BAYMARKETS[™]

Clara External CSV files Interface

Version 1.2



Table of contents

1.0 Introduction	2
1.1 Functionality:	2
1.2 Change log	3
1.2.1 Version 1.0 -> 1.1	3
1.2.2 Version 1.1 -> 1.2	3
2.0 Supported messages	3
2.1 DTx – Derivative transactions	3
2.2 Clearing holding	5
2.3 Cash settlement transactions	6
2.4 Exercise history	7
2.5 Delivery transactions	8
2.5.1 Equity derivatives	8
2.5.2 Commodity derivatives	9
2.6 Margin data (VaR margin model)	9
2.7 Margin data (SPAN like margin model)	10
2.7 Collateral holding	11
2.8 Collateral transactions	11
2.9 Instruments	12
2.10 Instrument prices	13
2.10 Odd lot adjustment	14
2.11 Fee transactions	15



1.0 Introduction

Baymarkets provide CSV files to clearing members via SFTP server as described in this document.

1.1 Functionality:

The following files can be delivered:

- Transactions (derivative transactions only)
- Positions (derivative positions only)
- Cash settlement transactions
- Exercise history
- Delivery Equity derivatives (delivery of underlying stock for derivatives with physical delivery)
- Delivery Commodity derivatives
- Account margin (VaR model/SPAN like model)
- Collateral holding
- Collateral transactions
- Instruments
- Instrument prices
- Odd lots
- Fee transactions

1.2 Change log

1.2.1 Version 1.0 -> 1.1

The following have changed from the previous version (Version 1.0):

- Added CSV file for commodity delivery
- Added CSV file for odd lot adjustment
- Renamed the field "ISIN" to "Instrument ID" for all messages where applicable
- "Counterparty" is no longer a field in the Derivative transaction message
- Fee is removed from the cash settlement message
- Margin data file only applicable for instances of the clearing system running in Var mode

1.2.2 Version 1.1 -> 1.2

The following have changed from the previous version (Version 1.1):

- Added CSV file for fee transactions
- Added CSV file for margin calculations (SPAN like model)
- Field change in Clearing Holding file. Removed fields: Account type, Ledger type. Added field: Gross/net



 Updated document to reflect that transaction sub type is added to DTx-Derivative transactions

2.0 Supported messages

2.1 DTx – Derivative transactions

Main content: Clearing members own trades executed or cancelled on the trading venue.

Clearing members take-up/give-up, int-gup/int-tup and allocations.

NCM's trades executed/cancelled on the trading venue. NCM's take-up/give-up, int-gup/int-tup and allocations.

Corresponds to Clara web menu Clearing transactions derivatives - trade view.

File name standard: DTx_Operator-Owner_YYYYMMDD for EOD file DTx_Operator-Owner_YYYYMMDD_HHMM for intraday file Sorting will be ascending. For a GCM, there will be one file per NCM.

Time schedule: Available EOD and intraday (every 30 min). The file is cumulative.

Column	Description
_	
Account type	Always CL for clearing account
Operator	GCM or ICM as named in the clearing system
Owner	GCM, ICM or NCM as named in the clearing system
Account	Account-Id in the clearing system
Ledger type	Always CLPOS, Clearing positions
Currency	Currency of derivative instrument
Instrument ID	Can be an ISIN code or other unique identifier for an instrument.
Ticker	Ticker symbol of derivative series
Product code	Ticker of underlying instrument
Contract type	OP- Options, FU-Futures, FW-Forwards
Put/Call	P for Put, C for Call (Only applicable for contract type OP)
Strike	Option strike price (Only applicable for contract type OP)
Maturity	Expiration month and year, MMMYY (e.g. DEC19)
Open/Close	All new trades will have Open. Allocation, give up/take up will have close on "from account" and open on "to account"
Quantity	Number of contracts. Negative quantity is sell. Positive quantity is buy.
Amount	= Quantity * Trade Price * contract size
Trade price	Price as given in the trade, allocation, give up/take up



