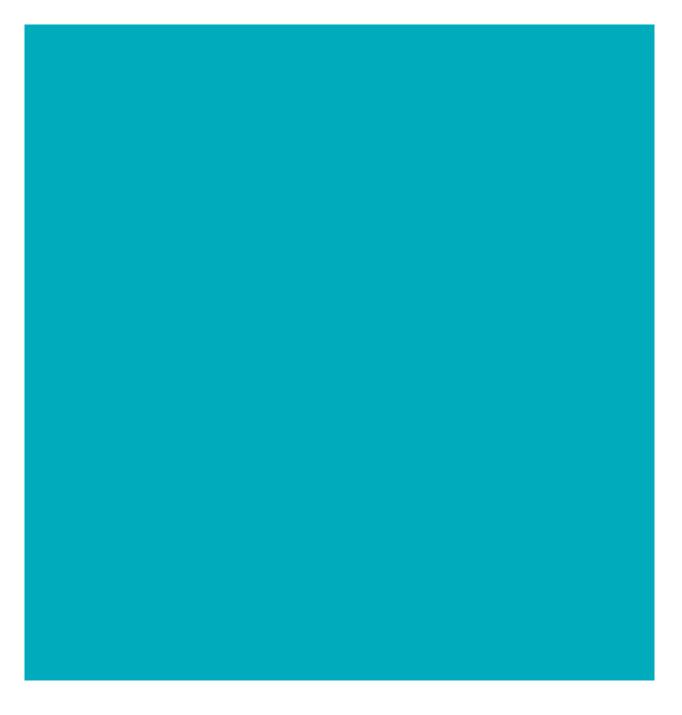
EquityClear Service Description

CSDR Settlement Discipline



For any questions regarding this document please contact:

Ian Mackenzie

Client Relationship Manager, EquityClear

Tel. +44 (0) 20 7426 7265

Email securitiesclientserviceLTD@lch.com

Greg Michaels

Product Development, EquityClear Tel. +44 (0) 20 7426 7176 Email greg.michaels@lch.com

Securities Client Services Team

Email <u>securitiesclientserviceLTD@lch.com</u>

Table of Contents

Introduction	4
Cash Penalties	
SME growth markets	
Daily process	
Monthly process	
Appeals	
Risk management	
CCP excess penalties	
Avoiding duplicate penalties	
Buying-in	
Notification of fails and potential buy-ins	
Buy-in notifications and actions	
Hold the failing settlement instruction	
Pay the buy-in costs	
Cancel the fail and reinstruct any partial remaining balance	
Notification of deferred buy-in execution	
Buy-in notifications and actions for fails outside the scope of CSDR	
CSDR – 'Out of Scope' Shares	
Switzerland	
United Kingdom	
Current process	
Summary	
Cash Compensation	
Member report specifications	
Fails report	
Cash penalty reports	
Buy-in report	
EREP0025 – Settlement – Fails	
Layout	
Example	
EREP0044 – Fees – Daily CSDR Penalty Calculations	
Layout	
Example	
EREPM044 – Fees – Monthly CSDR Penalty Calculations	
Layout	. 19
EREP0032 – Margin - High Level Additional Margin Summary	. 20
Layout	
Example	
EREP0045 – Settlement – Buy-in Process	
Layout	. 22
	. 24
Disclaimer	25

Introduction

The Central Securities Depositary Regulation (**CSDR**) requirements on settlement discipline are defined in:

- Level 1: Regulation (EU) No 909/2014 Articles 6-8
- Level 2: Commission Delegated Regulation (EU) 2018/1229 (the Settlement Discipline RTS)
- Level 3: ESMA Q&A

This document describes how LCH Limited (**LCH**) will implement the CSDR settlement discipline regime in EquityClear. It first describes the process steps to be followed and then provides specifications of how the necessary information will be provided in the EquityClear member reports.

The design objective has been to create a simple but comprehensive solution to help members integrate the EquityClear process and data into their systems.

The document covers cash penalties, buy-ins and cash compensation.

N.B. We are open to receive prompt feedback from members on this first circulated version of the document and could make some simple changes from proposals made – for example, the addition of one or more columns to a report. Therefore, members are invited to plan their design and build on the specifications provided but should allow for potential changes to be notified in a second version of this document within a month or so of the first publication.

Cash Penalties

CSDR requires CSDs to calculate cash penalties on fails. The CSDs are required to collect the penalties from and distribute them to their participants, except where a participant to a fail is a CCP. In this case the CCP is required to collect the penalties from and distribute them to their members. The CSDs will identify on the penalty calculations they report to their participants whether each penalty is to be collected or distributed by a CCP or not. The following applies to CSDR penalties for which LCH is responsible for their collection and distribution.

SME growth markets

Trades executed on SME growth markets attract lower penalties than trades executed elsewhere. By default, LCH will separately net trades per SME growth market using the MIC recognised by the CSDs.

Where an equity is traded on more than one SME growth market and they have chosen the same extension period, say the maximum 15 days, there is the potential to net trades from these markets together for settlement. This, however, would require CSDs to recognise a new SME growth market netting MIC, similar to 'VARI', to know to apply the reduced fees. If such a MIC is created and available to use in a CSD, then members will have the option to request cross netting of relevant trades. This is the same option we provide across all current markets.

