



WGMR Implementation Program

WGMR Margin & Collateral Processing Workstream

MINIMUM CONSIDERATIONS DOCUMENT (MCD)

Minimum Considerations for Uncleared Margin Future State Workflow

Document Version: 2.0

The ISDA WGMR Margin and Collateral Processing Workstream has modified the title of this document to “Minimum Considerations for Uncleared Margin Future State Workflow” to better reflect the objective of the document.

MCD to be revised following the issuance of relevant final rules

This MCD should be considered a working document based on the industry’s interpretation of the WGMR final framework published by the BCBS/IOSCO on Margin Requirements for Non-Centrally Cleared Derivatives in September, 2013 and the subsequent draft rules issued by the European Supervisory Authorities (ESAs), the U.S. Commodities Futures Trading Commission (CFTC) and U.S. Prudential Regulators in 2014. This document currently does not reflect proposals from the U.S. Securities Exchange Commission (SEC).

Subsequent iterations of this document will be published to include additional considerations as the proposed rules become clearer and final across respective jurisdictions.

Important Note and Disclaimer:

This document does not constitute legal, accounting or financial advice and describes the 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 this document is contractually binding on any parties or amends any ISDA Master Agreement or ISDA Credit Support Annex.

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1 Introduction

1.1 Executive Summary

The International Swaps & Derivatives Association, Inc. (ISDA) established the ISDA WGMR Margin & Collateral Processing Working Group (M&CPWG) to design and develop an operating framework to support the implementation of the WGMR final framework on margin requirements for non-centrally cleared derivatives published by the Working Group on Margining Requirements (WGMR) of the BCBS/IOSCO in September 2013. On March 18, 2015 the BCBS/IOSCO revised the implementation schedule for initial margin (IM) from December 1, 2015 to September 1, 2016 and adopted a six month phase-in of the requirement to exchange variation margin (VM) beginning September 1, 2016. Individual regulatory authorities across various jurisdictions are expected to proceed with margin rule finalization consistent with the WGMR final framework. Refer to Section 7, Appendices, for additional references.

The purpose of the Minimum Considerations for Uncleared Margin Future State Workflow is to define recommended business and technology considerations associated with implementation of the new margin rules. The document has been categorized based on five main components: 1) counterparty setup & client on-boarding, 2) trade execution, 3) IM & VM calculations, composite margin notifications & settlement provisions, 4) collateral eligibility, and 5) segregation, summarized below:

- 1) Counterparty setup & client onboarding – This section outlines the required information for counterparty identification and setup. It also covers related system enhancements required to support the new legal documentation (CSAs or other related documents), collateral calculations and collateral settlement provisions.
- 2) Trade execution – This section sets out the operations and technology requirements required to enhance trade capture systems, along with the methodology to track legacy trades. Additional data fields (such as asset class, relevant CSAs and settlement currency) for in-scope trades will be captured and reconciled. Several systems would thereby need to be enhanced to consume these new data fields and feed downstream systems accordingly.
- 3) IM & VM calculations, composite margin notifications & settlement provisions – Minimum considerations for IM and VM calculations, reconciliation, margin notifications and settlement processes are described within this section. It also covers the new data fields required to feed trade capture systems, collateral management/margin messaging platforms, exposure calculators, and other related downstream systems. Requirements identified in this section may also require enhancements to external/industry solutions and vendors applications.
- 4) Collateral eligibility – The section details the eligibility criteria of collateral assets and methods permissible to compute haircuts for collateral. It also outlines the treatment and application of the cross-currency haircuts¹ to IM and VM collateral, where applicable, in the event of a currency mismatch between the trade and collateral currencies.
- 5) Segregation – Permissible segregation arrangements, along with corresponding considerations are laid out in this section. The main issues that have been identified in the MCD are defining the structure of custodial accounts with a third party or a tri-party, gauging custodians' capacity to creating a standardized communication protocol with all custodians to automate the instruction of collateral movements/release, and ensuring continued protection for both parties subject to jurisdictionally-based legal and compliance requirements.

¹ The U.S. Prudential Regulator's proposed rule, U.S. CFTC's proposed rule, EU draft RTS and Japanese FSA's proposed rule include variations for applying "cross-currency haircuts also known as the additional 8% haircut". Note: Additional cross jurisdictional differences have been flagged in section 5 however should not be considered exhaustive. This document will be further revised based on regulatory guidance from the respective regulators on advocacy points raised by ISDA and its members in its comment letters.

The M&CPWG has also identified key challenges that firms would need to consider as they are preparing for the implementation of the requirements proposed in this document, such as:

- Supporting multiple collateral agreements per counterparty relationship across relevant regulatory frameworks
- Ability to capture all the new regulatory data fields within their internal legal, collateral, trade capture platforms and related systems
- Ambiguity of regulatory margin jurisdiction when the local regulation applies different considerations for in/out scope determination, margin calculation, eligible collateral, etc.
- Unclear dispute resolution process for different IM calculations due to lack of transparency around internal models between the counterparties
- Additional source of collateral disputes resulting from the adoption of eligible collateral haircuts computed using 1) standardized haircuts, or 2) proprietary models
- Implementing a framework to facilitate compliance with the cross-currency haircuts
- Additional computational time due to complexity of IM calculation
- Dependency on custodians partnering with the industry on required development
- Written or electronic documentation of margin process terms between counterparties prior to trade execution

In summary, the M&CPWG has outlined the key minimum considerations that should be considered by business, technology and operations groups in order to comply with the Minimum Considerations for Uncleared Margin Future State Workflow. Understanding the complexity of the changes, ISDA's WGMR M&CPWG developed this document after detailed analysis of related issues from various perspectives including input from ISDA Legal and industry experts from various institutions. This document should be used as a baseline reference and should not be considered exhaustive.

1.2 Overview

The baseline regulatory references for the development of this MCD include: 1) the WGMR final framework published by the BCBS/IOSCO on Margin Requirements for Non-Centrally Cleared Derivatives, 2) the proposed European Regulatory Technical Standards (EU RTS) on Risk-Mitigation Techniques for OTC-Derivatives Contracts not Cleared by a CCP, 3) the U.S. Prudential Regulators (FRB, FDIC, OCC, FHFA, and FCA) re-proposed draft rule on Margin Requirements for Covered Swap Entities, and 4) the Commodity Futures Trading Commission (Commission or CFTC) re-proposal on Margin Requirements for Uncleared Swaps for Swap Dealers and Major Swap Participants. The purpose of this document is to define the business and technology requirements associated with implementation of margin rules which are scheduled to come into effect in September 2016. Individual regulatory authorities across various jurisdictions are expected to proceed with margin rule finalization consistent with the WGMR final framework.

As specified in the executive summary, the WGMR recommends IM and VM requirements for non-centrally cleared derivatives subject to certain exceptions. All covered entities must exchange both IM and VM on a bilateral basis. This margin exchange would not apply to end users or other non-covered entities (e.g. sovereigns, central banks, multilateral development banks, etc.) as determined by each national regulator. A quantitative model or standard schedule may be used to calculate IM. The collateral posted and collected is subject to haircuts and must be segregated. Rehypothecation is prohibited.

The revisions published by the BCBS/IOSCO in March 2015 require the exchange of VM with covered entities belonging to a group whose aggregate month-end average notional amount of non-centrally cleared derivatives exceeds EURO 3 trillion (provided that it also meets that condition) to begin on September 1,

2016. This requirement applies only to new contracts entered into after September 1, 2016. Beginning March 1, 2017, all other covered entities will be required to exchange VM. The requirement to exchange two-way IM will begin on September 1, 2016 for covered entities belonging to a group whose aggregate month-end average notional amount of non-centrally cleared derivatives exceeds EURO 3 trillion. Between September 1, 2017 and September 1, 2020, the requirement to exchange two-way IM will be phased in based on aggregate month-end average notional amounts of non-centrally cleared derivatives ranging from EURO 2.25 trillion down to EURO 8 billion. National regulators are expected to revise their proposals to be consistent with the BCBS/IOSCO March 2015 revisions. Refer to Section 7.2 (Local Jurisdictional Rule References) of this document for the applicable IM phase-in schedules by jurisdiction.

2 Scope

The MCD has been categorized based on the main components of the collateral management lifecycle necessary to comply with the WGMR final framework as specified bellow.