Trade code	For exchange trades this will be the trade code as received from the exchange/marketplace. For allocations and give up/take up this will be the trade code as given in the inbound message.
Transaction type	TRADE: Exchange trade ALLOC: A position/trade that is allocated from a Main Account (position account) to a Sub Account (clearing account) within the same clearing member. ADJUST: Transaction type used when members adjust quantity debit/quantity credit on gross accounts. GIVE UP: A position/trade that is given up to another member. TAKE UP: Acceptance of give up POSXFER: Position transfer INTGUP/TUP: Allocation between own Main Accounts (position accounts) CANCEL: An allocation cancelled. A cancellation of an exchange trade will have transaction type CANCEL.
Transaction sub type	Transaction sub type can be Block, EFRP or Other. If no sub type is received for the trade from the marketplace the field will be blank.
Trade date	Date for when the transaction was booked
Changed	Date and time when the transaction was booked in the clearing system.
Original CCP ID	ID assigned by the clearing system
Status	Will show Cancelled for cancelled transactions, blank for the rest.
Settlement date	Expiration date for the instrument.
Free text	Will show free text added to the order in the trading system.

Please note that open/close transactions related to Corporate Action are not included in the file.

2.2 Clearing holding

Main content: Positions on members house, client or market maker accounts. Corresponds to Clara web menu Clearing holdings for transaction types OP, FU, FW. If subscription is added to the CPP, the file will give positions across all members

File name: Holdings_Operator-Owner_YYYYMMDD

For a GCM, there will be one file per NCM.



Column	Description
Operator	GCM or ICM as named in the clearing system
Owner	GCM, ICM or NCM as named in the clearing system
Account	Account-id in the clearing system
Gross/net	Gross/net position indicator
Settlement date	Expiry date for derivative series
Currency	Currency code e.g. USD
Instrument ID	Can be an ISIN code or other unique identifier for an instrument.
Ticker	Ticker symbol
Product code	Ticker of underlying Instrument
Contract type	OP- Options, FU-Futures, FW-Forwards
Put/Call	P for Put, C for Call (Only applicable for contract type OP)
Strike	Option strike price (Only applicable for contract type OP)
Maturity	Expiration month and year, MMMYY
Quantity	Net quantity
Amount	Net amount
Quantity credit	Quantity of held/bought contracts
Amount debit	FU/FW =Cash value of position OP = 0 since a cash settlement transaction has been created
Quantity debit	Quantity of written/sold contracts
Amount credit	FU/FW =Cash value of position OP = 0 since a cash settlement transaction has been created

2.3 Cash settlement transactions

Main content: Show all cash settlement for settlement date > today.

Corresponds to Clara web menu Clearing transactions — Settlement view.

File name: CashTransactions_Operator-Owner_YYYYMMDD

For a GCM, there will be one file per NCM.



Column	Description
Account type	Always CL for Clearing account
Operator	GCM or ICM as named in the clearing system
Owner	GCM, ICM or NCM as named in the clearing system
Account:	Account-id in the clearing system
Ledger type	Always CLPOS-Clearing positions
Settlement date	Date when the cash settlement will be debited/credited to the bank accounts
Instrument ID	Currency code e.g. USD
Ticker	Currency code e.g. USD
Open/Close	Always Open
Quantity	The cash amount to pay (negative quantity) or receive (positive quantity)
Amount	As the cash amount is in "Quantity" this will always show 0.00
Trade price	N.A
Transaction type:	Can be the following types: EXP_STLM – Expiration Cash settlement for cash settled options FWM2M – Expiration Cash settlement for forwards M2M – Mark to market PREMIUM – Option premium
Trade date:	The date the cash transaction is created
Related series	Ticker of the derivative series the cash settlement is related to
Product code	Ticker of underlying instrument
Contract type	OP- Options, FU-Futures, FW-Forwards
Put/Call	P for Put, C for Call (Only applicable for contract type OP)
Strike	Option strike price (Only applicable for contract type OP)
Maturity	Expiration month and year, MMMYY
Related Price	For transaction type M2M it will show fixing price for futures (the price used for M2M calculations)
Changed	Date for when the transaction was booked
Original CCP ID	ID assigned by the clearing system
Account name	Name of account as in the clearing system
Previous CCP ID	For Trans type EXP_STLM: Refers to Original CCP ID of the exercised transaction
Trade code	N.A



2.4 Exercise history

Main content: Overview of exercise data.

