

Buy-ins, how they work, and the challenge of CSDR

An ICMA briefing note

July 2015 (updated)

Introduction

Buy-ins are a widely available and often used remedy in the event that a financial transaction does not settle (a 'fail'). It most commonly takes the form of a contractual right of the purchaser of securities and a means by which to secure delivery of those securities from a third-party in the instance that the original selling counterparty is unable to make delivery. Recently, the concept of the 'buy-in' has become a hotly discussed topic in the context of European securities markets, as EU law, in the form of a provision in the CSD-Regulation, attempts to reconstruct buy-ins, not in only terms of how they work, but also with respect to their legal construct, making them a mandated obligation¹, rather than a right.

The purpose of this paper is to provide an explanation of what a buy-in is and its function as an available contractual remedy in financial securities markets, as well as to illustrate, very simply, the dynamics and flows of the buy-in process. The paper then looks at the provision for mandatory buy-ins under the EU CSD-Regulation (passed into law in August 2014), and highlights how this seems to re-construct what a buy-in is, and, accordingly, why the regulation will be highly problematic to implement and enforce.

What the paper does not explore is the broader issue of *mandatory buy-ins* in the context of market impact, such as implementation costs for various market participants, the practicalities of processing millions of buy-ins per year, and the unintended consequences for market pricing and liquidity². These have been analyzed and discussed elsewhere, and are now broadly understood. Rather, this is a practical 'nuts-and-bolts' discussion of the buy-in process, and the challenges of implementing *mandatory buy-ins* under CSDR.

How this paper is organized

The paper is in two parts. Part I is an overview of what a buy-in is, and how, operationally, buy-ins work today. Through examples and illustrations, it explains buy-ins, the delivery of the securities by the buy-in agent, the cash settlement where the buy-in price is higher or lower than the original transaction price, buy-in chains and pass-ons, cash compensation, as well as the benefits and challenges associated with executing buy-ins and cash compensation.

Part II seeks to highlight the practicalities, and challenges, of the CSDR approach to buy-ins. While CSDR does not define what a buy-in is, or what it is intended to do, it does provide for who should be responsible for, and be affected by, a buy-in, as well as the related cash-flows. Meanwhile, the Level 2 Consultation Paper builds on the Level 1 to propose three different potential mandatory buy-in processes. Again, these options are illustrated and explained.

¹ And not necessarily an obligation of the failed-to purchasing counterparty.

² For example, see: [ICMA, 2015, 'Impact Study for CSDR Mandatory Buy-ins'](#)

Executive Summary

What is a buy-in and how do they work?

- A buy-in is a contractual remedy available to the purchasing counterparty to a financial transaction in the event that the selling counterparty fails to deliver the purchased securities.
- The purpose of the buy-in is to restore the counterparties to the transaction to the economic position they would have been in had the original transaction settled.
- The bought-in securities are delivered to the failed-to purchasing counterparty, and not to the failing selling counterparty.
- Failing chains of linked transactions can be resolved by means of a pass-on mechanism and a single buy-in that is initiated and executed at the end of the chain.
- Buy-ins are not a penalty mechanism, however, the bought-in counterparty will often incur an economic loss due to the 'buy-in premium' (the difference between the buy-in price and the current market 'fair value').
- Buy-ins can be difficult to execute, particularly for illiquid securities, and finding a buy-in agent may not always be possible.
- A cash compensation remedy is a means to provide certainty of outcome to the buy-in process, but this creates issues around the rights of the receiving counterparty as well as determining the appropriate reference price.
- Buy-ins are usually a discretionary right, rather than an obligation, and in some circumstances may be difficult to enforce.

The challenges of implementing CSDR mandatory buy-ins

Level 1

- The 'buy-in' is not defined, nor is the purpose of the buy-in explained.
- The buy-in process seems to apply to CSD participants, which may not be the same as the trading counterparties to the transaction.
- The provision for the payment of the price differential between the buy-in price and the original transaction price is reversed, compared to standard buy-in processes.

The Level 2 Options

- The RTS do not specify how the price differential between the buy-in price and the original transaction price should flow.
- The trading counterparties to the original transaction may not be involved in the buy-in or cash compensation process (Options 2 and 3).
- The buy-in process could require the involvement of a trading venue, which may not have sufficient information to initiate the buy-in process.
- The RTS do not specify how the reference price for cash compensation is to be determined.
- Where the buy-in process only involves the trading counterparties to the original transaction (Option 1), the buy-in, in some circumstances, may not be enforceable.

Part I: What is a buy-in and how do they work?

What is a buy-in?

A buy-in is a contractual remedy available to a purchasing counterparty of financial securities in the event that the selling counterparty fails to deliver the securities³. Where the selling counterparty fails to deliver on the agreed settlement date, the purchasing counterparty has the right to enforce delivery by instructing a third-party (a buy-in agent) to purchase and deliver the securities to replace the original transaction. Any differences between the price of the original transaction and the buy-in price are settled between the selling and purchasing counterparty. The purpose and effect of the buy-in process is to return all counterparties to the economic position they would have been in had the original transaction settled on the intended settlement date.

Example of the buy-in process

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

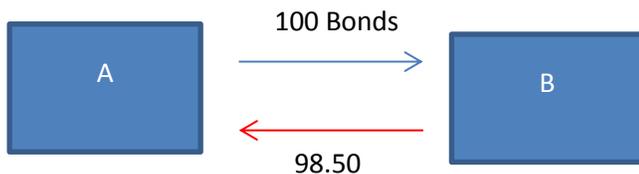
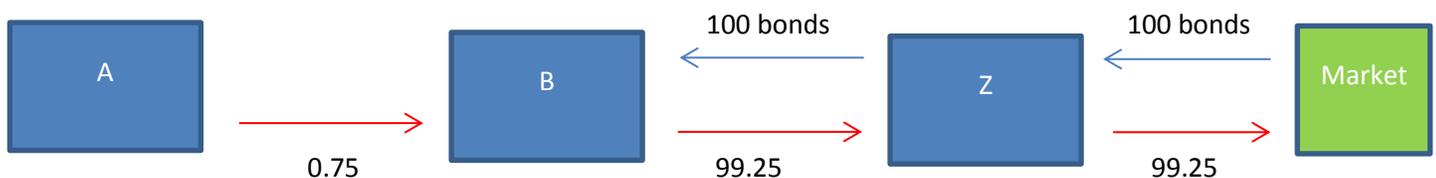


Figure 2: a standard buy-in



³ It should be noted that in some instances the fail is caused by the purchaser, and not the seller, in which case the equivalent remedy is a 'sell out'. However, CSDR overlooks this eventuality and resolution, and therefore so will this paper.

The above diagram shows clearly how the buy-in restores the economic position of A and B. B receives the securities at the equivalent price of the initial transaction (99.25-0.75), and A, after re-selling/marking their position at the new market price of 99.25⁴, is economically in the same position as if the original trade had settled at 98.50 (99.25-0.75).

The delivery of the securities by the buy-in agent

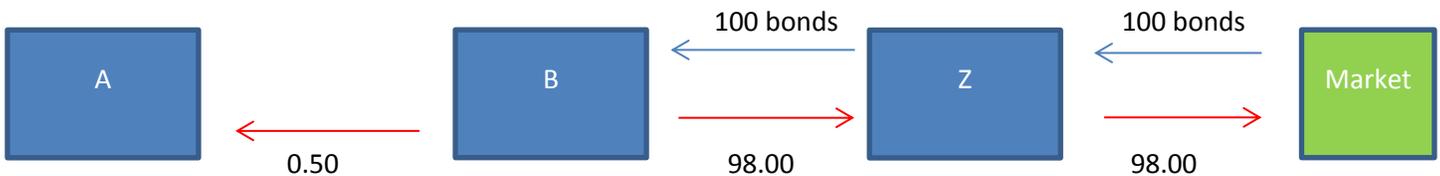
Note that in the above example the bought-in securities are delivered to the purchasing counterparty (who then cancels the original transaction with the selling counterparty). This is critical, since it ensures that the purchasing counterparty, who initiates the buy-in, takes delivery of the securities. For instance, were the buy-in agent to deliver the securities to the failing, selling counterparty, this would not guarantee that the purchasing counterparty receives the securities (for instance, the selling counterparty could have other delivery commitments in the same securities), and therefore would not ensure that the buy-in results in a satisfactory remedy. As we will see later, this also helps explain why, in the case of linked fails ('fails chains'), the buy-in is always initiated and settled at the **end** of the chain and not at the start. While the terminology may be confusing (the failing counterparty is said to have been 'bought-in'), it should be clearly understood that they **do not** receive the bought-in securities: the failed-to purchasing counterparty receives the securities, and the original transaction with the failing selling counterparty is canceled.

