrectly identified by asset class. This method has also been referred to by some users as ‘the waterfall method’ and can be found here ISDA-Taxonomy v2.0.

Please Note: The referenced material and links to information in this section is subject to continued maintenance and updates, for further information and the most current material please visit the ISDA website dedicated SIMM section.
5 Effective Issue Prioritization

Although the UMR regulations do not provide specific details regarding when and how to prioritise disputes, the regulations do indicate that regulated entities should have robust dispute resolution procedures in place. Prioritizing disputes based on regulatory and credit risks is important to manage resources and mitigate risks effectively. This can be based on the monetary value, ageing of such a dispute, and counterparty risk-weighting.

Procedures should be established to ensure disputes are monitored to effectively mitigate issues before they develop into a reportable occurrence to regulators. (refer to section 9. Regulatory Reporting Guidelines)

Each individual institution will likely adopt their own approach based upon internal configuration of business units, credit risk appetite, XVA and capital reporting but a suggested approach could be as follows:

- Reconcile trade portfolio to ensure portfolio trade alignment is complete
- Review large Mark-to-Market differences
- Review SIMM calculations per counterparty pairing and prioritise those with largest SIMM bucket differences
  - Those driving a potential margin dispute prioritised over calculation discrepancies or operational issues that do not materialise into a dispute
- Review top 10 (can be adjusted based upon internal threshold) SIMM pay and receive calculation differences and ensure transparency on root cause
- Develop internal reporting to ensure that Compliance, Operations, Credit, Finance, XVA and other relevant areas are informed accordingly

Applying threshold levels may also be a useful tool to add to procedures to ensure disputes are raised for monitoring and to allow sufficient time to mitigate issues before they develop into potential reportable items to regulators. The diagram below (Figure 1) is based on feedback received from members who introduced procedures for IM dispute monitoring during phases 1 to 4 of UMRs 2016-2019. These are based on individual associated risk of the parties facing one another at the time, the figures cannot be applied to every counterparty pairing and would need to be adjusted accordingly.

Please Note: ISDA is not prescribing, endorsing, or suggesting any thresholds, the specifics in [brackets] are examples and should be amended and applied using individual risk assessment.

Figure 1: Escalation and Risk Management Levels Example:
Level 1 items would be higher risk and prioritized to be addressed first. Additional layers could be applied to the level of risk of the counterparty faced for the individual dispute; a tiered grid system could be used to categorize these into a similar structure to ensure these have the required level of urgency.

6 Categorization: Operational Issues vs Discrepancies in Calculations

Whilst it is an individual institution’s determination of how they wish to classify certain types of disputes or causes of disputes, a standard approach can be adopted to add a framework to assist with categorisation.

Correct categorization of dispute types is important for effective timely resolution. Efficient analysis by the institution’s collateral management team to determine where and how to escalate the next stage for finding the root cause of a dispute is essential as a first step. The process from the outset of a substantial non-agreement of margin in full or part should initiate a reconciliation of the trade population, in some cases this is automated and reconciliations are performed daily and results accessible when the need arises. Once collateral teams are able to establish the type of dispute, it can be categorized in the following identification brackets:

- Matched trade population issues (i.e., missing, unmatched, misrepresentation issues)
- Fully reconciled matched trades with discrepancies relating to calculation drivers

Unmatched trades cannot be compared. The entire value of an unmatched trade contributes to a dispute. For IM, this is problematic because newly executed trades attract the most IM. These are considered discrepancies related to calculation methodology.

Only matched trades can be reconciled to determine the root cause of different IM dispute drivers. The nature and type of dispute will lead to different paths for investigation and in some cases escalation to different teams/resources. Collateral management areas will coordinate the dispute management process throughout the investigation lifecycle, the level of expertise and tools used will vary throughout each institution. For example, some collateral teams such as an outsourced service provider will identify a dispute and then escalate issues accordingly to the relevant business unit for investigation, whereas at some firms, the collateral management team will have the tools and experience to work through the investigation process and only escalate more complex issues.

Those involved in reviewing the trade population and determining the next steps toward resolving a margin call dispute would need to make an initial evaluation of the dispute type using the results of the portfolio reconciliation. Again, this process may be different per institution, some may employ vendor solutions which offer fully automated daily reconciliations and dispute management tools including analytics versus standard spreadsheet based reconciliation solutions.

The following diagram shows how a collateral function can categorize a margin call dispute and effectively escalate to the most relevant resolution channels.
Please Note: These resolution channels can potentially overlap and in some cases, issues contributing to an IM call dispute could be a combination of unmatched positions and model issues. Such situations would require collective resources across functions to resolve issues.