Corresponds to Clara web menu Exercise history.

File name: ExerciseHistory_Operator-Owner_YYYYMMDD

For a GCM, there will be one file per NCM.

Time schedule: Available EOD

Column	Description
Operator	GCM or ICM as named in the clearing system
Owner	GCM, ICM or NCM as named in the clearing system
Account	Account-id in the clearing system
Instrument ID	Can be an ISIN code or other unique identifier for an instrument.
Ticker	Ticker symbol of derivative series
Product code	Ticker of underlying instrument
Contract type	OP- Options, FU-Futures, FW-Forwards
Put/Call:	P for Put, C for Call (Only applicable for contract type OP)
Strike	Option strike price (Only applicable for contract type OP)
Maturity	Expiration month and year, MMMYY
Quantity	Number of contracts (Negative quantity reflects close of a long position. Positive quantity reflects close of a short position)
Date	Exercise date
Transaction type	The following transaction types applies: ASSIGNED: Writer of option contract has been assigned AUTO_EXERCISED: Automatic exercised on expiry date. CLOSED: Positions on series that has not been assigned, auto exercised or manually exercised. DENIED: Automatic exercise has been denied. MANUAL_EXERCISED: An exercise request has manually been entered.

2.5 Delivery transactions

2.5.1 Equity derivatives

Main content: Delivery of the underlying stock of a derivative contract. Corresponds to Clara web menu Delivery.



File name: DeliveryTransactions_Operator-Owner_YYYYMMDD

For a GCM, there will be one file per NCM.

Time schedule: Available EOD

Column	Description
Operator	GCM or ICM as named in the clearing system
Owner	GCM, ICM or NCM as named in the clearing system
Account	Account-id in the clearing system
Ticker	Ticker symbol of underlying stock to be delivered or received
Quantity	Number of underlying stocks to be delivered (negative quantity) or received (positive quantity)
Amount	Quantity * Trade price
Currency	Ticker of derivative series
Date	Date the delivery transaction was created.
Transaction type	Always DELIVERY

2.5.2 Commodity derivatives

Main content: Physical delivery of the underlying commodity and cash payments are handled outside the clearing system. Once buyer and seller have confirmed delivery versus payment, the position on the derivative instrument will be closed in the clearing system. This message will contain the transactions created due to closing delivered positions.

File name: DeliveryTransactionsCommodity_YYYYMMDD

For a GCM, there will be one file per NCM.

Column	Description
Operator	GCM or ICM as named in the clearing system
Owner	GCM, ICM or NCM as named in the clearing system
Account	Account-id in the clearing system
Open/close	Close
Ticker	Ticker symbol of the derivative instrument
Quantity	Quantity closed, corresponds to the contracts delivered



	(Negative quantity reflects delivery of a long position Positive quantity reflects delivery of a short position)
Amount	Amount closed, corresponds to the cash amount settled
Currency	Currency of the cash settled
Date	Date the delivery transaction was created.
Transaction type	Always DELIVERY

2.6 Margin data (VaR margin model)

Main content: Margin information on account level. Corresponds to Clara web menu Account margin.