A buy-in where the buy-in price is lower than the transaction 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 transaction price



⁴ It is important to understand that after the selling counterparty (A) is bought-in, the original settlement instruction is canceled which restores A to the position they were in before the original transaction. The new position will either need to be flattened (through another sale) or marked-to-market; either of which (after the price differential between the buy-in price and the original transaction price is settled between A and B) will restore A to the economic position they would have been in had the original trade settled.

In this scenario, B effectively still pays the original price of 98.50 for the bonds ($98.00 + 0.50$). Meanwhile, after A re-sells/marks their bonds at 98.00, and receives the payment from B of 0.50, they are also in the same position as if they had sold their bonds at 98.50 ($98.00 + 0.50$).

Buy-in agents and fees

A key component of the buy-in process is the buy-in agent. Buy-in agents are usually broker-dealers (most often market-makers in the securities being bought-in), with no affiliation to either the purchasing counterparty initiating the buy-in, or the selling counterparty being bought-in. The buy-in agent is generally appointed by the purchasing counterparty initiating the buy-in, and is expected to execute the buy-in in the best interests of the purchasing counterparty (i.e. purchasing the securities for guaranteed delivery in a timely fashion), while carrying out due diligence in terms of the selling counterparty being bought in, by securing the best (i.e. lowest) possible price for the buy-in (the reason for this will be explained a little further on).

Naturally, being a buy-in agent, and the process and due diligence of executing a buy-in, can be an arduous and time consuming task, and clearly distracts from the broker-dealers commercial priorities (i.e. making prices and providing liquidity to their clients). It is therefore often possible (though seldom applied) for buy-in agents to charge a *reasonable* fee for their time and efforts, which is passed on to the selling counterparty being bought-in. This is illustrated in the two examples below.

Figure 4: a buy-in with a buy-in agent fee (buy-in price higher than original transaction price)

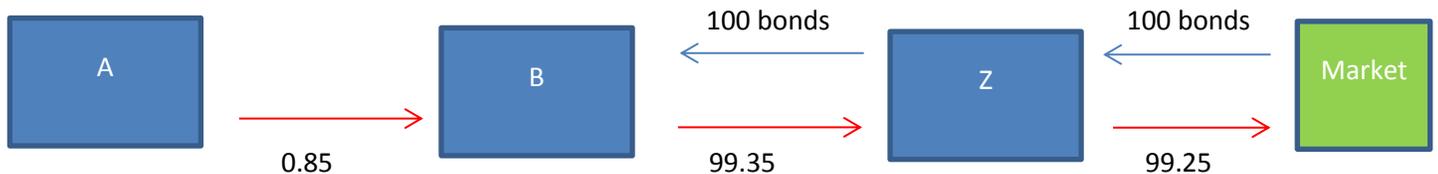
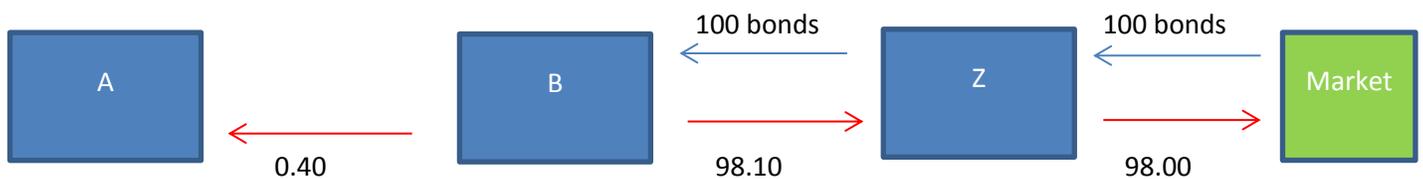


Figure 5: a buy-in with a buy-in agent fee (buy-in price lower than original transaction price)



In both of the above cases (based on the original trade in *Figure 1* and the scenarios in *Figures 2 and 3*), the buy-in agent (Z) charges 0.10 commission, or fee, which it passes on to the purchasing counterparty (B). B, in turn, passes this 0.10 cost on to the selling counterparty being bought-in. In this way, both A and B are restored to their original economic position, with the notable exception of A paying the costs of the buy-in agent.

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 single buy-in at the end of the chain through a simple process known as a *pass-on*. This is illustrated below.

Figure 6: original inter-connected transactions

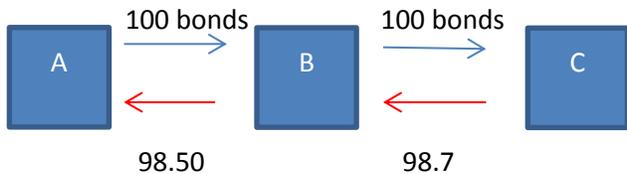
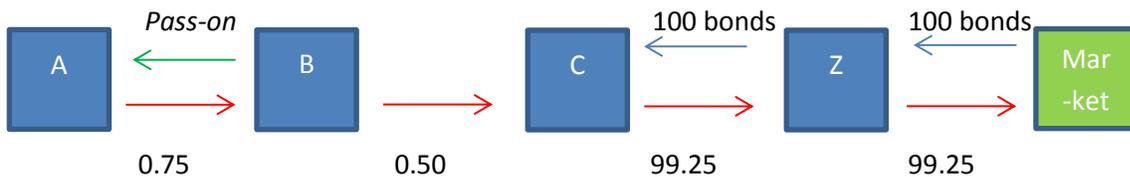


Figure 7: settling the buy-in chain



In the scenario illustrated in *Figure 6*, A fails to deliver securities to B, who in turn fails to C. *Figure 6* illustrates how the buy-in process using pass-ons resolves the fails-chain.

C issues a buy-in against B, and appoints the buy-in agent, Z, to execute the buy-in.

B, who is an intermediary in the chain, issues a **pass-on** to A, who is failing to them and causing them to fail to C.

Z purchases the bonds in the market (at 99.25), and settles them to C at the same price.

C cancels its trade with B, and B pays 0.50 ($99.25 - 98.75$) to C.

B cancels its trade with A, and A pays B 0.75 ($99.25 - 98.50$).

In this way, C takes delivery of the securities and all counterparties in the chain are restored to the economic position they would have been had the original transaction(s) settled (as per *Figure 5*):

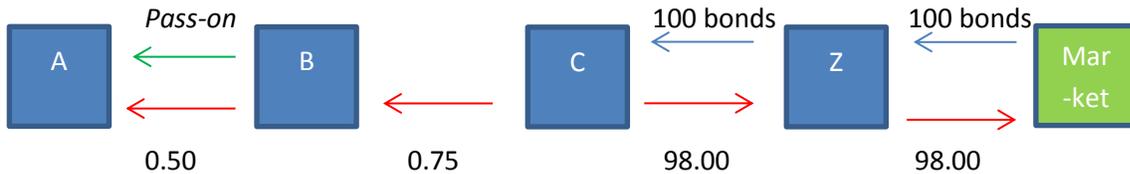
C owns the securities at the equivalent of 98.75 ($99.25 - 0.50$).

B has no position, but nets 0.25 ($0.75 - 0.50$).

A re-sells/marks its securities at the new market price of 99.25, which, after paying the buy-in difference to B, is economically the same as selling the securities at 98.50 ($99.25 - 0.75$).

