CSDR Mandatory Buy-ins:

An illustration of the problems arising from the asymmetric treatment of the payment of the buy-in or cash compensation differential

DRAFT v.5

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Executive summary

- The normal buy-in process allows for the payment of the differential between the buy-in price and the original trade price to be made in either direction between the selling the purchasing parties, depending on whether the buy-in price is higher or lower than the original trade price.
- This ensures an equitable remedy to the buy-in, with neither party receiving or incurring an undue benefit or cost.
- This also ensures the equitable remedying of transaction chains involving one or more intermediaries
- The same principal applies to the settlement of the price differential in the event of cash compensation.
- The CSDR buy-in and cash compensation processes only allow for the payment of the differential to be made from the seller to the purchaser, in the event that the buy-in or cash compensation reference price is higher than the original trade price.
- This asymmetry for the payment of the differential creates an unequitable remedy that will unduly benefit the purchaser and penalize the seller in the event that the buy-in or reference price is lower than the original trade price.
- This also penalizes intermediaries in transaction chains, who will see any profits wiped out in the event that the buy-in or reference price is lower than the original purchase price.
- From a risk perspective, the asymmetry is the economic equivalent of any seller of securities also writing a free put option (struck at the sale price) that becomes active in the event of a buy-in. Conversely, the purchasers of securities receive this free put option.
- In a normal buy-in process, any cost to the bought-in selling party arises from the 'buy-in premium', which is the difference between the buy-in price and the current market price, and is irrespective of the original trade price.
- Unless the asymmetry in the CSDR buy-in and cash compensation processes is addressed, this could be highly problematic for sellers of securities, as well as principal intermediaries, who will be put at undue risk in the event of a buy-in.

Overview

European CSD-Regulation (passed into law in 2014) provides for the mandatory initiation and execution of a buy-in process in the event of a settlement fail related to the sale of a financial instruments. While there has been debate over the need to mandate an already existing discretionary contractual remedy available to purchasers of securities in the case of settlement fails, there has also been much focus on the buy-in process as outlined by the regulation. One of the key concerns is how the buy-in differential (i.e. the difference between the original trade price and the buy-in execution price) is settled between the purchasing and the selling counterparties, and how this differs from more conventional buy-in processes.

In a standard buy-in process (such as the buy-in process provided for under ICMA Rules and Recommendations for OTC bond transactions) the payment of the differential can go in either direction between seller and purchaser, depending on whether the buy-in price is higher or lower than the original trade price; this ensures an equitable outcome for both seller and buyer, and also allows for the orderly settlement of a chain of interconnected transactions without any adverse loss or gain to the parties in the chain. The buy-in process prescribed by CSDR, however, only allows for the payment of the differential to pass in one direction (from the seller to the buyer), where the buy-in price is higher than the original trade price, and explicitly prevents the differential being paid in the opposite direction (from the buyer to the seller) in the event that the buy-in price is lower than the original trade price.

This short paper illustrates how this asymmetry in the payment of the buy-in differential between sellers and buyers can create undue and unpredictable gains and losses for the trading parties, including for intermediaries in a chain of transactions. It is ICMA's conclusion that in keeping with the intention to promote the smooth and orderly functioning of Europe's capital markets, this anomaly should be addressed in the regulation before the mandatory buy-in regime is implemented.

It is expected that CSDR mandatory buy-ins will be implemented in early 2018.

Context: CSDR mandatory buy-ins

The inclusion of a provision for mandatory buy-ins in the CSD-Regulation (that was passed into law in 2014) prompted significant market scrutiny, firstly related to the potential market impacts of a mandatory as opposed to discretionary buy-in regime[1], but also to the outlined process for the buy-in itself. Issues considered to be potentially problematic from an implementation perspective included: a lack of flexibility in the timing for when the buy-in must be initiated (either 4 or 7 business days after the intended settlement date, depending on the perceived liquidity of the relevant security); placing the responsibility of the buy-in on entities that are not the original trading parties (mainly CSD participants[2] and trading venues); the inclusion of securities financing transactions (SFTs) in scope of buy-ins; the mandating of a cash compensation resolution in the event that the buy-in is unsuccessful; and an asymmetric treatment of the payment of the buy-in price differential.

