

**ORDER EXECUTION SUMMARY DATA REPORTS UNDER RULE 605(a)(2)**  
**TECHNICAL SPECIFICATION**

**Preamble**

This document provides the technical specification for how a market center, broker or dealer prepares an Order Execution Summary (OES) data report pursuant to 17 CFR 242.605(a)(2). The specification does not provide guidance on any rule.

This technical specification has been created for a technical audience. The specification may be updated to, among other reasons, harmonize with any relevant changes made to the National Market System (NMS) Plan Establishing Procedures Under rule 605 of Regulation NMS (such as the list of codes identifying Designated Participants shown below).

Please provide any technical input on the OES Data Technical Specification via email to StructuredData (at) sec.gov and include “Order Execution Summary data” in the Subject line.

**I. Definitions**

- (a) “Designated Participant” means the Participant with which each market center, broker, or dealer has made the arrangements set forth in Section VIII of the Plan.
- (b) “Participant” means a party to the Plan.
- (c) “Plan” means the NMS Plan establishing procedures under Rule 605 of Regulation NMS, as amended from time to time in accordance with its provisions.
- (d) “Rule” means Rule 605 of Regulation NMS.
- (e) All terms defined in Rule 600 of Regulation NMS or in the Rule shall have the same meaning when used in this specification, unless otherwise specified.

**II. File Type, Compression, and Naming:**

Summary monthly reports required under paragraph (a)(2) of the Rule shall be prepared in standard, comma-delimited (“,”) ASCII format and may be compressed using standard Zip or Gzip compression. Uncompressed files shall be named according to the following convention: “[reporter identification code][six-digit date code (yyyymm)].csv”. A market center, broker, or dealer will use

the reporter identification code assigned to it pursuant to Section VIII of the Plan. The date code shall refer to the calendar month of trading for the report contained in the file. Compressed files will be named according to the same convention, except that the extension will be “.zip” or “.gz”.

### **III. File Structure**

#### *(a) Order and Format of Fields*

The order and format of fields in a file for the summary monthly report under paragraph (a)(2) of the Rule shall be those set forth in Exhibit A to this specification, which is incorporated herein. For fields that allow up to six decimal places, if the digit following the sixth decimal place is five or greater, a market center, broker, or dealer shall round up the sixth decimal place by adding one to it, and if the digit following the sixth decimal place is less than five, the value of the sixth decimal place shall remain unchanged.<sup>1</sup>

#### *(b) Records*

Files for summary monthly reports under paragraph (a)(2) of the Rule shall have:

1. An initial record containing the comma-separated field names shown in Appendix A.
2. Separate records for each combination of S&P 500 flag, order type, and order size by which a market center, broker, or dealer must categorize its report under the Rule (a maximum of 28 data records for each report).
3. The end of each record shall be designated by a carriage return line feed.

If there are no orders on which a market center, broker, or dealer must report during a month for a specific combination of S&P 500 flag, order type, and order size, no record for such combination need be displayed.<sup>2</sup> If there is no data for a particular field within a record, the field shall be left empty.

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<sup>1</sup> For example, a cumulative notional value of covered orders of 12.3456789 would round to 12.345679.

<sup>2</sup> For example, if the reporting entity received orders but did not execute shares, the reporting entity would only provide values for the designated participant code, the reporting entity code, the S&P 500 flag, the order type, the order size category, the average order size, and the average notional order size fields. The reporting entity would leave the other fields empty.

#### **IV. Internet Sites for Downloading Files**

A market center, broker, or dealer shall make its summary monthly reports under paragraph (a)(2) of the Rule available for downloading, both at a single page on an Internet site that is free of charge and readily accessible to the public.<sup>3</sup> A market center, broker, or dealer shall make available on such page the files containing the monthly reports for a period of three years from the initial date of posting on the Internet site of the market center, broker, or dealer.

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<sup>3</sup> A market center, broker, or dealer may maintain its own Internet site at which its files can be downloaded or arrange for another person to maintain the Internet site at which the market center, broker, or dealer's files can be downloaded (as well as potentially the files of other market centers, brokers, or dealers).

