October 2018

ISDA®

Clearing Incentives, Systemic Risk and Margin Requirements for Non-cleared Derivatives

Recent studies and research into clearing incentives and margining raise questions about whether certain aspects of the margin requirements support their stated key policy goals. These questions include:

- Does the scope of the current margin framework for non-cleared derivatives appropriately support the goal of systemic risk mitigation? Or does it impose costs on firms that pose little or no systemic risk, and can it potentially have an adverse impact on their risk management activities?

- Does margining of non-cleared derivatives (which is higher than margining for cleared derivatives) incentivize central clearing? If and when it is not a major factor, then are the higher margin costs for non-cleared derivatives versus cleared derivatives appropriate, especially in situations where the risks of both may be similar?

Based on this data and analysis, ISDA suggests:

- IM should not be required for counterparties that pose little or no systemic risk. Toward this end, the current threshold of €8 billion in notional outstanding could be raised to €100 billion (and restricted to initial margin eligible trades) – a level that addresses systemic risk issues and avoids adverse and unnecessary consequences for hundreds of firms that pose no such concerns.

- The role of margin as a clearing incentive should be re-calibrated, with consideration given for the existing inherent benefits of clearing, such as multilateral netting.

INTRODUCTION

Recent research into clearing incentives and margining has raised questions about whether aspects of these rules meet policy objectives

Central clearing of standardized derivatives and margin requirements for non-cleared derivatives are two of the basic tenets of global financial regulatory reform. They are also inter-related: the purpose of margin requirements is to both reduce systemic risk and promote or incentivize central clearing.

Recent studies and research into clearing incentives and margining raise questions about whether certain aspects of the requirements do in fact support these key policy goals. These questions include:

- Does the scope of the current margin framework for non-cleared derivatives appropriately support the goal of systemic risk mitigation? Or does it impose costs on firms that pose little or no systemic risk, and can it potentially have an adverse impact on their risk management activities?

- Does margining of non-cleared derivatives (which is higher than margining for cleared derivatives) incentivize central clearing? If and when it is not a major factor, then are the higher margin costs for non-cleared derivatives versus cleared derivatives appropriate, especially in situations where the risks of both may be similar?

This paper draws on research done internally by ISDA and recent studies by policy-makers to analyze and answer these questions.

In terms of systemic risk reduction, a relatively small number of the counterparties (approximately 20%) subject to the initial margin (IM) requirements account for a large majority of the total IM that will be required to be posted (approximately 85%) under the current rule set. Conversely, 80% of the firms currently in scope of the margin rules pose little or no systemic risk, but would collectively be required to document thousands of agreements, and set up thousands of segregated accounts in order to exchange collateral. This could have needless adverse effects on economic and risk hedging activity.

In terms of clearing incentives, while IM for non-cleared swaps may encourage clearing in certain market segments, there is substantial evidence that other economic incentives have a significantly greater impact. This includes regulatory capital requirements for cleared versus non-cleared swaps, as well as the significant benefits that flow from the ability to net a large, diverse swaps portfolio with a single central counterparty (CCP). Consequently, there are strong incentives to clear, and the higher IM requirement for non-cleared versus cleared swaps may not be necessary to encourage clearing.

Based on this data and analysis, ISDA suggests:

- IM should not be required for counterparties that pose little or no systemic risk. Toward this end, the current threshold of €8 billion[1] in notional outstanding could be raised to €100 billion (and restricted to IM eligible trades) – a level that addresses systemic risk issues and avoids adverse and unnecessary consequences for hundreds of firms that pose no such concerns[2].

- The role of margin as a clearing incentive should be re-calibrated, with consideration given for the existing inherent benefits of clearing, such as multilateral netting.

[1] All threshold levels are denominated in euros, as per the final margin requirements for non-centrally cleared derivatives paper by the Basel Committee on Banking Supervision and International Organization of Securities Commissions. National regulators have used their home denominations when implementing their rules

[2] Further information and analysis related to changes proposed by ISDA to the margin rules are detailed in a recent letter to policy-makers

BACKGROUND ON MARGIN REQUIREMENTS

Margin rules were explicitly meant to meet the policy objectives of reducing systemic risk and promoting central clearing

In 2009 and in 2011, the leaders of the Group-of-20 nations articulated five commitments to reform over-the-counter (OTC) derivatives markets. One was that standardized derivatives should be centrally cleared. Another was that non-cleared derivatives should be subject to minimum standards for margin requirements.

