

Jonathan G. Katz, Esquire
Securities & Exchange Commission
450 Fifth Street
Washington, DC 20549-0609

Re: File # S7-10-04

Dear Mr. Katz:

This comment letter reflects my personal views on the Regulation NMS Market Data proposal and associated market structure issues.

I am the president of Market Systems Inc. (MSI) which is a leading preparer of SEC 11Ac 1-5 execution quality data and a provider of a database and suite of tools for the analysis of published 1-5 data. MSI has recently, on behalf of a number of plan participants, completed an analysis of the SEC Regulation NMS proposed change in the formula for allocating Market Data plan net income.

I would like to comment on implementation details of the income allocation formula should the commission decide to proceed with the proposed changes.

1. Security Income Allocation

The Commission has asked for comment on a number of issues related to the calculation of the security income allocation. Specifically, if trades would be a more suitable measure than dollars and if using the square root in the calculation meets the stated objectives.

I would suggest that 50% of Security Income Allocation be calculated using dollars and the other 50% using trades. This is consistent with the approach already proposed for the Trade Share calculation where there is equal weighting given to the dollar and trade calculations. Giving trades equal weighting to dollars in the income allocation formula will evenly reward market participants for volume and trade activity.

The use of the square root is an effective means of meeting the objective of compressing the high end of the range of the income allocation distribution. The square root is also the best understood function that can accomplish this. I think the consternation expressed in other comments to the Commission about having a square root as part of the calculation is not justified and that is not technically difficult to implement.

2. Quote Eligibility

As the Commission requested for comment, I strongly support allowing only quotes at the NBBO that are accessible through an Auto-Ex facility to be

considered in the allocation of market data revenues. This will significantly reduce the “gaming” of the quote share income allocation. Without this eligibility requirement there is a strong incentive for a participant to generate large volume manual quotes throughout the day and “fade” orders when it is not convenient to trade.

Consideration should also be given to a quote share size limitation. The fact that a quote is Auto-Ex is not sufficient to discourage quoting in excessive size with the objective of collecting Quote Share income. A number of market scenarios would allow for a participant to do this without risk. For example, when a stock is illiquid and has a wide quote spread a participant could quote a very large volume away from the market with minimal risk. A second example is when there is a bidder of the entire float of a stock. Without a quote size limitation there is nothing to prevent the participant from bidding a number of shares far in excess of the float and garnering all the Quote Share income for that stock. Having a size cap on the quotes could be done by a formula such as the average daily volume for the month. Since this is a retrospective analysis the period used for calculating the daily volume can be concurrent with the quote activity being capped.

Minimum quote durations of one second should be required for inclusion in the Income Allocation calculation. If the quote is not persistent it will be possible to flash quotes, making them effectively inaccessible, and collect Quote Share income.

3. NBBO improvement shares

The NBBO improvement shares are the most complex part of the proposal and are subject to manipulation (quoting with trades already in hand). It is not possible to accurately associate trades with quotes using the Network feeds. I also agree with the Commission that this calculation is not necessary if there is an Auto-Ex quote requirement for income allocation.

4. \$5,000 Minimum dollar amount for inclusion of trades

Disenfranchising Retail trades from market data revenue creates an unnecessary penalty to market centers that service them. Partial trade credit for trades less than \$5000 should be given as a fraction of \$5000 of the dollars traded (trade dollars/\$5000). This will be just as effect at eliminating the shredding of trades below the \$5000 minimum dollar amount as excluding them.

5. \$500,000 dollar cap for included trades

Comment was requested on a \$500,000 cap on trades to prevent exceptionally large trades from dominating allocation. This idea is consistent with the objective of flattening the high end of the distribution which is the justification for using the

square root in the Income Allocation calculation. This is a good idea but consideration should be given to making the dollar level \$200,000 which is the definition of a block trade.

6. Informational limitations in Networks A & B

Networks A & B do not identify summary records which are excluded from the Income Allocation calculation. This major deficiency should be corrected for market transparency reasons. This change will make it possible for someone other than the Network processor to do the Income Allocation calculation and could reduce the cost of such service.

Please refer to the appendix “An Analysis of Trade Reporting for Plan Income Allocation” for more details.

7. Definition of a Trade Eligible for Income Allocation

Network A and B primary markets are counting every executed customer order as a trade for the income allocation calculation. This means that both sides of customer crosses are counted. The non-primary market participants are counting trades based on the more restrictive definition used for regular last sale reports. I have no recommendation on how trades should be reported for the income allocation calculation other than it should be the same for all market participants within a Network.

Please refer to the appendix “An Analysis of Trade Reporting for Plan Income Allocation” for more details.

8. Implementation Costs

The cost of calculating and disseminating the proposed Income Allocation calculation should be minimal in the context of the large sums being allocated. I am confident that it can be cost effectively implemented by a third party if the Network processor proves to be too costly.

I hope my comments assist the Commission in its deliberations and will be available to respond to your request for clarification or additional comments.