For fully matched portfolio discrepancies which are derived from calculation of model or sensitivity issues and investigated by the risk areas highlighted in the diagram above, it would be beneficial to first validate all internal contributing factors of your calculation before approaching the counterparty to discuss the cause of your dispute.

7 Internal Escalation Process Recommendations

Institutions need to consider their individual stakeholders and understand the content and frequency that information needs to be made available. A general example could be:

Intra-day
- Difference and dispute reporting to Collateral Management
- Dispute information to Credit Risk
- Funding and Optimisation

End of Day
- Difference and dispute reporting to Collateral Management
- Dispute information to Credit Risk
- Funding and Optimisation
- XVA
- Business function COO
These processes will ensure any reporting risks are monitored and escalated accordingly, especially for more significant disputes.

It would also be suggested that these internal escalation processes should include additional weekly and/or monthly reporting to ensure consistent monitoring of potential issues and discrepancies. This regular reporting of weekly and monthly snapshots to internal stakeholders should be structured and based on various risk parameters (such as amount, percentage, and age). This will facilitate analysis for determining root causes and monitoring trends to identify common disputes potentially leading to further resolution and risk mitigation.

Additional measures could be applied to regularly coordinate teams to monitor and escalate disputes. As an example:

On a weekly basis or when determined appropriate, a dispute escalation forum could be held to review material IM disputes with key governance stakeholders. Stakeholders could include business partners from Front Office, Credit Risk, Operations, and Compliance. All meetings would be documented to ensure appropriate record keeping of relevant decisions, actions, and outcomes. IM disputes breaching materiality thresholds would be tracked through this forum following a prescriptive path of escalation decisions which starts with clearly defined entry points to escalation (i.e., as defined by threshold) and conclude with clearly defined closure points to escalation, which may involve either a resolution of the underlying root-cause driver or an agreement to conclude further escalation actions. With coordination with stakeholder groups, it is possible to administer all necessary risk control actions in association with those agreed thresholds.

In addition, on a monthly basis or as otherwise determined appropriate by internal determination or, if applicable, external regulatory requirements, executive heads from each stakeholder group would be required to acknowledge any severe dispute that remains open to evidence awareness of disputes at an executive level.

8 Resolution Timeframe Management

Applying timeframe management to processes should be considered. This would be determined by certain characteristics of the dispute, such as size, age, counterparty risk and/or regulatory commitments. Similar to dispute prioritization outlined in section 5, a timeframe structure for escalating and management of issues could be outlined in procedures. In the prioritization process, items for escalation would only apply if present for, as an example, three days or more before action is taken; depending on the characteristics of the issue, this number of days can be tailored to fit individual circumstances and be reduced or extended.

Once an issue has been identified and escalated to a resolution channel, the coordination of the resolution can also be allocated a timeframe for management of the outcome, whether it will be resolved completely or regularly monitored. An appropriate timeframe or number of days can be allocated to resolve or revisit individual issues throughout the end-to-end process.

Similar timeframe management can be applied to reporting to internal stakeholders and frequency of dispute reporting either daily, weekly, or monthly dependent upon requirements (as outlined in section 7.)
Under regulations, detailed in section 9 (Regulatory Reporting Guidelines), institutions would need to report to regulators when a dispute is 15 Million Euros / 20 Million USD and if consistently in dispute for a certain number of business days or more. Regulators also indicate that procedures shall at least record the length of time for which the dispute remains outstanding. A process should be in place at a minimum to effectively monitor candidates that could potentially reach this regulatory reporting status.

9 Regulatory Reporting Guidelines

The regulatory reporting requirements for the CFTC, US Prudential, Europe and NFA are referenced below. Users of this document should review the various regulations that apply to them and their counterparty relationships to determine the applicable regulatory requirements and develop relevant reporting procedures.

**US: CFTC and Prudential Regulators**

*Each swap dealer and major swap participant shall promptly notify the Commission and any applicable prudential regulator, or with regard to swaps defined in section 1a(47)(A)(v) of the Act, the Commission, the Securities and Exchange Commission, and any applicable prudential regulator, of any swap valuation dispute in excess of $20,000,000 (or its equivalent in any other currency) if not resolved within:*

1. Three (3) business days, if the dispute is with a counterparty that is a swap dealer or major swap participant; or
2. Five (5) business days, if the dispute is with a counterparty that is not a swap dealer or major swap participant.

Further Information can be found in [CFTC Portfolio Reconciliation 17 CFR Part 23](#).

