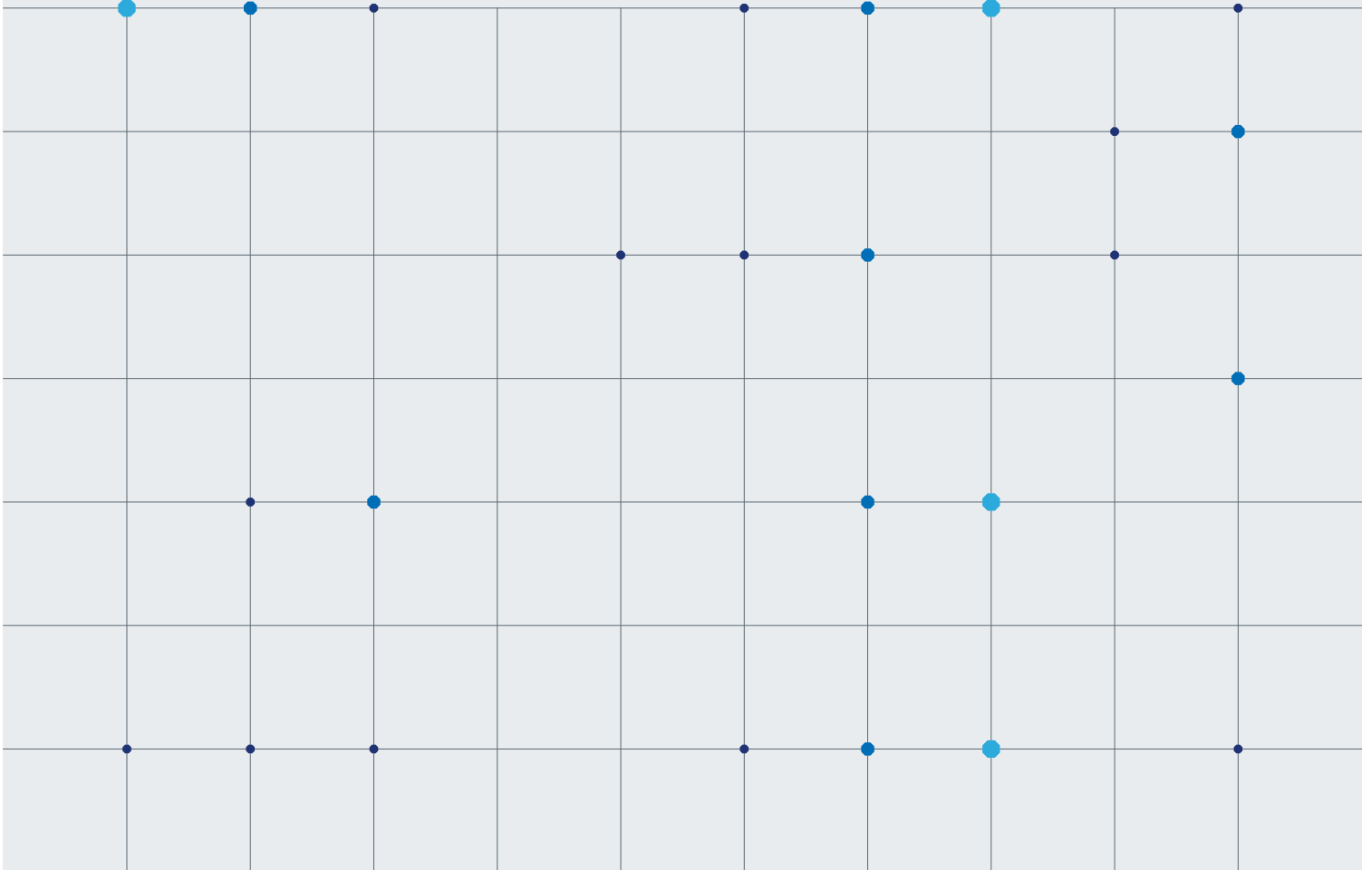


Initial Margin Preparation Guide



Introduction

With a simple trade file and rapid onboarding, TriOptima enables you to meet your IM obligations with ease.