Daily process

LCH will match and reconcile each penalty calculation against its record of fails to ensure reported penalties are recognised as valid and that no expected penalty calculations are missing. The matching process also allows EquityClear to identify the member and Settlement Firm responsible for each penalty and hence report, collect and distribute the penalties appropriately.

At the end of each day EquityClear will provide each member with a single report giving all the cash penalty calculation records, including separately both new penalties and corrections, for all CSDs. The report will use the usual EquityClear format, which is a simple tabular data set. It will contain the necessary data extracted from the CSD penalty reports, generally from MT537 messages, along with EquityClear enriched data such as the Member Account and Settlement Firm ID. This should allow GCMs, in particular those not involved in the settlement of the fails and hence not receiving the penalty calculations directly from the CSDs, to track and manage the liabilities of their clients through each penalty month.

Monthly process

EquityClear will generally follow the month end penalty processing timetable of the CSDs.

On the 14th 'Penalties Business Day'¹ of each month EquityClear will provide each member with a single report giving all the cash penalty calculation records for the previous penalty month but including only the final corrected records. The sum of these records will match the amounts to be collected and distributed, which will be in the settlement/penalty currency. This report will also allow reconciliation and dispute resolution with members' clients as necessary.

Penalty collection and distribution will go through the usual invoicing process. CSDR cash penalties will be identified as separate line items on the invoice, per penalty currency per Settlement Firm.

-

¹ The Penalties Business Day (PBD) is as defined by ECSDA in their CSDR Penalties Framework document.

Members must therefore have PPS² accounts in all relevant settlement/penalty currencies to facilitate payments.

LCH will endeavour to align the value date for payments with the CSDs, being the 17th 'Penalties Business Day' of the month.

LCH will continue to apply its own penalty charges. These will continue to be reported separately on the existing report.

Appeals

LCH requests that a member or their client who wishes to appeal the CSD calculated penalty amount or attribution does so directly to the relevant CSD via the CSD participant. This will be much more efficient than using LCH as an intermediary.

However, if the member or their client is comfortable with the CSD reported calculation but has an issue with how LCH has reported it then this should be raised by the member with LCH.

Risk management

In theory, LCH should be net flat to penalties. That is, for fails from LCH to members, and hence penalty liabilities on LCH, there should be an equal amount of fails from members to LCH, and hence corresponding penalties due to LCH to cover its liabilities. However, members can go into default and therefore potentially not pay their liabilities to LCH. LCH will always pay penalties due to its members, irrespective of whether there is a default of another member, as members would expect, this being a primary function of a CCP. Therefore, LCH will calculate and collect margin to cover the future penalty liability. This additional CSDR cash penalty margin will be shown as a separate line item on member report 'EREP0032 – Margin – High Level Additional Margin Summary'.

CCP excess penalties

In practice there are scenarios in which LCH is not flat to penalties and incurs a loss, where neither LCH nor its members are at fault (e.g. where a CSD settles late deliveries to LCH but ends its process before delivering those securities back out to receiving members).³ The size of this loss to LCH is currently unknown. But it is estimated to be of limited but not insignificant value to LCH in total. LCH is therefore considering how to cover such losses. There is the potential that this will be mutualised as a specific add-on charge to members.

Avoiding duplicate penalties

There are scenarios where LCH and its members need to cancel matched settlement instructions after ISD and reinstruct new related ones with the original ISD. These include net-offs, manual splits to support settlement and manual splits to support electing on optional corporate events with options. In such cases cash penalties would have already been calculated on the matched fails. However, a simple reinstructing of the new instructions would incur late matching penalties to whoever matched second. These would be duplicate and unwarranted penalties.

There is also the new scenario required by the CSDR buy-in rules to reinstruct after a partial buy-in. The drafters of CSDR recognised the potential problem of the duplicate penalties and explicitly required CSDs to only charge penalties from the reinstruction date. CSDs have put in a mechanism

³ Other scenarios are described in the EACH CSDR Settlement Discipline Framework.



_

² The LCH Protected Payments System.

by way of a flag on settlement instructions to implement this requirement. LCH proposes to use this matching flag to automatically and correctly avoid the duplicative penalties in the previously listed other scenarios.

Buying-in

CCPs have been required by the Short Selling Regulation⁴ (**SSR**) to buy-in member fails in share transactions. CSDR repeals the SSR requirements and replaces them with new requirements. CCPs remain responsible for buying-in failing members. CCPs cannot be bought-in on their fails. As CCPs are always flat, their execution of buy-ins against fails to them will provide the securities to then fulfil their onward deliveries.

The CSDR operational requirements are more prescriptive than the SSR ones, so EquityClear needs to make changes to the current established process. It should be noted that the new buy-in process that CCPs need to follow as receiving party versus the failing party is virtually identical to the process for non-cleared fails.

EquityClear will apply the following buy-in process for each i failing settlement to LCH which is in scope of CSDR and for which a buy-in is possible.

Where LCH has been given power of attorney in a CSD to undertake the instructions required of CSDR it will do so on behalf of the member. Otherwise the member, or their appointed agent, must instruct the CSD as required.

LCH will use buy-in agents, generally settling on a non-guaranteed T+2 basis, as has been the practice for the SSR requirements.

Notification of fails and potential buy-ins

The relevant extension period for the fail will be determined. This is based on the type of instrument, whether shares or not, and whether the fail relates to a financial instrument traded on an SME growth market.