Following extensive consultation with market stakeholders and representative bodies, ESMA was successfully able to address many of these potential issues in the draft Level 2 regulatory technical

[1] The potential impacts of a mandatory buy-in regime for fixed income market liquidity and pricing are discussed and quantified in a 2015 ICMA impact study

[2] CSD participants are primarily settlement agents (which can include CSDs) and custodian banks

standards (RTS) that were submitted to the European Commission in February 2016. Accordingly, the draft RTS provide for a trading-level buy-in process, the maximum timeframe before a buy-in is initiated (7 business days) for fixed income and illiquid equities, and an exemption for most SFTs. However, ESMA was not able to address the issue of the asymmetric treatment for the payment of the buy-in differential within the limits of the Level 1 text.

Explaining the asymmetry

The provision for the payment of the buy-in price differential is outlined in Article 7.6 of the CSDR.

…the price of the shares agreed at the time of the trade is higher than the price paid for the execution of the buy-in, the corresponding difference shall be paid to the receiving participant by the failing participant no later than on the second business day after the financial instruments have been delivered following the buy-in.

The wording is unusual, not only in that it seems to imply an asymmetry in the direction of the payment, but it also appears to have the payment going in the wrong direction. In a normal buy-in, where the trade price is higher than the buy-in price, the difference is paid to the failing trading party (the seller) by the receiving (purchasing) trading party. However, the explanation for this seems to be that the drafters envisaged a buy-in process where the bought-in securities are delivered to the failing, selling trading party, and not directly to the purchasing trading party.

ESMA redresses this change of direction in the draft RTS. However, the asymmetry remains, and more explicitly so:

1. Where the price of financial instruments…agreed at the time of the trade is higher than the price paid for such financial instruments at the execution of the buy-in…the price difference in the case of shares…or the corresponding difference for other financial instruments…shall be deemed paid.

2. Where the price of financial instruments…agreed at the time of the trade is lower than the price paid for such financial instruments at the execution of the buy-in…the failing clearing members, trading venue members or trading parties shall be liable for the corresponding difference to the benefit of the CCP, receiving trading venue members or trading parties, as applicable.

[Article 35 of the draft RTS]

The regulation also ensures that this asymmetry also applies to cash compensation:

Cash compensation shall be paid to the receiving participant no later than on the second business day after the end of either the buy-in process referred to in paragraph 3 or the deferral period, where the deferral period was chosen.

[Article 7.7 of CSDR]

Again, the asymmetry is set out more explicitly in the draft RTS:

1. For transactions cleared by a CCP, the CCP shall charge the cash compensation to the failing clearing members and pay the receiving clearing members.

2. For transactions not cleared by a CCP but executed on a trading venue, the failing trading venue members shall pay the cash compensation to the receiving trading venue members.

3. For transactions that are not cleared by a CCP and not executed on a trading venue, the failing trading party shall pay the cash compensation to the receiving trading party.

[Article 33 of the draft RTS]

As we will see through the following illustrations the result of this asymmetry is that in the event of the buy-in price being lower than the original trade price, the failed-to purchasing trading party will be economically advantaged with a profit that they would not have received had the trade settled (equivalent to the difference between the original price and the current market price), while the failing selling trading party will be economically disadvantaged and suffer an economic cost that they would not have incurred had the trade settled (effectively the same difference)[3]. In the event of a buy-in chain, this potentially leads to even further irregular outcomes throughout the chain of intermediaries.

[3] From an economic perspective, under CSDR the seller of securities will effectively be writing a put option (with a strike price equivalent to the sale price) that will become active in the event of a buy-in. Similarly, the purchaser of securities will be long the put option.

The existing OTC buy-in process

Standard buy-in where the buy-in price is higher than the original trade price

The below scenario illustrates a standard market buy-in where the buy-in price is higher than the original trade price.

Counterparty A sells 100 bonds to counterparty B at price of 98.50.
The trade does not settle, and B elects to initiate a buy-in against A.
The buy-in agent (Z) purchases the bonds at a price of 99.25 and delivers them to B at the same price (99.25).
Simultaneously, B cancels the original settlement instruction with A.
A pays B the difference between the original transaction and the buy-in price, i.e. 0.75.
If A now re-sells (or marks-to-market) their original 100 bonds (at the market price of 99.25), both A and B will be in the same economic position they would have been in had the transaction settled.