Our comprehensive preparation guide highlights the seven simple steps you need to take to facilitate compliance. No costly consultant fees, no lengthy project plans – just IM compliance made easy.

Step One:

The Ground Work

Is my firm in-scope for initial margin, and if so, when?

The first task is to determine if your firm is in-scope for regulatory initial margin. If in-scope, you must understand when you need to start exchanging IM. This depends on the structure of your group and the overall size of your derivatives portfolio.

To determine when you are subject to IM you must calculate your aggregate average notional amount (AANA) outstanding for all non-centrally cleared derivatives during the months of March, April and May 2020 for compliance from September 1, 2020 (phase 5). For phase 6, you must calculate your AANA in June, July and August for compliance September 1, 2021 in the US, and in March, April and May of 2021 in all other jurisdictions. The frequency of your AANA calculation will vary depending on your location; in the US the calculation is done on a daily basis during the specified time period, whereas in the EU it is calculated monthly. Regardless of where you are located, all non-cleared bilateral derivatives including physically settled FX forwards and swaps, as well as non-cleared intra-group transactions, should be included in the AANA.

For corporate groups, the above calculation must be performed and aggregated across all members of the group. It's important to note that investment funds are generally considered distinct legal entities, as long as they are not collateralised by or otherwise guaranteed by other entities, funds or advisors for insolvency purposes.

Once you have done this calculation refer to the chart below to determine whether you exceed the threshold for any given year. If so, you will be subject to regulatory IM as of September 1 for the year in which the threshold is exceeded.

Threshold Amount (USD, EUR or CHF)	Threshold Amount (JPY)	Threshold Amount (CAD)	Threshold Amount (SGD)	IM Phase in Date
3 trillion	420 trillion	5 trillion	4.8 trillion	Sep 1, 2016
2.25 trillion	315 trillion	3.75 trillion	3.6 trillion	Sep 1, 2017
1.5 trillion	210 trillion	2.5 trillion	2.4 trillion	Sep 1, 2018
750 billion	105 trillion	1.25 trillion	1.2 trillion	Sep 1, 2019
50 billion	–	–	–	Sep 1, 2020
8 billion	1.1 trillion	12 billion	13 billion	Sep 1, 2021

Source: International Swaps and Derivatives Association, Inc. (ISDA)

TriOptima can help

Do you use triResolve?

We can help you with your AANA calculation. With the data you are already sending us we can help you quickly and easily estimate your AANA.

Step Two:

The Practicalities

Which counterparties do I need to contact?

Once you have determined your firm's compliance date, it's now time to confirm which counterparties you need to interact with.

You will have to be set up to exchange regulatory initial margin with all your counterparties who fall into any phase-in date up to, and including, your own.

All counterparties need to be contacted and you should work together to confirm the mutually effective dates, and also to determine which tri-party agent/custodian(s) you will each use to manage the IM segregation. Ensure you begin this discussion well in advance, as negotiation of the new IM collateral agreement, selection of tri-party agent/custodian(s) and putting in place account control agreements take time to negotiate.

You must also consider that custodians often set deadlines well in advance of your proposed compliance date. This is to ensure that account control agreements are in place, enabling the custodian to operationally on-board your firm in advance of the IM exchange effective date. This insight is often mentioned by firms already in-scope as an important "lesson learned."

TriOptima can help

Do you use triResolve?

Like with the AANA calculation, we have your trade data and the expertise to help. Contact us today and we can provide automated reports which will help you understand which of your counterparties you should consider contacting as a priority. We can also estimate your number of in-scope IM trades and what that might look like in the first quarter and year post compliance.

Step Three:

The Number Crunching

How do I calculate initial margin?

The regulation stipulates that you can calculate margin in two different ways:

1. **Scheduled-based calculation**
2. **Regulatory approved model-based calculation**

With the netting and funding advantages it can deliver, firms already in-scope have universally decided to use a model based calculation, and all have adopted ISDA's Standard Initial Margin Model (SIMM)[™] to calculate initial margin.

ISDA members worked together to develop this sensitivity-based approach to provide ease of calculation, transparency and effective dispute resolution. Risk factors and sensitivities form the inputs, whilst risk weights, correlations and aggregation formulae produce initial margin amounts.