As in *Figure 3*, the same logic applies to the flows in the event that the buy-in price is lower than the original execution price. This is illustrated in *Figure 8*, below.

Figure 8: settling the buy-in chain where the buy-in price is lower than the original trade price



Again, it can be seen that all counterparties are returned to the economic position they would have been in had the original transaction(s) settled:

C owns the securities at the equivalent of 98.75 ($98.00 + 0.75$).

B has no position, but nets 0.25 ($0.75 - 0.50$).

A re-sells/marks its securities at the new market price of 98.00, which, after **receiving** the buy-in difference from B, is economically the same as selling the securities at 98.50 ($98.00 + 0.50$).

The benefits of the pass-on mechanism to remedy fails-chains

Figures 7 and 8 illustrate very clearly how the pass-on mechanism helps to resolve the entire fails-chain with just one buy-in, and returns the entire chain to the economic position that they would have been in had the original failing transaction in the chain settled. The key benefits of this mechanism are:

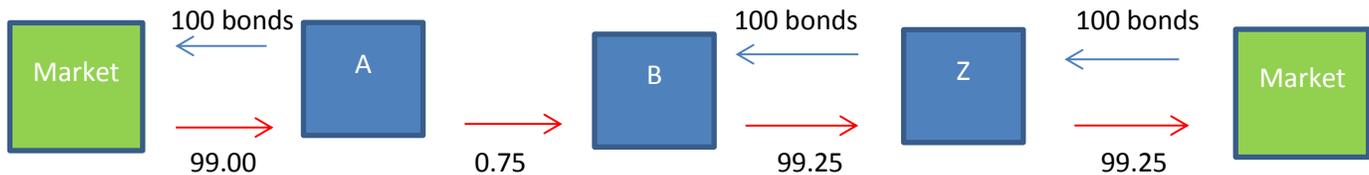
- (i) The buy-in only need be initiated by the final counterparty in the chain (who will know that they are the last in the chain since they have an inward fail and no onward delivery).
- (ii) There is no need for any counterparty in the chain, the buy-in agent, or any other party to have overall visibility of the chain; each counterparty only need know who *they* have transacted with.
- (iii) Since the securities are delivered directly by the buy-in agent to the last counterparty in the chain, there is no settlement risk (see earlier point about the risks of delivering the bought-in securities to the failing selling counterparty, and how this does not necessarily ensure delivery to the receiving counterparty).
- (iv) It avoids exposing counterparties that are effectively 'flat' to the risks of being bought-in on a position they do not have.

Does a buy-in penalize the failing counterparty?

A buy-in is not intended to penalize a failing counterparty, nor is it the appropriate legal construct to attempt this. As should be clear already, a buy-in is a contractual remedy designed to restore the trading counterparties to the economic position they would have been in had the original transaction settled. However, the failing counterparty being bought-in will invariably suffer some economic cost through the process. This is as a consequence of the buy-in execution price being higher than the market 'fair value' price. The reason for this difference is that a buy-in will be for *guaranteed delivery*, which means that the seller into the buy-in must physically hold the securities and be able to deliver them to the buy-in agent; this invariably commands a premium. Furthermore, a buy-in in itself is a signal to the market that securities will be purchased *no matter what the price*, and so sellers will adjust their offer prices accordingly. As a general rule, the less liquid the security, the greater the *buy-in premium*.

The cost of the buy-in premium to the failing counterparty is illustrated below, drawing on the same scenario of *Figures 1 and 2*.

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



In this scenario the buy-in is executed at 99.25, compared to a 'fair' market price of 99.00. B is restored to its original position of buying the securities at an equivalent of 98.50 ($99.25 - 0.75$), however, when A re-sells/marks its position, it incurs a loss of 0.25 ($99.00 - 98.50 - 0.75$).

It should also be remembered that even where the buy-in execution price is the same as the market price, the counterparty being bought-in will most likely still incur a cost through the bid-ask spread (with the buy-in executed at the 'ask' price, and the bought-in counterparty re-selling/marking their position at 'bid'). Furthermore, the bought-in counterparty may be liable for any fees charged by the buy-in agent (see earlier section).

Buy-in auctions

A possible alternative to the classic buy-in agent model is a buy-in auction. In this scenario, the receiving counterparty, rather than appoint a buy-in agent to go into the market to find the securities, would initiate a buy-in auction on a third-party trading venue. Holders of the securities being bought-in could then tender their securities allowing the buy-in to be executed at the most competitive price. Such a process, in theory can add a degree of transparency and liquidity to the buy-in process, as well as streamlining and automating the process.

However, it does not necessarily negate the need for agents, and it may be prudent (or even required) that an agent execute the buy-in purchase in the auction, particularly where the counterparty initiating the buy-in is not a member of the venue hosting the auction. Similarly, many of the counterparties tendering securities into the auction may need to do so through an agent that is also a member of the venue. However, the time, effort, and risks of the buy-in agent (see next section) are significantly reduced.

In the case of linked transactions and fails chains, the process employing the use of pass-ons is exactly the same as illustrated in *Figures 7 and 8*, with the buy-in auction process being initiated by the purchasing counterparty at the end of the chain, and any price differential being subsequently settled along the chain.

Challenges with buy-ins

Despite the buy-in remedy being widely available, relatively few buy-ins are actually executed relative to number of failed transactions. Also, initiating a buy-in process does not necessarily result in successful execution, particularly where the underlying securities are illiquid. These factors can be attributed to a number of challenges related to the buy-in process:

- (i) The buy-in process is very time consuming for all parties concerned, including the counterparty initiating the buy-in and the buy-in agent.
- (ii) Finding buy-in agents can be difficult, particularly as there is little incentive for market-makers to act as a buy-in agent. There is no legal obligation to act as a buy-in agent.
- (iii) Buy-ins can have a distortive impact on market pricing, partly due to the required premium for guaranteed delivery, but also through its signaling function that there may be a 'distressed-buyer' in the market.
- (iv) Where the buy-in execution price is significantly higher than the perceived market 'fair value', this can lead to legal disputes between the counterparty being bought-in and the counterparty issuing the buy-in, and possibly even the buy-in agent.
- (v) Buy-ins are not always executable, particularly where the underlying securities are illiquid. In this instance the purchasing counterparty initiating the buy-in may not be able to receive their securities, and could be left with the option of either cancelling or deferring the buy-in, or, in some instances, electing for cash settlement (see next section).
- (vi) Based on the contracts between trading counterparties, or the terms of the transaction, a buy-in (or pass-on) may not be legally enforceable in some jurisdictions. Trading counterparties need to be aware of this, and adjust their pricing, or their decision to transact with certain counterparties, accordingly.

Cash compensation

Where a buy-in is not possible, some buy-in regimes allow for the possibility of 'cash compensation'. In this case the original transaction is canceled (no securities are delivered to the purchasing counterparty), and cash differences are settled between the counterparty based on a reference price for the securities, which represents the 'fair' market value. This is intended to be the economic equivalent of the purchasing counterparty receiving their securities as per the original transaction, and subsequently selling them at the market price at the time of the cash compensation resolution. Economically, this is very similar to the classic buy-in illustrated in *Figures 2 and 3*, but with no delivery of securities.

The three examples below illustrate the cash compensation process.