The two commitments are understood to be interconnected. As a recent Financial Stability Board (FSB) paper notes: "A number of post-crisis reforms are, directly or indirectly, relevant to incentives to centrally clear. These include mandatory clearing requirements, capital, liquidity and margin requirements related to OTC derivatives activity…"[3].

In fact, as policy-makers have stated in their final policy paper on margin requirements for non-cleared derivatives, the margin rules have two main goals: reduction of systemic risk and promotion of central clearing. To achieve these objectives, policy-makers articulated a set of key principles upon which their final margin rules are based[4].

One of these principles and rules (Principle and Requirement 2) relates to the scope of coverage and applicability of the margin rules. It requires that all financial firms and systemically important non-financial entities with more than €8 billion in derivatives notional exposure exchange variation margin (VM) and IM on their trades[5]. The IM requirement is being phased in: the first two phases included firms with €3 trillion and €2.25 trillion in notional, respectively. The third phase began September 2018, and covers firms with €1.5 trillion in notional. The fourth phase takes effect September 2019, and covers firms with €0.75 trillion in notional. The fifth and final phase (September 2020) covers firms with at least €8 billion in notional.

Principle and Requirement 3 relates to the level of IM that must be posted for non-cleared swaps. It stipulates that IM for such transactions should be based on a 10-day margin period of risk (MPOR), compared to a five-day MPOR for cleared swaps. The end result is that non-cleared margin is designed to be higher than cleared margin (by approximately 40%) due to an historical view of the legal close-out process for non-cleared swaps.

ISDA supports the efforts of policy-makers to enhance the strength, resiliency and transparency of the global derivatives market by imposing margin requirements. In that context, universal VM exchanges are useful. At the same time, however, it is becoming increasingly clear that certain aspects of the margin rules can be recast to more effectively support the two main goals of systemic risk reduction and promotion of central clearing, as discussed in the following pages.

[3] FSB August 2018 paper, Incentives to centrally clear over-the-counter (OTC) derivatives

[4] BCBS-IOSCO Working Group on Margin Requirements (WGMR) March 2015 paper, Margin requirements for non-centrally cleared derivatives. The BSBS-IOSCO final policy on margin requirements for non-cleared derivatives were issued in September 2013 and revised in March 2015 to reflect an adjustment to the phase-in schedule. All references in this document to the final policy are to the March 2015 paper

[5] VM is exchanged to cover day-to-day changes in market value, and IM is exchanged to cover potential future exposure that could arise when a counterparty defaults

MARGIN AND SYSTEMIC RISK ISSUES FOR NON-CLEARED DERIVATIVES

Under current margin rules, a large proportion of smaller firms caught by phase five of the IM rollout will not actually be required to post IM

As the Basel Committee on Banking Supervision (BCBS) and the International Organization of Securities Commissions' (IOSCO) Working Group on Margining Requirements (WGMR) stated:

> "Margin requirements for non-centrally cleared derivatives would be expected to reduce contagion and spillover effects by ensuring that collateral is available to offset losses caused by the default of a derivatives counterparty. Margin requirements can also have broader macroprudential benefits, by reducing the financial system's vulnerability to potentially destabilizing procyclicality and limiting the build-up of uncollateralized exposures within the financial system."

The AIG situation in 2007-2008 amply demonstrates the importance of not allowing uncollateralized exposures to build up in the system, particularly when coupled with ratings triggers, which require and/or increase the amount of margin that one counterparty must post with another when its credit rating deteriorates. AIG did not post full or, in some cases, any VM on its exposures to counterparties[6]. When the company's financial products subsidiary lost its AAA rating, it faced massive VM calls, resulting in a liquidity crisis for AIG that ultimately led to its bailout by the federal government. The AIG situation reinforced the importance of full VM posting for derivatives exposures.

The benefit of VM, then, is clearly one of the most important lessons learned from the financial crisis. The requirement to exchange VM became effective on March 1, 2017 for all covered entities.

The impact of the regulations and counterparty requirements with regard to VM is clear: the top 20 participants in the non-cleared derivatives market exchanged $1.5 trillion in VM for such trades at year-end 2017[7].

