2019

ICCL Interoperability Risk Framework – FAQ

Contents

Netting Framework

Q1. If I buy a scrip in one exchange and sell it in another exchange, will my position be netted off?

Yes. An investor trading through the same broker across exchanges will be eligible for netting benefits for his trades in a given security across exchanges. The Margin requirement shall be netted at level of individual client, for trades across exchanges, and it shall continue to be on gross basis at the level of Trading/Clearing Member. The margin requirement for the proprietary position of Trading/Clearing member shall also be on net basis for trades across exchanges.

Q2. Currently, margins are calculated on an individual client's portfolio level in a given segment for a particular exchange. What would constitute individual client's portfolio under the interoperability framework?

An individual client's portfolio would comprise of his net positions in securities across exchanges in the case of the Equity Cash Segment. Similarly, the portfolio would include his net positions in all the futures and options contracts across exchanges in the case of Equity Derivatives and Currency Derivatives segments.

Q3. Which futures will be eligible for netting across exchanges?

The futures have to be the same underlying and same expiry.

Q4. Which options will be eligible for netting across exchanges?

The options have to be the same underlying, same type (Call/Put), same expiry and same strike.

Kindly refer to Annexure for Netting Illustration

Margining Framework

Q1. Will there be a change in the margin collected from Members?

There will be no change in the margin models or risk parameters. The Risk/Margin files provided by ICCL will contain data for securities/contracts available on all Exchanges.

Q2. Will CCPs levy a new margin on the members under the new Interoperable framework

No. There is no new margin being introduced specifically for Interoperability.

Q3. Will the SPAN File Format change?

No. There will be no change in the SPAN file format. It will constitute the following contracts:

- BSE Exclusive Contracts (Already present in the ICCL SPAN Risk File with ICCL nomenclature) – *No change.*
- BSE & NSE Common Contracts (Already present in the ICCL SPAN Risk File with ICCL nomenclature) – *No change.*
- NSE Exclusive Contracts – *will be included in the ICCL SPAN Risk File with* ***ICCL nomenclature (symbol / series).***

Q4. Will Value at Risk ("VaR")/ Extreme Loss Margin ("ELM") format change?

No. There will be no change in the VaR/ ELM file format. It will constitute the following contracts:

- BSE Exclusive Contracts (Already present in the ICCL VaR/ ELM File with ICCL nomenclature) – *No change.*
- BSE & NSE Common Contracts (Already present in the ICCL VaR/ ELM File with ICCL nomenclature) – *No change.*
- NSE Exclusive Contracts – *will be included in the ICCL VaR/ ELM File with* ***ICCL nomenclature (symbol / series).***

Q5. Will there be a separate VaR/SPAN/ELM file for each exchange?

No. ICCL will continue to publish the same VaR/SPAN/ELM file, which would include eligible scrips/contracts across exchanges.

Q6. How will the NSE scrips/contracts be incorporated in the ICCL VaR/ SPAN/Extreme Loss Margin Files?

The NSE scrips/ contracts shall be included in the current ICCL files as follows:

- BSE & NSE Common Scrips/Contracts (Already present in the ICCL VaR/SPAN/ELM File with ICCL nomenclature) – *No change.*
- NSE Exclusive Scrips/Contracts – *will be included in the ICCL* VaR/SPAN/ELM *with* ***ICCL nomenclature (symbol / series).***

Q7. Will ICCL provide the VaR margin grouping for NSE exclusive scrips?

Yes. ICCL will categorize the NSE exclusive scrips into Group I, Group II or Group III as per the current methodology. The consolidated file including (BSE exclusive Scrips, BSE & NSE Common Scrips and NSE Exclusive Scrips) will be published on the ICCL Website.

Q8. Will ICCL block margin from members for NSE trades on a real time basis or end of day basis?

ICCL will continue to levy margins upfront on an on-line real-time basis at the time of trade for all exchanges by adjusting against available common collateral limits of Clearing Members and common notional limits of the Trading Members.

Q9. Will a Clearing Member be required to earmark collateral deposited with ICCL separately for each exchange with ICCL?

No, the Clearing Member won't be required to earmark collateral separately for each exchange. A Clearing member will have to deposit eligible collateral as a common pool with ICCL for trades across exchanges. The Clearing Member will get exposure to the extent of eligible collateral deposited (subject to haircut and concentration limits) for carrying out trades on any exchange.

Q10. Will a Clearing Member be required to provide separate Notional Limits for each exchange, to its Trading Members?