Figure 1: the original transaction

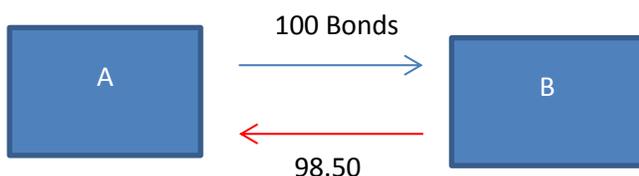


Figure 10: cash compensation where the reference price is higher than the original transaction price

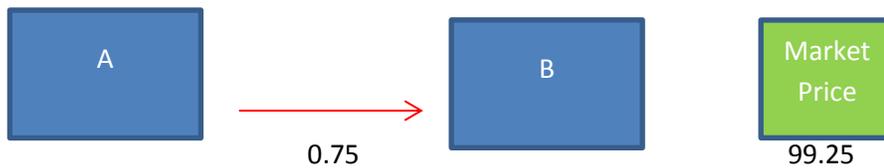
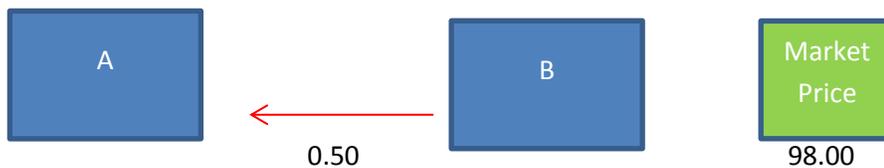


Figure 11: cash compensation where the reference price is lower than the original transaction price



As with buy-ins, it can be seen that the cash differentials paid between the counterparties can go in either direction, depending on the reference price being applied. Again, this is to ensure that the counterparties are restored to an equitable economic position, and that neither is unfairly penalized or enriched.

The same process can be applied to fails-chains, again using the pass-on mechanism, with a single reference price determining the cash differentials that are passed along the chain (similar to *Figures 7 and 8*).

The challenges with cash compensation

There are two main challenges with a cash compensation mechanism:

- (i) If the cash compensation resolution is automatically applied (say in the case of buy-in failing), it could be argued that this compromises the rights of the failed-to purchasing counterparty. Even where a transaction is failing, the transaction is still valid, and the purchasing counterparty retains their intended economic exposure to the purchased securities⁵. For example, this could be an insurance or pension fund that purchase assets to match a specific liability. While cash compensation attempts to produce the same economic remedy as a buy-in from a 'snap-shot perspective', it is very different in that it replaces the purchaser's intended exposure to a particular financial instrument with a cash payment. The purchasing counterparty may wish to maintain their exposure until the securities are delivered (or bought-in), and could argue that cash compensation is an unsatisfactory, and even disadvantageous, remedy.
- (ii) Setting the appropriate reference price can be difficult, and contentious. The failing seller and the failed-to purchaser may disagree on what is market 'fair value', particularly if the security is illiquid. In the case where cash compensation is the chosen remedy as a result of

⁵ Although they will assume counterparty exposure to the failing selling counterparty until the securities are eventually settled, or bought-in.

a buy-in not being possible, there is an implication that there is no applicable market ‘fair value’ price. Choosing the wrong reference price runs the risk of inadvertently enriching or penalizing either of the counterparties to the transaction.

The benefits of cash compensation

Despite the difficulties in applying a cash compensation remedy for failing transactions, there are also some potential benefits:

- (i) It can provide some certainty where a buy-in is not possible, and prevents the buy-in process being stretched out indefinitely. This is particularly important for CCPs, who need to minimize their internal exposures.
- (ii) In some cash compensation agreements, the reference price is capped relative to the original transaction price. While this is not necessarily consistent with establishing an equitable remedy (i.e. it does not ensure that the reference price represents fair market value and so restore both counterparties to the economic position they would have been had the transaction settled), it does at least limit the *cash compensation premium* exposure of the failing selling counterparty⁶.

⁶ However, the introduction of ‘caps’ or ‘floors’ to cash compensation changes the structure of the mechanism, with it taking on some of the features of a penalty mechanism, rather than it being a purely equitable remedy.

Buy-ins: a summary box

- A buy-in is a contractual remedy available to the purchasing counterparty to a financial transaction in the event that the selling counterparty fails to deliver the purchased securities.
- The purpose of the buy-in is to restore the counterparties to the transaction to the economic position they would have been in had the original transaction settled.
- The bought-in securities are delivered to the failed-to purchasing counterparty, and not to the failing selling counterparty.
- Failing chains of linked transactions can be resolved by means of a pass-on mechanism and a single buy-in that is initiated and executed at the end of the chain.
- Buy-ins are not a penalty mechanism, however, the bought-in counterparty will often incur an economic loss due to the 'buy-in premium' (the difference between the buy-in price and the current market 'fair value').
- Buy-ins can be difficult to execute, particularly for illiquid securities, and finding a buy-in agent may not always be possible.
- A cash compensation remedy is a means to provide certainty of outcome to the buy-in process, but this creates issues around the rights of the receiving counterparty as well as determining the appropriate reference price.
- Buy-ins are usually a discretionary right, rather than an obligation, and in some circumstances may be difficult to enforce.

Part II: CSDR and buy-ins

What does the Level 1 provide for?

CSD-Regulation, which was passed into EU Law in August 2014, aims to improve the efficiency and safety of EU settlements systems. Article 7 of the regulation focuses on measures to address settlement fails, which includes a provision for the mandatory initiation of buy-ins where the settlement of financial securities in a transaction fails:

Article 7(3)

...where a failing participant does not deliver the financial instruments...to the receiving participant within 4 business days after the intended settlement date ('extension period') a buy-in process shall be initiated whereby those instruments shall be available for settlement and delivered to the receiving participant within an appropriate time-frame.

There are 3 key exemptions to this rule: (i) where the liquidity of the financial instrument is low⁷, the extension period can be increased to 7 days; (ii) the extension period for SME growth markets can be increased to 15 days; and (iii) in the case of securities financing transactions that are sufficiently short in duration, the start-leg can be exempted.

However, the purpose of this analysis is not to focus on the technicalities around extension periods, or which transactions are out of scope, but rather on the buy-in process outlined in the Regulation. More details of this are provided in Articles 7(6) and (7).

Article 7(6)

...where 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.

Article 7(7)

If the buy-in fails or is not possible, the receiving participant can choose to be paid cash compensation or to defer the execution of the buy-in to an appropriate later date ('deferral period'). If the relevant financial instruments are not delivered to the receiving participant at the end of the deferral period, cash compensation shall be paid.

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.

The key observation here is that the buy-in initiation and process is framed in terms of the *receiving* (i.e. purchasing) and *failing* (i.e. selling) **participant**. 'Participant' refers to the members of a CSD in scope of the regulation, which is not necessarily the same as the trading counterparties. In many cases, this could

⁷ Defined in the legislation as '*where a shorter extension period would affect the smooth and orderly functioning of the financial markets concerned*'

be the settlement agent of the trading counterparties. So immediately the buy-in process provided for in CSDR is very different to the normal buy-in process in two key respects:

- (i) Initiating a buy-in is no longer the right of the failed-to purchasing counterparty, but rather an obligation that is out of their hands.
- (ii) The buy-in process no longer applies to the purchasing and selling counterparties, but rather to the *participants* of the regulated CSD, which may not be involved in the transaction(s).

This creates two fundamental requirements for the regulation to be implemented:

- (i) A mechanism to ensure that the buy-in process is initiated (with or without the involvement of the purchasing counterparty).
- (ii) The creation of a contractual relationship between trading counterparties and CSD participants in relation to the buy-in process.

ESMA attempts to do this in the suggested buy-in processes outlined in the Consultation Paper published in July 2015, and which are examined a little later.

What does a Level 1 buy-in look like?

Article 7(6) is interesting in that it provides for a scenario that is very different to the normal buy-in process. It states that where the buy-in execution price is lower than the original transaction price, **the difference is paid by the failing participant to the receiving (purchasing) participant**. Compare this with Figure 3 in the earlier section, which illustrates how in a normal scenario, the cash difference would be paid by the receiving counterparty to the failing counterparty.

The buy-in process outlined by Article 7(6) is illustrated below. Note that for simplicity we will assume that both the selling and receiving participants are also the trading counterparties.

