Key point summary

- Initial Margin is central to the regulatory response to mitigating systemic counterparty risk in derivatives
- The impact of Initial Margin is likely to be widely felt across both cleared and non-cleared OTC derivatives
- Different institutions may choose to calculate Initial Margin for different business purposes – e.g. for pre-trade funding cost assessment, to support client clearing, for margining processes
- To implement a robust Initial Margin infrastructure will require change across systems, business processes, policies and methodologies

Definition: Initial Margin (IM) is the collateral/margin which a party to a financial transaction is required to place in order to secure its counterparty against exposures which may arise due to future movements in the mark to market of a transaction or portfolio of transactions. Initial Margin supplements Variation Margin (VM) which covers the current mark to market exposure.

However, these uses of IM were often non-systematic and selectively implemented, particularly in the case of OTC derivatives. The regulatory response to the financial crisis has now brought IM to the forefront of the agenda for OTC derivatives, and it is one of the primary policy tools being promoted to reduce systemic counterparty risk within the financial sector.

IM for OTC derivatives will primarily be implemented under two activity streams:

1. As an automatic consequence of trades migrating to central clearing (a process which is currently underway)
2. For non-cleared derivatives, IM will be required under current regulatory proposals which are under consultation (BCBS226) for response by 28th September 2012

In reaction to these developments, we are seeing a large increase in activity and investment in many aspects of IM. Some of these investments are defensive, whilst others are seen to present opportunities. The most common amongst these areas of activity amongst our client base are:

- Development of IM modelling, processing and reporting capabilities to support client clearing offerings
- Replication of CCP IM calculations (for multiple differing purposes, e.g. to support the pricing of funding costs, for internal risk control purposes etc)
- Initial assessment of the impact of non-cleared OTC margin requirements under regulatory proposals (i.e. analysis of how much additional collateral is expected to be required and how much will this cost to fund)
How are you affected?
For most banks, the consistent implementation of an Initial Margin infrastructure and process across their OTC derivatives trading portfolios will require significant change - both from a systems and a business process perspective. To assess the extent of these challenges, it is worth considering the primary uses a bank will have for calculating IM. The table below provides an overview of the most common of these drivers.

<table>
<thead>
<tr>
<th>Driver</th>
<th>Cleared trades</th>
<th>Non-cleared trades</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calculate IM pre-trade to assess funding impact</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Calculate IM pre-trade to assess optimal clearing location</td>
<td></td>
<td>✓</td>
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<tr>
<td>Calculate IM pre and post trade for clients</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>Calculate IM for margin call purposes</td>
<td></td>
<td>✓</td>
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<tr>
<td>Calculate IM for internal control verification</td>
<td>✓</td>
<td>✓</td>
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</tbody>
</table>

The extent of IM processing capability that any given institution will need to put in place will therefore depend upon a number of questions:

- Is the institution looking to provide OTC execution and clearing services for clients (where the client is not subject to end-user exemptions)?
- How optimally does the institution wish to manage its collateral funding costs?
- Does the bank wish to verify margin calls for control purposes (even for CCPs which may not be disputed)?
- To what extent does the non-cleared derivatives regulation require the calculation of two-way IM between trading counterparties? Current regulatory proposals do require the calculation of IM (but not necessary the exchange of IM when below a certain threshold) but the final rules are still to be determined

The complexity of the challenge will also depend upon the range of different types of IM models which the institution needs to build to support these differing needs. Such IM models can range from standard, fairly simplified schedules allowing for no portfolio offsets through to sophisticated portfolio models which provide more accuracy and benefit but are harder to implement and maintain. Moreover, to the extent that a bank is clearing through multiple CCPs, each CCP will differ in both its modelling methods and how these models are parameterised.

For an institution which does not currently have the capacity to calculate IM in an automated way and in a robust and controlled systems environment, putting in place an IM infrastructure will therefore present challenges. Changes will need to be made to systems, processes, policies, governance and organisation.

Impact areas
The change required across an organisation will be wide ranging. Some specific areas of high impact will be:

**Systems**
The complexity and scale of the systems changes required to put in place a process for the management of Initial Margin will to a large extent depend up on the business drivers. In particular:

- If an institution aims to use a portfolio model for the calculation of non-cleared initial margin, the collateral process will need to link to a risk engine to perform these calculations. This may mean the integration of an existing risk engine from within the wider organisation or alternatively implementing a separate vendor solution
- If an institution aims to replicate CCP models, these will differ for each CCP. The institution may decide to replicate these itself or integrate with CCP IM calculators, depending on scale and purpose
- If an institution aims to embed IM calculations in pre-trade decision making processes, this will require integration with impacted trading systems

**Processes**
Collateral management business processes will need updating to cater for Initial Margin processing. For example:

- Processes for integrating IM into the daily margin calculation process will need to be embedded. This will need automation and only involve manual intervention for exceptions
- Processes for IM disputes will be required for non-cleared activities. There are likely be significant challenges in resolving such disputes

**Policies and methodologies**
For non-cleared IM, an institution will need to define proprietary methodologies, calibration approaches and policies (to the extent that conservative standardised schedules are not used). This will be a significant initiative for an institution’s risk department and (depending upon the outcome of regulatory decisions) may require regulatory model approval.
How InteDelta can help
The challenges faced by institutions in implementing Initial Margin calculation and processing capabilities are likely to be significant. InteDelta can support institutions to successfully implement the necessary changes in the most effective way.

Our services include:
- Initial Margin impact assessment and benefits case
- Design of required changes to organisation, governance and business processes
- Initial Margin modelling and methodologies development
- Initial Margin systems design: assessment of technology options, system selection, business and functional requirements, implementation support

Contact us
The editions of InteDelta InSight are designed to provide a concise, informative snapshot of important risk and collateral management topics and to be easily digestible by the reader. Underlying each edition is extensive information and expertise which we are happy to discuss further with interested parties.

If you would like additional information about InteDelta or would like to discuss your approach to Initial Margin (IM), please contact:

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About InteDelta
InteDelta helps financial institutions implement risk management best practice. Combining a structured consulting approach with subject matter expertise, we work with our global client base to implement risk management best practice. Our areas of expertise cover the major risks faced by financial institutions: credit, market, liquidity and operational risk, alongside niche specialisms such as collateral management. Our clients have a global spread, ranging from some of the world’s largest banks and asset managers to developing market banks, hedge funds and risk software vendors.