

Stock Loans

CREST stock lending functionality enables members to borrow and lend securities using transaction type (SLO). An essential feature of the SLO transaction is that title to all securities and collateral passes from one party to the other outright. The party acquiring title is obliged to redeliver equivalent rather than identical securities. Although the transaction designation SLO suggests that it may only be used for stock loan and borrowing purposes, its use can actually result from lending, repo or sale and buy back arrangements.

An SLO transaction in CREST therefore results in a movement of securities between the accounts of two members using the functionality described in this section. Where a loan is intermediated, CREST regards this as being two distinct loans (i.e. two separate movements of stock, first from the lender to the intermediary and then from the intermediary to the borrower). These settle independently and CREST does not link them in any respect.

Stock loan input

Stock loans require the independent input of instructions by both the borrower and lender. When these stock loan inputs are matched by the CREST system, certain fields must both have been completed and contain either values that are identical to (or, in some cases, within a centrally set tolerance level of) each other or the transaction will not proceed to settlement.

For a SLO transaction, the following fields must be matched:

- Trade Date
- Intended settlement date
- Trade system of origin
- Stock loan margin2
- Debit party stock ID
- Credit party stock ID
- ISIN
- Quantity
- Consideration
- Suppress revaluations

Application of initial margin

One of the fields requiring completion is the cash consideration of the stock being lent, without taking into account any initial margin. Market practice is to use the prevailing reference offer price held in

CREST i.e. the previous day's closing offer price (pdco).

$SLO\ Consideration = Price\ (p.d.c.o) \times Quantity$

Example 1

The consideration for a stock loan of 1 million **ABC plc** 25p ordinary shares with trade date 27 June

2000, and offer price in CREST 900p for close of business 26 June 2000 should be:

SLO Consideration = 1,000,000 x £9.00

Therefore the input SLO Consideration should be £9,000,000.

The members undertaking the stock loan may specify and match an initial margin to be applied on settlement in order to provide the stock lender with an excess of cash collateral. At point of matching

(i.e. before settlement) the consideration on the SLO is overwritten by CREST to reflect the "gross" value (i.e. including initial margin).

The default margin within CREST is 0%. Members may override this and input any margin agreed with their counterparty, but the margin input must be matched. On matching of the two counterparties' stock loan instructions, this cash payment will become the new stock loan consideration. It is calculated as:

Cash Payment = SLO Consideration x Margin

Example 2

The cash payment for stock loan input with consideration of £9,000,000 and a margin of 5% will be:

SLO Consideration = £9,000,000 x 1.05

Therefore the cash payment which will be made to cover the stock loan and margin is £9,450,000. On

matching of the two counterparties' instructions this will become the new stock loan consideration.

Once the independently input instructions have matched, and the designated margin has been applied to the consideration, the transaction proceeds to settlement. SLOs are subject to the normal presettlement checks for credit and stock availability and to queue management. At the point of settlement stock is transferred against creation of an assured payment obligation. Stock loans settle according to the standard settlement algorithm. Common market practice is for settlement on either

trade date (T+0), currently 50-80% of trades, or the following day (T+1).

Automatic stock loan returns

On settlement of the stock loan, the system automatically creates a pre-matched stock loan return instruction (SLR)⁷. The intended settlement date created is the next business day and the instruction is created with a zero settlement priority on the stock giver's side (i.e. the borrower). The priority therefore needs to be lifted by the borrower in order to enable settlement of the loan return. The earliest settlement date of the stock loan return is one business day after the stock loan settled, reflecting market preference rather than system limitations.

The initial consideration of the stock loan return is calculated by:

SLR Consideration = SLO Cash Payment

Example 3

A stock loan return is created for a stock loan which settled with a cash payment of £9,450,000 being made by the stock borrower to the stock lender.

Therefore the SLR Consideration = £9,450,000.