No. The Clearing member will allocate on Notional Limit to each of its Trading Member for each segment. The Trading Member will get exposure to the extent of the Notional Limit for carrying out trades on any exchange.

Q11. If I buy a near month contract of an underlying in one exchange and sell a far month contract of the same underlying in another exchange, will I get calendar spread margin benefit?

Yes, the position will be eligible for calendar spread margin benefit.

Q12. If I buy XYZ scrip in one exchange and then sell it in another exchange, will I be charged Crystallised Loss Margin?

Yes, you will be charged Crystallised Loss Margin to the extent of the offsetting position. However, all the other applicable margins (Initial Margin, Exposure Margin) will be released.

Q13. If I have an open sell position in ABC derivative contract in one exchange and then buy a certain quantity of the same derivative contract in another exchange, will I be charged Crystallised Loss Margin?

Yes, you will be charged Crystallised Loss Margin to the extent of the offsetting position. However, all the other applicable margins (Initial Margin, ELM) will be released.

Q14. Will I get Net option Value ("NOV") benefit for buy open position in one exchange and sell open position in another exchange?

Yes, NOV of a portfolio is calculated as the Long Option Value minus the Short Option Value (irrespective of which exchange the options trades have been executed). A positive NOV will continue to reduce your SPAN Margin Requirement while, a negative NOV will continue to increase your SPAN Margin Requirement.

Q15. Will my Buy Premium for options traded on another exchange (not BSE) be blocked by ICCL or the other exchange's clearing corporation?

If you are an ICCL member, all margins and buy premium shall be blocked by ICCL irrespective of which exchange the trade has occurred on.

Q16. I am a member of ICCL, can my institutional client trade on another exchange? Will I be margined for that trade and when?

Yes. Interoperability allows clients to trade on either BSE, NSE and MSE while getting their trades centrally cleared and margined through their TM-CM combination's preferred Clearing Corporation.

The confirmation process will remain same and would happen on a T + 1 basis. All processes that are currently applicable under the current scenario will continue to be applicable for trades executed on another exchange. Post confirmation process, margins will be levied for un-confirmed trades by the preferred Clearing Corporation of the Clearing Member of the Trading Member.

Q17. Currently MTM margin is to be paid by CMs to CCs before start of the next trading day – will the timeline remain unchanged post interoperability?

Yes. All processes that are currently applicable under the current scenario will continue to be applicable for trades executed on another exchange

Q18. How will the CC determine end of day settlement prices for same contracts traded on different trading venues, will the trading venues be obliged to share real-time prices with all CCs?

The Daily & Final Settlement price shall be common across Exchanges and CCPs.

<u>Illustration</u>

<table>
<tr><th>Exchange</th><th>Closing Price of the Derivative Contract (“CP”)</th><th>Volume in the last 30 minutes (“V”)</th><th>Uniform Daily Settlement Price</th></tr>
<tr><td>1</td><td>1,100.42</td><td>20,00,000</td><td rowspan="3">1,100.38</td></tr>
<tr><td>2</td><td>1,092.54</td><td>10,000</td></tr>
<tr><td>3</td><td>1,103.65</td><td>0</td></tr>
<tr><td rowspan="3">Uniform Daily Settlement Price</td><td colspan="3">= (CP1 x V1 + CP2 x V2 + CP3 x V3) / (V1 + V2 + V3)</td></tr>
<tr><td colspan="3">= <u>(1,100.42 x 20,00,000 + 1,092.54 x 10,000 + 1,103.65 x 0)</u>
(20,00,000 + 10,000 + 0)</td></tr>
<tr><td colspan="3">= 1,100.38</td></tr>
</table>

Q19. Is there a change in the Risk Reduction Mode threshold level?

Yes.

The entry and exit threshold are detailed below:

- **Clearing Members:** Put in RRM at **85%** collateral utilisation & moved back to normal mode when utilisation goes below **80%**.
- **Trading Members:** Put on RRM at **85%** utilisation of trading limit assigned by their Clearing Members & moved back to normal mode when limit utilisation goes below **80%.**

Position Limit Monitoring

Q1. How will the Open Interest for a Trading Member be computed for Position Limit Monitoring purpose in the Equity Derivatives and Currency Derivatives Segment?

