When independent amount meets initial margin

Calypso Technology explores the three different options set out by ISDA for managing the combination of independent amount and regulatory initial margin and explains why the simplest approach operationally is likely to work out more expensive for the posting party

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The Uncleared Margin Rules' (UMR) documents, at least the early ones, seem to have ignored or maybe conveniently forgotten the fact that non-regulatory initial margin or independent amount (IA) existed.

Certainly, for the first three phases of UMR up to September 2018, no firms paying IA seem to have been pulled into the world of regulatory initial margin (Reg IM). Hence the movement of IA continued as part of the variation margin credit support annex (CSA) processing.

With Reg IM phase five approaching (planned for September 2020 until the recently announced delay to September 2021) the market has realised that firms paying IA will also need to pay (and receive) Reg IM.

Next generation documentation

In November 2018, International Swaps and Derivatives Association (ISDA) published its '2018 Credit Support Deed for Initial Margin' under English Law, and '2018 Credit Support Annex for Initial Margin' under New York Law. This was actually very good timing as the first buy-side firms who were paying IA fell into UMR phase four and had to start moving Reg IM from September 2019.

These ISDA documents are commonly referred to as the 'next generation' (or new generation) versions of the Reg IM documentation. They lay out three different options for managing the combination of IA and Reg IM, in what is known as the margin flow approach. These options are:

- Distinct margin flow (IM) approach
- Greater of margin flow (IM/IA) approach
- Allocated margin flow (IM/IA) approach

Each of these approaches comes with different levels of system and operational complexity, and crucially, a requirement for different amounts of collateral to be posted.

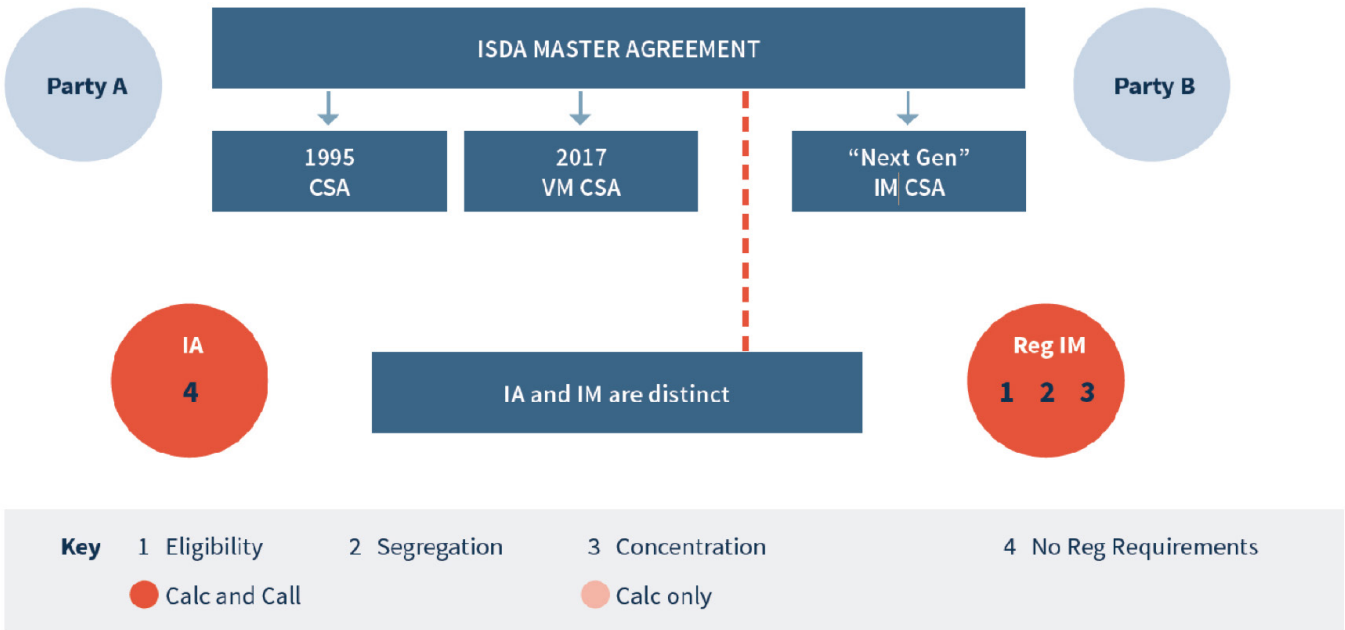
The next section looks at what is involved in each approach.

Distinct margin flow approach

In this model (see figure 1) the Reg IM and IA are managed completely separately, with Reg IM managed in the Reg IM agreement and the IA remaining in the 'other' agreement.