File name: MarginData_Operator-Owner_YYYYMMDD_HHMM

Time schedule: Available SOD, MOD, EOD

Column	Description
Margin account	M- Margin account Ms- Margin segregated account S – Margin service account D – Default fund account
Operator	GCM or ICM as named in the clearing system
Owner	GCM, ICM or NCM as named in the clearing system
Account	Margin account-id in the clearing system
Currency	Margin currency
Margin call	Negative amounts are the amounts needed to meet margin requirement, Positive amount show excessive collateral the time of margin call issuance. (For margin service accounts, this is just for information purpose)
Margin requirement	Margin requirement calculated today
Collateral	Collateral value
Status (applies to intraday calculations)	Normal: Intraday margin + collateral > 0 Control: Intraday margin + collateral + exposure limit < 0 Watch: Intraday margin + collateral + exposure limit > 0
Incl limit	Intraday margin + collateral + Exp limit
Intraday risk	Intraday margin + collateral
Intraday margin	intraday margin calculated
Exp limit	Exposure limit as defined by the member
Initial margin	Initial margin calculated



Variation margin	Variation margin calculated
Account name	Account name as in the clearing system
LME	Linked margin requirement
Contr	Concentration add-on
STMA	Stress test margin add-on
WWR	Wrong way risk add-on

2.7 Margin data (SPAN like margin model)

Main content: Margin information on account level.

Corresponds to Clara web menu Calculations.

File name: MarginData_YYYYMMDD_Operator_Owner_HHMM

Time schedule: EOD and upon margin/cash calls

Column	Description
Operator	GCM or ICM as named in the clearing system
Owner	GCM or ICM as named in the clearing system
Account	Margin account-id in the clearing system
Initial margin	Initial margin (IM) calculated
Variation margin	Variation margin (VM) calculated
TBS	Amount To Be Settled. This can be unsettled M2M or pending collateral release
Add ons	Sum add ons for the margin account
Collateral	Collateral value
Liability	IM+add ons+negative VM+negative TBS
Assets	Collateral+positive VM+positive TBS
Netted	Assets-Liabilities
Latest cash call	Pending cash call/Cash call not met
Latest margin call	Pending margin call/Margin call not met
Calculation time	The date and time of the margin calculation

2.7 Collateral holding

Main content: Collateral holding per collateral account per instrument. Corresponds to Clara menu Collateral holding.

File name: CollateralHolding_Operator_Owner_YYYYMMDD_HHMM

Time schedule: SOD, MOD, EOD



Column	Description
Operator	GCM or ICM as named in the clearing system
Owner	GCM, ICM or NCM as named in the clearing system
Account	Account-id in the clearing system
Ext ID	Reference to external account, e.g. bank account
Instrument ID	For cash collateral Instrument ID=Ticker=Currency. E.g. USD For bond collateral it can be an ISIN code or other unique identifier for the instrument.
Ticker	Ticker symbol
Quantity	Collateral amount/quantity.

2.8 Collateral transactions

Main content: Collateral transactions per collateral account per instrument. Corresponds to Clara menu Collateral transactions.

File name: CollateralTransactions_Operator_Owner_YYYYMMDD

Time schedule: EOD

Column	Description
Operator	GCM or ICM as named in the clearing system
Owner	GCM, ICM or NCM as named in the clearing system
Account	Collateral Account-id in the clearing system
Ext ID	Reference to external account, e.g. bank account
Instrument ID	For cash collateral Instrument ID=Ticker=Currency. E.g. USD For bond collateral it can be an ISIN code or other unique identifier for the instrument
Ticker	Ticker symbol
Quantity	Collateral amount/quantity.
Changed	Date and time for when the transaction was booked



2.9 Instruments

Main content: Instrument master data

File name: Instruments_YYYYMMDD

Time schedule: Available SOD

Column	Description
Instrument ID	Can be an ISIN code or other unique identifier for the instrument
Ticker	Ticker symbol
Product code	Ticker of underlying instrument in relation to derivatives
Contract type	EQ - Equity ETF - Exchange traded fund FU- Future FW — Forward IX — index OP - Option
Put/call	P for Put, C for Call (Only applicable for contract type OP)
Strike	Option strike price (Only applicable for contract type OP)
Maturity	Expiration month and year, MMYY (Only applicable for contract type FU, FW, OP)
Option style	AM for American, EU for European (Only applicable for contract type OP)
Contract size	Number of underlying instruments (Only applicable for contract type OP, FU, FW)
Currency	Currency on instrument
CFI	Classification of Financial Instrument
Dividend adj	S for Standard, F for Full dividend adjustment, N for no dividend adjustment. Adjustment rules according to marketplace rulebook.
Delivery type	P for physical, C for cash

2.10 Instrument prices

Main content: Price information.