Trading member wise position limit monitoring shall remain the same as per the existing methodology. The open interest for a Trading Member across contracts, across exchanges, in an underlying shall be computed as under:

For underlying X	Proprietary Position	Client 1	Client 2	Total Long	Total Short	Max of Long and Short
Future Contract1 of X	100	-50	-20	100	70	**100**
Future Contract2 of X	-	-30	-10	0	40	**40**
Option Contract1 of X	-80	120	-20	120	100	**120**
Open Interest for Trading Member in underlying X						**260**

Q2. How will the Open Interest for a Client be computed for Position Limit Monitoring purpose in the Equity Derivatives Segment?

Client level Position limit monitoring in the Equity Derivatives segment shall be on a gross level. The open interest for a Client across contracts, across exchanges, in an underlying shall be computed as under:

For underlying X	Client 1	Client 2
Future Contract1 of X	-50	-20
Future Contract2 of X	-30	-10
Option Contract1 of X	120	-20
Open Interest for Clients 1 and 2	**200**	**50**

Q3. How will the Open Interest for a Client be computed for Position Limit Monitoring purpose in the Currency Derivatives Segment?

Client level Position limit monitoring in the Currency Derivatives Segment shall be the higher of sentimental long (long futures, long calls and short puts) or sentimental short position (short futures, short calls and long puts). The open interest for a Client across contracts, across exchanges, in an underlying shall be computed as under:

For underlying X of Client 1	Long	Short	Sentimental Long	Sentimental Short
Future Contract1 of X	0	50	0	50
Future Contract2 of X	30	0	30	0
Option Contract1 of X call	120	0	120	0
Option Contract2 of X call	0	100	0	100
Option Contract1 of X Put	20	0	0	20
Option Contract2 of X Put	0	50	50	0
Total			**200**	**170**
Open Interest (max of long and short)			**200**	

Q4. Will there be any change in the position limits applicable at various levels (such as client, TM, FPI etc.) under interoperability?

There shall be no change in the applicable position limits after implementation of interoperability and the position limits will be continued to be applicable at each exchange.

Q5. Will the monitoring of positions be done on the basis of net positions across exchanges or exchange-wise positions?

The net positions across exchanges will be considered for position limit monitoring.

Q6. How will the limits be monitored?

The outstanding net positions will be allocated to one or more exchanges in the following manner:

- The overall net position (long/short) in each contract will be identified by the CC.
- The exchange wise net position (long/short) will also be identified by the CC.
- The overall net position shall be allocated pro rata to the exchanges which have the same side (long/short) of the position.

Consider the following example:

Exchange Name	Long	Short	Net Position
Exchange 1	300	100	200 Long
Exchange 2	150	50	100 Long
Exchange 3	40	100	60 Short
Overall Net			**240 Long**

The net position will be allocated pro-rata to exchanges having the same side position (long). In the case, the net position gets assigned as follows:

	Position
Net Position	240 Long
Exchange 1	160 Long [240*200/(200+100)]
Exchange 2	80 Long [240*100/(200+100)]

Q7. What limits will be the net positions allocated exchange-wise be assessed against?

The net positions allocated exchange-wise shall be monitored against the exchange-wise position limits calculated as per existing practice.

Q8. Will there be any change in the method of arriving at overall positions in an underlying across contracts in equity and currency derivatives, and for various entities (client, TM, FPI etc.)?

There shall be no change from the existing practice of the manner of aggregating positions at underlying across contracts for any segment or type of entity.

Core SGF and Default Waterfall

Q1. Will members be required to contribution to Core SGF post interoperability?

There is no change to the Minimum Required Corpus requirements for members due to interoperability.

In an interoperable scenario also, the Clearing Members contribution to Core SGF shall continue to be limited to 25% of MRC.

ICCL has currently fixed the Clearing Members' contribution Core SGF as "Nil". As specified in ICCL's Circular No. 20141129-2 dated November 29, 2014, any change will be notified to the members with sufficient notice through circulars/notifications.

Q2. Will Clearing Corporations contribute to each other's Core SGF?

No. Clearing Corporations shall not contribute to each other's Core SGF to prevent contagion effect.

Q3. Will Exchange's contribute to all Clearing Corporations Core SGF?

Yes. As per SEBI Circular on Core Settlement Guarantee Fund, Default Waterfall and Stress Test dated August 27, 2014, Stock Exchange contribution to Core SGF shall be at least 25% of the MRC.

The Clearing Corporation shall seek contribution to its Core SGF from all the Exchanges it clears trades for.

Q4. Will my limited liability requirement increase after interoperability?

As per SEBI Circular on Core Settlement Guarantee Fund, Default Waterfall and Stress Test dated August 27, 2014, Clearing Corporations are required to limit the liability of non-defaulting members.