*Please note: With respect to security-based swaps a compliance date is not yet in effect as of the date of publication of this document. For further information, please refer to the following link [SEC Portfolio Reconciliation 17 CFR Part 240](#).*

**EUROPE**

*Article 15 of the EU commission delegated regulation states that Financial counterparties shall report to the competent authority designated in accordance with Article 48 of Directive 2004/39/EC any disputes between counterparties relating to an OTC derivative contract, its valuation or the exchange of collateral for an amount or a value higher than EUR 15 million and outstanding for at least 15 business days.*

Further Information can be found in [European Commissions published C (2012) 9593 final – Article 15](#).
**NFA Reporting Requirements**

The National Futures Association (NFA) became an enforcing entity on 2016 and specifies requirements for swap valuation disputes that must be reported by certain market participants.

For further information please reference the following publications:

- Notice I-17-13 July 20, 2017 Effective date of Interpretive Notice to NFA Compliance Rule 2-49: Swap Valuation Dispute Filing Requirements
- 9072 - NFA COMPLIANCE RULE 2-49: SWAP VALUATION DISPUTE FILING REQUIREMENTS (Board of Directors, May 18, 2017, effective January 2, 2018.)
- Notice I-19-11 March 28, 2019 Reminder: Filing requirements for swap valuation dispute notices under NFA Compliance Rule 2-49 apply to all swap dealer Members

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**10 Standard Operational Practices Table**

**Definition of Suggested Operational Practices Table**

<table>
<thead>
<tr>
<th>SOP (Suggested Operational Practice) #</th>
<th>Unique reference number assigned to each consideration in the document</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process or Background</td>
<td>High level description of each minimum consideration</td>
</tr>
<tr>
<td>Minimum Consideration Description</td>
<td>Recommended business and technology considerations required to comply with new margin rules</td>
</tr>
<tr>
<td>Assumptions &amp; Dependencies</td>
<td>Description of key assumptions and dependencies related to each minimum consideration</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SOP#</th>
<th>Process or Background</th>
<th>Minimum Consideration Description</th>
<th>Assumptions &amp; Dependencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOP1</td>
<td>Procedure to notify IM Dispute</td>
<td>A process to be put in place to notify the other party (and the calculation agent (IM) if applicable) if there is a dispute to the delivery or return amount of a IM collateral call.</td>
<td>If partial agreement can be made the appropriate party will transfer the undisputed amount to the other party</td>
</tr>
<tr>
<td>SOP2</td>
<td>Initiate Process to resolve the IM dispute</td>
<td>Portfolio reconciliation to be carried out using industry utility or in-house solution. Identify matching population issues and isolate underlying root cause of the dispute</td>
<td>Utilize framework based on existing processes for management of Variation Margin disputes</td>
</tr>
<tr>
<td>SOP3</td>
<td>Extract report to identify IM margin call disputes</td>
<td>Report should be sorted with details re: counterparty credit risk, age of dispute, % of notional, and amount of discrepancy</td>
<td></td>
</tr>
<tr>
<td>SOP4</td>
<td>Review report for trade population variances</td>
<td>Ensure trade population is properly assigned for IM based on jurisdictional variances. Check for any operational booking issues.</td>
<td></td>
</tr>
<tr>
<td>SOP5</td>
<td>Identify discrepancies that are material and must be researched</td>
<td>To manage resources effectively, apply associated counterparty risk and apply relevant thresholds to determine which differences and disputes are immaterial or will be resolved within a business day and those that need further research and resolution.</td>
<td></td>
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<td>------</td>
<td>---------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>SOP6</td>
<td>If an unmatched trade, communicate trade processing issues to middle office</td>
<td>Research if trade was improperly attributed to the wrong account or assigned.</td>
<td></td>
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<tr>
<td>SOP7</td>
<td>If trade seems to be mis-assigned by jurisdictional variance, send to compliance/legal</td>
<td>Research if trade was improperly attributed as in-scope or out of scope for IM calculation.</td>
<td></td>
</tr>
<tr>
<td>SOP8</td>
<td>If dispute seems to be risk sensitivity-driven, send to SIMM/XVA/Market Risk/Trading areas</td>
<td>Escalate the calculation discrepancy to the relevant internal stakeholders to verify and validate all elements of calculation. Research risk sensitivities and share details, if possible, with dispute team to share with counterparty. Approval from compliance to share risk sensitivities with counterparty.</td>
<td></td>
</tr>
<tr>
<td>SOP9</td>
<td>Maintain log of communication and apply timeframe management of disputes</td>
<td>Ensure all communication internally and externally with counterparties is recorded re: every researched dispute. Apply timeframe management procedures based on size, age and counterparty risk.</td>
<td></td>
</tr>
<tr>
<td>SOP10</td>
<td>Internally escalate</td>
<td>Based on thresholds and procedures, ensure internal escalation reporting is sent at regular intervals and monitored</td>
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<tr>
<td>SOP11</td>
<td>Report to regulators, if not resolved and if applicable</td>
<td>If not resolved within the regulatory-required timeframe or dispute exceeds regulatory thresholds, report to regulators, if applicable</td>
<td>Coordinate proper approvals post-escalation process.</td>
</tr>
</tbody>
</table>
Appendix I

