

Goldman Sachs & Co. LLC (“GS&Co.”)

Quoting, Order Acceptance and Trading under the Regulation NMS Tick Size Pilot Program

Please note that GS&Co. has compiled the following frequently asked questions (“FAQ”) to assist you in understanding GS&Co.’s intended practices pertaining to quoting, order acceptance and trading in equity securities subject to the Tick Size Pilot Program. GS&Co. reserves the right, at any time, in the interests of its own business judgment to add, modify or remove any of the information appearing in this FAQ. You should periodically review the [Goldman Sachs Disclosures Website](#) for any additional terms and conditions that may be posted from time to time.

If you have any questions regarding this notice or the matters described below, please do not hesitate to contact your GS&Co. coverage representative.

A. TICK SIZE PILOT PROGRAM OVERVIEW

1. **What is the Tick Size Pilot Program (“Pilot”) and when does it begin?**

On May 6, 2015, the Securities & Exchange Commission issued an order approving the Pilot, which will officially commence on October 3, 2016. The Pilot is a data-driven test to determine whether or not widening the tick size from \$0.01 to \$0.05 for securities of smaller capitalization companies will impact trading, liquidity, and market quality of those securities. The Pilot will only affect quoting, order acceptance and trading in certain NMS stocks that are assigned to one of three test groups (“Pilot Securities”), with each test group having approximately 400 securities.

2. **How will NMS stocks be selected for the Pilot?**

The Pilot will include stocks of companies with \$3 billion or less in market capitalization, an average daily trading volume of one million shares or less, a volume weighted average price of at least \$2.00 for every trading day over a certain period of time prior to commencement of the Pilot, a closing price of \$2.00 on the last day of this period, and a closing price on every U.S. trading day during this period that is not less than \$1.50.

3. **Where are the Test Group assignments for Pilot Securities published?**

Test Group assignments were initially published and consolidated by FINRA on September 6, 2016. The assignments can be viewed by downloading the Test Group Assignment File available at <http://www.finra.org/industry/test-group-assignments>.

4. **How will the three test groups be treated differently under the Pilot?**

Test Group 1, Test Group 2 and Test Group 3 will each be subject to different sets of restrictions under FINRA Rule 6191:

- The **Control Group** will be accepted, ranked, quoted and traded at any price increment currently permitted.

- **Test Group 1** will be accepted, ranked and quoted in nickel increments, but will continue to trade at any price increment currently permitted.
- **Test Group 2** will be accepted, ranked, quoted and traded in nickel increments, but would allow certain exemptions for midpoint executions, retail investor executions, and negotiated trades.
- **Test Group 3**, in addition to the requirements of the second test group, will also be subject to a "trade-at" prohibition, which is subject to certain exemptions.

B. ORDER ACCEPTANCE

1. How will orders in Pilot Securities be impacted when the Pilot goes live?

When the Pilot goes into effect, all orders in Pilot Securities must be priced in increments of \$0.05, unless the order is priced to execute at the midpoint of the national best bid and national best offer ("NBBO"). In other words, GS&Co. is required to reject all limit orders in Pilot Securities with explicit price terms in non-nickel increments.

2. Are the Pilot rules regarding order acceptance for Pilot Securities applicable outside of regular trading hours?

Yes. The order acceptance rules of the Pilot are applicable at all times with respect to the Pilot Securities.

3. Can midpoint peg orders in Pilot Securities with limit prices in non-nickel increments be accepted by GS&Co.?

No. Limit prices for midpoint peg orders in Pilot Securities must be in increments of \$0.05 or such orders must be rejected by GS&Co.

4. Can orders in Pilot Securities with discretionary offsets priced in non-nickel increments be accepted by GS&Co.?

No. Discretionary offsets applied to orders in Pilot Securities must be in increments of \$0.05 or such orders must be rejected by GS&Co.

5. Can stop or stop limit orders in Pilot Securities with stop trigger prices in non-nickel increments be accepted by GS&Co.?

No. Stop trigger prices applied to orders in Pilot Securities must be in increments of \$0.05 or such orders must be rejected by GS&Co.

6. Can GS&Co. round or otherwise modify any non-nickel price terms explicitly stated in orders for Pilot Securities, such as limit prices, stop trigger prices or discretionary offsets, prior to accepting such an order?

No. GS&Co. is prohibited under the Pilot from rounding or otherwise changing any impermissible explicit price terms to permissible price terms prior to accepting such an order.

7. How does GS&Co. handle orders that are not explicitly priced in impermissible non-nickel increments, but that involve instructions or information intended to permit GS&Co. to determine an explicit price that may result in an impermissible non-nickel increment?

GS&Co. will use the instructions or information in the order to determine an explicit limit price and will round appropriately to the nearest nickel (GS&Co. will round down in the case of an order to buy, and up in the case of an order to sell). For example, if an order is originally priced in a foreign currency that will be executed in the US market, GS&Co. may perform foreign exchange rate calculations to convert the foreign currency to USD and then round such price to the nearest \$0.05 increment using the logic described above. Another example includes an order with a price dependent on the price of another security. In this case, GS&Co. will use such instructions to calculate the relevant price for the order and will round if necessary so that such price term conforms to the rules of the Pilot.