Mark-to-market revaluations

Immediately after settlement of the stock loan, CREST marks-to-market the resulting transaction by reference to the previous business day's closing offer price. This is the only time a revaluation occurs intra-day; thereafter CREST marks-to-market outstanding stock loans using the same process as part of an overnight batch process. Where necessary, variation margin is transferred as a stock loan revaluation transaction (SLD), and the consideration of the stock loan return adjusted accordingly. If the price of the relevant securities has fallen since the previous revaluation, an assured payment obligation is credited to the benefit of the borrower and in the opposite direction if the price has risen.

Aside from the initial revaluation, which acts as a check that no mistakes have been made and market practice has been followed, the purpose of the daily revaluation process is to protect erosion of the loan margin due to price changes in the period since the loan was arranged. The revaluation takes into account the agreed initial margin, and is created with a CREST generated priority of 91, which cannot be changed by either party. Stock loan revaluations settle during standard settlement, generally during the first cycles of settlement of the morning.

The stock loan revaluation is calculated by:

SLD Consideration = [Price (p.d.c.o) x Quantity x Margin] - existing SLR Consideration

At the same time as the stock loan revaluation is created, the consideration of the stock loan (SLR) changes equivalently:

New SLR Consideration = Existing SLR Consideration +/- SLD Consideration

This process is repeated each night using the offer price at close of business. The loan margin is protected against market price changes, since the SLR consideration always equals the market value of the stock (plus margin).

Example 4

A stock loan was created for 1 million **ABC plc** 25p ordinary shares with trade date 27 June 2000 for next day settlement. The offer price in CREST was 900p at close of business 26 June 2000. The loan margin was 5% and a stock loan return was created for £9,450,000 when the stock loan settled on 28 June 2000 (T+1). The offer price for **ABC plc** ordinary shares had risen by 50p to 950p by close of business 27 June 2000.

SLD Consideration = [£9.50 x 1,000,000 x 1.05] = £9,450,000

SLD Consideration = [£0.50 x 1,000,000 x 1.05] = £525,000

Since the borrower of the stock is now holding a more valuable asset the result of the revaluation is the creation of a SLD (a cash payment) for £525,000 from the stock borrower to the stock lender.

The stock loan return consideration is increased to take into account the additional cash payment received by the stock lender.

New SLR Consideration = £9,450,000 + £525,000

Therefore the new SLR consideration is £9,975,000.

Stock loan considerations may be denominated in a different currency to that in which a security is priced (e.g. an Irish security is lent, but the stock loan consideration may be denominated in GB pounds sterling). In such cases, the mark to market each night takes into account both the movement in the exchange rate as well as the market price, and may result in the generation of a stock loan revaluation even when the underlying market price of a security is unchanged.

SLDs are always made in the same currency as the original stock loan consideration.

Splitting of stock loan returns to allow partial return of stock.

A stock loan return will only settle after the stock borrower has raised the priority of the return from zero, subject to normal queue management and pre-settlement checks for credit and stock availability.

The return settles according to the standard settlement process with the stock lender receiving the stock back and the stock borrower receiving the current stock loan return consideration i.e. the market value of the stock plus any margin. When a loan is fully closed out, the net effect of all stock and cash movements is zero.

If the stock borrower wishes to sub-divide a stock loan return to allow part of the borrowed stock to return to the lender, this is possible by splitting the return. Either party can split a stock loan return at any time prior to settlement.

The transaction which has been split is known as the 'parent' transaction; the new transactions created are its 'siblings'. Once a transaction has been split, CREST treats each of the siblings as independent transactions which may settle, or fail to settle, independently and which may be assigned different priorities or re-split.

CREST imposes a number of limitations on the splitting of transactions:

- the instruction to split may contain no more than 60 shapes for the sibling transactions;
 - the quantity of securities in the siblings must always total to that of the parent.
- CREST pro-rates the consideration across the siblings, maintaining the same unit price. No action is required of the counterparty during, or subsequent to, the splitting process.

Automatic Cash Unfreeze

At a set time each day prior to the close of normal settlement, CREST unfreezes the cash priority of certain transactions which are due for settlement but whose priority has been set to zero on the cash side.

Stock loan returns are not subject to this process.