Extension period criteria	Buy-in extension period
Shares (liquid and illiquid ⁵)	ISD + 4 business days
Other than shares	ISD + 7 business days
Financial instrument traded on an SME growth market	ISD + 15 days, or a shorter period at the choice of the SME growth market

Therefore, for most settlements, the buy-in extension period will remain at four business days, as for the SSR. However, it should be noted that CSDR does not allow for a longer extension period for market makers.

The existing EquityClear fails report 'EREP0025 – Settlement – Fails' already shows the 'Buy-in trigger date' and the 'Intended buy-in date'. These will continue to be populated in the same way. That is, in CSDR terminology, the 'Buy-in trigger date' is the final date of the applicable 'extension period' (see the table above) and the 'Intended buy-in date' is the business day following the expiry of the extension period, on which a buy-in agent is appointed. Fails appear on this report from the end of the ISD. Thus, early notification of a potential buy-in is provided.

⁵ CSDR Article 7.5 does not allow the extension for illiquid shares to 7 business days in Article 7.4 to apply when cleared by a CCP.



-

⁴ Regulation (EU) 236/2012 Article 15.1

Buy-in notifications and actions

To allow members a simple consolidated buy-in process, EquityClear will report to members the progress of the buy-in process and any actions the member needs to take through a single new daily member report 'EREP0045 – Settlement – Buy-in'6. This will be provided to members from around 15:15 UKT.

This time has been chosen as it is soon after most settlement for the current business day has completed and should provide sufficient time to instruct a CSD (e.g. to put a transaction on hold) before next day settlement begins.

Hold the failing settlement instruction

A buy-in agent must be appointed on the business day following the expiry of the extension period. All such appointments will be done soon after 15:00 UKT. Up until this time the member may deliver the outstanding instruments directly to LCH.

The notification for the member to put the fail on hold will be given in the new report. **Members** must ensure the fail is put on hold and not allowed to settle, in accordance with their obligation under CSDR.

The consequences of a member not putting their failed instruction on hold and it settling (aside from the member being in breach of their regulatory obligation) is that LCH would be left with excess securities and would not receive the appropriate cash penalty calculation from the CSD. To remedy this situation, were it to arise, LCH would require the member to buy back the bought in securities, pay the cash penalty calculated by LCH in lieu of the CSD, and pay an administration fee to cover the operational costs of this exceptional process.

Pay the buy-in costs

LCH will notify the member of the details of a successful buy-in execution for the fail. The buy-in report will include the buy-in quantity, price, buy-in agent fee and the payment amount the member must pay to LCH. The payment amount calculation depends on whether the buy-in price is greater or less than the effective fail price (fail consideration ÷ fail quantity).

If the buy-in price is greater than the effective fail price, then:

Payment amount = agent fee + (buy-in price - effective fail price) x quantity

If the buy-in price is less than or equal to the effective fail price, then:

• Payment amount = agent fee. The price difference is 'deemed paid'.

Payment of the buy-in costs is due on the ISD of the buy-in. Payment will be made in the CSD using a PFOD⁷ instruction where possible. Otherwise the payment will be made by bank transfer⁸

The payment obligation will be raised in EquityClear as a cash position for future settlement. The liability will be margined until the payment is received and the position closed.

⁸ This is the current practice and to confirm this is not through the PPS.



⁶ This will replace the existing buy-in report 'EREP0029 – Settlement – Buy-in'. The report number change is to ease cutover between the old and new regimes.

Payment free of delivery

LCH will continue to try to execute buy-ins for any remaining partial balance until any such buy-in could not settle by the end of the deferral period. The objective is to maximise the chance of obtaining the outstanding securities and being able to fulfil the onward delivery to waiting members. Cash compensation will only be applied if appropriate buy-ins have not or cannot be settled by the end of the deferral period.

Cancel the fail and reinstruct any partial remaining balance

LCH will notify the member of the details of successful buy-in settlement against the fail.

If the settled quantity equals the fail quantity, then the buy-in report will identify that the member should cancel their fail⁹. LCH will instruct cancellation of its side of the fail.

If the settled quantity is less than the fail quantity, then the buy-in report will identify that the member should cancel their fail and provide the quantity, consideration and ISD which the member must reinstruct as a delivery for the remaining balance. The member reinstruction must be on hold and flagged as being a post buy-in reinstruction¹⁰ to avoid duplicate penalties. LCH will instruct a receipt for the remaining balance and instruct cancellation of its side of the fail when the balance reinstruction has matched.

Notification of deferred buy-in execution

If full buy-in execution has not been successful LCH will notify the member on the buy-in report that execution of the remaining balance has been deferred.

Buy-in notifications and actions for fails outside the scope of CSDR

How settlement discipline is applied to fails falling outside the scope of CSDR depends on a number of factors.

Firstly, any applicable legal requirement will be applied. After this LCH will be guided by local market practice, suitably protecting LCH and providing an efficient but effective service offering to members.

CSDR - 'Out of Scope' Shares

CSDR Article 7.13 provides that "[Article 7 of CSDR] shall not apply where the principal venue for the trading of shares is located in a third country. The location of the principal venue for the trading of shares shall be determined in accordance with Article 16 of Regulation (EU) No 236/2012 [the Short Selling Regulation]."11. So, there is no requirement under CSDR to buy-in fails for such out-of-scope shares.