IM for Non-cleared Derivatives

The BCBS-IOSCO WGMR, however, believed additional protection against counterparty credit risk was necessary, and decided to impose an IM requirement. In this way, the margin treatment of non-cleared derivatives would be similar to that of cleared derivatives. For both, VM would be exchanged to cover day-to-day changes in market value, and IM would be exchanged to cover potential future exposure that could arise when a counterparty defaults. As noted above, IM for non-cleared was set at a higher level than for cleared swaps.

The BCBS-IOSCO WGMR stipulated that the new rules should be phased in based on the derivatives notional exposure of covered entities[8]. The first phase went into effect in September 2016, and covered firms with €3 trillion or more in derivatives notional; there were 20 such firms. A year later, the threshold reduced to €2.25 trillion, with six more firms coming into scope. The threshold for September 2018 was €1.5 trillion (with an additional eight firms now in scope), and in 2019, it lowers to €0.75 trillion. In September 2020, the final phase will occur and the threshold will drop significantly to €8 billion.

[6] AIG In Hindsight, Federal Reserve Bank of Chicago, October 2014

[7] 2017 ISDA Margin Survey

[8] BCBS-IOSCO Working Group on Margin Requirements (WGMR) March 2015 paper, Margin requirements for non-centrally cleared derivatives: "[A]ll covered entities (i.e. financial firms and systemically important non-financial entities) that engage in non-centrally cleared derivatives must exchange initial and variation margin as appropriate to the counterparty risks posed by such transactions." It then goes on to specify that "any covered entity belonging to a group whose aggregate month-end average notional amount of non-centrally cleared derivatives for March, April, and May of the year exceeds €8 billion will be subject to the requirements…"

Current IM Requirements for Non-cleared Derivatives

Recent market research by ISDA since the imposition of the margin rules shows their impact. As Table 1 shows, IM collected by the 20 largest market participants (phase-one firms) for their non-cleared derivatives totaled approximately $130.6 billion at year-end 2017, representing an increase of 22% over the level reported in a previous survey as of the end of the first quarter of 2017. Of this amount, $73.7 billion (described in Table 1 as Regulatory IM Received) came from the 20 phase-one firms and the six phase-two firms.

Table 1: IM Posted and Received by Top 20 (Phase-One) Derivatives Counterparties[9] ($b)

	Q4 2017	Q1 2017	Q4 vs. Q1
Regulatory IM Posted	75.2	47.2	59%
Regulatory IM Received	73.7	46.6	58%
Discretionary IM Posted	6.4	16.3	-61%
Discretionary IM Received	56.9	60.5	-6%
Total IM Posted	81.7	63.6	28%
Total IM Received	130.6	107.1	22%

Source: ISDA Margin Survey

Approximately $56.9 billion was collected by phase-one firms under existing collateral agreements from counterparties not currently in scope (Discretionary IM Received). Phase-one firms posted about $6.4 billion of discretionary IM for non-cleared derivatives. The difference in discretionary IM collected and discretionary IM posted ($56.9 billion versus $6.4 billion) is probably due to the fact that phase-one firms are more likely to have one-way collateral agreements in place that only require their non-phase-one and non-phase-two counterparties to post IM. Under the new margin rule set, two-way exchange of margin is required.

Estimated Future IM Requirements for Non-cleared Derivatives

According to research conducted by ISDA, the total amount of IM that firms will be required to post once the margin rules are fully phased in is estimated between approximately $500 billion (if the ISDA Standard Initial Margin Model, or SIMM, is used) and $1.84 trillion (if the standard IM grid is used).

In September 2020 – the last IM phase-in date for counterparties with notionals of €8 billion or more – about 1,200 additional counterparties are expected to come into scope for the exchange of IM. This represents over 95% of all the firms that will be subject in total to the IM rules (with only about 50 to 60 firms being in scope under phases one to four).

In aggregate, these 1,200 counterparties coming into scope in phase five are expected to post $163 billion-$513 billion of IM (depending on the IM calculations model used). Sixteen percent of the 1,200 counterparties (all of which have derivatives notionals of €100 billion or more) account for 54% of the required IM.