8. Can GS&Co. accept orders in a Pilot Security with non-nickel price increments if the price of the relevant Pilot Security drops below \$1.00 per share during the trading day?

No. In the event that the price of a Pilot Security drops below \$1.00, all of the relevant Pilot rules related to quoting and order acceptance will continue to apply.

Please note that if a Pilot Security closes at a price below \$1.00 on its primary listing exchange, such security will be moved to the Control Group starting the next trading day and will no longer be subject to the relevant quoting and order acceptance rules in the Pilot.

9. Will the stock component of complex orders or qualified contingent orders involving Pilot Securities be impacted by the order acceptance restrictions under the Pilot?

In the event that the stock components of either complex orders or qualified contingent orders are submitted to GS&Co. with explicit limit prices in non-nickel increments for Pilot Securities, GS&Co. will reject such component orders in accordance with the requirements under the Pilot.

However, if such component orders in Pilot Securities are submitted to GS&Co. as market orders or limit orders with explicit price terms in permissible nickel increments, they will not be impacted by the order acceptance restrictions of the Pilot.

C. ORDER EXECUTION

1. How will the execution of orders in Pilot Securities be impacted when the Pilot goes live?

Orders in Pilot Securities that are designated as Test Group 2 or Test Group 3 securities can only be executed in increments of \$0.05 unless an applicable exception applies. The below FAQs address various order execution exceptions.

2. Are the Pilot rules regarding order execution for Pilot Securities assigned to Test Group 2 or Test Group 3 applicable outside of regular trading hours?

Yes. The order execution rules of the Pilot are applicable at all times with respect to the Pilot Securities assigned to Test Group 2 or Test Group 3. However, the trade-at prohibition

applicable to Test Group 3 securities will only apply during regular trading hours.

3. Can GS&Co. execute midpoint peg orders in Test Group 2 and Test Group 3 securities in non-nickel increments?

Yes. The Pilot permits GS&Co. to execute orders at the midpoint between the NBBO for Pilot Securities, which may occur at a price increment of \$0.025 depending on the prevailing market in the relevant security at the time of execution.

4. Can GS&Co. execute riskless principal transactions in Test Group 2 and Test Group 3 securities in non-nickel increments?

Yes. The second leg of a riskless principal trade (e.g., the customer fill) that complies with the relevant FINRA riskless principal reporting rules is not considered a separate transaction for purposes of the Pilot and may therefore be executed in increments other than \$0.05.

5. Can GS&Co. trade Test Group 2 and Test Group 3 securities on a net pricing basis in non-nickel increments?

No. Under the Pilot, GS&Co. is prohibited from executing trades on a net basis if the price per share (inclusive of any applicable commissions, fees, markup or markdown) of a Test Group 2 or Test Group 3 security is in an increment other than \$0.05. If the net price per share is in an increment of \$0.05, GS&Co. may execute the trade at that price if there are no other regulatory obligations preventing the same (e.g., the Regulation NMS trade through prohibition).

6. Under what other scenarios can GS&Co. execute customer orders in Test Group 2 and Test Group 3 securities in non-nickel increments?

The Pilot allows orders in Test Group 2 and Test Group 3 securities to be executed in increments other than \$0.05 where the execution price was not based on the quoted price of a Pilot Security at the time of execution and for which the material terms were not reasonably determinable at the time the order was accepted by GS&Co., namely benchmark trades. Examples of benchmark trades include but are not limited to: (1) volume weighted average price; (2) time weighted average price; (3) average price trade; (4) guaranteed opening price; and (5) guaranteed closing price. GS&Co. can also execute orders in Test Group 2 and Test Group 3 securities in increments other than \$0.05 if these orders are part of Qualified Contingent Trades and meet all of the relevant applicable regulatory requirements for such transactions.

7. Will GS&Co. be utilizing the trade-at intermarket sweep order (“TA-ISO”) exemption to the prohibition against executing trades in Test Group 3 securities at the NBBO?

No. While GS&Co. will not be utilizing the TA-ISO exemption to execute trades at the NBBO for Test Group 3 Securities, GS&Co. will be utilizing other exemptions under the rule, including the Block Size exemption. This exemption permits GS&Co. to execute an order at the NBBO if the order is at least 5,000 shares or has a market value of at least \$100,000.

8. How will the order acceptance and execution requirements under the Pilot impact trading activity in GSCO's SIGMA X² ("X²") the Alternative Trading System ("ATS")?

Please review the *Goldman Sachs SIGMA X² US FAQs*, available at the following location, for additional information about X² in the context of the Pilot requirements for Test Group 1, Test Group 2 and Test Group 3 securities:

<http://www.goldmansachs.com/what-we-do/securities/gset/equities/liquidity-access/index.html>

D. ADDITIONAL INFORMATION

1. Where can I find more information about the Tick Size Pilot Program?

More details about the Pilot are available on FINRA's website at

<http://www.finra.org/industry/tick-size-pilot-program>.