Counterparty Setup/Client On-boarding

- Capture and consume counterparty legal entity information
- Enhance legal documentation system to incorporate additional data fields
- Enhance collateral calculation system to incorporate additional data fields
- Enhance downstream data feeds to include counterparty information

Trade Execution

- Enhance trade capture systems to support IM calculations, reconciliations, and distinction of new CSAs
- Develop mechanisms to track legacy trades

IM & VM Calculations, Composite Margin Notifications & Settlement Provisions

- Enhance upstream systems to feed risk calculations down to the collateral management system
- Establish and maintain documentation of margin terms and any exemptions
- Reconcile trade populations, IM amounts and IM calculation inputs
- Develop capabilities to calculate IM and VM amounts
- Develop the ability to issue IM calls and validate counterparties' IM calls
- Deliver collateral movement instructions to custodians based on counterparty preferences

Collateral Eligibility

- Accommodate expanded list of eligible collateral for IM and VM
- Derive appropriate collateral haircuts using prescribed methods for each jurisdiction
- Monitor concentration limits and wrong-way risk limits. Only relevant for entities subject to the EMIR regulation
- Develop enhanced capability to calculate exposure and collateral in “currency portfolios” to incorporate currency mismatch haircuts

Segregation

- Prepare for establishing additional custodian accounts including connectivity to custodians
- Assess the feasibility of implementing segregation arrangements (e.g. affiliate entity, third party)
- Develop capabilities to consume collateral data provided by custodians for reconciliation
- Custodians may need to develop capability to conduct eligibility checks for IM

3 Minimum Considerations Timetable

The table below reflects expected iterations of the MCD. Dates shown below are subject to periodic revisions.

Note: The Draft MCD will be further updated once final rules are issued.

Activity Description	Date	Comments
ISDA published DRAFT MCD Version 1.0	November 7, 2014	First draft. Minimum considerations based on review of the WGMR final framework and the draft EU RTS with some cross-jurisdictional consideration of US and JFSA rules.
ISDA published DRAFT MCD Version 2.0	March 31, 2015	Second draft. Minimum considerations based on review of draft proposals issued by the U.S. CFTC and Prudential Regulators.
ISDA to publish FINAL MCD	TBD <Subsequent to final rules issuance>	Final version. Minimum considerations will be inclusive of all final rules available across jurisdictions.

4 Assumptions & Dependencies

Relevant assumptions and dependencies related to each minimum consideration have been categorized below along with the description of the minimum consideration in Section 5 of the MCD. The assumptions listed in this document are subject to change and periodic revision based on rule finalization.

Regulators

- ISDA advocates for national regulators to achieve as much consistency as possible across their final rules. To achieve consistency, regulators in the United States, Europe, and Japan must resolve discrepancies in critical areas such as definitions, compliance dates, and scope of coverage

ISDA

- ISDA is supporting the development of an standard initial margin model (ISDA SIMM) that is widely adopted by the industry
- ISDA will revise, as appropriate, its form of ISDA 2013 Account Control Agreement to account for final margin rules in the United States. In Europe, ISDA will look at whether it could publish a form of Account Control Agreement that parties may use to facilitate a rule compliant custodian account structure
- ISDA may provide a collateral taxonomy as a post-compliance date reference tool to the extent that regulators can provide standards for producing definitions, post-compliance legal agreements will contain definitions reflecting industry consensus (e.g. what constitutes “significant wrong way risk”)

Counterparties

- Counterparties will self-disclose information necessary for compliance

Custodians

- Custodians will support the account arrangements needed to comply with the WGMR final framework
- Custodians can accept pledge/release instructions from dealers now required to post IM
- Custodians adopt a market standard messaging infrastructure and can provide required information for intraday management of cross-currency settlement risk

5 Minimum Considerations Table Sections

- 5.1 Counterparty Setup/On-boarding
- 5.2 Trade Execution
- 5.3 IM & VM Calculations, Composite Margin Notifications & Settlement Provisions
- 5.4 Collateral Eligibility
- 5.5 Segregation

Definitions of Minimum Considerations Tables:

MC#	Unique reference number assigned to each considerations in the MCD
Process or Background	High level description of each minimum consideration
Minimum Consideration Description	Recommended business and technology considerations required to comply with new margin rules
Assumptions & Dependencies	Description of key assumptions and dependencies related to each minimum consideration
Open Questions & Outstanding Issues	Open questions and outstanding issues raised by the M&CPWG. Some may require further clarity from the regulators
Cross-Jurisdictional Regulatory Differences	Key regulatory differences observed that can change or have an impact to the prescribed minimum consideration. Important Note: This should not be considered an exhaustive list of the regulatory differences
Regulatory References	Related rule references from the WGMR final framework and the proposed rules by the EU and US regulators

Assumptions in the Minimum Considerations Tables:

All the assumptions listed in section 5 of this document are consistent with recent comment letters submitted by ISDA to relevant regulators. Assumptions are subject to change and periodic revision based on rule finalization.

MC#	Process or Background	Minimum Consideration Description	Assumptions & Dependencies	Open Questions & Outstanding Issues	Cross-Jurisdictional Regulatory Differences	Regulatory References
5.1 Counterparty Setup/On-boarding						
MC 1	Counterparty legal entity information	<p>EU and US: Counterparties will need to self-disclose Legal Entity Information, Consolidated Group Information and provide Confirmation as described in ISDA's "Self Disclosure Template" and summarized below: <u>Legal entity self-disclosure:</u></p> <ul style="list-style-type: none"> • Legal entity information (Legal Name, Entity Identifier, Address) • Multi branch party information including branch jurisdiction • Legal entity status for each applicable jurisdiction <p><u>Consolidated Group Information:</u></p> <ul style="list-style-type: none"> • Group membership • Aggregate Average Notional Amount (AANA) <p><u>Confirmation:</u></p> <ul style="list-style-type: none"> • Name, Date and Electronic Signature 	<p>EU and US: • Dependency: Firms will self-disclose Legal Entity Information, Consolidated Group Information and provide Confirmation as described in ISDA's "Self Disclosure Template" • Dependency: ISDA Amend may be central source setup for entities to self-disclose the necessary information required for counterparties to determine (i) whether counterparties are in scope for purposes of applicable margin regulations and (ii) the phase in for the IM requirements • Assumption: Each regulatory jurisdiction might have a slightly different way of calculating AANA which may require each self-disclosing entity to have the ability to disclose its AANA for purposes of the rules of its own regulatory regime as well as its AANA for purposes of the rules of the counterparty's regulator • Assumption: Firms will self-disclose relevant information at both the consolidated group level and underlying legal entity level Note: Firms may also agree to exchange this information bilaterally using any agreed upon means</p>	<p>EU and US: • Estimate of go-live compliance dates may not be required for compliance but would be useful for assessing compliance • Firms to independently assess level of integration required to ISDA Amend</p>	<p>• None identified</p>	<p>BCBS/IOSCO:</p> <ul style="list-style-type: none"> • Scope of Coverage (2.4, 2.6) • Phase-In (8.1) <p>ESA:</p> <ul style="list-style-type: none"> • Chp 5, Article 1 FP (para 2, 3, 7) <p>US:</p> <ul style="list-style-type: none"> • US PR: § __.2 Definitions; § __.6 Eligible collateral; § __.8 IM models and standardized amounts; § __.10 Documentation of margin matters • CFTC: 23.151, 23.156, 23.158
MC 2	Enhance legal documentation system	<p>EU and US: Enhance the legal documentation system with following data:</p> <ul style="list-style-type: none"> • Identification of relevant collateral agreement • Capture in scope/covered products <requirements vary by jurisdiction> • Capture IM calculation type: Standard Grid or IM model calculation method or both • Capture and track changes to IM & VM eligible collateral & haircuts to capture credit downgrades and other credit events that may cause changes to collateral eligibility • Capture collateral concentration limit requirement <applies only under EU RTS> • Capture IM & VM margin valuation frequency • Choose in-house (internal) <applies under EU RTS> or third-party (external) segregation where applicable <applies under US rules> • Capture custodian name(s) if segregating at a third-party • Firms will need to include affiliate and FX swaps activity to covered scope/products for phase in determinations <applies only under US rules> <p>Impacted applications: Reference data system, documentation system, downstream end users, collateral calculation system</p>	<p>EU: • Dependency: Documentation system to feed appropriate legal agreement criteria to the collateral calculation system • Dependency: Capturing relevant credit criteria from CSA, Account Control Agreement (ACA) or other relevant margin agreement • Assumption: Credit criteria will include: • Cross-currency haircut for FX mismatch requirement • IM threshold group level threshold requirements • Phase-In by jurisdiction (refer to Section 7.3) • Capture of concentration limit requirements • Assumption: Concentration limits may be captured in the new CSA/Protocol. Subject to change based on commercial decisions on how to comply with new documentation; subject to rule finalization US: • Assumption: Threshold calculations reflect exemption for inter-affiliate and FX swaps; subject to revision post final rules publication • Assumption: Counterparties will bilaterally agree how the group level 50MM IM threshold will be allocated across CSAs</p>	<p>EU: • Further clarity is required if group IM thresholds are negotiated and allocated via CSAs US: • Pending regulator guidance on exemption of interaffiliate swaps from the IM requirements. <ISDA Comment Letter to US PRs and CFTC submitted on November 24> EU and US: • ISDA's WGMR Legal & Documentation Workstream reviewed and discussed institutional views regarding documentation architecture approaches in respect of the bilateral documents which would be published on the ISDA bookstore. An architecture approach was agreed for developing new regulatory compliant IM/VM CSAs on the bookstore. The group will continue to assess changes which may be necessary based on final rule issuance</p>	<p>• Scope of entities and scope of covered products varies by regulatory jurisdiction • EU: Exception for inter-affiliate transactions may be granted by competent authority • CFTC & PR: No exemptions for inter-affiliate trades • CFTC & PR: Group level IM threshold caps vary by margin jurisdiction: • BCBS/IOSCO: €50 M • US PR: \$65 M • US CFTC: \$65 M • ESA: €50 M • JFSA: ¥ 7 BN • Japan: Excludes affiliate swaps activity for phase-in determinations</p>	<p>BCBS/IOSCO:</p> <ul style="list-style-type: none"> • Scope of Coverage (2.1 - 2.3) • Methodology (3.1, 3.7, 3.8, 3.14) • Eligible Collateral (4.1-4.4) • IM Treatment (5.1) • Phase-In (8.8) <p>ESA:</p> <ul style="list-style-type: none"> • Chp 1: Article 1 Def (para 3); Article 2 Gen (para 3-6) • Chp 3 Article 1 LEC (para 1); Article 7 LEC (para 1); Article 1 HC (para 1); Article 2 HC (para 1-7) • Chp 4: Article 1 OPE (para 1, 3) • Chp 5: Article 1 FP (para 3) <p>US:</p> <ul style="list-style-type: none"> • US PR: § __.10 Documentation of margin matters; § __.8 IM models and standardized amounts; § __.7 Segregation of collateral; § __.6 Eligible collateral; § __.2 Definitions. • CFTC: 23.158, 23.155, 23.154, 23.151, 23.701
MC 3	Enhance collateral calculation system	<p>EU and US: • Enhance the collateral calculation system to consume relevant fields • Enhance the collateral system to consume counterparty reference data: • Capture in scope/covered entities • Capture relevant margin jurisdiction • Capture counterparty domicile • Capture if counterparty is internal/external • Impacted applications: Reference data system, documentation system, downstream end users, collateral calculation system</p>	<p>EU and US : • Dependency: Collateral system to consume appropriate CSA and/or currency bucket CSA credit criteria and provide the mapping of trades to appropriate CSA (see 3rd point above under MC2, Open Questions and Outstanding issues regarding separate IM and VM CSAs) • Dependency: Collateral system to consume counterparty reference data • Assumption: Capturing and development of static data will be at firm's discretion • Assumption: Firms will develop an upstream calculation model that will perform the calculation and feed a daily requirement to the margin calculation system • Assumption: Firms will handle differences in product definitions, in particular determine what sets of rules apply for cross-border transactions via the Protocol. ISDA is expected to conduct consultation on these issues; subject to changes based additional cross-border guidance and rule finalization</p>	<p>EU and US : • How firms will handle wrong way risk and new collateral concentration requirements which are in-scope for EU rules but not required under US rules</p>	<p>• Collateral handling of differences in in-scope products • Wrong way risk and collateral concentration requirements</p>	<p>• N/A</p>
MC 4	Enhance collateral calculation (feeds to downstream)	<p>EU and US: • Enhance collateral downstream feeds to consume relevant fields • Impacted applications: RWA, Basel, credit risk valuation models, liquidity, reporting, collateral optimizer, settlement systems</p>	<p>• None identified</p>	<p>• None identified</p>	<p>• None identified</p>	<p>• N/A</p>