[9] The IM statistics in this paper exclude IM posted for inter-affiliate transactions. Inter-affiliate IM was estimated to be approximately $30 billion at year-end 2017

Conversely, 84% of the phase-five counterparties (those with €8 billion-€100 billion of derivatives notional) account for 46% of the required phase-five IM. These roughly 1,000 counterparties also account for 80% of the total population of firms that would be in scope of the IM rules and less than 15% of the total IM that would be required to be posted. As can be seen, many of these 1,000 or so firms have relatively little derivatives exposure. On average, it ranges (depending on the model) between €10.5 million and €30 million per relationship for each counterparty[10].

A recent paper from the UK Financial Conduct Authority[11] adds additional context to the discussion. The analysis demonstrates that a €100 billion threshold would capture 1.4% of the firms – and 95.4% of the derivatives activity – that are potentially subject to the IM requirements.

Other policy-makers have also weighed in on this issue. The US Commodity Futures Trading Commission (CFTC), for example, has suggested expanding the scope of counterparties exempt from the margin requirements to include small financial institutions that do not present systemic risk challenges[12].

Recalibrating the Margin Threshold to Focus on Systemic Risk

The findings of an August 2018 FSB study on clearing incentives "reinforce the importance of understanding and carefully considering the effects of the scope and interaction of the reforms on market participants that are not considered systemically important."[13]

ISDA believes that recalibrating the margin rules to exclude firms posing little or no systemic risk is among the most important areas meriting such reconsideration.

As noted above, such low- or no-systemic risk counterparties would in aggregate be required to document thousands of agreements, and set up thousands of segregated accounts in order to exchange collateral. In addition, some firms – such as pension funds – are not geared to provide collateral, as their focus is on investing fund assets on behalf of their clients.

On the one hand, the additional hurdles and associated costs of exchanging and financing margin would represent an unnecessary expense that could be channeled into more productive economic activities. On the other hand, it might also incentivize firms to alter or curtail their risk hedging practices, which in turn might increase risk for them.

Finally, the rationale supporting the current threshold for inclusion into the margin framework (€8 billion in notional) is not clear from a systemic risk mitigation perspective.

ISDA research notes that notional amount outstanding is widely used as a metric or trigger for regulation[14]. Some policy-makers have questioned its use in this regard[15]. The CFTC, for example, has written that "another problem with the current MSE threshold [the €8 billion threshold] is that it is an absolute amount. Entities with small absolute swaps positions are unlikely to pose systemic risk, but so are entities with small swaps positions relative to the size of their businesses."

[10] The IM rules establish a threshold of €50 million of exposure above which the exchange of IM is required. These statistics refer to the amounts above this threshold

[11] FCA paper, EMIR data and derivatives market policies, August 2018

[12] CFTC paper, Swaps Regulation Version 2.0, April 2018

[13] FSB August 2018 paper, Incentives to centrally clear over-the-counter (OTC) derivatives

[14] ISDA Research Note, Uses of Notional Amount in Derivatives Regulation

[15] CFTC ENN paper

Another issue related to the use of notionals can be seen via the example of two firms – one that uses derivatives to hedge existing business or financial risk, and a second that is a directional investor that takes on unhedged risk exposure for investment purposes. The notional amount of their positions may be identical, but their risk exposures differ significantly.

Policy Suggestion

IM should not be required for counterparties that pose little or no systemic risk. Toward this end, the current threshold of €8 billion in notional outstanding could be raised to €100 billion (and restricted to IM eligible trades). This would address systemic risk issues and avoid adverse and unnecessary effects on economic and risk hedging activity for hundreds of firms that pose no such concerns[16].

[16] As per Footnote 2, additional information and analysis supporting ISDA's proposed changes to the margin rules are contained in a letter to policy-makers. These proposals include removing physically settled foreign exchange forwards and swaps from the notional calculation for phase five; exempting phase three-phase five counterparties from IM monitoring requirements; exempting non-dealers from any SIMM pre-approval under EU and Japanese rules; and allowing non-dealers to rely on dealers for calculations on their behalf under EU and Japanese rules

CLEARING INCENTIVES AND MARGINING OF NON-CLEARED DERIVATIVES

There are more important drivers encouraging firms to clear, other than margining requirements

With regards to the role of margining in the promotion of central clearing, the BCBS-IOSCO WGMR wrote that:

> "In many jurisdictions, central clearing will be mandatory for most standardized derivatives. But clearing imposes costs, in part because CCPs require margin to be posted. Margin requirements on non-centrally cleared derivatives, by reflecting the generally higher risk associated with these derivatives, will promote central clearing, making the G-20's original 2009 reform programme more effective. This could, in turn, contribute to the reduction of systemic risk."