As a starting point for the initial margin calculation, the model requires firms to calculate sensitivities in accordance with ISDA SIMM[™] for all in-scope trades. This can be a significant data exercise in itself. Trades need to be identified as being in-scope, labelled correctly and appropriate sensitivities must be calculated for each trade. With an average of 20 sensitivities applicable to each trade and 150 or more sensitivities applicable for more exotic trades, the effort required for this step should not be underestimated and preparation is essential (see step four).

Once the task of calculating sensitivities has been completed, you need to undertake the calculation of initial margin exposure by feeding the sensitivities into the latest version of the SIMM model (comprising the risk weights, correlation tables and aggregation formulae) to produce a total IM exposure amount from both the perspective of the secured party (where you collect IM) and the pledgor (where you must pay IM). The requirement to calculate IM twice for each counterparty (from perspective of both pledgor, and secured) is something that many firms initially overlook in their original analysis.

Firms must evaluate whether their existing systems are able to calculate SIMM sensitivities, or whether they require building new internal processes to calculate them, or whether they wish to have a vendor provide this service. Furthermore, firms should note that once SIMM sensitivities have been created, they must be fed into the SIMM model in a specific file format, known as CRIF (Common Risk Interchange Format).

TriOptima can help

Do you use triCalculate?

TriOptima's centralised web-based service, triCalculate, can calculate trade sensitivities for you. Easy to integrate and requiring limited data, we identify the IM in-scope trades, label them as per the SIMM convention and calculate the sensitivities. The SIMM model can then be applied to calculate your IM exposure.

Step Four:

Pre-Go-Live Analytics

What can I do in advance to ensure a smooth go-live?

Ahead of initial margin calculation and exchange, it's important to consider some key questions.

Firstly, you need to decide if your firm will use the schedule or SIMM calculation methodology, or a combination of both. Once this is done you then need to agree and communicate this with each counterparty.

Next, you should understand what your initial margin cost will be both per counterparty, and in total, so as to understand the potential impact on funding.

Finally, it's important to recognise where you stand with the thresholds for exchanging initial margin (€50m or currency equivalent with each counterparty). You will have to actively exchange initial margin with all in-scope counterparties that exceed the threshold. Note, in some instances you may agree a threshold with your counterparty that is below the regulatory amount.

TriOptima can help

triCalculate supports both methodologies and can help in the SIMM™ vs. schedule decision-making process with analytics on the effects of each methodology on your IM exposure.

By working with triCalculate, you can identify a suitable proxy portfolio to represent your actual trading post go-live, and use this to simulate your potential IM cost across all eligible relationships. This will provide you with a more accurate depiction of what you can expect post go-live.

We can measure your IM exposure amounts versus a threshold for each relationship. triCalculate can calculate the IM amount per counterparty, which can then be pro-actively monitored in triResolve Margin. When a threshold is breached, calls will be generated and automatically sent to your counterparties. Firms can also use this approach to 'monitor' IM exposure in the scenario where they do not yet have an IM CSA in place, and want to prioritise which counterparty to begin negotiation with, or which accounts need a custodian account setting up.

Step Five:

Collateral System Requirements

How can I agree margin calls and collateral movements with my counterparties?

Integrating the IM calculations with your collateral process, exchanging and agreeing margin calls with your counterparties, and establishing a dispute resolution workflow are the next steps you need to consider.

A new type of margin call

Collateral management systems (CMS) were not built to handle IM pledgor and secured margin calls, so the first challenge is to build that capability. These margin calls need to be separate and distinguishable from your existing variation margin calls and other margin amounts.

You should then consider how you will connect your CMS to the IM calculation engine, as you need to be able to extract an IM exposure first thing in the morning to be able to produce a margin call.

Going electronic

A key theme from in-scope firms is that they are all exchanging IM calls electronically via AcadiaSoft's MarginSphere (an electronic message exchange platform that replaces manual emails). If you wish to follow suit, you must then build connectivity between MarginSphere and your CMS. You'll have a head start if you have already done this for VM, but you must still consider any nuances for the IM pledgor and secured calls.