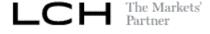
Switzerland

LCH understands that settlements in the Swiss CSD, which is operated by SIX SIS Limited, will not fall within the scope of the CSDR settlement discipline regime.

United Kingdom

The written statement by the Chancellor of the Exchequer on 23 June 2020¹² informs the situation. However, it is not yet clear, at least initially, what the situation will be for settlements in Euroclear UK and Ireland. In the first instance there is a dependency on whether the Brexit transition period ends before or after the CSDR settlement discipline regime comes into force.

¹² UK Parliamentary Business - Financial Services Update: Written statement - HCWS309



10 / 25

⁹ The member does not have to wait for this notification to send their cancelation, as the CSD will not cancel the transaction until LCH cancels its side.

¹⁰ Using a flag set to BSSP or similar – refer to CSD specifications.

¹¹ The relevant shares are listed in the 'Exempted Shares Under Short Selling Regulation' ESMA register

Current process

The current EquityClear process has worked well for many years and is simpler than the CSDR process. That is, the fail is not held but continues to be allowed to settle and the member buys the buy-in back from LCH. The reporting for this option will be incorporated in the new buy-in report rather than as a new trade in the trade report, as currently. How this would be reported is shown on the buy-in report specification below.

Summary

In summary, there will be two buy-in process options that LCH will be able to apply to each failing settlement which is out of the scope of CSDR:

- the CSDR process; or
- the current process.

The LCH preferred position is to apply the current process.

Cash Compensation

The need for cash compensation in EquityClear has been and is expected to continue to be very rare.

LCH Operations will continue to communicate directly with the operations staff at both the failing member and the one or more selected receiving members on the details of the cash compensation, and coordinate the necessary actions required. It is felt that this more hands-on approach is better suited to this rare exception.

The actions required are the cancellation of the relevant fails, payment of the appropriate cash amounts and the potential reinstruction of a delivery from LCH to a receiving member for any remaining balance beyond the quantity being cash compensated.

Member report specifications

Fails report

There is no change to report 'EREP0025 – Settlement – Fails', it is just provided here for completeness. The existing 'Buy-in trigger date' is the final date of the CSDR 'extension period'. This report can therefore be seen and used as a 'pre-notification' of a buy-in.

Cash penalty reports

A new 'EREP0044 – Fees – Daily CSDR Penalty Calculations' report will be produced daily as an end-of-day report and be available from 22:30 UKT.

A new 'EREPM044 – Fees – Monthly CSDR Penalty Calculations' report will be produced monthly and be available from late afternoon (around 17:00 UKT) of the 14th business day of the month.

An additional line item will be added to the existing 'EREP0032 – Margin – High Level Additional Margin Summary' report to show the additional CSDR cash penalty margin.

Buy-in report

A new 'EREP0045 – Settlement – Buy-in Process' report will be produced daily, replacing the current 'EREP0029 – Settlement – Buy-in Process' report, and be available from around 15:15 UKT.

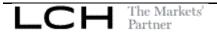
EREP0025 - Settlement - Fails

This report details all failed settlements between the member and LCH at the end of each day. It is the basis for calculating fails charges and initiating the buying-in process.

Report Name	<control prefix="">EREP0025 – Settlement – Fails</control>
Report Owner	EquityClear Business Operations
Sort Order	IntendedSettlementDate > SettlementFirmID > CSD > Settlement Account > Settlement Agent > SecurityCode > Currency > TradePlace > TradingCapacity > LCH Reference

Layout

Field Name	Type	Length	Description
Intended Settlement	Date	8	The intended settlement date of the position.
Date			
Settlement Firm ID	Char	13	Usually the trading firm ID. Where trades from two or more trading firms are to be netted together for settlement
			they are grouped under this common ID.
Settlement Firm Name	Char	40	The name of the settlement firm.
CSD	Char	4	An identifier of the CSD in which settlement is to occur.
Settlement Account	Char	35	The settlement account in the CSD. This is the lower level in a two tier structure (e.g. CREST 'member account')
Settlement Agent	Char	34	The settlement agent identifier in the CSD. This is the higher level in a two tier structure (e.g. CREST 'participant
			lD')
Security Code	Char	20	The ISIN code of the equity.
Security Name	Char	40	The name of the security.
Quantity (signed)	Integer		The (signed) quantity of stock to be delivered / received. Always reported from a member perspective. A negative
			quantity is a delivery and a positive quantity is a receipt.
Currency	Char	3	The ISO code of the currency of the financial amounts in the report.
Consideration (signed)	Float	15.2	The (signed) cash amount to be paid / received. Always reported from a member perspective. A negative quantity
			is a payment and a positive quantity is a receipt.
Buy-in trigger date	Date	8	The date at which the buying-in process will be triggered by LCH. The Buy-In trigger date will only be reported for
			transactions where the member has failed to deliver stock (i.e. for negative stock quantities) and the security is
			settleable. This is the end of the 'extension period' in CSDR terminology.
Intended Buy-in date	Date	8	The intended execution date of the buy-in. This is normally the day after the buy-in trigger date. For the
			registered market maker scheme this may be a later date.