Figure 1: the original transaction

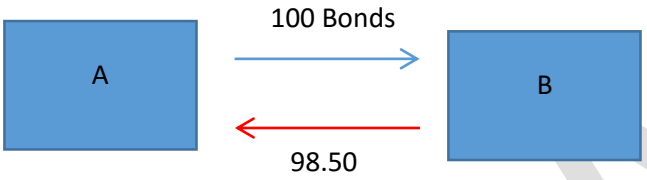
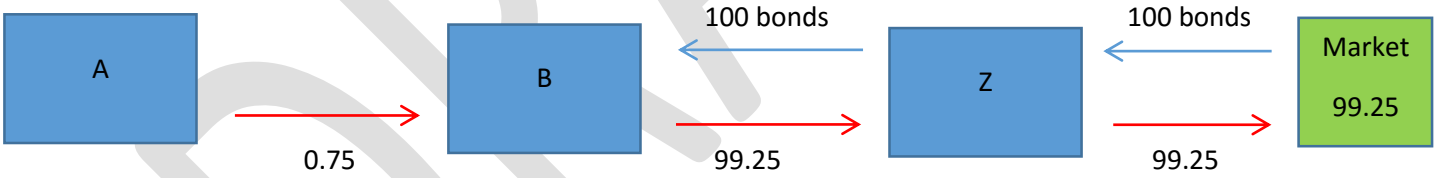


Figure 2: a standard buy-in



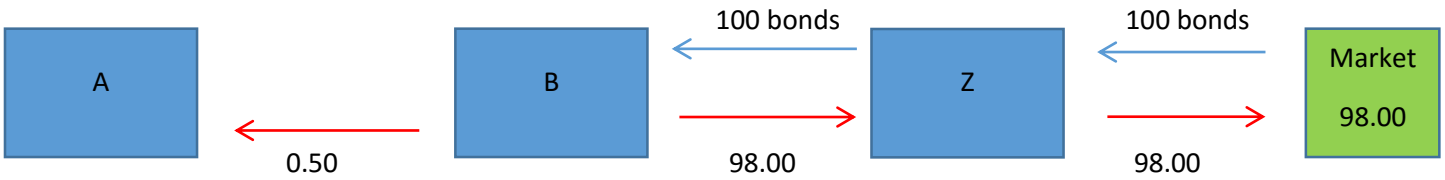
It can be seen that following the buy-in neither party is economically advantaged or disadvantaged. B effectively receives their bonds at the same price originally agreed (99.25-0.75 = 98.50), while A is in the same economic position after selling the bought-in bonds, or marking them to market (99.25-98.50-0.75 = 0).

Standard buy-in where the buy-in price is lower than the original trade price

In the previous example, the price of buy-in is higher than the original transaction price, and so the selling counterparty (A) pays the difference to the purchasing counterparty (B). In the event where the buy-in price is lower than the original transaction price, the cash payments move in the opposite direction; i.e. the purchasing counterparty would pay the difference to the selling counterparty. Again, this is to ensure that both counterparties are restored to the correct economic position, and that neither is unfairly disadvantaged or advantaged.

In the above example, if the buy-in price had been at 98.00, the buy-in flows would work as below:

Figure 3: a standard buy-in where the buy-in price is below the original trade price



In this instance, B, who initiates the buy-in, pays the differential (0.50) to A, the failing bought-in trading party. This again ensures that B receives their bonds at effectively the same price as the original transaction (98.00+0.50), and A is in the same economic position after selling the bought-in bonds, or marking them to market (98.00-98.50+0.50 = 0).

Buy-in chains

Often transactions can be linked (say, in the case of matched-principal intermediation), in which case a fail by a selling counterparty can lead to a sequence of market fails (known as a 'fails chain'). In this instance, the fails chain can be completely settled with one singe buy-in at the end of the chain through a simple process known as a *pass-on*. This is illustrated below.

Figure 4: original inter-connected trades

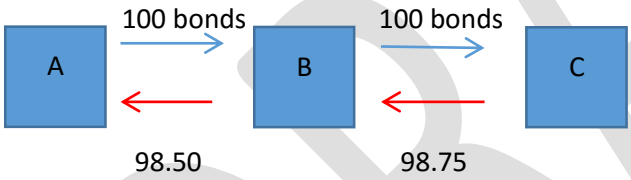
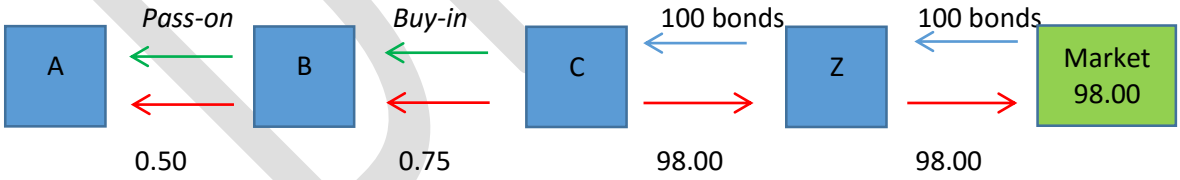


Figure 5: settling the buy-in chain



In this example, B purchases bonds from A (at 98.50) and sells them on to C (at 98.75), and nets a spread between the two transactions (0.25). A however, fails, causing B to fail to C.