Securities support

Under the rules, collateral collected and posted for IM needs to be held in a segregated account by a third party. You need to consider whether you want to use a tri-party agent or a custodian for that segregation. Whichever way you go, you need to consider that custodian banks are generally reluctant to accept cash as it may negatively impact their leverage ratio. Therefore, if you are coming in to scope for IM but have only ever exchanged cash collateral, you need to consider how you will agree and handle securities.

- How will you get a view of your available securities collateral?
- How will you value your inventory?
- How will value incoming pledges and check for eligibility?
- How will you agree movements with your counterparty?
- How will you monitor collateral concentration?

TriOptima can help

triResolve Margin, TriOptima's award winning collateral management solution, automatically captures IM amounts from triCalculate or AcadiaSoft's IMEM to provide an automated and transparent IM collateral workflow.

All calls and collateral movements can be exchanged in real-time using MarginSphere, AcadiaSoft's electronic messaging service.

Fully flexible securities support is included, there is no implementation required and you only pay for margin calculations we perform.

Step Five:

Collateral System Requirements (cont.)

Dispute Resolution

Perhaps the biggest challenge for the industry is resolving disputes when your IM amounts differ from those of your counterparty. Due to the way that SIMM is structured, disagreements will naturally arise when you or your counterparty provide different inputs. The sheer volume of sensitivity data – and the more complex type of data involved – will mean investigation of differences creates a new set of challenges. To be able to resolve disputes efficiently you need to be able to understand where these differences reside and what is driving them.

TriOptima can help

AcadiaSoft's IM Exposure Manager, which is powered by TriOptima, reconciles sensitivities and calculates IM on a multitude of different levels, enabling you and your counterparty to work together to quickly understand what is driving your dispute.

Step Six:

SIMM Governance

How can I keep pace with the evolving SIMM model and demonstrate my compliance?

Once you are set-up with your SIMM IM daily workflow, you then need to consider your ongoing commitment to your SIMM governance.

ISDA carry out revisions to the SIMM model at least once a year. As a SIMM user you will be obligated to keep up-to-date with an implementation of the latest SIMM model.

Further, as a SIMM user you are likely to be required by ISDA, or by your regulator, to demonstrate suitability of the SIMM model for your trading portfolio. This can be achieved through backtesting and benchmarking.

The backtesting approaches:

1. Comparison of actual portfolio level PnL moves with IM generated from SIMM

- a. Ten-day SIMM vs. ten-day actual PnL moves, or
- b. One-day SIMM vs. one-day actual PnL moves

TriOptima can help

triCalculate supports an ongoing "actual" method of backtesting. With a simple trade file submission, triCalculate can run backtesting for you and generate the respective reports in the format recommended by ISDA.

Step Seven:

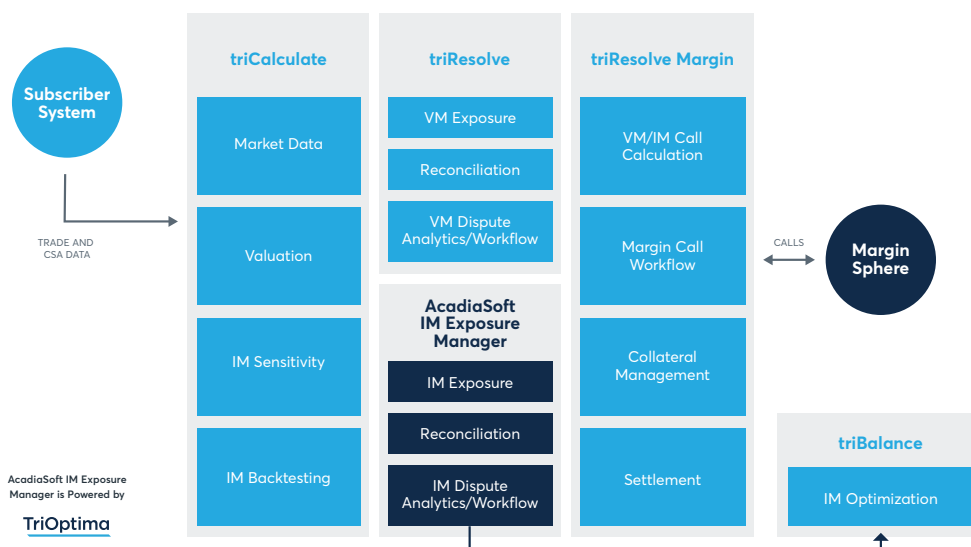
Bringing it all together

How can I make all this easy?