The regulations specify that you can calculate IM using two different approaches:

- Schedule-based calculation (Grid)
- Regulatory approved model-base calculation ISDA Standardized Initial Margin Model (“ISDA SIMM™”)

ISDA have produced an overview of the two approaches and the challenges involved across both. The material also provides steps taken for the calculations and key implementation considerations. This can be found on the ISDA website, Initial Margin Calculation Methods: SIMM and GRID.
## Appendix II

<table>
<thead>
<tr>
<th>EMIR/CFTC Comparison</th>
<th>CFTC Port Rec Rules</th>
<th>EMIR Port Rec Rules</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Client Classification</strong></td>
<td></td>
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</tr>
<tr>
<td>Swap Dealers (SDs) and Major Swap Participants (MSPs)</td>
<td></td>
<td>Financial counterparts (FC's), Non-Financial Counterparties above the clearing threshold (NFC+) and Non-Financial Counterparties below the threshold (NFC).</td>
</tr>
<tr>
<td><strong>Rule applicable to</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agree in writing with each counterparty on terms governing portfolio reconciliation</td>
<td>Agree in writing or by other electronic means with each of their Counterparties the terms on which the portfolio will be reconciled</td>
<td></td>
</tr>
<tr>
<td><strong>Compliance date</strong></td>
<td>23rd August 2013</td>
<td>15th September 2013</td>
</tr>
<tr>
<td><strong>Reconciliation venue</strong></td>
<td></td>
<td>Bilateral or qualified 3rd party vendor subject to agreement of the parties</td>
</tr>
<tr>
<td><strong>Reconciliation frequency</strong></td>
<td>Daily for portfolio 500+ trades Weekly for 51-499 trades Quarterly for 1 - 50 trades</td>
<td>Quarterly for portfolio &gt;100 trades Annual 1-100 trades</td>
</tr>
<tr>
<td><strong>Material Terms Definition</strong></td>
<td>Material Terms (subset of SDR reportable fields)</td>
<td>Key trade terms, including at least valuation attributed to each contract</td>
</tr>
<tr>
<td><strong>Resolution of parameter discrepancies</strong></td>
<td>Immediate resolution of any discrepancy in material terms</td>
<td>Resolution of any discrepancies in a material term in a timely fashion</td>
</tr>
<tr>
<td><strong>Valuation discrepancy definition</strong></td>
<td>Difference between the lower and the higher valuation of more than 10% of the higher valuation (per the rule).</td>
<td>Defined by each firm's internal risk tolerances and documented within their policies.</td>
</tr>
<tr>
<td><strong>Resolution of valuation discrepancies</strong></td>
<td>Establish policies and procedures reasonably designed to ensure the swap valuation discrepancies are resolved as soon as possible but in any event within 5 business days</td>
<td>Establish policies and procedures reasonably designed to resolve swap valuation discrepancies in a timely fashion</td>
</tr>
<tr>
<td><strong>Reporting of valuation disputes</strong></td>
<td>Valuation disputes &gt; 3 business days Exceeding USD 20mm Reported to CFTC</td>
<td>Valuation disputes &gt; 5 business days Exceeding USD 20mm Reported to the CFTC</td>
</tr>
<tr>
<td><strong>Record keeping</strong></td>
<td>SDs and MSPs - Make and keep a record of each swap portfolio reconciliation including number of portfolio reconciliation discrepancies Including number of swap valuation disputes (including time to resolution of each dispute, age of outstanding valuation disputes, categorized by transaction and counterparty) For 5 years after termination, maturity, expiration, transfer, assignment or novation date of the swap. Records to be made available promptly on request to CFTC and other US regulators (if applicable).</td>
<td>At the conclusion of the derivative contract with each other, FC and NFC shall have detailed procedures and processes for the recording of disputes. Key elements: i) length of time which the dispute remains outstanding, ii) counterparty, iii) amount disputed.</td>
</tr>
</tbody>
</table>

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