ICCL has currently fixed the liability of non-defaulting members as INR 10 Lakh (INR 1 Million).

Any change will be notified to the members with sufficient notice through circulars/notifications.

Q5. What is the Default Waterfall structure if the defaulting member is a member from ICCL itself?

ICCL

- Monies of defaulting member available with ICCL
- Insurance of USD 60 Million
- ICCL resources (equal to 5% of the segment MRC)
- Core SGF of the segment in the following order:
  i. Penalties
  ii. ICCL contribution to the extent of at least 25% of the segment MRC
  iii. Remaining Core SGF: ICCL contribution, Stock Exchange contribution and non-defaulting members' primary contribution to Core SGF on pro-rata basis.
- Proportion of remaining ICCL resources (excluding ICCL contribution to core SGFs of other segments and INR 250 Crore) equal to ratio of segment MRC to sum of MRCs of all segments.
- ICCL/ Stock Exchange contribution to Core SGFs of other segments (after meeting obligations of those segments) and remaining ICCL resources to that extent as approved by SEBI.
- Capped additional contribution by non-defaulting members of the segment (INR 10 Lakh for each non-defaulting member across segment)
- Any remaining loss to be covered by way of pro-rata haircut to payouts

Q6. What is the Default Waterfall structure if the defaulting member is a member of another Clearing Corporation?

Other CCP

- Monies of defaulting member
- Insurance, if any
- "Other CCP" resources (equal to 5% of the segment MRC)
- Core SGF of the segment in the following order:
  i. Penalties
  ii. "Other CCP's" contribution to the extent of at least 25% of the segment MRC
  iii. Remaining Core SGF: "Other CCP's" contribution, Stock Exchange contribution and non-defaulting members' primary contribution to Core SGF on pro-rata basis
- Proportion of remaining "Other CCP" resources (excluding "Other CCP" contribution to core SGFs of other segments and INR 100 Crore) equal to ratio of segment MRC to sum of MRCs of all segments.
- "Other CCP"/ Stock Exchange contribution to Core SGFs of other segments (after meeting obligations of those segments) and remaining "Other CCP" resources to that extent as approved by SEBI.
- Capped additional contribution by non-defaulting members of the segment

ICCL

- Monies of "Other CCP" available with ICCL
- Insurance of USD 60 Million
- ICCL resources (equal to 5% of the segment MRC)
- Core SGF of the segment in the following order:
  i. Penalties
  ii. ICCL contribution to the extent of at least 25% of the segment MRC
  iii. Remaining Core SGF: ICCL contribution, Stock Exchange contribution and non-defaulting members' primary contribution to Core SGF on pro-rata basis.
- Proportion of remaining ICCL resources (excluding ICCL contribution to core SGFs of other segments and INR 250 Crore) equal to ratio of segment MRC to sum of MRCs of all segments.
- ICCL contribution/ Stock Exchange to Core SGFs of other segments (after meeting obligations of those segments) and remaining ICCL resources to that extent as approved by SEBI.
- Capped additional contribution by non-defaulting members of the segment (INR 10 Lakh for each non-defaulting member across segments)
- Any remaining loss to be covered by way of pro-rata haircut to payouts

Annexure

Netting Framework - Illustration

Equity Segment

Mapping

Client 2 has one UCC ("Unique Client Code") across exchanges and is linked to TM ABC -> CM PQR. CM PQR has designated CCP A as its preferred CCP of choice.

CCP		CM		TM		Client
A	←	PQR	←	ABC	←	Client 2

Trades

Assuming all trades for a given settlement number (settlement calendar and settlement number of CCP A will be considered).
Consider the following trades carried out by Client 2:

CCP	Exchange	Scrip Code (Exchange Level)	Scrip Code (Designated CCP)	Scrip Name	B/S	Quantity	Legend
CCP A	Exchange A	123	123	Scrip FIO	B	150	*A*
CCP A	Exchange B	456	123	Scrip FIO	S	50	*B*
CCP A	Exchange A	987	987	Scrip BEN	B	350	*C*
CCP A	Exchange A	987	987	Scrip BEN	B	350	*D*
CCP A	Exchange B	826	437	Scrip SHA	S	60	*E*
CCP A	Exchange B	773	356	Scrip SAN	S	500	*F*
CCP A	Exchange A	356	356	Scrip SAN	B	260	*G*