MC#	Process or Background	Minimum Consideration Description	Assumptions & Dependencies	Open Questions & Outstanding Issues	Cross-Jurisdictional Regulatory Differences	Regulatory References
5.2 Trade Execution						
MC 5	Enhanced trade capture systems	<p>EU and US: Enhance trade processing systems to capture the following fields for all trades: IM product taxonomy: • The Asset Class to which this trade is assigned for the purpose of IM calculations, selected from a defined list of values provided by ISDA. Note: If the regulators allow use of risk factors for categorization based on industry advocacy/recommendations, separate calculations will be made for each asset class based on pre-defined risk factors • Ability to distinguish security based swaps vs. CFTC swaps to distinguish differences in the rules Relevant CSAs and/or Master Netting Agreement (MNA): • The CSAs which governs the IM and VM calculations applicable to this transaction. Default values are: (i) for trades executed pre-September 1, 2016, the legacy CSA and/or related MNA in force at the time of trade; (ii) for trades executed on or after September 1, 2016, the post compliance CSAs and/or related MNA in force at the time Relevant CCY Bucket: • The bucket within the relevant CSAs to which this trade is to be assigned for VM calculation purposes. Default values are: (i) for all trades with settlements in more than one currency then USD; (ii) for all trades with settlements in a single currency that is one of BGN, HRK, EUR, ISK, LVL, LTL, MAD, RON, RSD, TRY then EUR; (iii) USD Note: Refer to MC13 for VM calculation standards</p>	<p>EU and US: • Assumption: A counterparty can have multiple post-compliance date CSAs/MNAs and can choose which CSAs/MNA is used for a specific trade • Dependency: Vendors to support the trade capture enhancements • Assumption: Trades will be assigned to specific asset classes and currencies; subject to change based on advocacy with the regulators regarding the use of risk factors for categorization and subsequent rule finalization. If the requirement persists, the Asset Class and Currency will be captured and reconciled. The CSA and/or MNA will be captured and reconciled • Assumption: The use of separate CSAs will be sufficient to distinguish pre and post compliance date trades. Counterparties will continue use of existing ISDA MNAs for the purposes of compliance with the non cleared margin rules <applies to US only ></p>	<p>EU and US: • Need to follow-up with ISDA's WGRM Risk Classification & Methodology Workstream regarding the necessity of a product taxonomy • Rules for determination of relevant currency bucket (currency silos) for cross-currency swaps has yet to be determined</p>	<p>• CFTC & PR: Margin requirements will not apply to transactions entered into before compliance dates. However, if transactions before and after the compliance date use the same master netting agreement, then the pre-compliance date transactions will be subject to the margin requirements • CFTC & PR: Proposed rules do not permit counterparties to be out-of-scope for the purposes of margin requirements once they are deemed to be in-scope counterparties</p>	<p>BCBS/IOSCO: • Scope of Coverage (1.1- 1.2) • Phase-In (8.1) ESA: • Chp 1 Article 2 GEN (para 1-4) • Chp 5 Article 1 FP (para 3-5, 6) US: • US PR: § __.2 Definitions; § __.6 Eligible collateral • CFTC: 23.151, 23.156</p>
MC 6	Enhance confirmation systems	<p>EU and US: • No enhancements will be necessary to trade confirmations systems for compliance with the non cleared margin rules on day 1 (September, 2016). The M&CPWG may reassess if changes are necessary at a later time based on complexities arising from the dispute resolution process</p>	<p>• None identified</p>	<p>EU and US: • The fields for (i) IM product taxonomy, (ii) relevant CSA and/or MNA, and (iii) relevant currency bucket may be captured and confirmed as an ideal future state implementation plan • These changes will require to be executed in coordination with vendors and other relevant ISDA working groups responsible for trade confirmations</p>	<p>• None identified</p>	<p>• N/A</p>
MC 7	Enhance reconciliation systems	<p>EU and US: • Enhance reconciliation systems to include the applicable fields in MC5</p>	<p>EU and US: • Dependency: Reliance on vendors to support the trade capture enhancements and new reconciliation requirements (i.e., risk factors) which could arise from the new two way IM requirement (see MC11)</p>	<p>• None identified</p>	<p>• None identified</p>	<p>• N/A</p>
MC 8	Develop legacy trade logic	<p>EU and US: Develop a criteria to distinguish legacy trades from regulatory compliant trades: • Use trade date as an indicator on the regulatory mandated trades • Make the trade date a reconcilable field and consume downstream to collateral systems</p>	<p>EU and US: • Dependency: Commercial design decisions related to MC6 and MC7</p>	<p>EU and US: • It is possible that identification of product types will be required if regulations across jurisdictions have varying margin requirements</p>	<p>• None identified</p>	<p>• N/A</p>