Field Name	Type	Length	Description
Is Settleable	Char	1	Indicates whether the security can be physically settled in the CSD, either 'Y' or 'N'. [Please note that this flag may not always be correct given the nature of the information.]
Valid settlement day	Char	1	Indicates whether the current business date is a valid settlement day for the currency for that Trade Source and CSD. Either 'Y' or 'N'. Will always be 'N' where 'Is Settlable' is 'N'.
Trade Place	Char	4	The LCH reference for the trade source exchange/MTF (sometimes its MIC). This value will be set to 'CLCH' where cross trade source netting has been chosen for the constituent trades.
Trade Date	Date	8	Date on which the trade was executed.
Trading Capacity	Char	1	Legal capacity in which the trading participant has traded, (A)gency or (P)rincipal.
Sub Account	Char	1	LCH sub-Account denomination through which to clear the trade. H(ouse) or C(lient).
LCH Reference	Char	16	The LCH generated settlement reference for the failing settlement. This reference is put on the settlement instruction input by LCH when instructing on behalf of the member.

Example

<Control Prefix>EREP0025 - Settlement - Fails

Intended	Settlement Firm ID	Settlement Firm	CSD	<u>Settlement</u>	<u>Settlement</u>	Security Code	Security Name	Quantity	Currency	Consideration
Settlement Date		<u>Name</u>		<u>Account</u>	<u>Agent</u>					
20121115	ZYGCGB20GC1	Sett Firm GC1	SCOM	NONREF	CH112114	CH0011339204	ASCOM N 10	-3970	CHF	69350.00
20121115	ZYGCGB20NC2	Sett Firm NC2	SCOM	NONREF	CH112114	CH0011339204	ASCOM N 10	-3970	CHF	69350.00
20121115	ZYGCGB20GC1	Sett Firm GC1	SCOM	NONREF	CH112114	CH0012005267	Novartis AG	2584	CHF	-175712.00
20121115	ZYGCGB20GC1	Sett Firm GC1	SCOM	NONREF	CH112114	CH0012083017	Julius Bar	100	CHF	-11020.00
20121115	ZYGCGB20GC1	Sett Firm GC1	SCOM	NONREF	CH112114	CH0012138530	Credit Suisse	34377	CHF	-2929420.00
20121115	ZYGCGB20GC2	Sett Firm GC2	DAKV	1234	1234	DE000BAY0017	Bayer AG	-1000	EUR	0.00

Continued...

<u>Buy-in Trigger</u> Date	Intended Buy-in Date	<u>Is Settleable</u>	Valid Settlement Day	<u>Trade</u> Place	Trade Date	<u>Trading</u> Capacity	<u>Sub</u> Account	LCH Reference
20121121	20121122	Υ	Y	XSWX	20121112	P	H	SBBTP000196B
20121121	20121122	Υ	Υ	XSWX	20121112	Р	Н	SBBTP000396B
		Υ	Υ	XVTX	20121112	Р	Н	SBBTP000199B
		Υ	Υ	XVTX	20121112	Р	Н	SBBTP000194B
		Υ	Υ	XVTX	20121112	Р	Н	SBBTP000191B
20121121	20121129	Υ	Υ	CLCH	20121112	Р	Н	SBBTP000246B



EREP0044 – Fees – Daily CSDR Penalty Calculations

This report details the CSDR penalty calculations made by CSDs for which LCH is responsible for collecting and distributing the penalties. It includes both new and corrected calculations. It shows the calculations received and reconciled by LCH, which will normally be reported on the day they are received but could be later if resolving a reconciliation break takes some time. The report shows penalties at the most granular level per date of failure. In the layout below the first set of fields are sourced from the LCH records of the settlement fails. The second set of fields are sourced from the CSD provided calculations and their descriptions include the associated MT537 sequence and qualifier identifiers.

Report Name	<control prefix="">EREP0044 - Fees - Daily CSDR Penalty Calculations</control>
Report Owner	EquityClear Business Operations
Sort Order	AccountCode ➤ SettlementFirmID ➤ CSD ➤ SettlementAgent ➤ Settlement Account ➤ SecurityCode ➤ PenaltyDate ➤ PenaltyType

Layout

Field Name	Туре	Length	Description
CurrentBusinessDay	Date	8	The business day being reported.
AccountCode	Char	4	Concatenation of the member mnemonic and the House/Client sub-account indicator (e.g. XXXH or XXXC).
SettlementFirmID	Char	13	Usually the trading firm ID. Where trades from two or more trading firms are to be netted together for
			settlement they are grouped under this common ID.
SettlementFirmName	Char	40	The name of the settlement firm.
SecurityCode	Char	12	The ISIN code of the equity.
CSD	Char	4	An identifier of the member's CSD in which settlement is to occur.
SettlementAgent	Char	34	The settlement agent identifier in the CSD. This is the higher level in a two tier structure (e.g. CREST 'participant ID')
SettlementAccount	Char	35	The settlement account in the CSD. This is the lower level in a two tier structure (e.g. CREST 'member account')
TradePlace	Char	4	The LCH reference for the trade source exchange/MTF (sometimes its MIC). This value will be set to 'CLCH' where cross trade source netting has been chosen for the constituent trades.
IntendedSettlementDate	Date	8	The intended settlement date of the settlement instruction.
Quantity	Int	15	The unsettled number of cash equities; positive where the member is delivering to LCH and negative where LCH is delivering to the member.
Currency	Char	3	The ISO code of the currency of the consideration.
Consideration	Float	15.2	The net unsettled cash payment; positive where the member is paying LCH and negative where LCH is paying the member.