Figure 1: the original transaction

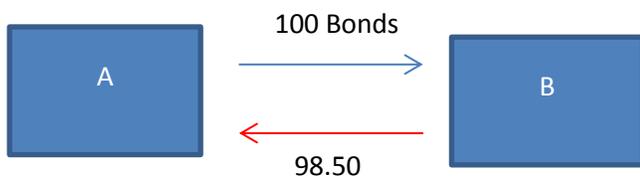
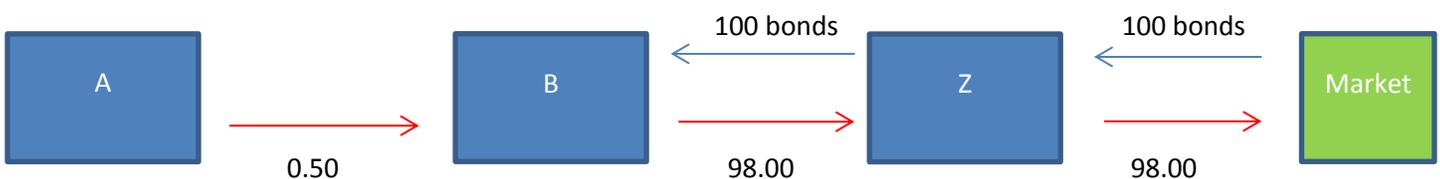


Figure 12a: CSDR buy-in where the buy-in price is below the original transaction price



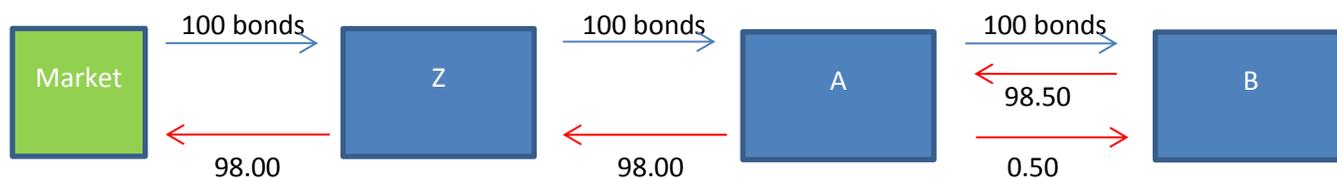
In this scenario B not only receives the securities at a lower price from the buy-in agent (98.00), but also receives an additional payment from A (0.50).

Meanwhile, A not only takes a loss in terms of the re-sale/mark of its bonds (from 98.50 to 98.00), but also makes an additional payment of 0.50 to B.

Neither counterparty is restored to the economic position they would have been in had the original transaction settled. Instead, B is unfairly enriched by the equivalent of 1.00 ($98.50 - 98.00 + 0.50$), while A is unfairly penalized by the same amount ($98.00 - 98.50 - 0.50$).

This raises the question of whether this is the intention of the regulation, or could it even be an error in the text? One possible explanation is that CSDR was not drafted with a standard buy-in in mind, but with a buy-in process where the bought-in securities are delivered to the failing counterparty rather than to the receiving (purchasing) counterparty (i.e. the buy-in is executed at the start of the chain). This possibility is illustrated below:

Figure 12b: CSDR buy-in where the buy-in price is below the original transaction price (alternative interpretation)



In this scenario, the buy-in agent, Z, purchases the securities at 98.00, which it then sells to A (the failing counterparty) at the same price. A is then able to make good its delivery to B, as per the original transaction, at the agreed price of 98.50. However, the regulation requires that A also pays the difference between the original transaction price and the buy-in price (0.50).

However, this still does not restore both counterparties to the economic position they would have been in had the original transaction settled.

B receives the securities at the original transaction price, but also receives an additional payment from A of 0.50. Thus B effectively purchases the securities at an effective price of 98.00 (0.50 less than the original transaction).

A receives the new securities from the buy-in agent at 98.00, and so delivers to B at the original price of 98.50, but also makes an additional payment of 0.50 to B. This leaves A 0.50 worse off than they would have been had the original trade settled.

So even in this scenario, the receiving (purchasing) counterparty is unfairly enriched, and the selling (failing) counterparty is unfairly penalized.

So in conclusion, it is very difficult to reconcile Article 7(6) with how buy-ins work in current market practice, even if the buy-in delivers the securities to the failing counterparty (the start of the chain). It is beyond the scope of this analysis to make any assumptions on whether the wording of Article 7(6) is intentional, or if it is a drafting error, but it is clear that what is provided for is not consistent with any recognized buy-in process.

The ESMA Consultation Paper (June 2015)

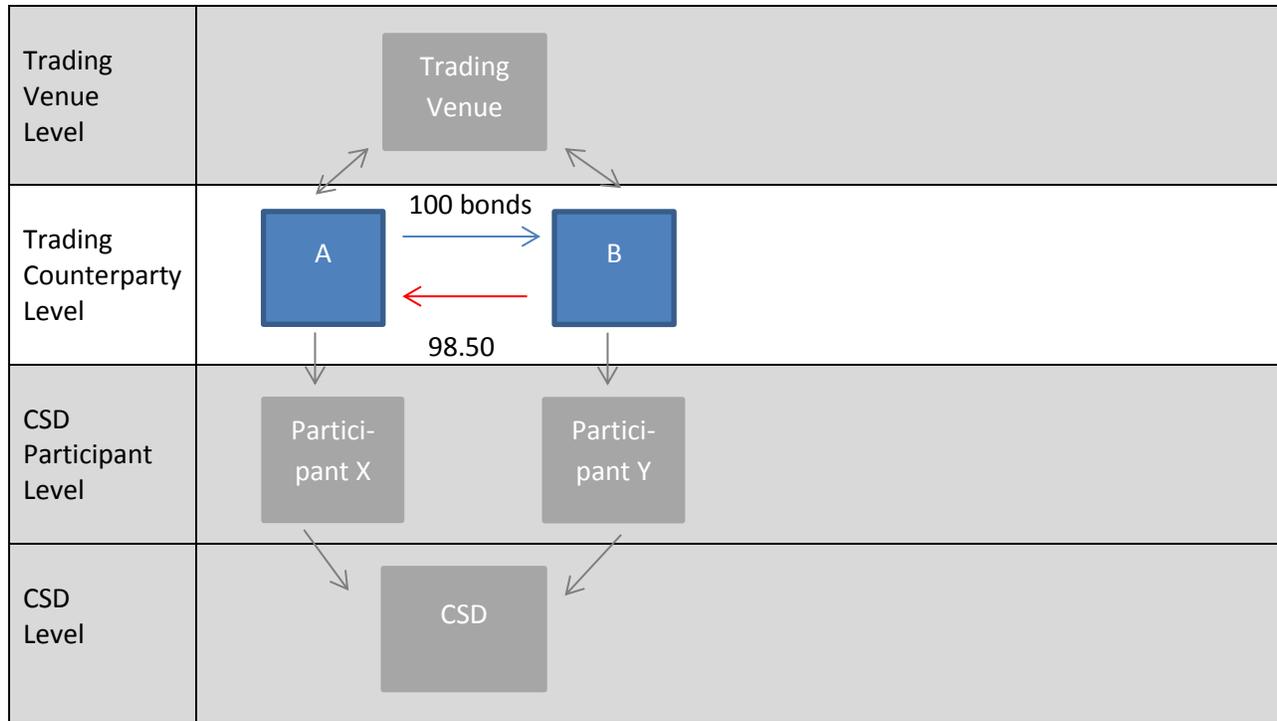
In June 2015, ESMA published a Consultation Paper focusing specifically on the Level 2 regulatory technical standards (RTS) of *the operation of the buy-in process*. It should be noted that these options relate to non-cleared transactions⁸. The paper presents three possible options, for the buy-in process under CSDR:

- (i) Trading level execution
- (ii) Trading level with fall-back option execution
- (iii) CSD participant level execution

Of note, the various options introduce three new actors into the buy-in process: CSD participants, CSDs⁹, and trading venues¹⁰. This adds new layers of complexity that need to be considered.

If we take *Figure 1*, used earlier in this paper, as the basis of a simple transaction between two trading counterparties (A and B), we now need to view it from the perspective illustrated in *Figure 13* as the basis of our analysis of the three options.