C issues a buy-in against B. B, in turn, passes the buy-in on to A.

The buy-in is executed at the current market price of 98.00. Since this is lower than the original trade price between B and C (98.75), C pays the difference (0.75) to B.

In the pass-on to A, the buy-in price (98.00) is also below the original trade price between A and B (98.50). B therefore pays this difference (0.50) to A.

All trading parties are in the same position they would have been had the original trades settled, with nobody economically advantaged or disadvantaged:

C receives the bonds at effectively the same price (98.00+0.75=98.75).
A is in the same economic position once they sell their bonds or mark them to market (98.00-98.50+0.50=0).
Meanwhile, B still receives the same spread (0.75-0.50=0.25).

The CSDR mandatory buy-in process

In the event that the buy-in price is higher than the original trade price(s), the CSDR mandatory buy-in process works in exactly the same way as current buy-on processes:

CSDR buy-in where the buy-in price is higher than the original trade price

Figure 1: the original transaction

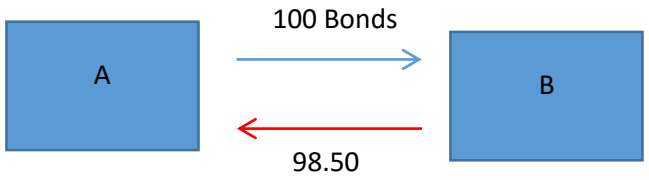
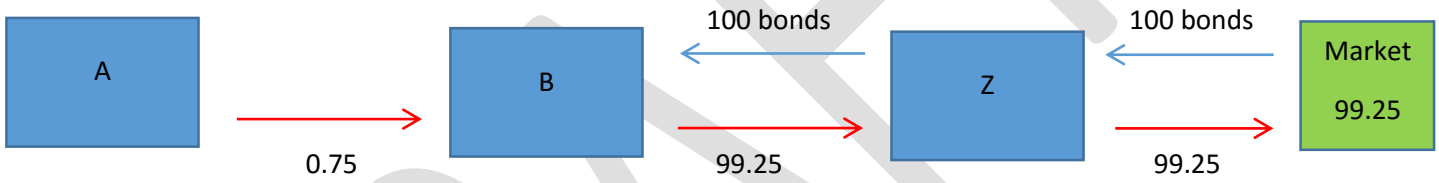


Figure 6: CSDR buy-in

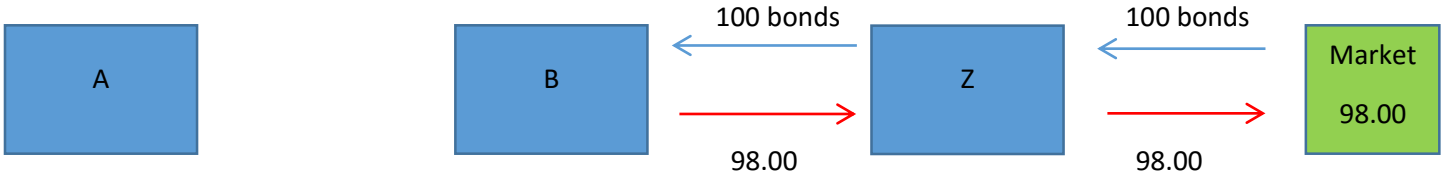


In this scenario, in exactly the same way as the standard buy-in process shown in Figure 2, the CSDR buy-in will ensure that both A and B are restored to the same economic position that they would have been had the original trade settled.

However, the following illustration shows that this breaks down when the buy-in price is lower than the original trade price.

CSDR buy-in where the buy-in price is lower than the original trade price

Figure 7: a CSDR buy-in where the buy-in price is below the original trade price



Again using Figure 1 as the original trade, it can be seen that in this scenario neither trading party is restored to the same economic position they would have been in had the original trade settled: B is economically advantaged by the buy-in, while A is economically disadvantaged.