Clearly, one of the central goals of policy-makers in establishing the margin rules was to economically incentivize firms to clear[17]. Toward that end, the BCBS-IOSCO WGMR established a margin framework based in part on a 10-day MPOR, which is the time from the most recent exchange of collateral until the position is closed out. The 10-day MPOR is twice that of the five-day MPOR used in calculating IM for cleared swaps. This equates to roughly a 40% increase in non-cleared margin versus cleared margin.

Recent data and analysis provide a means to assess the effectiveness of margining as an incentive to clear. While there is some evidence that margining of non-cleared swaps may support the initial evolution to clearing of a market segment that has no regulatory clearing mandate, there is also substantial evidence that other economic incentives have a greater impact for 'mature' markets.

US IRD Clearing: Comparing Actual Cleared Volumes vs. Mandated Cleared Volumes

Using data from publicly reported derivatives trades in the US from 2014-2017, ISDA analyzed the total amount of interest rate derivatives (IRD) traded per year, the percentage that was mandated to be cleared and the percentage that was actually cleared. The results are shown in Table 2.

Table 2: US IRD Trading Volumes, % Cleared and % Mandated to be Cleared

	2014		2015		2016		2017	
Total IRD ($b)	**Notional**	**%**	**Notional**	**%**	**Notional**	**%**	**Notional**	**%**
Cleared	**111,109**	**77**	**111,598**	**78**	**139,677**	**84**	**169,271**	**88**
Mandated	105,159	73	104,387	73	127,699	77	164,728	85
Non-cleared	**32,683**	**23**	**30,642**	**22**	**26,595**	**16**	**23,868**	**12**
Grand Total	**143,792**	**100%**	**142,240**	**100%**	**166,272**	**100%**	**193,139**	**100%**

[17] BCBS-IOSCO Working Group on Margin Requirements (WGMR) March 2015 paper, Margin requirements for non-centrally cleared derivatives: "A third key element of the margin requirements is the minimum baseline amount of initial and variation margin that would need to be collected for a non-centrally cleared derivatives and the methodologies by which that baseline amount would be calculated. The BCBS and IOSCO have evaluated the calculation of these baseline margin amounts by reference to the two underlying benefits of the margin requirements described in Part A – systemic risk reduction and promotion of central clearing...From the perspective of promoting central clearing, the BCBS and IOSCO have considered the costs associated with complying with the baseline margin requirements; this line of analysis involves calibrating baseline margin amounts relative to the costs of executing the same or similar transactions on a centrally cleared basis. This paper establishes a general framework for calculating baseline variation and initial margin that is intended to realize both benefits of margin requirements"

As Table 2 shows, the percentage of US IRD trading volumes (measured by notional amounts outstanding) that was mandated to be cleared between 2014 and 2017 increased from 73% in 2014 and 2015 to 77% in 2016 and 85% in 2017.

During the same four-year time period, the percentage of US IRD trading that was actually cleared increased from 77% in 2014 to 78% in 2015, 87% in 2016 and 88% in 2017.

In short, against a backdrop of increased trading volumes, the percentage of centrally cleared derivatives has been steadily growing since the clearing mandates were imposed in 2013[18]. Perhaps even more importantly, market participants have consistently cleared more than they were required to clear: four percentage points more in 2014, five percentage points more in 2015, seven percentage points more in 2016, and three percentage points more in 2017. This is true both before and after the margin rules went into effect, and it is true even after the US clearing mandate was expanded (both of which occurred in late 2016). It is also true across IRD product categories – fixed-floating swaps, basis swaps, forward rate agreements and overnight indexed swaps – for which there was a clearing mandate[19].

Multilateral Netting is a Strong Incentive to Clear

Multilateral netting is a strong incentive to clear that does not stem from regulation but is inherent in the structure of central clearing itself. The fact that all transactions that are cleared at a particular CCP are legally novated to it enables the clearing member to net all exposures to this CCP for the purpose of calculating exposures. It also enables the CCP to net all transactions when calculating IM and VM.