MC#	Process or Background	Minimum Consideration Description	Assumptions & Dependencies	Open Questions & Outstanding Issues	Cross-Jurisdictional Regulatory Differences	Regulatory References
5.3 IM & VM Calculations, Composite Margin Notifications & Settlement Provisions						
MC 9	Trade booking & confirmation	EU and US: • Trade is booked in risk management system based on criteria in Section 5.1 and fed downstream to collateral management system(s)	EU and US: • Assumption: new confirmable fields will be captured and reconciled to facilitate margin processing	EU and US: • Need to finalize what fields will be captured • Need to define alternative solution for confirmation changes that may not be implemented by September, 2016	• None identified	• N/A
MC 10	Legal documentation (new CSA and related documents)	EU: • Counterparties will need to execute an eligible ISDA CSA to govern in scope OTC derivative contracts following applicable compliance dates. The agreement should include the method used to compute IM, amongst other terms • Formal application to request exemption of intragroup trades from margin requirements US: • In addition to the above, firms can execute an eligible ISDA MNA to calculate and comply with the VM requirements on an aggregate net basis with respect to all OTC derivative contracts entered into before the applicable compliance dates	In the context of derivative transactions that will attract both regulatory required VM and regulatory required IM under the proposed margin rules for uncleared derivative transactions EU: • Assumption: From a legal perspective, the required VM would be documented under the English law title transfer CSA and, due to the segregation requirements, the required IM would be documented under the English law security interest Credit Support Deed US: • Assumption: From an operational perspective it is preferable for all derivative transactions to be allocated to a single credit support document for IM and VM. The two credit support document approach outlined (for EU) is under review from a commercial and operational feasibility perspective • Assumption: Counterparties may bilaterally agree to migrate legacy positions into post-compliance date agreements. Systems and procedures will be flexible to support both a bifurcated IM/VM documentation and a single agreement documentation structure • Assumption: Counterparties will continue use of existing ISDA MNAs and execute new ISDA CSA documentation to distinguish pre and post compliance date trades Both EU and US: • Assumption: Beginning September 1, 2016, it is estimated that 17-25 counterparty groups will be required to exchange two-way IM and VM. From March 1, 2017, all covered entities will be required to exchange VM. The requirements to exchange VM applies to new contracts. • Assumption: Industry participants will rely on electronic means or protocol mechanisms to avoid manual execution of CSAs for VM. Firms will use standard industry solutions, where possible, to conform existing legal documents to new rule requirements • Assumption: Counterparties can net 2 CSAs under an ISDA Master (e.g. pre and post compliance date CSAs) to reduce the volume of collateral payments. Practicable netting would be dependent on overlapping collateral sets for the new and old CSAs; subject to change based on rule finalization	US: • A new master agreement will not be required to prevent pre-compliance date swaps from being subject to the margin rules <ISDA Comment Letter to US PRs and CFTC submitted on November 24> • Documentation requirements related to valuation may be too burdensome, duplicative and/or repetitive in the US <ISDA Comment Letter to US PRs and CFTC submitted on November 24>	• CFTC & PR: Margin requirements will not apply to transactions entered into before compliance dates. However, if transactions before and after the compliance date use the same master netting agreement, then the pre-compliance date transactions will be subject to the margin requirements • PR: Counterparty agreements must specify methods and inputs for determining swap values for VM and related dispute resolution procedures • CFTC: Documentation must show variation methodology so that counterparties and regulators can approximate VM calculation. Requires documentation with non-financial entities as to whether margin will be exchanged, and associated information if applicable	BCBS/IOSCO: • Methodology (3.13) • Treatment of IM (5.1) • Affiliate Transactions (6.1) ESA: • Chp 4, Art 1 OPE 1. (d) & (e) • Chp 5, Art 1 - 3 IGT, Art 1 FP US: • US PR: § __.4 VM • US PR: § __.10 Documentation of margin matters • CFTC: 23.157, 23.158
MC 11	Reconciliation	EU and US: • Daily reconciliation of pre and post compliance date trades to support IM and VM margin process will be conducted simultaneously along with issuance of a IM and VM margin calls • Risk factor reconciliation will include new IM model inputs, parameters and sensitivities provided by source risk management systems	EU and US: • Dependency: New fields will be added to exposure reconciliation for new post-compliance portfolios • Dependency: New data feed of risk factors created and delivered to reconciliation vendor • Assumption: Reconciliation prior to margin call may not be possible if daily IM calls are mandated by regulations	EU and US: • Definition of what would be considered a break (dispute or discrepancy) and tolerance levels will be required • Need further clarity on the process to resolve IM disputes based on clarifications of methodology inputs • Under the final rules for portfolio reconciliation issued by the US and Europe there are different definitions for material dispute/discrepancy. These will need further clarification as part of the dispute resolution procedure best practices	• None identified	BCBS/IOSCO: • Methodology (3.10, 3.12, 3.15) ESA: • Chp 1 Article 1 EIM (para 3-4); • Chp 3 Article 2 LEC (para 1); • Chp 4 Article 1 OPE (para 1d) US: • US PR: § __.3 IM; § __.8 IM models and standardized amounts. • CFTC: 23.152
MC 12	IM calculations/ methodologies <REFER TO MC14>	EU and US: • Risk systems are used to calculate the gross IM required • Collateral systems are then used to calculate the amount to be called and posted (gross requirement less collateral held + in-transit) • Firms should have the ability to calculate IM from its own perspective and its counterparty's perspective based on each firm's own data and its own calculations. Netting restrictions vary by jurisdiction • New IM requirement must be calculated using: risk-based model and/or standard schedule based on product type • EU: Netting is allowed within 4 broad risk categories, semi-annual calibration • US: Netting is allowed within 7 broad risk categories, monthly calibration Note: Subject to further deliberations of ISDAs WGMR RC&MWG with regulators - ISDA SIMM may not follow regulatory recommended "broad risk categories" instead use risk factors for categorization	EU: • Assumption: Firms will adopt ISDA SIMM and employ the risk-based model and/or the standard schedule independently depending on the product type • Assumption: IM calculation may remain daily but IM will not settle daily • Assumption: IM and VM calls would be separate requirements but could be communicated in the same margin call statement • Dependency: Knowing which CSA a new trade is booked to • Assumption: Parties will disclose to each other what model (e.g. ISDA SIMM) will be used in the legal agreement US: • Assumption: One broad risk category will be permissible for commodities. Pending regulatory guidance on ISDAs comment letter to US PRs and CFTC on November 24. Subject to revision post final rules publication • Assumption: A longer period for settlement of IM will be permitted (up to T+5). Pending regulatory guidance on ISDAs comment letter to US PRs on January 16; subject to revision post final rules publication	EU: • Need to define target SLAs • Will each firm consume blended rates or each other's data? • Where will firms create IM calculation engine? In existing system or separate infrastructure? US: • The proposed period for calibration and the holding period should be harmonized with the applicable periods in other jurisdictions <Pending regulatory guidance on several advocacy points submitted in ISDAs Comment Letter to US PRs and CFTC on November 24> Both EU and US: • Regulators will need time to formalize the regulatory approval processes for IM models across multiple jurisdictions	• CFTC: Daily calculation of hypothetical IM requirement for a non-financial end user with material swaps exposure • CFTC & PR: Historical data set used for performing the IM calculation varies across jurisdiction • CFTC & PR: Model may net within 7 broad risk categories (compared to 4 in the EU) • CFTC & PR: The mandatory capture of main non-linear dependencies and certain other model requirements are overly rigid and prescriptive	BCBS/IOSCO: • Methodology (3.1-3.6) ESA: • Chp 1 Article 1 EIM (para 1-2) • Chp 2 Article 1 SMI; Article 1 MRM US: • US PR: § __.8 IM models and standardized amounts. • CFTC: 23.154