Figure 13: the original transaction – the CSDR perspective



⁸ CCPs are out of scope of the CSDR mandatory buy-in provisions.

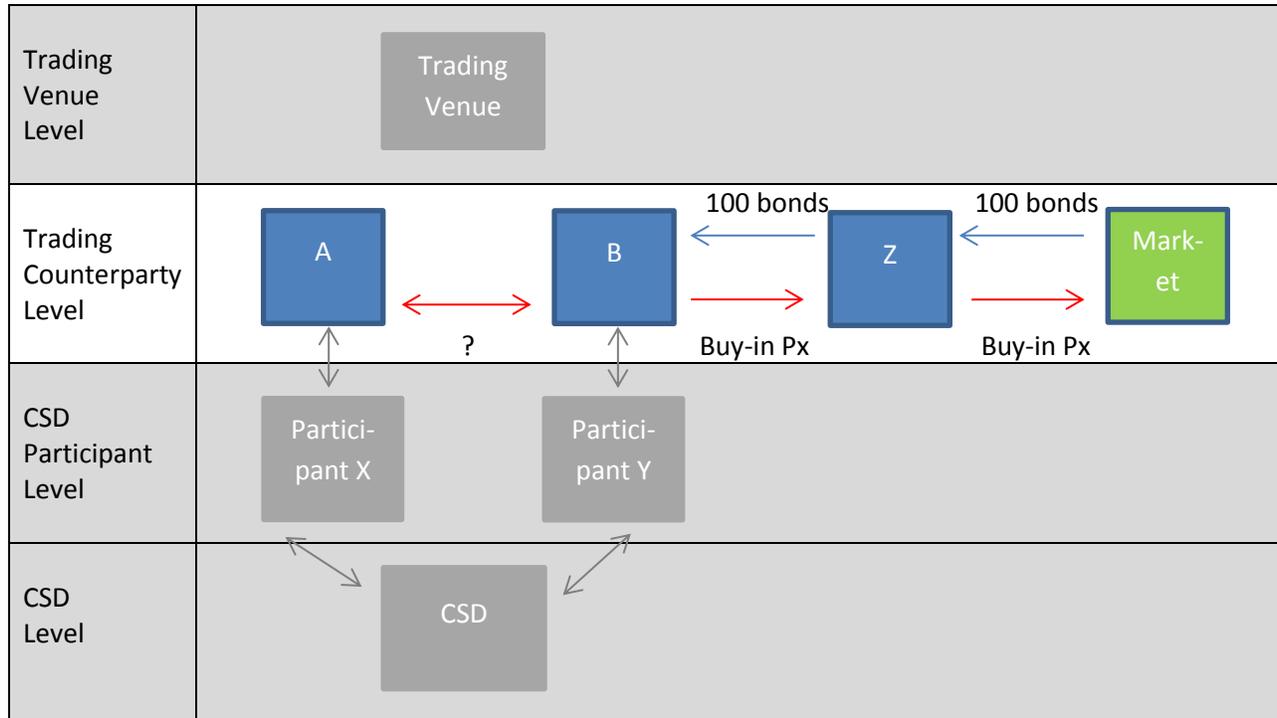
⁹ In the case of CSDs, the involvement is mainly in the form of including buy-in provisions in their rules, and information flows to support the buy-in process, rather than actually participating in the buy-in process itself.

¹⁰ Importantly, CCPs are not in scope of CSDR mandatory buy-ins. Many, if not all, CCPs will have their own buy-in rules as part of their counterparty risk mitigation, and which will be very similar to the trading counterparty level buy-in model.

Option 1: Trading level execution

Option 1 provides for the buy-in to be performed by the trading counterparties that concluded the transaction, and for the buy-in agent to deliver the securities to the receiving (purchasing) counterparty. In most respects, this is the same as the standard buy-in process that currently exists, and which is illustrated in Part 1 of this paper (see *Figures 2 and 3*).

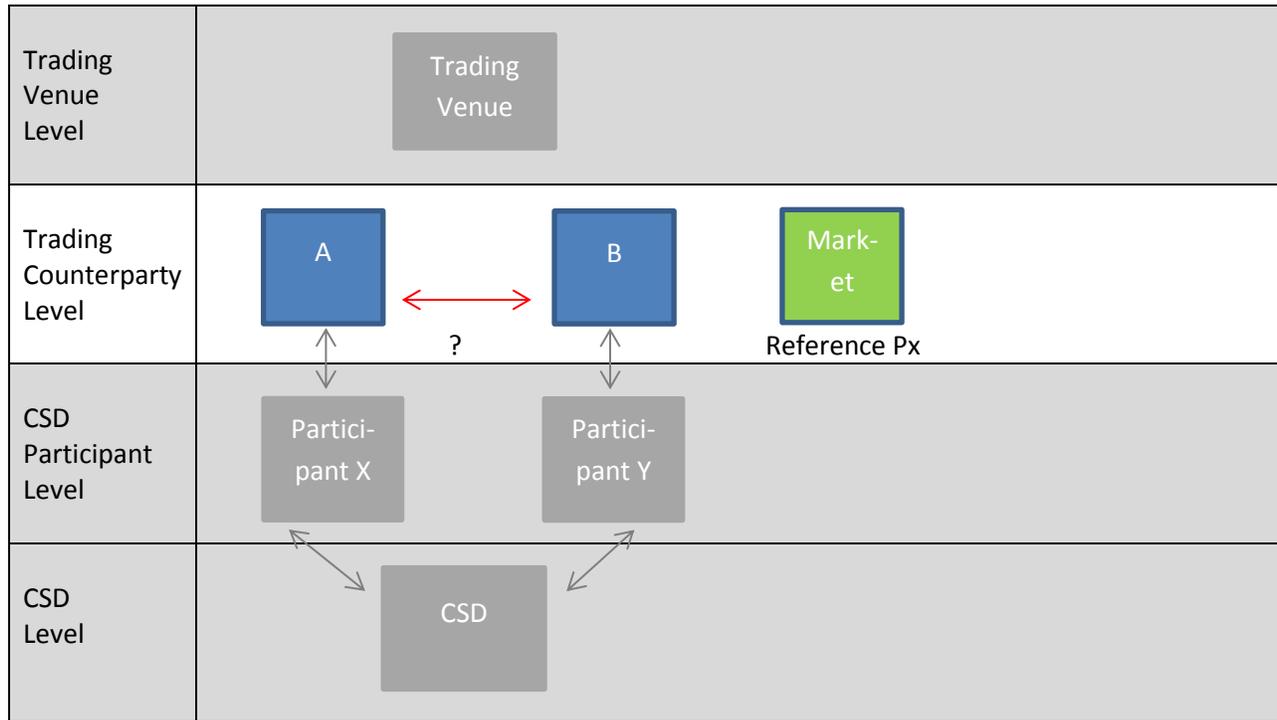
Figure 14: A buy-in under CSDR Option 1



In terms of the operational flow, this is identical to the standard buy-in illustrated in *Figure 2*. However, neither the Consultation Paper nor the draft RTS provide clarity on how the price differential is settled between the counterparties. It may be that this is deliberately avoided in light of Article 7(6) of the Level 1. This lack of clarity needs to be borne in mind when considering all three options, and it cannot be assumed that the payments of cash differentials are necessarily consistent with the standard buy-in model.

In the event that the buy-in is not successfully executed, Option 1 provides for a cash compensation remedy. Again, this is at the trading counterparty level, so similar to *Figure 10* in Part 1. However, the draft RTS only provide for cash compensation to be paid by the failing (selling) counterparty to the receiving (purchasing) counterparty, which would be consistent with the reference price being higher than the original transaction price (see *Figure 10*), but not where the reference price is lower than the original transaction price (see *Figure 11*). The RTS does not exclude the latter option, but again, without clarity, it is difficult to make assumptions about the intent of the RTS. Furthermore, the CP and draft RTS provide no details on how the reference price for the cash compensation is established.