**Exhibit A**

<b>Column #</b>	<b>Rule Reference (if applicable)</b>	<b>Field Header</b>	<b>Field Description</b>	<b>Data Type</b>	<b>Valid Values (specified in the format value - description)</b>	<b>Additional Notes</b>
1		DsgntParticipant	The code identifying the Participant that is acting as Designated Participant under Section VIII of the Plan	String	A - NYSE American Z - BZX Y - BYX B - Nasdaq BX M - NYSE Texas C - NYSE National J - EDGA K - EDGX Q - NASDAQ T - FINRA N - NYSE P - NYSE ARCA X - Nasdaq PSX V - IEX L - LTSE H - MIAX U - MEMX	
2		RprtEntityCd	The code identifying the market center, broker, or dealer, as assigned by a Designated Participant pursuant to Section VIII of the Plan	String		

3		RptDate	The six-digit code identifying the calendar month of trading for the report contained in the file	Integer		Must be a valid date in the format - YYYYMM
4	Rule 605(a)(2)	Sp500	S&P 500 Flag	String	Y: NMS stocks that are included in the S&P 500 Index as of the first day of that month; N: other NMS stocks	
5	Rule 605(a)(2)	OrderSize	Categorizes by the order notional size buckets	Integer	0: Less than \$250 250: \$250 - <\$1,000 1000: \$1,000 - <\$5,000 5000: \$5,000 - <\$10,000 10000: \$10,000 - <\$20,000 20000: \$20,000 - <\$50,000 50000: \$50,000 - <\$200,000 199999: \$0 - <\$200,000 200000: >=\$200,000	

6	Rule 605(a)(2)	OrderType	Order types by which the Rule requires a market center, broker, or dealer to categorize its report	String	M - Market Orders ML - Marketable Limit Orders	Under Rule 605(a)(2), the summary data report should be limited to this subset of order types.
<b>The following data must be calculated for market orders and marketable limit orders only:</b>						
7	Rule 605(a)(2)(i)	AvgOrderQty	The average order size in shares	Decimal		Up to 6 decimal places. Trailing zeroes are not required. Example: 123456.6789 or 123456.678900  Values should not be negative.
8	Rule 605(a)(2)(ii)	AvgOrderSize	The average notional order size	Decimal		Up to 6 decimal places. Trailing zeroes are not required. Example: 123456.6789 or 123456.678900  Values should not be negative.
9	Rule 605(a)(2)(iii)	ExctdOrderMidPtAvg	For executions of covered orders, the average midpoint	Decimal		Up to 6 decimal places. Trailing zeroes are not required. Example: 123456.6789 or 123456.678900  Values should not be negative.

10	Rule 605(a)(2)(iv)	PctExctdAtQuoteOrBetter	For executions of covered orders, the percentage of shares executed at the quote or better	Decimal		Up to 6 decimal places. Trailing zeroes are not required. Example: 123456.6789 or 123456.678900  Values should not be negative.
11	Rule 605(a)(2)(v)	PctExctdPI	For executions of covered orders, the percentage of shares that received price improvement	Decimal		Up to 6 decimal places. Trailing zeroes are not required. Example: 123456.6789 or 123456.678900  Values should not be negative.

12	Rule 605(a)(2)(vi)	WghtdAvgPct PI	For executions of covered orders, the share-weighted average percentage price improvement, calculated as the cumulative amount that prices were improved less the cumulative amount that prices were executed outside the quote divided by sum of the average midpoint times the number of shares executed	Decimal		Up to 6 decimal places. Trailing zeroes are not required. Example: 123456.6789 or 123456.678900  Values may be positive or negative.
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13	Rule 605(a)(2)(vii)	AvgEffctvSprdPct	For executions of covered orders, the average percentage effective spread	Decimal		Up to 6 decimal places. Trailing zeroes are not required. Example: 123456.6789 or 123456.678900  Values may be positive or negative.
14	Rule 605(a)(2)(viii)	AvgPctQuotSprd	For executions of covered orders, the average percentage quoted spread, calculated as the average quoted spread divided by the average midpoint for such orders	Decimal		Up to 6 decimal places. Trailing zeroes are not required. Example: 123456.6789 or 123456.678900  Values should not be negative.
15	Rule 605(a)(2)(ix)	AvgEFQPct	For executions of covered orders, the average effective spread divided by the average quoted spread, expressed as a percentage	Decimal		Up to 6 decimal places. Trailing zeroes are not required. Example: 123456.6789 or 123456.678900  Values may be positive or negative.

16	Rule 605(a)(2)(x)	AvgRealSprd Pct15sec	For executions of covered orders, the average percentage realized spread as calculated 15 seconds after the time of execution	Decimal		Up to 6 decimal places. Trailing zeroes are not required. Example: 123456.6789 or 123456.678900  Values may be positive or negative.
17	Rule 605(a)(2)(xi)	AvgRealSprd Pct1min	For executions of covered orders, the average percentage realized spread as calculated 1 minute after the time of execution	Decimal		Up to 6 decimal places. Trailing zeroes are not required. Example: 123456.6789 or 123456.678900  Values may be positive or negative.
18	Rule 605(a)(2)(xii)	WghtdAvgEx ctnTime	For executions of covered orders, the share-weighted average execution speed, in milliseconds	Decimal		Format: mmm.nnnnnn  Up to 6 decimal places. Trailing zeroes are not required.  Values should not be negative.  Numbers to the left of the decimal are not limited to three digits.