MC#	Process or Background	Minimum Consideration Description	Assumptions & Dependencies	Open Questions & Outstanding Issues	Cross-Jurisdictional Regulatory Differences	Regulatory References
MC 13	VM calculations	<p>EU and US:</p> <p>New VM requirement must be calculated:</p> <ul style="list-style-type: none"> VM to be called for and agreed on a daily basis <ul style="list-style-type: none"> US firm trading with US firm likely to be settled in single CCY (USD) EU firm trading with EU firm likely to be settled in currency (number of CCYs to be negotiated between the parties) <ul style="list-style-type: none"> For MTA considerations please refer to MC15 For collateral eligibility and associated haircuts (see assumptions in MC13, 3rd bullet) <p>Note: Firms would need to develop their systems in consideration of the following additional inputs:</p> <ul style="list-style-type: none"> Cross-currency haircuts to be applied to IM or VM depending on outcome of advocacy with regulators. (See Open Questions & Outstanding Issues in MC13, 2nd bullet) 	<p>EU and US:</p> <ul style="list-style-type: none"> Dependency & Assumption: Population of in-scope entities will be known (e.g. entities will self-disclose information to each other) New CSA with a counterparty is not needed if terms of the old CSA meet the new requirements Assumption: New VM requirement may be netted with pre-compliance date IM and VM requirement if under the same master agreement 	<p>EU and US:</p> <ul style="list-style-type: none"> Will the 8% haircut on VM be added to the VM requirement or will it be added to the IM? Where firms are required to exchange post compliance date VM and IM, it is expected that if firms are required to pay an 8% additional haircut on an fx mismatch – this will be factored into IM. <p>Where firms are exchanging post compliance date VM only, it is expected that firms will simply add the 8% additional haircut onto the delivery of collateral at the time collateral is agreed with their counterparty</p> <ul style="list-style-type: none"> Require US regulatory clarity on agreements required between parties for methodologies and data sources to be used in valuing exposure How will industry handle haircut for collateral that is not posted in the underlying CCY of the swap 	<ul style="list-style-type: none"> CFTC: If practicable, for recent transactions, reliance on third party valuation or other objective criteria CFTC: Calculation of hypothetical VM for non-financial end user with material swaps exposure for each business day 	<p>BCBS/IOSCO:</p> <ul style="list-style-type: none"> Scope of Coverage (2.1, 2.3) Methodology(3.14) <p>ESA:</p> <ul style="list-style-type: none"> Chp 1 Article 1 Def (para 3); Article 2 GEN (para 4); Article 1 VM (para 1-2) Chp 3 Article 1 LEC (para 1); Article 1 HC (para 1); Article 2 HC (para 1-7) <p>US:</p> <ul style="list-style-type: none"> US PR: §__4 VM CFTC: 23.155
MC 14	IM margin calls	<p>EU and US:</p> <ul style="list-style-type: none"> IM calls will be issued daily in a single currency. The timing for the IM call and settlement cycle may likely differ from the VM cycle with IM calls expected to be processed later than VM in the same day due to additional processing requirements In-scope firms to exchange IM on a gross two way basis IM cannot be netted with other VM requirements, nor can it be netted with the corresponding IM requirement between the counterparties Margin call statements to include the relevant firm's custodian standard settlement instructions Considerations for MTA (refer to MC15) and threshold 	<p>EU:</p> <ul style="list-style-type: none"> Assumption: Both parties use ISDA SIMM model, where possible Assumption: Industry participants will not be able to settle IM the same day as the IM call when securities with greater than T+1 settlement cycles are posted Assumption: In-transit IM would be treated like in-transit VM, i.e. assumed to be settled with respect to the margin call calculation <p>US:</p> <ul style="list-style-type: none"> Assumption: Collection of IM is subject to the time required to deliver the collateral 	<ul style="list-style-type: none"> Firms using different models would result in increased number of IM disputes Will firms be able to calculate IM requirement daily given processing cycle envisioned. It's not possible to settle IM on T+1 basis Will the calculations and issuance of IM calls happen less frequently than daily? Open: Advocacy letter requested weekly Regulators to clarify separate MTA for IM and VM (refer to MC 15) 	<ul style="list-style-type: none"> CFTC & PR: IM margin calls must be issued on or before the business day following the day the transaction is executed and daily thereafter 	<p>BCBS/IOSCO:</p> <ul style="list-style-type: none"> Product Scope (2.1–2.3) Methodology (3.13) Treatment of IM (5.1) <p>ESA:</p> <ul style="list-style-type: none"> Chp 1 Article 1 Def (para 3), Article 2 Gen (para 3, 5, 6) <p>US:</p> <ul style="list-style-type: none"> US PR: §__3 IM CFTC: 23.152

MC#	Process or Background	Minimum Consideration Description	Assumptions & Dependencies	Open Questions & Outstanding Issues	Cross-Jurisdictional Regulatory Differences	Regulatory References
MC 15	Minimum transfer amount (MTA)	<p>EU and US:</p> <ul style="list-style-type: none"> • MTA values for IM and VM would both be defined in the legal arrangement and subsequently applied, as today, during the IM and VM margin calculations <ul style="list-style-type: none"> • Application of MTA when firms margin in-currency (see Open Questions and Outstanding Items, 1st bullet) 	<p>EU and US:</p> <ul style="list-style-type: none"> • Assumption: The MTA will apply to IM and VM separately as these amounts will be calculated differently, potentially with different frequencies and will be subject to different reconciliation and netting requirement; subject to revision post final rules publication • Assumption: If counterparties agree to move collateral in currency, there will be a need to apply the agreed upon eligible collateral exchange plan for the range of CSA solutions that may be negotiated (i.e. single currency level, separately for IM/VM, or at the currency bucket level). If counterparties plan to margin in this fashion, it will be have to be determined bilaterally, as it will not be included in the ISDA CSA • Assumption: Firms can agree a static allocation of the MTA across IM and VM; subject to revision post final rules publication 	<p>EU and US:</p> <ul style="list-style-type: none"> • It is expected that IM would be margined in a single currency. In the event that VM is performed in the currency of the derivative exposure it is expected that the regulatory defined MTA would be allocated across the applicable currency buckets in aggregate; subject to change based on rule finalization. • Pending regulatory clarity to advocacy requesting that the MTA amount applies separately to IM and VM <ISDA Comment Letter to US Regulators submitted on November, 24> 	<p>CFTC & PR:</p> <ul style="list-style-type: none"> • MTA amounts vary by margin jurisdiction: • BCBS/IOSCO: €500 K (both IM/VM) • US PR: \$650 K (both IM/VM) • US CFTC: \$650 K (both IM/VM) • ESA: €500 K • JFSA: ¥ 70 M (separately for IM/VM) 	<p>BCBS/IOSCO:</p> <ul style="list-style-type: none"> • Scope of Coverage (2.3) <p>ESA:</p> <ul style="list-style-type: none"> • Chp 1 Article 2 GEN (para 4) <p>US:</p> <ul style="list-style-type: none"> • US PR: § __,5 Minimum transfer amount and satisfaction of collecting and posting requirements • CFTC: 23.151, 23.154
MC 16	VM settlement	<p>EU:</p> <ul style="list-style-type: none"> • Firms should be operationally prepared to support a range of multi currency VM collateral movements that might be required where firms margin VM in-currency (see MC13 VM Calculation for additional detail) • For dealer to non-dealer transactions with no regulatory IM requirement, firms need to operationally prepare for the possibility of factoring the additional 8% haircut into the process where firms agree what collateral will be paid to meet the daily VM margin requirements <p>US:</p> <ul style="list-style-type: none"> • For dealer to non-dealer transactions, firms need to be operationally prepared for a range of settlement options to either pay in USD dollars or the currency in which payment obligations under the swap are required to be settled would be subject to an additional haircut once the counterparties agree on the eligible collateral currencies (i.e. paying 8% in IM or moving collateral in multiple currencies) 	<p>EU:</p> <ul style="list-style-type: none"> • Assumption: Significantly increased number of payments due to non-netting, settlement in underlying currency and daily movements 	<p>EU and US:</p> <ul style="list-style-type: none"> • Herstatt risk may be facilitated by a payment vs. payment matched settlement facility which would be ideally in place before the regulatory go-live date for VM (as specified in Appendix 7.3) • Commercial decision based on funding requirements 	<ul style="list-style-type: none"> • None identified 	<ul style="list-style-type: none"> • N/A
MC 17	IM settlement	<p>EU:</p> <ul style="list-style-type: none"> • IM cash and securities movements will be delivered to an affiliate custodian or other permissible legal structure <p>US:</p> <ul style="list-style-type: none"> • IM cash and securities movement instructions delivered to third party custodians of each party's choice • Also see section 5.5 	<p>EU and US:</p> <ul style="list-style-type: none"> • Assumption: Custodians can accept pledge/release instructions from counterparties now required to post IM in an automated form • Assumption: TriParty may likely be used to support securities IM and bilateral settlement custodians both cash and securities IM 	<p>EU and US:</p> <ul style="list-style-type: none"> • Type of messaging to use between dealers and custodians to automate pledge and release process 	<ul style="list-style-type: none"> • None identified 	<p>BCBS/IOSCO:</p> <ul style="list-style-type: none"> • Treatment of IM (5.1) <p>ESA:</p> <ul style="list-style-type: none"> • Chp 4 Article 1 OPE (para 1-3); Article 1 SEG (1-5) <p>US:</p> <ul style="list-style-type: none"> • US PR: § __,7 Segregation of collateral • CFTC: 23.157, 23.152, 23.701

