**ENCORE – Delta Position Limits
Reference Guide for Exchanges**

**Version 1.7
May 2019**

Contents

Overview

A rule has been approved by the SEC (the Delta-Based Position Limit Exemption), which allows participating firms to use delta position limits rather than standard position limits.

Please refer to individual exchange website for specific rule language.

The Delta-Based Position Limit Exemption rule requires the options exchanges to collect delta position limit data from this subset of firms. The OCC has agreed to serve as an aggregator for this effort. In order to achieve this end, the OCC will receive the delta position limit data from participating firms, aggregate it into a single report, and make it available to the exchanges. The ISG Technology Subgroup is facilitating this effort among firms and exchanges.

The OCC will perform only basic validations (primarily on the format of the data) and return records which do not pass the validations to the submitting firm so they can be resubmitted correctly the following business day.

At the end of each trading date, no later than 12:00 a.m. CT, delta participating firms will send the OCC their net delta positions grouped by underlying symbol. Firms only need to submit net delta figures when either their conventional or their standard options positions are over the contract limit and the firm has elected to apply delta to that position.

In addition, each firm will report for each aggregation unit the options contract equivalent of the net delta ("OCEND") of each position in the security where the firm is electing to delta hedge. The firm does not need to report the OCEND for the underlying security unless the firm exceeds the standard or conventional position limit on a contract basis.

All net delta position limit information provided by firms to exchanges will be subject to review for potential position limit and reporting violations.

12:00 a.m. CT is the cutoff for file submission to OCC. During overnight processing, an OCC batch job will execute which collects the files submitted by the firms, parses the data into the expected record layout, performs basic validations, and then aggregates the data into a single report for exchange consumption. This report will be made available to the exchanges by 5:00 a.m. CT. Valid records will be made available on-line in ENCORE by means of an on-demand report. Firms may view their own records only.

During this overnight processing, any records which do not meet validations will not be included in the aggregated file and a notification of each record will be sent to the submitting firm (that elects to receive electronic notification). Rejected records will also be made available on-line in ENCORE by means of an on-demand report. The firm may correct these records and resubmit them the following business date. Corrections require the prior business date be provided. Exchanges do not receive notification of rejected records.

The following section describes the flow and processing of Clearing Member and Non-Clearing Member data to/from OCC. It is intended to help clarify the flow of data and processing that takes place prior to the transmission of the aggregator file to the exchanges.

Delta Position Limit Data (to OCC) and Rejected Data (back to Firm)

The accuracy of the data sent to the OCC is the responsibility of the submitting firms. Some basic validations will be performed by the OCC system upon receiving the CM file:

- Data Type and FIXML values match the record layout.

- All required fields are populated for each record.

- OCC Clearing Member Number is a valid CM number in the Encore database.

- Non Clearing Member Organization is in the Encore database as a valid NCO eligible for Delta Position Limit submission.

- Clearing Business Date (Position Effective Date) on the records is either the business date the file was submitted or the prior business date. These validations will be driven from the Encore Business Date and exchange holidays and OCC holidays will be excluded. If a record's trade date is older than two business days, that record will be rejected. It is the responsibility of the firm to provide this data to the exchanges directly.

- A single Net Delta Quantity must be supplied as a Long (positive Net Delta) or Short quantity (negative Net Delta). If a non-zero Long **and** a non-zero Short quantity is supplied for a single record, the record will reject.

If multiple files are submitted on a particular day from the same submitting firm, the latest file submission will be processed and prior files will be ignored.

The rejected records will be returned to the firm "as-is", meaning the data submitted will be returned as it was sent, without error messages or any indication of the reason for rejection. It is the responsibility of the submitting firm to determine the source of errors and resubmit corrected data the following day if desired. Corrected records should have a trade date of the previous day.

In the instance that the file received by the OCC from a submitting firm has been corrupted or contain fundamental errors preventing the OCC from opening, reading, and parsing the file, the file will not be processed by the OCC. OCC is not required to notify a submitting firm that their file is corrupt. If the OCC's Data Center discovers a corrupted file, they may attempt to contact the designated Technical Contact at thesubmitting firm. This is consistent with existing OCC policy.

If the file cannot be parsed, it is not possible to return the individual FIXML Reject records to the submitting firm. Without these error records, the firm may not be aware that there was an issue with their data. The submitting firm must identify who should be contacted in the unlikely event a file must be rejected. This contact information should be provided to the submitting firm's designated OCC Representative.

Additionally, the OCC will not verify that each participating firm has transmitted their file for a given day. It is the responsibility of the submitting firm to ensure that their file is transmitted.

On-demand reports in ENCORE will display valid and rejected records. They will be available once the aggregator file has been sent to the exchanges. Reason(s) for each rejection will be provided in the On-demand report.

Aggregator File of Delta Position Limit Data (OCC to Exchanges)

Given the discussion of the data supplied to the OCC from the participating firms above, OCC will collate the data into a single file for transmission to the exchanges. The same file will be transmitted to each exchange that is set up to receive it. It will arrive prior to 5:00 a.m. CT after each valid business date. The layout for the data is located in Appendix A.