TriOptima has helped many phases one, two, three and four firms meet their IM requirements. We understand the complexities and are best placed to help you overcome them with our seamless solution that requires only one simple trade file.

“TriOptima has helped us cope with the IM requirements in a very efficient and manageable way. The solution provides an easy to use workflow and allows us to operate high levels of STP with its out-of-the-box integration with both MarginSphere and AcadiaSoft’s IMEM. Together with IM sensitivity calculations generated by triCalculate, the integrated services provide a perfect overview via a single GUI.”

- Nordea Life and Pension | Phase 2 Initial Margin Firm



Now Optimize

Additionally, for those that want to optimize their bilateral exposures as well as their cleared OTC exposure, triBalance takes the next step in optimizing counterparty risk exposures and margin across multiple asset classes.

Why Choose TriOptima?

Get started today with one of the market's leading initial margin solutions:



One simple trade file

Only one data file and upload is required for calculating your risk sensitivities and Initial Margin, managing your margin process and resolving your disputes with our seamless solution



Rapid onboarding

You can be up and running on our web-based service in a day



Operational efficiencies

With unrivalled automation and an exception-based process, you can free up resources to focus on your risk



Cost efficient

Our transparent pricing model is pay as you go with no hidden fees



Facilitates regulatory compliance

We enable firms to meet the demands of the new non-cleared margin regulation without additional resources



Margin Optimization

Optimizes counterparty risk exposure and margin – bilateral and cleared OTC

To discover how TriOptima can help you comply with the initial margin requirements, get in touch to book a demo or to discuss getting started. Please email info@trioptima.com or contact your local TriOptima office.

New York
+1 646 744 0400

London
+44 20 7382 2200

Stockholm
+46 85 452 5130

Singapore
+65 6372 8181

Tokyo
+81 35511 6688

TriOptima Award-Winning Innovation



Sell-Side Technology Awards Winner 2019
Best Implementation at a Sell-Side Firm
TriOptima

Sell-Side Technology Awards
2019 Best Sell-Side



Sell-Side Technology Awards 2018
waterstechnology

Sell-Side Technology Awards
2018 Best Sell-Side Analytics Product



FOW Awards
Best New Post Trade Technology Product



TriOptima (www.trioptima.com) is now part of CME Group

All information contained herein ("Information") is for informational purposes only, is confidential and is the intellectual property of CME Group Inc and/or one of its group companies ("CME"). The Information is directed to Equivalent Counterparties and Professional Clients only and is not intended for Non-Professional Clients (as defined in the Swedish Securities Market Law (lag (2007:528) om värdepappersmarknaden)) or equivalent in a relevant jurisdiction. This Information is not, and should not be construed as, an offer or solicitation to sell or buy any product, investment, security or any other financial instrument or to participate in any particular trading strategy. The Information is not to be relied upon and is not warranted, either expressly or by implication, as to completeness, timeliness, accuracy, merchantability or fitness for any particular purpose. All representations and warranties are expressly disclaimed. Access to the Information by anyone other than the intended recipient is unauthorized and any disclosure, copying or redistribution is prohibited without CME's prior written approval. If you receive this information in error, please immediately delete all copies of it and notify the sender. In no circumstances will CME be liable for any indirect or direct loss, or consequential loss or damages including without limitation, loss of business or profits arising from the use of, any inability to use, or any inaccuracy in the Information. CME and the CME logo are trademarks of the CME Group. TriOptima AB is regulated by the Swedish Financial Supervisory Authority for the reception and transmission of orders in relation to one or more financial instruments. TriOptima AB is registered with the US National Futures Association as an introducing broker. For further regulatory information, please see www.nex.com.