A recent ISDA research initiative shows the impact of multilateral netting. The study examined the non-cleared portfolios of 19 firms that are currently subject to bilateral margin requirements. With other factors remaining the same (for example, the IM model), the IM saving was estimated from netting these transactions between counterparties, using the ISDA SIMM model.

Based on this sample, the exercise demonstrates that, on average, firms would pay 62% less IM by netting their non-cleared transactions within an asset class across their counterparties.

Other Clearing Incentives

The strength of netting as an incentive to clear is also evident in the August 2018 FSB study. On a weighted basis, netting ranks as the third most important incentive among dealers. The top two considerations are regulatory capital costs and counterparty risk management considerations. The fourth is the opportunity to compress cleared portfolios. IM for non-cleared ranks fifth.

[18] Compliance dates for US clearing requirements were phased by type of market participant entering into a swap. Category 1 entities began clearing on March 11, 2013 for swaps they enter into on or after that date. Category 2 entities were required to clear swaps beginning on June 10, 2013 for swaps entered into on or after that date, and Category 3 entities were required to clear swaps beginning on September 9, 2013 for swaps entered into on or after that date

[19] See ISDA Research Note, Actual Cleared Volumes vs. Mandated Cleared Volumes: Analyzing the US Derivatives Market

Trading Volume of Non-clearing Mandated Products

As the IM rules were being finalized, it was noted that they "will also diminish the incentive to tinker with contract language as a way to evade clearing requirements"[20].

Based on recent analysis by ISDA[21], trading volume in non-cleared products for which there is no clearing mandate – interest rate options, swaptions and cross-currency swaps – has remained roughly the same over the past four years. In 2017, these products accounted for 10% of all rates trading volume; in 2014, they were approximately 10.5%. There is no indication, either in the volume of non-cleared products or in the increasing percentage of overall volume that is cleared, that counterparties are switching to non-cleared products to avoid the clearing requirements.

If anything, the statistics demonstrate the powerful economic pull that clearing has through its ability to put more transactions through a single counterparty and optimize the benefits of netting.

Policy Suggestion

There is significant evidence of the strong incentives to clear that currently exist. Consequently, the higher IM requirement for non-cleared versus cleared swaps may not be necessary to encourage clearing. The role of margin as a clearing incentive should be re-calibrated, with consideration given for the existing inherent benefits of clearing such as multilateral netting.

[20] Interconnectedness and Systemic Risk: Lessons from the Financial Crisis and Policy Implications, Speech by Federal Reserve Board Chair Janet L. Yellen to the American economic Association, January 2013

[21] See ISDA Research Note, Actual Cleared Volumes vs. Mandated Cleared Volumes: Analyzing the US Derivatives Market

SUMMARY

Rising the phase-five threshold to €100 billion would exclude smaller entities that pose little or no systemic risk, without significantly reducing the amount of IM exchanged

ISDA supports the efforts of policy-makers to enhance the strength, resiliency and transparency of the global derivatives market by imposing margin requirements. In that context, universal VM exchanges are useful.

At the same time, however, it is becoming increasingly clear that certain aspects of the current rules related to IM do not effectively align with their stated goals of mitigating systemic risk and promoting central clearing. Instead, they impose unnecessary costs and may impede economic and risk management activity.

A relatively small number of the counterparties (approximately 20%) subject to the IM requirements account for a large majority of the total IM that will be required to be posted (approximately 85%) under the current rules. Conversely, 80% of the firms that would be in scope for the margin rules pose little or no systemic risk, but would collectively be required to negotiate documentation and incur large operational costs in order to post non-systemically important amounts of IM. IM should not be required for counterparties that pose little or no systemic risk. Toward this end, the current threshold of €8 billion in notional outstanding could be raised to €100 billion – a level that addresses systemic risk issues and avoids adverse and unnecessary consequences for hundreds of firms that pose no such concerns.

While IM for non-cleared swaps may marginally encourage clearing in certain market segments, there is substantial evidence that other economic incentives have a significantly greater impact. This includes lower regulatory capital requirements for cleared versus non-cleared swaps, as well as the significant benefits that flow from the ability to net large, diverse swaps portfolios with a single CCP. Consequently, there are strong incentives to clear, and the higher IM requirement for non-cleared versus cleared swaps may impose unnecessary costs on market participants. The role of margin as a clearing incentive should be re-calibrated, with consideration given for the existing inherent benefits of clearing, such as multilateral netting.