Position at CCP A and Margin

CCP	Scrip Code (Designated CCP)	Scrip Name	B/S	Position Quantity	Legend	Position Value	Margin Value
CCP A	123	Scrip FIO	B	100	*A-B*	5,000.00	625.00
CCP A	987	Scrip BEN	B	700	*C+D*	35,000.00	17,500.00
CCP A	437	Scrip SHA	S	60	*E*	43,700.00	10,925.00
CCP A	356	Scrip SAN	S	240	*F-G*	5,11,100.00	5,11,100.00
Client 2's Margin at CCP A							**5,40,150.00**

Derivatives Segment

Mapping

Let us take the same Client 2 as an example. Client 2 has one UCC (“Unique Client Code”) across exchanges and is linked to TM XYZ -> CM TAN. CM TAN has designated CCP B as its preferred CCP of choice for the Equity Derivatives Segment.

CCP		CM		TM		Client
B	←	TAN	←	XYZ	←	Client 2

Trades

Consider the following trades carried out by Client 2. *Assume that Client 2 has no open (carried forward) trades.*

CCP	Exchange	Series ID (Exchange Level)	Series ID (Designated CCP)	FUT/ OPT	Call/ Put	Series Code	Expiry	Strike	B/S	Quantity	Legend
CCP B	Exchange A	1234	7896	FUT	-	FLOH	31-05-19	-	B	500	*A*
CCP B	Exchange B	7896	7896	FUT	-	FLOH	31-05-19	-	S	200	*B*
CCP B	Exchange B	7999	7999	FUT	-	FLOH	30-06-19	-	S	400	*C*
CCP B	Exchange B	8426	8426	OPT	Call	KUNG	31-05-19	80	S	200	*D*
CCP B	Exchange A	1224	8426	OPT	Call	KUNG	31-05-19	80	B	100	*E*
CCP B	Exchange B	8759	8759	OPT	Call	KUNG	31-05-19	82	B	150	*F*

Position at CCP B and Margin

CCP	Series ID (Designated CCP)	FUT/ OPT	Call/ Put	Series Code	Expiry	Strike	B/S	Position Quantity	Legend	Position Value	Margin Value
CCP B	7896	FUT	-	FLOH	31-05-19	-	B	300	*A-B*	500,000.00	
CCP B	7999	FUT	-	FLOH	30-06-19	-	S	400	*C*	700,000.00	
CCP B	8426	OPT	Call	KUNG	31-05-19	80	S	100	*D-E*	300,000.00	
CCP B	8759	OPT	Call	KUNG	31-05-19	82	B	150	*F*	200,000.00	77,900.00

Useful Links

Equity Cash Segment

- Margin: http://www.icclindia.com/Static/Risk_Management/margin_cash.aspx
- Historical VaR ELM Margin: http://www.icclindia.com/riskmgmt/VaRELMargin.aspx
- Var Margin Groups: http://www.icclindia.com/riskmgmt/varmargin.aspx?flag=1

Equity Derivatives Segment

- Margin: http://www.icclindia.com/Static/Risk_Management/margin_derivatives.aspx
- EDX Risk Parameter Files: http://www.icclindia.com/riskmgmt/RiskparameterNEW.aspx

Currency Derivatives Segment

- Margin: http://www.icclindia.com/Static/Risk_Management/margin_currency.aspx
- CDX Risk Parameter Files: http://www.icclindia.com/riskmgmt/CurrRiskparameternew.aspx

Peak/Average Stress Loss

For the Year ended March 31, 2019

Segment	Peak/Average Stress Loss (INR Million)	
Equity Cash Segment	Average end-of-day value	610.00
	Peak end-of-day value	13350.00
Equity Derivatives Segment	Average end-of-day value	0.18
	Peak end-of-day value	1.50
Currency Derivatives Segment	Average end-of-day value	47.48
	Peak end-of-day value	1287.02

Clearing Volume

Segment	Financial Year	Clearing Volume
Equity Cash Segment	2018-2019	51,564,600,000
Equity Derivatives Segment	2018-2019	31,167
Currency Derivatives Segment	2018-2019	1,052,452,157

Initial Margin Requirements

For the Quarter ended March 31, 2019

Segment	Initial Margin Requirement (INR Billion)	
Equity Cash Segment	Average end-of-day value	4.7316
	Peak end-of-day value	12.8657
Equity Derivatives Segment	Average end-of-day value	0.0014
	Peak end-of-day value	0.0058
Currency Derivatives Segment	Average end-of-day value	2.6260
	Peak end-of-day value	3.8869