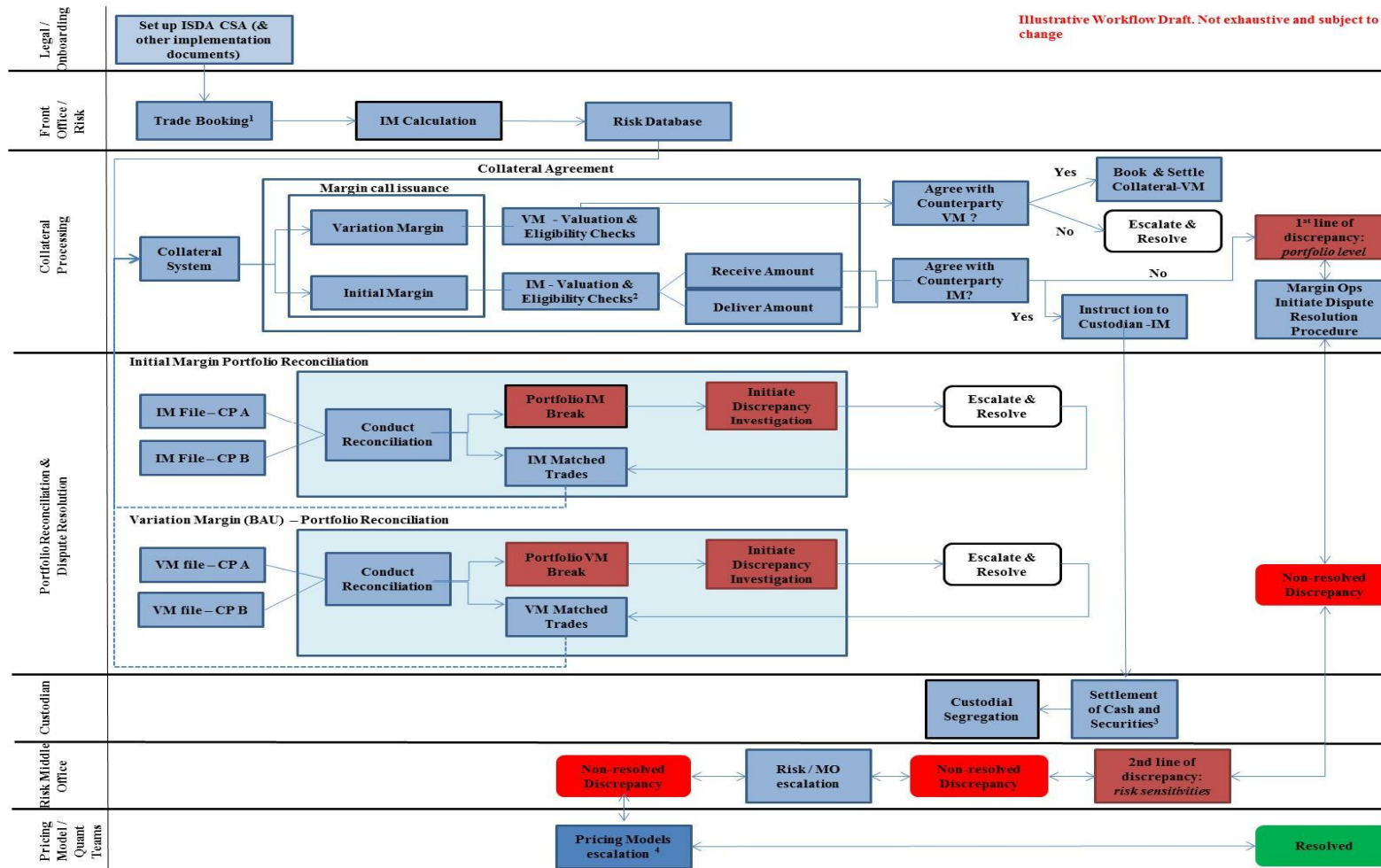
MC#	Process or Background	Minimum Consideration Description	Assumptions & Dependencies	Open Questions & Outstanding Issues	Cross-Jurisdictional Regulatory Differences	Regulatory References
5.4 Collateral Eligibility						
MC 18	Eligible list of collateral assets	<p>EU and US:</p> <ul style="list-style-type: none"> Accommodate eligible collateral (as defined by each regulator) that are applicable to both IM and VM Eligibility checking spans: <ul style="list-style-type: none"> Eligible asset types <vary by jurisdiction> <ul style="list-style-type: none"> EU: Posting/collecting of UCITS as eligible collateral will not be used in CSAs US: Firms are expected to post VM in cash only (must be USD or swap settlement currency) Credit quality assessments Wrong way risk <applies only under EU RTS> Concentration limits <applies only under EU RTS> Eligibility check must be done: <ul style="list-style-type: none"> On a pre-acceptance basis for proposed collateral Daily for collateral already held 	<p>EU:</p> <ul style="list-style-type: none"> Assumption: Custodians may not be in a position to conduct concentration limits and/or WWR of posted collateral on behalf of the receiving party as they won't have available a firms complete inventory of collateral Assumption: Collateral is sufficiently diverse to meet diversification requirements Assumption: Parties will need to bilaterally agree the collateral eligibility within the regulatory CSA Dependency: Equities, as constituent of a main index (collateral asset - ESMA will develop draft implementing technical standards (ITS) to specify main indices Dependency: EBA shall maintain a publicly available database of all regional governments and local authorities within the Union - related to collateral asset (d) <p>US:</p> <ul style="list-style-type: none"> Non identified 	<p>EU:</p> <ul style="list-style-type: none"> To what extent do UCITS funds display a look through to the underlying assets to allow assessment of eligibility? And to what extent is this needed? Due to lack of look through eligibility checking of UCITS funds, they are deemed to be impractical based on current bilateral eligibility schedules & feasibility of settlement Advocate removal of UCITS as eligible collateral due to the highlighted challenges What is the timeline for ESMA to develop draft implementing technical standards (ITS) to specify the main equity indices? And to publish a publicly available database of all regional governments and local authorities within the Union? Certain contractually agreed collateral will only qualify as "eligible" for purposes of meeting regulatory margin requirements if it is above a certain credit threshold Eligible collateral taxonomy may be developed by ISDA as a post-compliance date activity and shared across the industry <p>US:</p> <ul style="list-style-type: none"> Eligible collateral for VM will include non-cash collateral Scope of eligible collateral for IM will be broader and more consistent with the BCBS/IOSCO policy framework Entities that are affiliated with sovereigns will be allowed to use sovereign debt as margin Cross jurisdictional differences in eligible collateral will be harmonized or acceptable substitute compliance will be available 	<p>CFTC & PR: The propose list is narrower in scope than that in the BCBS/IOSCO Paper or the list in the EMIR draft RTS or the Japanese Margin Proposal</p> <ul style="list-style-type: none"> VM can be posted in cash only (in USD or swap settlement currency) Bank debt is not eligible for IM <p>EU: Posting and collecting of UCITS eligible collateral is only recognized under EU RTS</p>	<p>BCBS/IOSCO:</p> <ul style="list-style-type: none"> Eligible Collateral (4.1-4.2) <p>ESA:</p> <ul style="list-style-type: none"> Chp 1 Article 1 DEF (para 2) Chp 3 Article 1 LEC (para 1); Article 5 LEC (para 1-6) <p>US:</p> <ul style="list-style-type: none"> US PR: § __.6 Eligible collateral US PR: § __.2 Definitions CFTC: 23.151, 23.156
MC 19	Collateral haircut calculations	<p>EU:</p> <ul style="list-style-type: none"> Derive collateral haircuts for eligible collateral based on the prescribed universally standard approach (e.g. Credit Quality Step or CQS) of the relevant collateral based on External Credit Assessment Institution (ECAI ratings) The ability to calculate collateral haircuts based on the standard method using external ratings is recommended as a minimum consideration that can be implemented universally while minimizing the potential for disputes. Refer to the appendix for a brief description of the alternative approaches <Not permissible under US> <p>US:</p> <ul style="list-style-type: none"> Haircuts on eligible collateral for IM should be determined according to the standardized schedule Firms are not required to assess credit quality of collateral to determine standard haircuts 	<p>EU:</p> <ul style="list-style-type: none"> Assumption: IRB approach may not likely be adopted and ECAI will most likely be prevalent Dependency: EBA publishing definitive mappings between ECAI ratings, PDs and CQ. No such mappings exist today Assumption: Assets are correctly categorized in the correct RTS buckets to ensure CQS eligibility check, concentration limit check and WWR checks are all correctly carried out. An industry asset class taxonomy would be defined to address this Assumption: Collateral takers would need to manage both external and IRB rating models to support the approaches acceptable by their counterparties Assumption: Counterparties to bilaterally agree upon use of IRB approach or ECAI for determining the CQS Assumption: In order to adopt the IRB approach, firms would have to establish a framework to rate securities and assign a PD to each one of them. No such framework exists today Assumption: CQS assessment to be done pre- acceptance of collateral Assumption: No CQS eligibility check for asset types (C, D, E) where in the domestic currency. No CQS eligibility check for securities h, i, p, q and r Assumption: EBA mappings between ECAI ratings and CQS will be conducted based on joint consultations paper published by EBA, ESMA and EIOPA on mapping of ECAIs in Oct. 2014 Assumption: Firms likely will not use 'Own Estimates of Volatility' i.e. proprietary models to determine collateral haircuts <p>US:</p> <ul style="list-style-type: none"> Assumption: The rules will allow the use of a model for haircuts on IM collateral as well as a standardized schedules. Consistent with recent advocacy and subject to revision post final rules publication 	<p>EU:</p> <ul style="list-style-type: none"> With respect to asset classes (c), (d), (e) the rule refers to "or funded" that requires clarification Under the IRB approach, where collateral falls below the eligible CQS level, what remedial actions must the collateral taker implement to remedy the CQS breach on collateral already held? (Sanctions are only specified for ECAI breaches in para. 8.) Where using the ECAI approach, when collateral falls below the eligible CQS level, the collateral taker is allowed to increase the HC. To what level can the haircut be increased to? Point (c) of para 8 on pg. 35 Article 3 LEC EU RTS requires clarification Unclear what EU RTS Article 2 HC para 3 means – "no correlation of collateral to exposures" Unclear what EU RTS Article 2 HC para 4 means – "in determining relevant categories...?" A series of negative impacts are expected to be realized where IRB models are used summarized as follows: increase in disputes, not transparency, negative rating, prevents outsourcing of eligibility checks to custodians <p>US:</p> <ul style="list-style-type: none"> Proposals do not tie haircuts to credit ratings 	<p>Japan: May use model or prescribed haircut schedule; model must be approved by the Commissioner of JFSA</p> <p>Japan: Firms not required to assess credit quality of collateral to determine standard haircuts</p> <p>CFTC & PR: Haircuts on eligible collateral for IM are to be determined according to the standardized schedule provided in the rules. Use of model based haircuts not permitted</p> <p>CFTC & PR: Firms not required to assess credit quality of collateral to determine standard haircuts</p>	<p>BCBS/IOSCO:</p> <ul style="list-style-type: none"> Eligible Collateral (4.2-4.4) <p>ESA:</p> <ul style="list-style-type: none"> Chp 3 Article 1 HC (para 1); Article 2 HC (para 1-7) <p>US:</p> <ul style="list-style-type: none"> US PR: § __.6 Eligible collateral CFTC: 23.156