File name: InstrumentPrices_YYYYMMDD



Column	Description
Business date	The date the file is valid for
Instrument ID	Can be an ISIN code or other unique identifier for the instrument
Ticker	Ticker symbol
Product code	Ticker of underlying instrument in relation to derivatives
Contract type	EQ - Equity ETF- Exchange traded fund FU- Future FW — Forward IX — index OP - Option
Put/call	P for Put, C for Call (Only applicable for contract type OP)
Strike	Option strike price (Only applicable for contract type OP)
Maturity	Expiration month and year, MMMYY (Only applicable for contract type FU, FW, OP)
Currency	Currency on instrument
Fixing price	For contract type FU this will be the price used for M2M calculations. All index and commodity futures will have a fixing price. Only stock futures with open interest will have a fixing price. Fixing price is equal to the settlement price. For contract type EQ this will be the price used to calculate if option contracts should be automatically exercised on expiry date, and for cash settlement of FW contracts on expiry day
Closing price	For contract type IX, EQ, ETF, OP, FU and FW this will be the closing price set by the exchange.
Expiry date	YYYYMMDD, Expiry date for contract type FU, FW, OP
Contract size	Number of underlying instruments (Only applicable for contract type OP, FU, FW)
Market flexibility	STD - Standardized derivative instrument TM - Tailor Made derivative instrument

2.10 Odd lot adjustment

Main content: Adjustment of positions according to contracts required for physical delivery. Adjustments will be done EOD on expiry date to a price equal to final settlement price.

File name: OddLotTransactions_YYYYMMDD For a GCM, there will be one file per NCM.

Time schedule: Available EOD on expiry date



Column	Description
Operator	GCM or ICM as named in the clearing system
Owner	GCM, ICM or NCM as named in the clearing system
Account	Account-id in the clearing system
Open/close	Always Close
Ticker	Ticker symbol
Quantity	Quantity adjusted in order to have a position according to the number of contracts required for physical delivery
Price	Final settlement price
Amount	= Quantity * Price * No of underlying lots
Currency	Currency of the instrument
Date	Date for when the transaction was created. Will always be the expiry date of the instrument
Transaction type	ODD_LOTS

2.11 Fee transactions

Main content: Show all fee transactions for one Fee date.

Corresponds to Clara web menu Fee-Transactions.

If subscription is added to the CPP, the file will give fee transactions across all members

File name: CsvFeeTransactions_Operator_Owner_YYYYMMDD

For a GCM, there will be one file per NCM.

Column	Description
Fee date	Calculation date for the fee
Settlement date	Settlement date for the fee
Ticker	Ticker symbol
Fee type	Applicable fee types: derivative-trade-fee give-up-fee take-up-fee interest-admin-fee
Operator	GCM or ICM as named in the clearing system
Owner	GCM, ICM or NCM as named in the clearing system



Account	Account-id in the clearing system. For trade related fees it will be the clearing account, for collateral related fees it will be the collateral account
Trading capacity	Trading capacity as defined on the clearing account, HOUSE or CLIENT
Trade subtype	Blank if no subtype is given in the trade. Subtypes can be Block or ERFP
Qty traded	Quantity in the trade. Only applicable for fees based on quantity in the trade.
Currency	Fee currency USD
Fee rate	The applicable fee rate
Fee	The calculated fee amount
GST rate	The applicable GST rate
GST total	Fee*GST rate
Fee total	Fee + GST total
Fee code	Fee code as defined in the clearing system for the fee