Field Name	Туре	Length	Description
CSDTxnRef	Char	16	[RELTRAN/ASRF] The transaction reference assigned to a transaction by the CSD, which is common to both
			parties. This is only provided where available, otherwise it will be blank.
MarketInfrastructureTxnID	Char	16	[RELTRAN/MITI] The transaction reference assigned to a transaction by a market infrastructure other than a
			CSD (e.g. T2S), which is common to both parties. This is only provided where available, otherwise it will be
			blank.
PenaltyCommonReference	Char	16	[PENDET/PCOM] Penalty common reference - reference assigned by the CSD to the penalty and that is
			common for both the failing and the non-failing participant.
PenaltyDate	Date	8	[CALDET/PEDA] Date/time on which the penalty is calculated.
PenaltyType	Char	4	[PENDET/PNTP] 'SEFP' – Settlement fail penalty; 'LMFP' – Late matching fail penalty
Penalty Currency	Char	3	[PENACURR/PECU] The ISO code of the currency of the penalties
PenaltySecurityAmount	Float	15.2	[CALDET/SECU] The penalty calculated by the CSD for a failure to deliver securities. A positive value is a
			penalty the member owes LCH and a negative value is a penalty LCH owes the member.
PenaltyCashAmount	Float	15.2	[CALDET/CASH] The penalty calculated by the CSD for a failure to deliver cash. A positive value is a penalty
			the member owes LCH and a negative value is a penalty LCH owes the member.
PenaltyStatus	Char	4	[PENDET/PNST] Expected to be either ACTV or REMO.
PenaltyReason	Char	4	[PENDET/ACTV; REMO] The 'Reason Code'. E.g. NEWP, UPDT or CORP, TEIM
InstrumentTypeClass	Char	30	[FIA/CLAS] Likely a CSDR code, e.g. SHRS, but could be a CFI code, e.g. ESVUFR.
Liquid	Char	1	[FIA/LIQU] Y=yes, N=No.
SMEGrowthMarket	Char	1	[FIA/SMEM] Y=yes, N=No.

Example

< Control Prefix> EREP0044 - Fees - Daily CSDR Penalty Calculations

Current BusinessDay	Account Code	Settlement FirmID	Settlement FirmName	<u>SecurityCode</u>	<u>CSD</u>	Settlement Agent	Settlement Account	TradePlace	Intended SettlementDate	Quantity	Currency	Consideration
20210211	XXXH	SETT2	SETT2N	IT0001111111	MOTI	11111	GHI	CLCH	20210210	10000	EUR	-1500000.00
20210211	XXXH	SETT2	SETT2N	IT0002222222	MOTI	11111	GHI	CLCH	20210209	-20000	EUR	2000000.00
20210211	XXXH	SETT2	SETT2N	IT0002222222	MOTI	11111	GHI	CLCH	20210209	20000	EUR	2000000.22
20210211	XXXH	SETT2	SETT2N	GB0003333333	CRES	ABC101	122021	AIMX	20210208	20000	GBP	-3000000.00

Continued...

<u>CSDTxnRef</u>	MarketInfrastructure TxnID	Penalty Common Reference	Penalty Date	Penalty Type	Penalty Currency	Penalty Security Amount	Penalty Cash Amount	Penalty Status	Penalty Reason	Instrument Type Class	<u>Liquid</u>	SME Growth Market
	ABC11111	PCR1111111	20210210	SEFP	EUR	16.00	0.00	ACTV	NEWP	SHRS	Υ	N
	ABC44444	PCR2222222	20210209	LMFP	EUR	20.22	0.00	REMO	CORP	SHRS	Υ	N
	ABD77777	PCR3333333	20210210	SEFP	EUR	21.22	0.67	ACTV	UPDT	ETFS	Υ	N
CTR12345		PCR444444	20210208	SEFP	EUR	7.25	0.00	ACTV	NEWP	SHRS	N	Υ



EREPM044 – Fees – Monthly CSDR Penalty Calculations

This report details all the finalised CSDR penalty calculations made by CSDs for fails in the previous calendar month. The content is the same as the daily version of the report, except that only the records in an active/final status are shown.

Report Name	<control prefix="">EREPM044 – Fees – Monthly CSDR Penalty Calculations</control>
Report Owner	EquityClear Business Operations
Sort Order	AccountCode ➤ SettlementFirmID ➤ CSD ➤ SettlementAgent ➤ Settlement Account ➤ SecurityCode ➤ PenaltyDate ➤ PenaltyType

Layout

The layout is the same as the daily version of the report.



EREP0032 – Margin - High Level Additional Margin Summary

This report shows daily additional margins and changes. This now includes the CSDR penalty additional margin.

Base Currency is defined as the Currency of Risk associated to the member's margin account and represents the currency in which the margin is calculated.