MC#	Process or Background	Minimum Consideration Description	Assumptions & Dependencies	Open Questions & Outstanding Issues	Cross-Jurisdictional Regulatory Differences	Regulatory References
MC 20	Concentration limits	<p>EU:</p> <ul style="list-style-type: none"> Monitor concentration limits for specific asset classes, issuers, and issuer types Concentration risk must be measured by comparing the total amount of an asset collected as either IM or VM against the total regulatory margin requirement for IM and VM Ensure ability to flag issuer and related entities which are part of the same group or have close links <p>US:</p> <ul style="list-style-type: none"> No requirement specified 	<p>EU:</p> <ul style="list-style-type: none"> Assumption: Definition of “groups” and “links” are well defined by the regulations Assumption: Default valuation of zero for collateral in excess of limit Assumption: Computations for concentration risk are likely to be carried out (a) as part of the eligibility checking process and (b) on a T+1 post acceptance basis Assumption: The new master agreement/CSA will contain appropriate drafting language covering concentration limits Assumption: That potential use of collateral definitions taxonomy of collateral assets to simplify monitoring of concentration limits and assume daily calculation of concentration limits Dependency: That entities would need to ensure daily custodian connectivity is in place to enable the calculation of the required concentration checks Assumption: Interpreting the concentration limits across the 3 categories each of these categories is not meant to exceed 50% of all IM and VM collateral. How does one interpret the concentration limits across the 3 categories? Assumption: Concentration limit checks will be conducted to the post-haircut amounts. Assumption: Collateral concentration limits will be left at firm’s discretion. In some cases the collateral calculation system determines margin based on credit criteria fed from upstream Assumption: Collateral held against non-regulatory CSAs will not impact the concentration limits; subject to change based on rule finalization <p>US:</p> <ul style="list-style-type: none"> N/A 	<p>EU:</p> <ul style="list-style-type: none"> Where entities might currently outsource eligibility checking to the custodian, concentration monitoring (one of the three eligibility checks) by the custodian will no longer be a practical proposition for the following reasons: <ul style="list-style-type: none"> Custodians may not want to assume responsibility for ensuring regulatory compliance A single custodian may not have all the relevant collateral holdings data as collateral may be held across multiple custodians Can we base concentration limits on a single issuer for phase 1 (de-scoping related entities or those that have close links)? For future phases, need further clarity on what constitutes “related entities” and entities deemed to have “close links” Are there dual requirements on categories o,p,q, and r across 1(b) and 1(c) on page 39? If a party is in breach of both requirements simultaneously, how would you determine what to do in a structured deterministic way? <p>US:</p> <ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> CFTC & PR: No requirement for monitoring concentration limits 	<p>BCBS/IOSCO:</p> <ul style="list-style-type: none"> Eligible collateral (4.4) <p>ESA:</p> <ul style="list-style-type: none"> Chp 3 Article 7 LEC (para 1) <p>US:</p> <ul style="list-style-type: none"> N/A
MC 21	Wrong way risk monitoring	<p>EU:</p> <ul style="list-style-type: none"> Wrong Way risk (WWR) to be monitored only for a specific list of asset classes Counterparties will implement risk management procedures that shall only include securities (f), (g), from (k) to (r) that fulfill the following criteria: <ul style="list-style-type: none"> They are not issued by the posting counterparty They are not issued by entities which are part of the same group of the posting counterparty or entities which have close links They are not otherwise subject to significant wrong way risk Maintain capabilities to monitor WWR on a periodic basis <p>US:</p> <ul style="list-style-type: none"> No requirement specified 	<p>EU:</p> <ul style="list-style-type: none"> Assumption: Groups are the same for WWR purposes as they are for Concentration Limits. Except for accepting collateral issued directly by the secured party, collateral takers will be regulatory compliant where they demonstrate that WWR monitoring is being carried out on a best efforts basis, regardless of the existence of WWR within the collateral set Assumption: Industry standard master agreement/CSA to draft language that addresses what constitutes “significant wrong way risk”. The European regulators will either provide a metric defining “significant wrong way risk” or drop the concept in order to conform to the U.S. approach. Pragmatically, the industry is unlikely to succeed in enforcing a standard on counterparties without a regulatory basis Assumption: Counterparty groups and links are well defined by the regulators <p>US:</p> <ul style="list-style-type: none"> N/A 	<p>EU:</p> <ul style="list-style-type: none"> How does one determine related entities within a group or that have close links? To what extent can custodians be expected to support parties’ ability to monitor WWR as part of eligibility checking where this function is outsourced by collateral takers? What constitutes “significant wrong way risk”? Can we monitor specific WWR to the posting counterparty alone for phase 1 (de-scoping related entities or those that have close links)? <p>US:</p> <ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> CFTC and PR: No requirement Japan: Less restrictive guidance on wrong-way risk 	<p>BCBS/IOSCO:</p> <ul style="list-style-type: none"> Eligible Collateral (4.0-4.5) <p>ESA:</p> <ul style="list-style-type: none"> Chp 3 Article 6 LEC (para 1) <p>US:</p> <ul style="list-style-type: none"> N/A
MC 22	Cross-currency haircut – “CCY mismatch”: calculations	<p>EU and US:</p> <ul style="list-style-type: none"> Members of the M&CPWG have submitted proposals outlining principles, assumptions and details examples in response to the advocacy points regarding the proposed haircut for currency mismatch. The M&CPWG has reviewed the proposals and elected to await further regulatory guidance before developing the minimum considerations necessary to meet the regulatory requirements 	<p>EU and US:</p> <ul style="list-style-type: none"> TBD 	<p>EU and US:</p> <ul style="list-style-type: none"> TBD 	<ul style="list-style-type: none"> CFTC & PR: Only standardized haircuts permitted, including an 8% cross-currency haircut for IM CFTC & PR: Firms not required to assess credit quality of collateral to determine standard haircuts 	<p>BCBS/IOSCO:</p> <ul style="list-style-type: none"> Eligible Collateral (4.2 – 4.4) <p>ESA:</p> <ul style="list-style-type: none"> Chp 3 Article 1 HC (para 1); Article 2 HC (para 1-7) <p>US:</p> <ul style="list-style-type: none"> US PR: § __.6 Eligible collateral CFTC: 23.156