Sincerely,

Theodore Karn
President
Market Systems Inc.

Appendix

An Analysis of Trade Reporting for Plan Income Allocation Prepared by Ted Karn and Paul Garrow – June 2004

Overview

Market Systems Inc. (MSI), on behalf of a number of plan participants, recently completed an analysis of the SEC Regulation NMS proposed change in the formula for allocating Market Data plan net income. The analysis included implementing a computer model of income allocation under the proposed regulation. During the implementation we developed a more detailed knowledge of how trades are currently reported under the joint industry plans.

MSI has concluded:

1. Trades for inclusion in the income allocation calculation are being counted differently among the primary market and other participants within Networks A and B.
2. Market trade data disseminated by Network A and B does not contain sufficient detail to precisely calculate the income allocation formula.

Network A and B Trade Conditions

The analysis requires some background in conditions that accompany trade reports.

Under normal conditions trades are initially reported to the tape with the regular last sale condition which is designated with the symbol “@”. The plan participants are prohibited from reporting a regular last sale trade more than once. An example of this would be reporting both the buy and sell sides of the same transaction (double printing).

At the time a trade occurs either the trade or a Summary record is reported. A Summary report represents multiple transactions. Detail records are delayed reports that follow a Summary record and can be identified by their trade condition of either “G” for opening bunched trades or “H” for Intraday bunched trades. The Detail records were created to preserve transmission bandwidth and are transmitted during periods of lower tape activity.

Determining the Summary record is not a problem with opening trades because they are always the first trades reported. One can determine they are Summary records if “G” records are subsequently reported. However, only in limited cases where prices are unique can Intraday Summary records be unambiguously identified and associated with “H” Detail records. This lack of a Summary record indicator in the publicly disseminated

trade feed is the reason that the trade data currently disseminated by the Network processors is not sufficient for the income allocation calculation.

Network A and B Detail and not Summary reports are used to count trades in the income allocation calculation. The Network A and B processor, SIAC, does not disseminate which records are Intraday Summary records and SIAC is therefore the only entity with enough information to precisely calculate the trade counts for the network allocation formula.

The number of shares reported in the Summary and associated Detail records are frequently inconsistent. This is possible only if the definition of a trade is different between Summary and Detail records. The Network A and B primary market participants generate Summary and Detail records and non-primary participants do not. Therefore Network A and B primary and non-primary market participants are, in effect, using different rules for reporting trades. Network C does not have Summary and Detail trade reports so the problem does not occur in that Network.

An analysis of Network A and B trade reporting examples will follow.

General Analysis

For the purposes of this memo MSI examined a single day, March 22nd 2004 to illustrate the trade reporting issues. On that day for Network A and B the trade message counts are summarized in Table I below:

NYSE Trade Messages

Count	Percentage	Condition
2,440,115	57.1%	H - Intraday Detail
1,392,508	32.6%	@ - Regular Last Sale
52,039	1.2%	G - Opening Detail
386,793	9.1%	Other Conditions
4,271,455	100.0%	Total Trade Messages

AMEX Trade Messages

Count	Percentage	Condition
119,766	68.2%	H - Intraday Detail
50,311	28.6%	@ - Regular Last Sale
5,594	3.2%	G - Opening Detail
66	0.0%	Other Conditions
175,737	100.0%	Total Trade Messages

**NYSE and AMEX Trade Message Counts For 3/22/04
Table I.**

For purposes of trades reported for inclusion in the income allocation formula Intraday “H” and Opening “G” records are counted and their associated Summary records are excluded. The lack of a Summary record indicator makes it impossible to precisely determine how many Summary records exist. For the purpose of modeling the income allocation formula MSI has estimated the number of Summary records based on the number of bunched trades in a single stock reported consecutively at the same price.

MSI attempted to reconcile NYSE regular last sales to ‘G’ and ‘H’ trade messages to what the computer model could best determine was the associated Summary record and found that in approximately:

- 40% of the cases the ‘G’ Opening Detail volume is equal to Opening Regular Last Sale volume.
- 95% of the cases the ‘G’ Opening Detail volume is equal to Opening Regular Last Sale volume or twice that volume.
- 60% of the cases the ‘H’ Intraday Detail volume is equal to the Regular Last Sale volume of what we infer is the associated Summary record.
- 90% of the cases the ‘H’ Intraday Detail volume is equal to the Regular Last Sale volume or twice that volume of what we infer is the associated Summary record.

This implies that the Detail records are frequently double printing the shares reported in the Summary records. In effect both sides of a single trade are frequently being counted for the income allocation calculation.

To understand how this is occurring we are providing a number of examples in infrequently traded issues. These examples are unambiguous but Intraday Summary records in active issues can’t be matched with any certainty with their Detail records. Please note that we are using the letter “R” in these examples to indicate the Regular Last Sales trade condition.