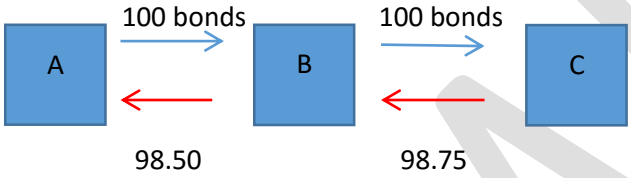
B now receives bonds at a price of 98.00, 0.50 better than the original agreed trade.
A, meanwhile, now has to re-sell, or mark-to-market, their bonds at 98.00, which is 0.50 lower than the original agreed trade.

Undue benefits/costs arising from the buy-in		
	End Seller	End Purchaser
Normal buy-in (Figure 3)	0	0
CSDR buy-in (Figure 7)	-0.50	+0.50

CSDR Buy-in chains

Using Figure 4 from above, it can be seen that in the event of inter-connected trades, the asymmetry of CSDR buy-ins can also economically disadvantage intermediaries.

Figure 4: original inter-connected trades

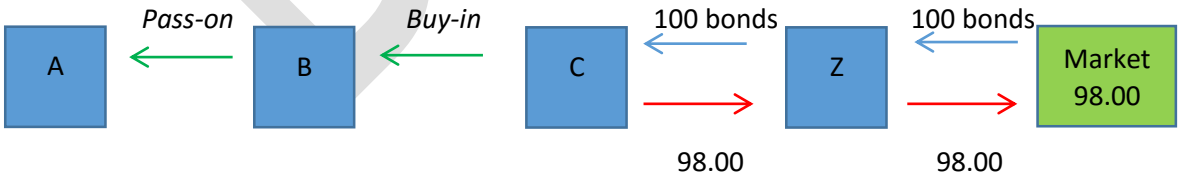


As per the earlier example, B purchases bonds from A (at 98.50) and sells them on to C (at 98.75), and nets a spread between the two transactions (0.25). A however, fails, causing B to fail to C.

C issues a buy-in against B. B, in turn, passes the buy-in on to A.

The buy-in is executed at the current market price of 98.00. Since this is lower than the original trade price between B and C (98.75), and the original trade price between B and A, there is no payment from C to B or B to A.

Figure 8: settling the buy-in chain under CSDR



In this scenario, C is economically advantaged, while B and A are economically disadvantaged:

C now receives their bonds at 98.00, which is 0.75 better than the original agreed trade with B.
A, after re-selling or marking to market their bonds is now 0.50 worse off (98.50-98.00).
Meanwhile, B, who was expecting to net 0.25 between the two transactions, is now 0.25 worse off since they no longer have a purchase from A or a sale to C.
So C receives an unexpected windfall profit, while B and A both incur unexpected losses.

Undue benefits/costs arising from the buy-in			
	End Seller	Intermediary	End Purchaser
Normal buy-in (Figure 4)	0	0	0
CSDR buy-in (Figure 8)	-0.50	-0.25	+0.75

Should there be a cost to the failing trading party as a result of the buy-in?

It is often asserted that buy-ins should not only provide a remedy for failing settlements, but should also be an economic deterrent to failing. But it should be noted that buy-ins invariably create a cost for the failing bought-in trading party. However, this cost is independent of the original trade price; rather it is the result of the difference between the buy-in price and the current market price at the time of the buy-in. It is common that buy-in prices will be higher than the prevailing market price, and this can be due to two main reasons.

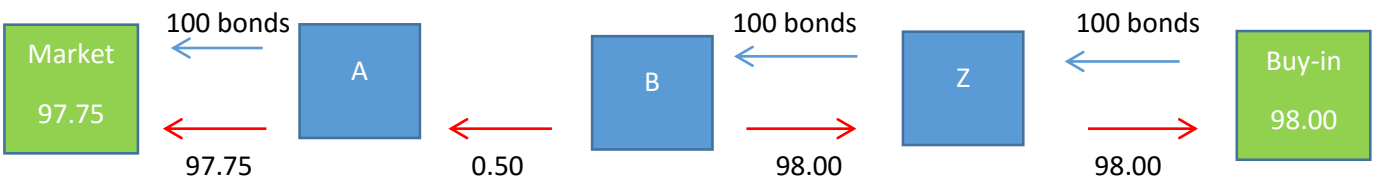
Firstly, the buy-in agent may build a commission into the buy-in price to compensate them for their effort and risk in executing the buy-in. This commission is effectively passed on by the failed-to purchasing trading party to the bought-in failing counterparty through the differential payment.