MC#	Process or Background	Minimum Consideration Description	Assumptions & Dependencies	Open Questions & Outstanding Issues	Cross-Jurisdictional Regulatory Differences	Regulatory References
5.5 Segregation						
MC 23	Meet the segregation requirements under applicable law	<p>Definitions:</p> <ul style="list-style-type: none"> In a Third Party custodial relationship, an unaffiliated bank, broker dealer or other party operates under agreement with one of the two counterparties and simply provides typical custody and safekeeping services In a Tri-Party custodial relationship, an unaffiliated bank or other party operates under a three-way contract between it and the two derivative counterparties. Among other duties, the tri-party agent releases collateral to each of the counterparties subject to pre-defined conditions <p>Minimum Considerations:</p> <p>EU and US:</p> <ul style="list-style-type: none"> Market participants are clear on which segregation structures can be used between counterparties in particular jurisdictions. Updates of opinions must meet local regulatory requirements of different jurisdictions Market participants to ensure that their choice of segregation meets the qualification requirement of the regulatory bodies and where choosing Tri party custodial arrangements, ensure that arrangements provide sufficient automation to support bilateral risk monitoring and daily balance reconciliations 	<p>EU:</p> <ul style="list-style-type: none"> Assumption: Only applicable to IM. WGMR final framework recommends but does not mandate IM segregation at a third party custodian Dependency: ISDA to propose a best practice and minimum interfacing standards for segregation based on relevant local laws Assumption: Custodians will support the account arrangements needed to comply with the WGMR requirements Dependency: Firms would use an industry standard ACA for each form of Third Party or Tri-Party segregation arrangement that meets all the regulatory requirements in each jurisdiction Assumption: Under English Law collateral arrangements it is assumed that segregated IM will operating under a pledge structure <p>US:</p> <ul style="list-style-type: none"> Assumption: Market participants will be prepared to segregate IM posted by CSE's to a 3rd party custodian not affiliated with either party; subject to revision post final rules publication Assumption: The U.S. proposals prohibit the use of affiliated custodians 	<p>EU:</p> <ul style="list-style-type: none"> Acceptable forms of account structure – cash or non-cash differentiation Local rules where collateral has to be held – ensure enforceability for secured party? Nonstandard process for ACA negotiation Collateral treatment for margin not required to be collected under draft RTS Firms ability to support internal segregation of counterparty IM on their firm's books and records to the degree of control and security required by the rules; subject to change based on rule finalization <p>US:</p> <ul style="list-style-type: none"> None identified 	<ul style="list-style-type: none"> CFTC & PR: If a CSE posts IM, including IM not required by the margin rule, then that margin must be held by a 3rd party custodian not affiliated with either party. If CSE collects IM as required by the margin rules, then that IM must be held by a 3rd party custodian not affiliated with either party Japan: IM must be segregated in a trust account or by other measures CFTC & PR: Require the use of an independent non-affiliate 3rd party custodian for IM where as EU RTS: require IM collected as collateral to be segregated from proprietary assets on the books and records of a third party holder or custodian, or via other legally effective arrangements made by the collecting counterparty 	<p>BCBS/IOSCO:</p> <ul style="list-style-type: none"> Treatment of provided IM (5.0) <p>ESA:</p> <ul style="list-style-type: none"> Chp 4 Article 1 SEG (para 1,3) – p. 42 <p>US:</p> <ul style="list-style-type: none"> US PR: § __.7 Segregation of collateral CFTC: 23.157, 23.701
MC 24	Instructing collateral movements and settlement	<p>EU and US:</p> <ul style="list-style-type: none"> Firms to ensure they have the appropriate connectivity with custodians to meet the volume and timing of margin requirements Working with the relevant industry participants to agree and implement a market standard messaging infrastructure for Third Party and Tri-Party segregation arrangements for the following activities: cash movements – pledge and return, security movements – pledge and return, confirmation of settlement, and collateral release 	<p>EU and US:</p> <ul style="list-style-type: none"> Assumption: ISDA will coordinate with market participants to set considerations for custodial standard messaging for Third Party and TriParty segregation arrangements. There will be a need to have automation of messaging not only for the settlement instruction but also the settlement status update and confirmation (including dual routing to the pledger and secured party) as well as standardization of the reporting available from the custodians for holdings reconciliation by both pledger and secured party 	<ul style="list-style-type: none"> None identified 	<ul style="list-style-type: none"> None identified 	<ul style="list-style-type: none"> N/A
MC 25	Reconciliation of collateral positions	<p>EU and US:</p> <ul style="list-style-type: none"> At the close of each business day or as soon as possible thereafter, the Third Party or Tri-Party system should provide, in a standardized electronic format, the information needed to effect a daily reconciliation of collateral balances. The format of the collateral balance file for reconciliation should be standardized across the industry to maximize efficiencies in the automation of reconciliation The minimum collateral balance fields required for reconciliation should include the following: close of business statement date, custody account number, collateral identifier (ISIN), cash currency, letter of credit reference, par value/original face amount of security, price, market value, and currency 	<p>EU and US:</p> <ul style="list-style-type: none"> Dependency: Custodians will adopt standards and are able to provide collateral balances Assumption: Potential use of product/instrument taxonomy for eligibility 	<ul style="list-style-type: none"> None identified 	<ul style="list-style-type: none"> None identified 	<p>BCBS/IOSCO:</p> <ul style="list-style-type: none"> Risk Mitigation Standards for Non-Centrally Cleared OTC Derivatives (Standard 5)
MC 26	Rehypothecation	<p>EU and US:</p> <ul style="list-style-type: none"> Not permissible 	<ul style="list-style-type: none"> None identified 	<ul style="list-style-type: none"> None identified 	<ul style="list-style-type: none"> BCBS/IOSCO: One-time rehypothecation is permissible 	<p>BCBS/IOSCO:</p> <ul style="list-style-type: none"> Treatment of provided IM (5.0) <p>ESA:</p> <ul style="list-style-type: none"> Chp 4 Art 1REU <p>US:</p> <ul style="list-style-type: none"> US PR: § __.7 Segregation of collateral

6. Future State Process Flow

Overview of the future state margin and collateral process flow is shown below. It should be noted that firms may procedurally manage certain aspects of the workflow within different functional groups than the ones outlined in the flow.



Working Assumptions:

- 1) Trade capture systems will provide trade characteristics sufficient to determine legacy trade vs. post compliance date trade
- 2) Custodians may not be in a position to carry out eligibility checking of posted collateral on behalf of the receiving party as they will likely not maintain a firm's entire collateral inventory. Valuation and eligibility checks may be performed by individual firms
- 3) Segregation structures may vary by region based on WGMR final framework (e.g. affiliate entity, third party)
- 4) Disputes will be managed according to an industry agreed dispute resolution procedure (currently being developed by ISDA). This will include a series of required actions for the disputing parties, including exchange of relevant portfolio and risk factor information, an obligation to consult with each other to investigate and seek resolution, and appropriate escalation procedures

7 Appendices

7.1 Appendix A: WGMR Final Framework References

On September 2, 2013, the Basel Committee on Banking Supervision (BCBS) and the International Organization of Securities Commissions (IOSCO) in consultation with the Committee on Payment and Settlement Systems (CPSS) and the Committee on the Global Financial System (CGFS) published the final framework for margin requirements for non-centrally cleared derivatives². The framework is available on the websites of the Bank for International Settlements and IOSCO.

7.2 Appendix B: Local Jurisdictional Rules References

Europe

On April 14, 2014 the European Supervisory Authorities (ESAs) published a Consultation Paper on Draft Regulatory Technical Standards (RTS) on Risk Mitigation Techniques for Non Cleared OTC Derivatives³ introducing a requirement to exchange a margin on non-centrally cleared OTC derivatives.

Following the Consultation Paper, and on the basis of the relevant input received, the ESAs will finalize their jointly developed draft RTS and submit them to the Commission.

Japan

On July 3, 2014 Japan's Financial Services Agency (FSA) published their proposed margin rule.

United States

Commodities Futures Trading Commission

On October 3, 2014, the Commodity Futures Trading Commission (CFTC) published a proposed rule⁴ to establish IM and VM requirements for certain swap dealers and major swap participants. In the same release, the CFTC also issued an Advance Notice of Proposed Rulemaking requesting public comment on the cross-border application of such margin requirements.

US Prudential Regulators

On September 24, 2014, the US Prudential Regulators (FRB, FDIC, OCC, FHFA, and FCA) published a re-proposed rule⁵ establishing minimum margin and capital a requirement for registered swap dealers, major swap participants, security-based swap dealers, and major security-based swap dealers for which one of the Agencies is the prudential regulator. Such entities and their counterparties shall apply these requirements to all uncleared swaps and uncleared security-based swaps.

² <http://www.bis.org/publ/bcbs261.pdf>

³ <https://www.eba.europa.eu/documents/10180/655149/JC+CP+2014+03+%28CP+on+risk+mitigation+for+OTC+derivatives%29.pdf>

⁴ <http://www.cftc.gov/ucm/groups/public/@lrfederalregister/documents/file/2014-22962a.pdf>

⁵ <http://www.gpo.gov/fdsys/pkg/FR-2014-09-24/pdf/2014-22001.pdf>

7.3 Appendix C: Phase-in Schedule

Below is the revised phase-in schedule for IM and VM issued by the BCBS/IOSCO⁶ on March 18, 2015:

Effective Date	BCBS/IOSCO Threshold for IM Phase In
September 1, 2016	AMEANA ⁷ > €3T
September 1, 2017	AMEANA > €2.25T
September 1, 2018	AMEANA > €1.5 T
September 1, 2019	AMEANA > €0.75 T
September 1, 2020	AMEANA > €8 B

Effective Date	BCBS/IOSCO Threshold for VM Phase In
September 1, 2016	AMEANA ⁸ > €3T
March 1, 2017	All covered entities

National regulators are expected to revise their proposals to be consistent with the BCBS/IOSCO revisions.

[Placeholder – Pending revisions from national regulators]

7.4 Appendix D: IM Margin Call Timeline [Placeholder]

⁶ <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD480.pdf>

⁷ AMEANA = Aggregate month-end average notional amount of non-centrally cleared derivatives in March, April and May of the relevant phase in year (e.g. 2016, 2017, 2018, 2019, 2020).

⁸ From September 1, 2016, any covered entity belonging to a group whose aggregate month-end average notional amount (AMEANA) of non-centrally clear derivatives for March, April, and May of 2016 exceeds €3.0 trillion will be required to exchange VM when transacting with another covered entity (provided that it also meets that condition). The requirement to exchange VM between these covered entities only applies to new contracts entered into after September 1, 2016. Exchange of VM on other contracts is subject to bilateral agreement.