AMEX Trade Reporting Examples

In the example in table II below at 09:33:28AM in stock AAA there is an Opening Summary print for 600 shares @ 62.80. This is followed by four ‘G’ *Opening Detail* prints for a total of 1200 shares. This is an example where (*Opening Detail Total Shares*) = (2 * *Opening Summary Shares*). It can be inferred that a single customer order for 600 shares was matched with three customer order for 100, 200 and 300 shares. This is being reported as four transactions for the income allocation calculation.

Date:		Stock:			Exchange:
3/22/2004		AAA			AMEX
Time	Shares	Price	Condition	Total	
9:33:28	600	62.80	R	Opening Shares	
9:43:29	600	62.80	G	G Shares Total = 1200	
9:43:34	100	62.80	G		
9:43:34	300	62.80	G		
9:43:34	200	62.80	G		
9:58:47	300	62.45	R		

**An Example of AMEX Opening Bunched Trade Reporting
Table II.**

In the example in table III for stock AFP below the matching and Summary and Detail records are color coded. Single Detail records are being provided even though they are redundant with the Regular Last Sale Reports and are increasing bandwidth utilization. For Summary Shares 2 there are two Detail records indicating that two customer orders were paired off in that trade. This is an example where (*Intraday Detail Total Shares*) = (2 * *Intraday Summary Shares*). It is being reported as two transactions for the income allocation calculation.

Date:		Stock:			Exchange:
3/22/2004		AFP			AMEX
Time	Shares	Price	Condition	Total	
9:31:33	100	23.38	R	Opening Shares	
9:35:35	100	23.13	R	Summary Shares 1	
9:40:55	100	23.38	G	G Shares	
9:48:38	100	23.13	H	H Shares 1	
10:15:12	100	22.89	R	Summary Shares 2	
10:31:46	100	22.64	R	Summary Shares 3	
10:32:43	100	22.89	H	H Shares 2	
10:32:43	100	22.89	H	Total = 200	
10:37:50	100	22.4	R		
10:47:47	100	22.64	H	H Shares 3	

**An Example of AMEX Opening and Intraday Bunched Trade Reporting
Table III.**

NYSE Trade Reporting Examples

In the example in table IV below at 09:35:49AM in stock MAG there is an Opening Summary print for 8300 shares @ 5.81. Ten minutes later seven 'G' *Opening Detail* records are reported for a total of 16600 shares. This is an example where (*Opening Detail Total Shares*) = (2 * *Opening Summary Shares*). It can be inferred that two customer orders for 8000 and 300 shares were matched with the other five customer order. This is being reported as seven transactions for the income allocation calculation.

At 10:04:50AM there is an Intraday Summary print for 1500 shares @ 5.85. Ten minutes later three "H" Detail records are reported indicating that a customer order for 1500 shares was matched to two customer orders for 600 and 900 shares. This is an example where (*Intraday Detail Total Shares*) = (2 * *Intraday Summary Shares*). It is being reported as three transactions for the income allocation calculation.

Date:	Stock:	Exchange:		
3/22/2004	MAG	NYSE		
Time	Shares	Price	Condition	Total
9:35:49	8300	5.81	R	Opening Shares
9:35:50	1500	5.81	R	
9:36:34	100	5.82	R	
9:36:36	100	5.85	R	
9:36:37	200	5.85	R	
9:37:33	100	5.85	R	
9:44:54	400	5.85	R	
9:45:48	1000	5.81	G	
9:45:48	1500	5.81	G	
9:45:48	2000	5.81	G	
9:45:48	400	5.81	G	
9:45:49	3400	5.81	G	
9:45:55	300	5.81	G	G Shares
9:45:55	8000	5.81	G	Total = 16600
9:47:44	100	5.85	R	
9:47:46	100	5.85	R	
9:48:40	700	5.85	R	
9:52:45	100	5.85	R	
9:54:02	100	5.85	R	
9:55:02	300	5.85	R	
10:03:44	100	5.85	R	
10:04:50	1500	5.85	R	Summary Shares
10:06:00	100	5.85	R	
10:08:45	100	5.85	R	
10:11:43	300	5.85	R	
10:11:44	100	5.85	R	
10:11:52	700	5.85	R	

10:14:50	600	5.85	H	
10:14:50	900	5.85	H	
10:14:50	1500	5.85	H	H Shares
				Total = 3000
10:17:47	100	5.85	R	

**An Example of NYSE Opening and Intraday Bunched Trade Reporting
Table III.**

Conclusions

Network A and B primary markets are counting every executed customer order as a trade for the income allocation calculation. This means that both sides of customer crosses are counted. The non-primary market participants are counting trades based on the more restrictive definition used for regular last sale reports.

The simplest example of this would be a customer market order executing against a customer limit order held by a market participant. As the trades are currently reported for the income allocation calculation the primary market would get credit for two trades and the secondary market one trade.

MSI has no recommendation on how trades should be reported for the income allocation calculation other than it should be the same for all market participants within a Network.