Report Name	<control prefix="">EREP0032 – Margin – High Level Additional Margin Summary</control>
Report Owner	EquityClear Risk Management
Sort Order	

Layout

Field Name	Type	Length	Description
ExchangeName	Char	3	Service/Exchange code. Always 'ECL' = EquityClear Service.
Member	Char	3	Member mnemonic.
MarginAccount	Char	1	Mnemonic sub-account denomination. H(ouse), C(lient)
Currency	Char	3	ISO code of the base currency in which the margins are calculated
Requirement	Char	10	Type of margin.
			CRIM – Credit Ratings Initial Margin add-on
			DFAM — Default Fund Additional Margin (Stress loss over eligible margin)
			IM_FLOOR – ESMA Floor
			CCP_BUFFER - Triple Witching Additional Margin
			PREFUNDING – Volatility Prefunding for Expiry dates
			SPI_AM
			CSDR_PEN - CSDR Penalty Additional Margin
PreviousLiability	Float	15.2	Always zero (due to a design change).
CurrentLiability	Float	15.2	Margin Liability for the current day
Change	Float	15.2	Current Liability minus Previous Liability



Example

<Control Prefix>EREP0032 – Margin - High Level Additional Margin Summary

<u>ExchangeName</u>	Member	MarginAccount	Currency	Requirement	<u>PreviousLiability</u>	CurrentLiability	<u>Change</u>	
ECL	XXX	Н	GBP	DFAM	0.00	12,400,000.00	12,400,000.00	
ECL	XXX	Н	GBP	CSDR PEN	0.00	1.800.000.00	1.800.000.00	



EREP0045 – Settlement – Buy-in Process

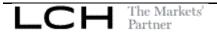
This report details the progress of the buy-in process and the actions the member needs to take.

This report replaces EREP0029 – Settlement – Buy-in Process.

Report Name	<control prefix="">EREP0045 – Settlement – Buy-in Process</control>
Report Owner	EquityClear Business Operations
Sort Order	AccountCode ➤ SettlementFirmID ➤ CSD ➤ SettlementAgent ➤ Settlement Account ➤ SecurityCode ➤ IntendedSettlementDate

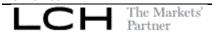
Layout

Field Name	Туре	Length	Description
CurrentBusinessDay	Date	8	The business day being reported.
AccountCode	Char	4	Concatenation of the member mnemonic and the House/Client sub-account indicator (e.g. XXXH or XXXC).
SettlementFirmID	Char	13	Usually the trading firm ID. Where trades from two or more trading firms are to be netted together for settlement,
			they are grouped under this common ID.
SettlementFirmName	Char	40	The name of the settlement firm.
SecurityCode	Char	12	The ISIN code of the equity.
CSD	Char	4	An identifier of the CSD in which settlement is to occur.
SettlementAgent	Char	34	The settlement agent identifier in the CSD. This is the higher level in a two-tier structure (e.g. CREST 'participant ID').
SettlementAccount	Char	35	The settlement account in the CSD. This is the lower level in a two-tier structure (e.g. CREST 'member account').
IntendedSettlementDate	Date	8	The intended settlement date of the position.
Quantity	Int	15	The unsettled number of cash equities; always positive as the member is failing to LCH.
Currency	Char	3	The ISO code of the currency of the financial amounts in the report.
Consideration	Float	15.2	The net unsettled cash payment. Positive values indicate the member is long cash, negative values indicate the member is short cash.
CSDTxnRef	Char	16	The transaction reference assigned to a transaction by the CSD, which is common to both parties. This is only provided where available, otherwise it will be blank.
MarketInfrastructureTxnID	Char	16	The transaction reference assigned to a transaction by a market infrastructure other than a CSD (e.g. T2S), which is common to both parties. This is only provided where available, otherwise it will be blank.



Field Name	Туре	Length	Description
Action	Char	2	This is a code for the action that needs to be taken or is just for information (BI). For CSDR buy-ins: 'HL' - put fail on hold 'PF' - pay for buy-in – fully executed 'PD' - pay for buy-in – partially executed – balance deferred 'FD' - full buy-in deferred (no action required) 'CF' - cancel held fail 'CD' - cancel held fail and reinstruct remaining balance as a delivery, flagged on hold and as a reinstruction ¹³ . For non-CSDR buy-ins: 'BI' – a non CSDR buy-in order has been placed. The member can still deliver on the failing instruction. 'BR' - instruct a receipt to purchase the buy-in from LCH for a non CSDR buy-in.
ToBeActionedByMember	Char	1	'Y' – member to carry out the action. 'N' – LCH to carry out the action on behalf of the member by PoA or similar, or no action is required.
BuyinQuantity	Int	15	The executed buy-in quantity. Only relevant to Actions 'PF' and 'PD'.
BuyinPrice	Float	15.6	The executed buy-in price. Only relevant to Actions 'PF' and 'PD'.
BuyinAgentFee	Float	15.2	The buy-in agent's fee. Only relevant to Actions 'PF' and 'PD'.
PaymentAmount	Float	15.2	The amount to be paid to LCH for a CSDR buy-in. Only relevant to Actions 'PF' and 'PD'.
PaymentValueDate	Date	8	The date on which LCH receives value for the CSDR buy-in payment. Only relevant to Actions 'PF' and 'PD'.
PaymentMethod	Char	4	'PFOD' for settlement in the CSD or 'BANK' for a bank transfer outside the CSD. Only relevant to Actions 'PF' and 'PD'.
InstructionQuantity	Int	15	The quantity of shares to be delivered to LCH for a CSDR buy-in remaining balance instruction, for Action 'CD'. The quantity of shares to be received from LCH for a non CSDR buy-in, for Action 'BR', which will always be shown as negative ¹⁴ .
InstructionConsideration	Float	15.2	The amount to be paid for a CSDR buy-in remaining balance reinstruction, for Action 'CD'. The amount will be negative where LCH will be paying the member (normal DvP case). The amount will be positive where the member is paying LCH (rarer DwP case). The amount to be paid to LCH for a non CSDR buy-in, for Action 'BR'.
InstructionISD	Date	8	The intended settlement date of the new settlement instruction. Only relevant to Actions 'CD' and 'BR'.
BuyinPeriodEndDate	Date	8	The last date on which a buy-in can settle before cash compensation is applied.