From a system point of view the distinct approach is the simplest as there is no need to consider any other agreements when making the margin call calculations.

Figure 1: Distinct margin flow approach



From an operational point of view participants would have to manage both calls separately, as they will have calls on both the Reg IM and IA agreements.

From a commercial point of view this is the most expensive approach as the IA payer would pay the total of the IA and Reg IM.

As the IA is part of the VM agreement there are no regulatory segregation requirements and settlement of the collateral can continue to be made in cash.

If (for the sake of this article) we assume that there are no legacy VM agreements, the distinct approach would involve participants in the following daily margin calls:

Calls (deliveries/receipts)

- Regulatory IM pledgor
- Regulatory IM secured
- Regulatory VM
- Independent amount

'Greater of' margin flow approach

In this model (see figure 2) participants calculate and move the greater of the IA and the Reg IM.

Participants calculate the IA on the IA agreement, but then 'recycle' this to the Reg IM agreement for inclusion in the margin call calculation.

From a system point of view the 'greater of' approach is more complex than the distinct approach as you need to calculate your IA before making the margin call calculations on the IM agreement.

From an operational and commercial point of view participants would have a single margin call for whichever is the 'greater of' the IA and the Reg IM.

As the IA is not part of the Reg IM agreement, the regulatory eligibility and segregation constraints and the collateral are likely to be part of triparty or third-party settlement arrangements.

Assuming no legacy VM agreements, the 'greater of' approach could involve participants in the following daily margin calls:

Calls (deliveries/receipts)

- Reg IM pledgor
- Reg IM secured (Including IA)
- Reg VM call

Figure 2: 'Greater of' margin flow approach

Allocated margin flow approach

In this model (see figure 3) participants calculate the Reg IM which is then used to offset any IA.

Participants calculate the Reg IM on the Reg IM agreement, but then 'recycle' this to the IA agreement where IA will continue to be paid until the Reg IM exceeds the IA.

From a system point of view the allocated approach is more complex than the distinct approach as you need to calculate your Reg IM before making the margin call calculations on the IA agreement.

From an operational perspective, there are likely to be calls on both the Reg IM and IA agreements.

From a commercial point of view, participants would manage the greater of the IA and the Reg IM.

As the IA component remains within the VM agreement there are no regulatory segregation requirements and settlement of the collateral can continue to be made in cash.

Again, assuming no legacy VM agreements, the allocated approach would involve the following daily margin calls:

Calls (deliveries/receipts)

- Reg IM pledgor
- Reg IM secured
- IA Call (reduced by IM)
- Reg VM call

Comparative collateral postings for each margin flow approach

It may be tempting to opt for the distinct approach, given that this is the simplest to implement from a system perspective as specific changes are unlikely to be required.

But this is also the most expensive option, as the following worked comparison example shows (see figure 4, overleaf), and operationally you will need to manage two different agreements.