Figure 15: when the buy-in under CSDR Option 1 fails: cash compensation



Other considerations for Option 1

The two main implementation issues with Option 1, from a *mandatory* perspective, are:

- (i) How to ensure that the receiving (purchasing) counterparty initiates the buy-in process?
- (ii) How to enforce the buy-in against the failing selling counterparty where the contractual agreements of the transaction do not allow for this?

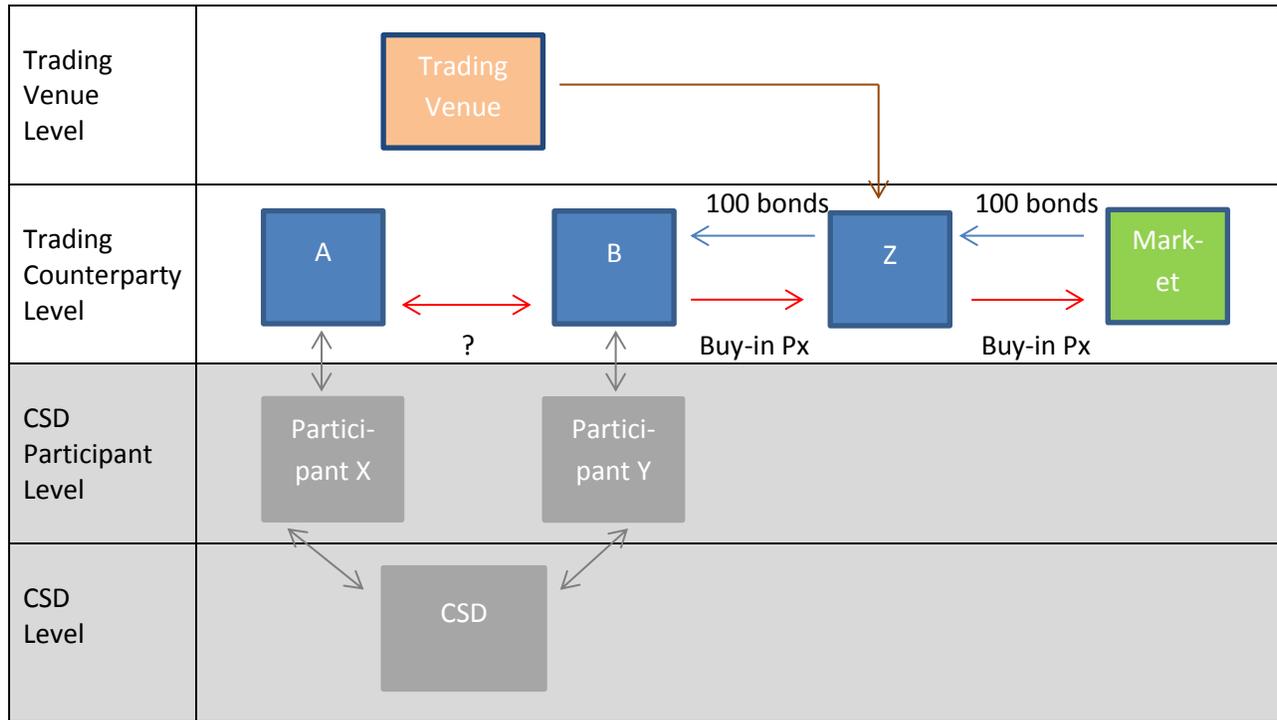
For transactions executed on a trading venue, the draft RTS attempt to address the first issue by providing that where the receiving counterparty does not initiate the buy-in, the trading venue will.

Draft RTS: Article 14(1)

For transactions executed on a trading venue and not cleared by a CCP, the rules of a trading venue shall provide that the receiving party shall appoint a buy-in agent. The trading venue shall appoint a buy-in agent where the receiving party does not do so within two business days following the elapse of the extension period.

Neither the CP nor the RTS explain how the trading venue will know that the buy-in needs to take place. As has been discussed widely in previous consultations, in many markets (in particular fixed income) the trading venue is not in a position to know whether any transaction it processes has settled or failed, or that a buy-in can or should be initiated. Overlooking this obvious challenge for now, *Figure 16* illustrates the proposed solution to the receiving counterparty not initiating the buy-in.

Figure 16: CSDR buy-ins when the receiving counterparty does not initiate the buy-in



Regarding enforceability of a buy-in against a failing selling counterparty, as with existing buy-in remedies, this is an issue where the terms of the transaction or the legal agreement between the counterparties does not provide for buy-ins. This is identified in the CP as the key challenge in implementing a *trading level* mandatory buy-in regime, and so Options 2 and 3 in the CP seek to address this.

Option 2 – Trading level with fall-back option execution

Similar to Option 1, the onus for initiating the buy-in falls on the receiving (purchasing) counterparty. However, in the case where the trading counterparty does not perform the buy-in, the failing participant will pay cash compensation to the receiving participant. Thus the buy-in process, in the first instance, is the same as that illustrated in *Figure 14*, but in the second instance resembles a cash compensation remedy (similar to *Figure 15*), but at the participant level. This is illustrated in *Figures 17a and 17b*.