Each exchange must coordinate transmission setup through:

Market Operations

877-501-3253

marketoperations@theocc.com

It is expected that the aggregator file will be significantly large and the exchanges should plan to allocate sufficient space and time to handle the file on a nightly basis.

Explanation of Selected Data Fields

Clearing Business Date – Position Effective Date on the records may be either the business date the file was submitted or the prior business date.

Published Date – Date on which OCC generates the outbound file

Model Type – The delta pricing model used by the submitting firm. There are two possible values for Model Type.

> **0** – The delta pricing model maintained and operated by the Options Clearing Corporation.

> **1** – An approved proprietary delta pricing model.

Aggregation Unit – The means to distinguish between different approved aggregation units within a firm. The value(s) provided will not be validated.

CRD (Central Registration Depository) is "a computerized database that contains information about most brokers, their representatives, and the firms they work for." (from the SEC website: www.sec.gov/investor/brokers.htm)

Appendix A

Aggregator File of Delta Position Limit Information from OCC to the Exchanges

Below is the FIXML layout for the Exchange File, sent from the OCC to subscribing exchanges.

Position Report – Delta Position Limit							
FIX Mapping					**Data**	**Data Type**	**Sample Data**
Tag#	**Report Block**	**Component Block**	**Sub Comp. Block**	**Fields**			
	PosRpt						
721				RptID	Unique Identifier of the Position	String	143771378
715				BizDt	Position Effective Date	LocalMkt Date	2007-07-19
743				DlvDt	Date Published	LocalMkt Date	2007-07-20
724				ReqTyp	Request Type 6 = Delta Position	Int	6
1434				ModelTyp	Model Type 0 = Utility Provided Standard Model (OCC) 1 = Proprietary (User Supplied) Model	Int	1
	➔	Pty					
448				ID	Firm Number	String	00005
452				R	Party Role 4 = Clearing Firm (Clearing Member) 7 = Entering Firm (Non-Clearing Member)	Int	4
	➔	/Pty					
	➔	Pty					
448				ID	Position Account Number (Aggregation Unit)	String	123456789
452				R	Party Role 38 = Position Account	Int	38
	➔	/Pty					

Position Report – Delta Position Limit

Tag#	Report Block	Component Block	Sub Comp. Block	Fields	Data	Data Type	Sample Data
	➔	Pty					
448				ID	CRD Number – Firm Identifying number	String	123456
452				R	Party Role 82 = CRD Number	Int	82
	➔	➔	Sub				
523				ID	Firm Name	String	Goldman
803				Typ	5 = Full Legal Name of Firm	Int	5
	➔	➔	/Sub				
	➔	/Pty					
	➔	Instrmt					
55				Sym	Symbol	String	GOOG
762				SubTyp	ETO = Exchange Traded Options OTC = Over the Counter Instrument CMB = Combined Position	String	ETO
	➔	/Instrmt					
	➔	Qty					
703				Typ	Quantity Type DLT = Net Delta Quantity	String	DLT
704				Long	Long Quantity **	Qty	100
705				Short	Short Quantity **	Qty	
	➔	/Qty					
	/PosRpt						

**Only a Long Quantity OR a Short Quantity will be provided. A non-zero Long Quantity value represents a positive Net Delta, while a non-zero Short Quantity value represents a negative Net Delta. If Long =0 and Short =0 are supplied, both will be passed.

Sample Outbound Messages to the Exchanges

Clearing Member Submission

```
<FIXML>
    <PosRpt BizDt="2007-07-19" DlvDt="2007-07-20" ReqTyp="6" ModelTyp="1">
        <Pty ID="00005" R="4"/>
        <Pty ID="123456789" R="38"/>
        <Pty ID="123456" R="82">
            <Sub ID="Goldman Sachs" Typ="5"/>
        </Pty>
        <Instrmt Sym="GOOG" SubTyp="ETO"/>
        <Qty Typ="DLT" Long="100"/>
    </PosRpt>
</FIXML>
```

Non-Clearing Member Submission

```
<FIXML>
    <PosRpt BizDt="2007-07-19" DlvDt="2007-07-20" ReqTyp="6" ModelTyp="1">
        <Pty ID="IAN" R="7"/>
        <Pty ID="123456789" R="38"/>
        <Pty ID="123456" R="82">
            <Sub ID="Ian Industries" Typ="5"/>
        </Pty>
        <Instrmt Sym="IBM" SubTyp="CMB"/>
        <Qty Typ="DLT" Short="500"/>
    </PosRpt>
</FIXML>
```

NOTE: The formatting of the sample messages contained in this document is for display purposes only. Actual FIXML messages will be contained on a single line and should not be broken into multiple lines or blocks.

Appendix B

Revision History

Version	Date	Author	Version Updates
1.5	12/12/2014	OCC	Update OCC contact information. Update cover page logo. Add Appendix B - Revision History.
1.6	8/28/2018	OCC	Apply branding updates
1.7	5/1/2019	OCC	National Operations departmental name and email address change to "Market Operations".