

### CME SPAN 4.0 - DECEMBER 2012

### FREQUENTLY ASKED QUESTIONS

#### What is it?

ASX Clear is changing its margin model for its derivative products from the current ADMS algorithm to CME SPAN 4.0 on Friday 7th December 2012 for margins payable Monday 10 December 2012.

## Where can I get more information?

## Summary

- 1. http://www.asx.com.au/clearing/cme-span-v4-0.htm
- 2. <a href="http://www.asx.com.au/documents/resources/Understanding\_Margins.pdf">http://www.asx.com.au/documents/resources/Understanding\_Margins.pdf</a>
- 3. Clients should contact their Clearing Participant.

## Detail

There is a dedicated web page on the CME SPAN 4.0 project – including the prior implementation on ASX Clear (Futures) in March 2012 – available here: <a href="http://www.asx.com.au/clearing/cme-span-v4-0.htm">http://www.asx.com.au/clearing/cme-span-v4-0.htm</a>.

In addition, an updated version of the Understanding Margins booklet has been published by ASX Clear for use by Participants and their clients in further understanding how margin is calculated by SPAN. The booklet is available here: http://www.asx.com.au/documents/resources/Understanding Margins.pdf.

ASX has been in ongoing dialogue with its Clearing Participants and their system vendors throughout the life of the project:

- ASX consulted its Clearing Participants on this topic in 2008 and 2009:
- It released updates to its Clearing Participants through 2011 and 2012;
- The SPAN file structure was made available in June 2012;
- Sample SPAN files were made available in August and October 2012;
- Participant testing was made available from 2 October 2012;
- A webinar and factsheets were made available in November 2012;
- An updated version of the Understanding Margins booklet was produced directly ahead of go-live.

Non-clearing Market Participants and clients should, as now, contact their Clearing Participants in the first instance with any queries on their margins: ASX Clear calculates the margins for its Clearing Participants but your Clearing Participant's margin requirements for your account may be different to those of ASX Clear if your broker uses a different margining standard to ASX Clear. The move to CME SPAN 4.0 does not change this.

Customers wishing to run their own reports might consider purchasing the PC SPAN Software. This may assist in loading daily SPAN risk parameters, defining portfolios, calculating margins etc. The software is available from suppliers, e.g.: <a href="http://usd.swreg.org/com/storefront/47151/product/471511">http://usd.swreg.org/com/storefront/47151/product/471511</a>.

#### What is CME SPAN 4.0?

The original version of SPAN (the <u>Standard Portfolio Analysis</u> of Risk) was developed and implemented in 1988 by Chicago Mercantile Exchange (CME).

In the years since its inception and now in its fourth generation, SPAN has become the industry standard for portfolio risk assessment. It is the official margin mechanism of 50 registered exchanges, clearing organisations, service bureaus and regulatory agencies throughout the world.

Source: CME.

# Why is ASX making this change?

## Summary

- 1. CME SPAN 4.0 will improve risk estimation.
- 2. It brings ASX into line with international best practice.
- 3. A common margining methodology across both its CCPs creates opportunities for margin offsets between the two CCPs.

#### Detail

In the first quarter of 2009, ASX sought responses to its Consultation Paper, "Delivering Efficiencies to the Marketplace through the Harmonisation and Linking of CCP Activities". The paper outlined a number of potential enhancements to the current operation and structure of ASX's two central counterparties, ASX Clear and ASX Clear Futures, and also the interaction between them.

Amongst other initiatives, support from Clearing Participants for the following initiatives was evident:

- migration from ADMS and RIVA SPAN to CME SPAN 4.0; and
- margin offset arrangements, in particular across equity derivatives products.

Given this market wide support for the CME SPAN 4.0 margining methodology, ASX believes the introduction of an advanced, common margining methodology across both its CCPs will improve risk estimation (for example, by more flexibly accounting for correlations between products and by correctly estimating changes in volatility and time on ASX Clear options), open opportunities for margin offsets between the two CCPs, and bring ASX's CCPs into line with international best practice.

Once implemented on both CCPs, CME SPAN 4.0 will potentially enable a margin offset capability between the two. This will allow margins for Clearing Participants that clear on both clearing houses to be calculated on the combined positions of related products rather than separately. It is anticipated that such offsets would provide capital efficiencies to Clearing Participants, and in turn, potentially their clients, who participate on both CCPs, at no increase in risk to the CCPs.

## Will all margins go up?

# Summary

- 1. Margins under CME SPAN 4.0 will more accurately reflect risk.
- 2. Some margins will increase and others decrease.
- 3. At a client level, the actual increase or decrease will depend on whether Clearing Participants continue to apply any margin multipliers.

## Detail

Margins under CME SPAN 4.0 will more accurately reflect the risk on the option positions underlying those margins than under ASX Clear's previous margin model.

In some cases this will lead to increases in margin, notably because CME SPAN 4.0 does not assume 100% correlation between different underlying equities and because CME SPAN 4.0 correctly estimates changes in volatility and time on ASX Clear options. As a result, Clearing Participants with directional options positions are likely to see margins increase given that movements in volatility and time will be accounted for as well as movements in price. Volatility scenarios are especially likely to impact options with higher volatility and/or that are long dated. Time scenarios are likely to have a larger impact on short dated options than long dated options.

Equally, in some cases this will lead to decreases in margin, notably because CME SPAN 4.0 accounts more accurately for correlations between different underlying equities: CME SPAN 4.0 will replace the current standard offset rate of 30% between all exchange traded options with over 1,000 inter-stock concessions based on actual market derived correlation. Clearing Participants with balanced portfolios are therefore likely to benefit from the increased granularity of inter-commodity concessions.

Non-clearing Market Participants and clients should, as now, contact their Clearing Participants in the first instance with any queries on their margins: ASX Clear calculates the margins for its Clearing Participants but your Clearing Participant's margin requirements for your account may be different to those of ASX Clear if your broker uses a different margining standard to ASX Clear. The move to CME SPAN 4.0 does not change this.

# Why hasn't ASX offered a year's worth of test data as it has in the Cash Market Margining project?

The cash market margining project involves the building of a new margining model for a market that has not previously been margined. The provision of test data is therefore a stepping-stone in this build process.

In contrast, the CME SPAN 4.0 project involves a change in margin model – to an industry standard model – in a market which has previously been margined.

# Why didn't ASX move instead to STANS, the margining model used now by the Options Clearing Corporation?

ASX sees benefit in using an industry standard margin model used by over 50 of its peers globally which is continually enhanced and elaborated based on input from those peers, from ASX and from the CME itself.

Once implemented on both CCPs, CME SPAN 4.0 will also potentially enable a margin offset capability between the two.

# Is ASX increasing its fees?

Margin is a risk mitigant not a fee. Where margins increase under SPAN, this may be because, for example, they more accurately reflect the risk on the option positions underlying those margins. ASX Clear – which is required to meet the RBA's Financial Stability Standard for Central Counterparties – is committed to ensuring that its risk protections are as accurate as possible and sees this as particularly important in the light of the Global Financial Crisis and recent default events.

The RBA has reviewed ASX Clear's implementation of CME SPAN 4.0 as part of its annual assessment of clearing and settlement facilities in Australia (see the report at: <a href="http://www.rba.gov.au/payments-system/clearing-settlement/compliance-reports/2011-2012/pdf/report-2011-2012.pdf">http://www.rba.gov.au/payments-system/clearing-settlement/compliance-reports/2011-2012/pdf/report-2011-2012.pdf</a>).