Secondly, buy-ins are executed for 'guaranteed delivery', which usually carries a premium to the normal market 'best efforts settlement' price. Furthermore, buy-ins are also a signal that there is a 'distressed buyer' in the market, which also causes the price to rise temporarily. Again, this creates a premium to the current market price (the 'buy-in premium'), which will be incurred as a cost to the bought-in failing trading party when they either re-sell or mark-to-market their position following the buy-in.

Whether through costs charged by the buy-in agent, or as a result of the 'buy-in premium', or both, the bought-in counterparty will invariably incur a cost, irrespective of whether the buy-in price is higher or lower than the original trade price.

The below figure illustrates how the bought-in trading party can still incur a cost even when the payment of the differential is from the failed to purchaser to the bought-in seller.

Figure 9: the cost to the failing counterparty due to the buy-in premium



In this scenario, using the same original trade as in Figure 1, A sells bonds to B at 98.50 and subsequently fails. B initiates a buy-in and it is executed at 98.00. As this is 0.50 below the original trade price, B pays the differential (0.50) to A. However, the market price is lower than the buy-in price, so when A re-sells or marks-to-market their bonds, they will realize a loss equivalent to the difference between the buy-in price (98.00) and the market price (97.75).

B effectively receives their bonds at the original trade price (98.00+0.50=98.50).
A incurs a cost equivalent to the difference between the buy-in price and the market price (97.75-98.50+0.50=-0.25)

Conclusion

The above scenarios illustrate how the asymmetric treatment of the direction of the buy-in price differential (which is exactly the same economics for cash compensation) can economically advantage failed-to purchasers while economically disadvantaging failing sellers, as well as intermediaries in transaction chains who are not responsible for the fail. ICMA does not believe that this was the original intention of the regulation, and, once implemented, this asymmetry is likely to cause significant risks and economic anomalies in the event of buy-ins. It also needs to be borne in mind that it is not unusual for buy-in prices to be below the original trade price (markets can go down as well as up). Furthermore, particularly in fixed income markets, inter-connected transactions are quite common, and can often involve multiple counterparties. Equitably settling a buy-in chain within the limitations of the CSDR buy-in asymmetry will be challenging to say the least. ICMA therefore proposes that the final RTS be amended to allow for the payment of the buy-in and cash compensation differentials to be made in either direction between the selling and purchasing trading parties, depending on whether the buy-in or reference price is higher or lower that the original trade price.

Figure 10. Buy-ins as an equitable remedy

	Standard OTC Buy-in mechanism		**CSDR Buy-in mechanism**	
Trading Party	Buy-in price higher	Buy-in price lower	Buy-in price higher	Buy-in price lower
Purchaser	✓	✓	✓	✗
Principal intermediary	✓	✓	✓	✗
Seller	✓	✓	✓	✗

Annex: suggested amendment to the RTS to address the asymmetric treatment of the buy-in and cash compensation differential payments

Article 35

Payment of the price difference

1. Where the price of financial instruments referred to in Article 5(1) of Regulation (EU) No 909/2014 agreed at the time of the trade is higher than the price paid for such financial instruments at the execution of the buy-in pursuant to Articles 27(5), 27(9), 29(5), 29(9), 31(5) and 31(9), the price difference in the case of shares referred to in Article 7(6) of Regulation (EU) No 909/2014 or the corresponding difference for other financial instruments referred to in Article 5(1) of Regulation (EU) No 909/2014 ~~shall be deemed paid~~, the receiving clearing members, trading venue members or trading parties shall be liable for the corresponding difference to the benefit of the CCP, failing trading venue members or trading parties, as applicable.

Article 33

Payment of the cash compensation

In the event that the cash compensation reference price is higher than the price agreed at the time of the trade:

1. For transactions cleared by a CCP, the CCP shall charge the cash compensation to the failing clearing members and pay the receiving clearing members.

2. For transactions not cleared by a CCP but executed on a trading venue, the failing trading venue members shall pay the cash compensation to the receiving trading venue members.

3. For transactions that are not cleared by a CCP and not executed on a trading venue, the failing trading party shall pay the cash compensation to the receiving trading party.

In the event that the cash compensation reference price is lower than the price agreed at the time of the trade:

4. For transactions cleared by a CCP, the CCP shall charge the cash compensation to the receiving clearing members and pay the failing clearing members.

5. For transactions not cleared by a CCP but executed on a trading venue, the receiving trading venue members shall pay the cash compensation to the failing trading venue members.

6. For transactions that are not cleared by a CCP and not executed on a trading venue, the receiving trading party shall pay the cash compensation to the failing trading party.