 ¹³ Using the special condition flag set to 'BSSP' or equivalent.
 14 The sign convention on this report is that positive values are where the member is delivering to or paying LCH and negative values are where LCH is delivering to or paying the member.



Example

<Control Prefix> EREP0045 – Settlement – Buy-in Process

Current Business Day	Account Code	Settlement FirmID	Settlement Firm Name	<u>SecurityCode</u>	<u>CSD</u>	Settlemen t Agent	Settlement Account	Intended Settlement Date ¹⁵	Quantity	Currency	Consideration CSDTxnRef	Market Infrastructure
20210226	XXXC	SETT1	SETT1N	DE0001111111	DAKV	0123	ABC	20210219	100	EUR	100.10	<u>TxnID</u> ARF11111
20210226	XXXC	SETT1	SETT1N	DE0002222222	DAKV	0123	ABC	20210218	200	EUR	220.00	ARF22222
20210226	XXXC	SETT1	SETT1N	DE0003333333	DAKV	0123	ABC	20210218	300	EUR	330.00	ARF33333
20210226	XXXC	SETT1	SETT1N	DE0004444444	DAKV	0123	ABC	20210216	400	EUR	440.00	ARF44444
20210226	XXXC	SETT2	SETT2N	DE0005555555	ECLR	0123	DEF	20210217	500	USD	550.55 EBTX11111	
20210226	XXXC	SETT2	SETT2N	DE0006666666	DAKV	0123	ABC	20210217	600	EUR	660.00	ARF55555
20210226	XXXC	SETT3	SETT3N	CH0007777777	SCOM	0123	GHI	20210219	700	CHF	777.00 SWR22222	
20210226	XXXC	SETT3	SETT3N	CH0007777777	SCOM	0123	GHI	20210218	700	CHF	777.00 SWR33333	

Continued...

<u>Action</u>	To Be Actioned By Member	Buyin Quantity	Buyin Price	Buyin Agent Fee	Payment Amount	Payment Value Date	Payment Method	Instruction Quantity	Instruction Consideration	Instruction ISD	Buyin Period End Date
HL	Y									<u> </u>	20210309
PF	Υ	200	1.50	2.00	82.00	20210301	PFOD				20210308
PD	Υ	230	1.00	2.00	25.00	20210301	PFOD				20210308
FD	N										20210304
CF	N										20210305
CD	Υ							66	-72.60	20210217	20210305
BI	N										20210309
BR	N	700	1.50	2.00				-700	1052.00	20210301	20210308

The sort order in this example is not the actual sort order. It is shown this way to help the reader follow the process flow from top to bottom.

The Markets'
Partner

24 / 25



Disclaimer

This document has been provided to you for <u>informational</u> purposes only and is intended as an overview of certain aspects of, and proposed changes to, the EquityClear service of LCH. LCH is regulated as a "recognised central counterparty" authorised under Regulation (EU) No. 648/2012 of the European Parliament and of the Council of 4 July 2012 on OTC derivatives, central counterparties and trade repositories and supervised by the Bank of England within the UK regulatory framework, and is a "derivatives clearing organization" registered with the U.S. Commodity Futures Trading Commission.

The relationship of LCH with its members is governed solely by its rulebook and certain other ancillary documentation, as applicable. This document does not, and does not purport to, contain a detailed description of any aspect of a service provided by LCH or any group undertaking of LCH Group Holdings Limited (where 'group undertaking' shall be construed in accordance with section 1161 of the Companies Act 2006) (each, an **LCH Group Company**) or any other topics in this document, and it has not been prepared for any specific person.

This document does not, and does not seek to, constitute advice of any nature. You may not rely on the contents of this document under any circumstance and should seek your own independent legal, investment, tax and other advice. The information and any opinion contained in this document does not constitute a recommendation or offer with respect to any derivative contract, financial instrument, security or service. No LCH Group Company makes any representation, warranty, condition or guarantee (whether express or implied) that the contents of this document are accurate, complete or up-to-date, and makes no commitment to offer any particular product or service. No LCH Group Company shall have any liability for any losses, claims, demands, actions, proceedings, damages, costs or expenses arising out of, or in any way connected with, the information contained in this document, except that each LCH Group Company accepts liability that cannot be excluded by applicable law.

Copyright © LCH Limited 2020. All rights reserved.

The information contained in this document is <u>confidential</u>. By reading this document, each recipient agrees to treat it in a confidential manner and will not, directly or indirectly, disclose or permit the disclosure of any information in this document to any other person (other than its regulators or professional advisers who have been informed of the confidential nature of the information) without the prior written consent of LCH.