Figure 17a: a buy-in under CSDR Option 2

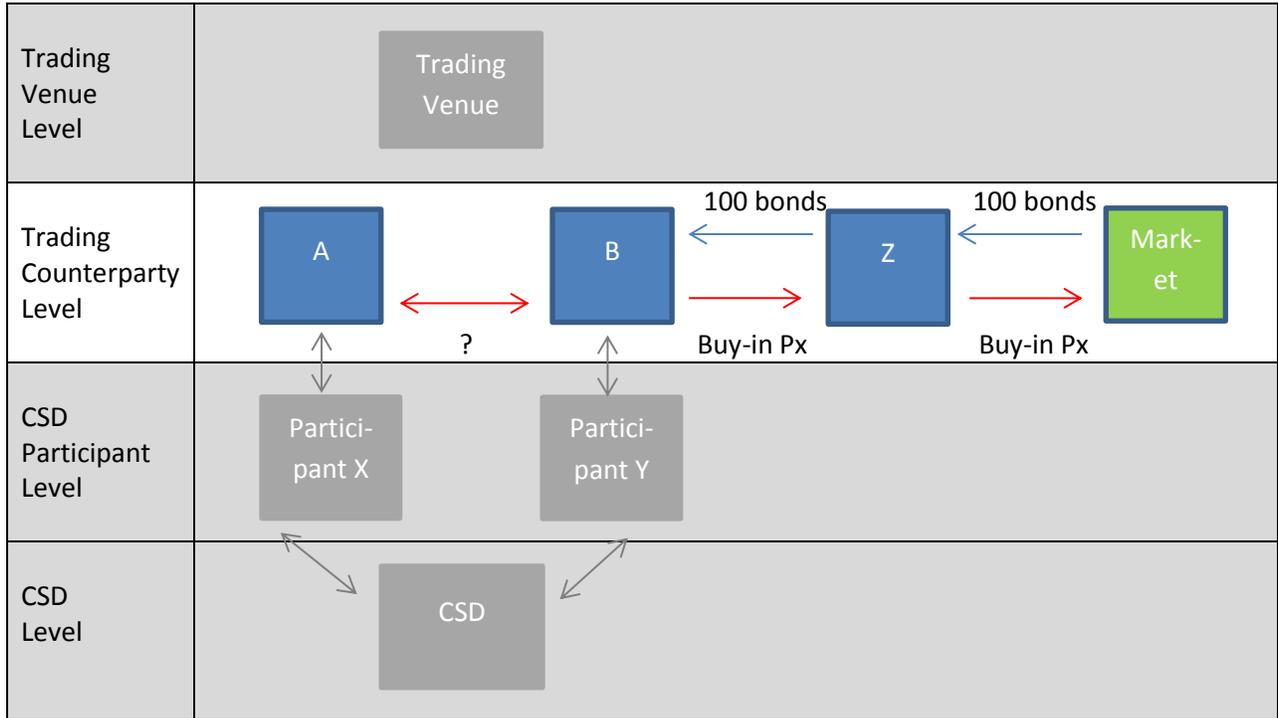
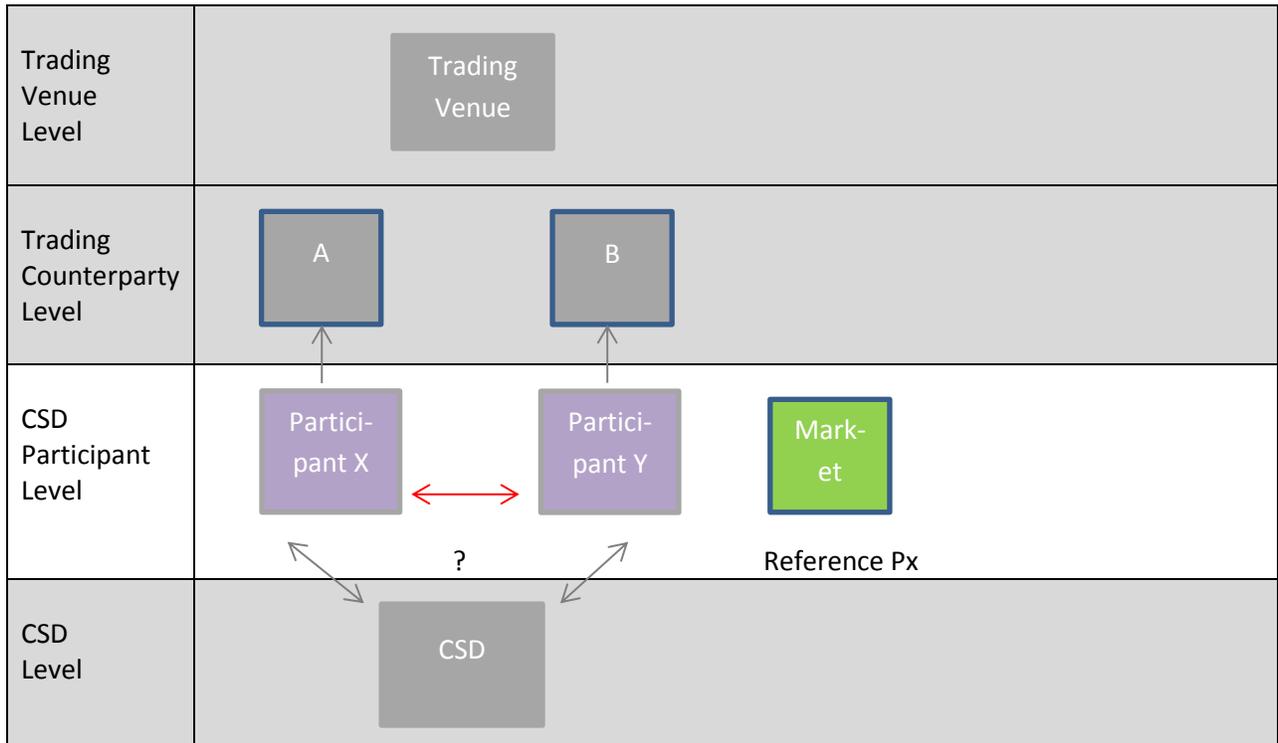


Figure 17b: cash compensation under CSDR Option 2 where the trading counterparty does not initiate the buy-in

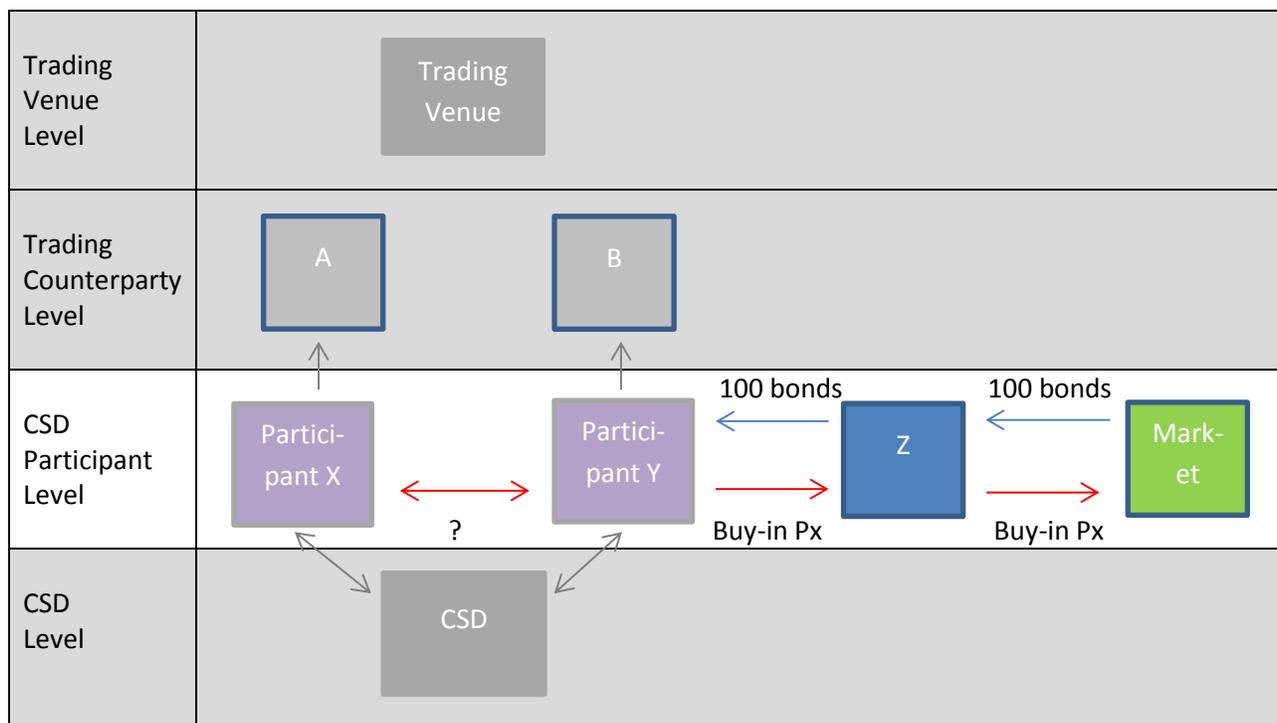


Where the buy-in under Option 2 is initiated by the receiving (purchasing) counterparty, but cannot be executed, then the same cash compensation remedy is available at the trading counterparty level as in Option 1. Again, it is not clear how the reference price for cash compensation is agreed, or whether the price differential is intended to flow in both directions depending on whether the reference price is lower or higher than the original transaction price.

Option 3 – CSD participant level execution

Under Option 3, the buy-in takes place at the participant level, with the receiving (participant) initiating the buy-in. This is illustrated in *Figure 18*.

Figure 18: a buy-in under CSDR Option 3



In the event that the buy-in cannot be executed, then a cash compensation remedy is available at the participant level (the same as *Figure 17b*).

The primary difference with Option 3 compared to a standard buy-in is that the buy-in process may not involve the trading counterparties to the failing transaction.

The challenges of implementing CSDR Mandatory Buy-ins: a summary box

Level 1

- The 'buy-in' is not defined, nor is the purpose of the buy-in explained.
- The buy-in process seems to apply to CSD participants, which may not be the same as the trading counterparties to the transaction.
- The provision for the payment of the price differential between the buy-in price and the original transaction price is reversed, compared to standard buy-in processes.

The Level 2 Options

- The RTS do not specify how the price differential between the buy-in price and the original transaction price should flow.
- The trading counterparties to the original transaction may not be involved in the buy-in or cash compensation process (Options 2 and 3).
- The buy-in process could require the involvement of a trading venue, which may not have sufficient information to initiate the buy-in process.
- The RTS do not specify how the reference price for cash compensation is to be determined.
- Where the buy-in process only involves the trading counterparties to the original transaction (Option 1), the buy-in, in some circumstances, may not be enforceable.

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