Figure 3: Allocated margin flow approach

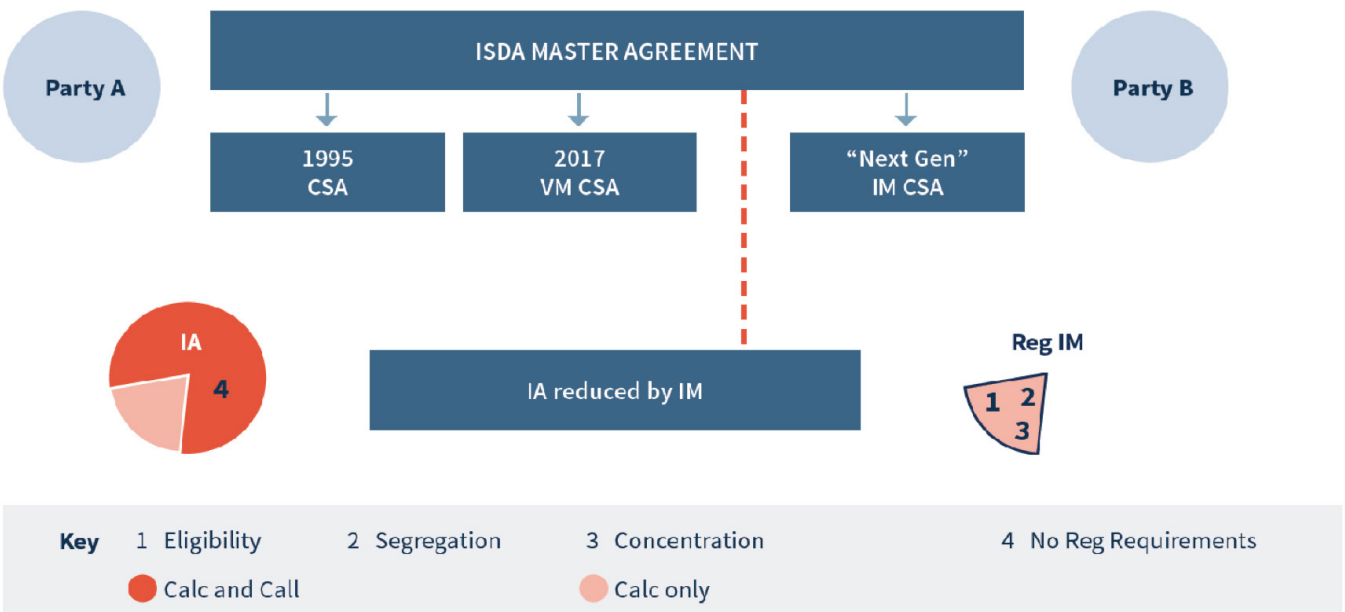


Figure 4: Comparative collateral postings for each margin flow approach

Distinct

	Day 1	Day 2	Day 3	
IA				
IA	95	95	90	
IA Threshold	50	50	50	
Margin Required	45	45	40	Calculate IA
Previous Collateral	0	45	45	
Margin Call Amount	45	0	-5	Settle IA separately from Reg IM
Reg IM				
Reg IM	30	90	60	
Reg IM Threshold	40	40	40	
Margin Required	0	50	20	Calculate Reg IM
IA/IM Offset	0	0	0	
Margin Required (post IA/IM Offset)	n/a	n/a	n/a	
Previous Collateral	0	0	40	
Margin Call Amount	0	40	-20	Settle Reg IM separately from IA
Total Collateral	45	85	60	

Greater Of

	Day 1	Day 2	Day 3	
Step1 - IA				
IA	95	95	90	
IA Threshold	50	50	50	
Margin Required	45	45	40	Calculate IA "recycle" to Reg IM
Previous Collateral	0	0	0	
Margin Call Amount	0	0	0	No IA Call
Step2 - Reg IM				
Reg IM	30	90	60	
Reg IM Threshold	40	40	40	
Margin Required	0	50	20	Calculate Reg IM
IA/IM Offset	45	0	20	"Recycle" IA from IA agreement
Margin Required (post IA/IM Offset)	45	50	40	Calculate the 'Greater of' IA/IM
Previous Collateral	0	45	50	
Margin Call Amount	45	5	-10	Settle the 'Greater of" as Reg IM
Total Collateral	45	50	40	

Allocated

	Day 1	Day 2	Day 3	
Step1 - Reg IM				
Reg IM	30	90	60	
Reg IM Threshold	40	40	40	
Margin Required	0	50	20	Calculate Reg IM "offset" with IA
Previous Collateral	0	0	50	
Margin Call Amount	0	50	-30	Settle 'Allocated' Reg IM
Step2 - IA				
IA	95	95	90	
IA Threshold	50	50	50	
Margin Required	0	45	40	Calculate IA
IA/IM Offset	0	-45	-20	"Offset" Reg IM from IM agreement
Margin Required (post IA/IM Offset)	45	0	20	
Previous Collateral	0	45	0	
Margin Call Amount	45	-45	20	Settle 'Allocated' IA
Total Collateral	45	50	40	

Concluding thoughts

There are a few things to take into account when working out which approach to take.

Firstly, adopting the simplest margin flow approach (distinct) will be the costliest route for the posting party.

Commercially speaking, 'greater of' and allocated approaches are the same, and both are cheaper than the distinct approach, for the posting party.

With the distinct and allocated approaches, participants must manage calls of both Reg IM and IA. Using 'Greater of', on the other hand, creates a single Reg IM margin call only.

Using the 'greater of' approach means that the IA is treated as Reg IM and must comply with the associated eligibility, concentration, haircut and segregation rules. This is not the case with the distinct and allocated approaches where the IA component falls under the VM agreement.

There is an additional complexity with the 'greater of' approach, as the IA is added to the Reg IM post threshold. This could see participants moving Reg IM sooner than would be the case in a distinct or allocated approach.

The decision as to the 'best' option will depend on individual circumstances: The 'greater of' approach appears to provide the best solution as commercially it is both the cheapest, and it removes the need to manage collateral on the IA agreement. It does come, however, with additional complications regarding the posting of Reg IM.

Additionally, being able to offset IA and IM becomes much more complex if the IA and Reg IM CSAs are not managed in a single solution.

As a final thought, firms looking to reduce the commercial impact of having to move both IA and Reg IM by using the 'greater of' or the allocated approach, must ensure that their systems are able to manage the additional complexity in the calculations - especially as our clients are telling us that they are being asked to support all of the approaches.