

U.S.-Listed Options Smart Order Router Market Order Handling

Prepared by Goldman Sachs Electronic Trading. In evaluating this material, you should know that it could have been previously provided to other clients and/or internal Goldman Sachs personnel, who could have already acted on it. The views or ideas expressed here are those of the desk and/or author only and are not an "official view" of Goldman Sachs; others at Goldman Sachs may have opinions or may express views that are contrary to those herein. This material is not independent advice and is not a product of Global Investment Research.

Effective December 22, 2011, Goldman Sachs Execution & Clearing, L.P. (GSEC) will implement an enhancement to its smart order router (SOR) logic for U.S.-listed options market orders from Goldman Sachs Electronic Trading (GSET) clients.

When GSEC receives a market order for 25* contracts or more, it will treat such orders as "not held" for purposes of handling your order when:

- (1) There would be an execution at a price that would be outside the national best bid or offer (NBBO) observed at the time of order receipt by an amount consistent with the obvious error guidelines of the options exchanges; or
- (2) GSEC has not received timely updated market data (*i.e.*, within 2 seconds).

Specifically, the SOR will capture the NBBO at the time of order receipt and determine the execution price that would exceed the obvious error guidelines – the "Market Order Threshold". As the SOR generates marketable child orders, it will consider whether the child order limit price would exceed the Market Order Threshold. If the Market Order Threshold would be exceeded or GSEC has not received timely updated market data to determine a reasonable child order limit price or venue for execution, the balance of your order will be cancelled.

Market Order Threshold Example

1. GSET customer sends a U.S.-listed options market order to buy 50 XYZ contracts when the current NBBO is \$9.50 - \$10.00.
2. The SOR establishes a threshold in accordance with the options exchange obvious error guidelines (as outlined below). The Market Order Threshold on the buy order for 50 XYZ contracts would be set at \$10.50.

Options Exchange Obvious Error Guidelines

Option Price	Minimum Amount
Below \$0.14	\$0.05
Below \$0.49 to \$0.15	\$0.07
Below \$2	\$0.25
\$2 to \$5	\$0.40
Above \$5 to \$10	\$0.50
Above \$10 to \$20	\$0.80
Above \$20	\$1.00

3. The SOR generates child limit orders at \$10.00 and sends them to the exchanges it deems appropriate in accordance with the displayed liquidity. After GSEC receives the execution reports back, 30 contracts are remaining on the parent order.
4. Prior to sending additional child limit orders, the SOR captures the current NBBO as \$10.01 - \$10.51. The SOR recognizes that the current offer price for XYZ options contracts has exceeded the Market Order Threshold. Accordingly, no child limit orders will be sent at the offer price and the balance of the order is cancelled back to the GSET customer.

If you have any questions regarding any of our routing practices, please contact your GSET client representative.

* GSEC may configure this contract threshold on a client-by-client basis to ensure the effectiveness of this control consistent with GSEC's obligations under Securities and Exchange Commission Rule 15c3-5, which will be disclosed to the relevant client in writing.

This message has been prepared by personnel in the Equities or Fixed Income, Currency and Commodities Sales/Trading Departments of one or more affiliates of The Goldman Sachs Group, Inc. ("Goldman Sachs") and is not the product of Global Investment Research. It is not a research report and is not intended as such. **Non-Reliance and Risk Disclosure:** This material should not be construed as an offer to sell or the solicitation of an offer to buy any security in any jurisdiction where such an offer or solicitation would be illegal. We are not soliciting any action based on this material. It is for the general information of our clients. It does not constitute a recommendation or take into account the particular investment objectives, financial conditions, or needs of individual clients. Before acting on this material, you should consider whether it is suitable for your particular circumstances and, if necessary, seek professional advice. The price and value of the investments referred to in this material and the income from them may go down as well as up, and investors may realize losses on any investments. Past performance is not a guide to future performance. Future returns are not guaranteed, and a loss of original capital may occur. We do not provide tax, accounting, or legal advice to our clients, and all investors are advised to consult with their tax, accounting, or legal advisers regarding any potential investment. The material is based on information that we consider reliable, but we do not represent that it is accurate, complete and/or up to date, and it should not be relied on as such. Opinions expressed are our current opinions as of the date appearing on this material only and only represent the views of the author and not those of Goldman Sachs, unless otherwise expressly noted. **Risk Disclosure Regarding futures, options, equity swaps, and other derivatives as well as non-investment-grade securities and ADRs:** Please ensure that you have read and understood the current options disclosure document before entering into any options transactions. Current United States listed options disclosure documents are available from our sales representatives or at <http://www.theocc.com/components/docs/riskstoc.pdf>. Certain transactions - including those involving futures, options, equity swaps, and other derivatives as well as non-investment-grade securities - give rise to substantial risk and are not available to nor suitable for all investors. If you have any questions about whether you are eligible to enter into these transactions with Goldman Sachs, please contact your sales representative. Foreign-currency-denominated securities are subject to fluctuations in exchange rates that could have an adverse effect on the value or price of, or income derived from, the investment. In addition, investors in securities such as ADRs, the values of which are influenced by foreign currencies, effectively assume currency risk.

If this material constitutes a financial promotion, it is issued and/or approved for distribution in the UK by Goldman Sachs International only to, and is only directed at (a) persons who have professional experience in matters relating to investments falling within Article 19(1) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (the "Order"); (b) high net worth entities falling within Article 49(1) of the Order; or (c) other persons to whom it may otherwise lawfully be communicated (all such persons together being referred to as "relevant persons"). This material must not be acted on or relied on by persons who are not relevant persons. Any investment or investment activity to which this communication relates is only available to relevant persons and will be engaged in only with relevant persons.

Special Risk Disclosure related to Exchange-Traded Funds ("ETFs") and Exchange-Traded Notes ("ETNs"): To the extent this communication contains information pertaining to ETFs or ETNs, consider the investment objectives, risks, and charges and expenses of the ETFs and ETNs carefully before investing. Each U.S. Registered ETF and ETN has filed a registration statement (including a prospectus) with the SEC which contains this and other information about the ETF or ETN as applicable. Before you invest in an ETF or ETN, you should obtain and read carefully the prospectus in the registration statement and other documents the issuer has filed with the SEC for more complete information about the product. You may get these documents for free by visiting EDGAR on the SEC website at www.sec.gov. Alternatively, you may obtain a copy of the prospectus for each of the ETFs and ETNs mentioned in these materials by (i) contacting your Goldman Sachs sales representative, or (ii) sending a request by calling toll-free 1-866-471-2526, or (iii) sending a request by email to Prospectus-nv@ny.email.gs.com, by fax to (212) 902-9316, or by mail to Goldman Sachs, 200 West Street, NY, NY 10282, Attn: Prospectus Department. ETFs are redeemable only in Creation Unit size aggregations and may not be individually redeemed; are redeemable only through Authorized Participants; and are redeemable on an "in-kind" basis. The public trading price of a redeemable lot of the ETFs may be different from its net asset value. These ETFs can trade at a discount or premium to the net asset value. There is always a fundamental risk of declining stock prices, which can cause losses to your investment. Most leveraged and inverse ETFs "reset" daily, meaning that they are designed to achieve their stated objectives on a daily basis. Due to the effect of compounding, their performance over longer periods of time can differ significantly from the performance (or inverse of the performance) of their underlying index or benchmark during the same period of time and as such are not meant to be held for the long term. This effect can be magnified in volatile markets. Prior to entering into a transaction in leveraged or inverse ETFs, you should be aware of the general risks associated with such transactions. You should not enter into leveraged or inverse ETFs transactions unless you understand the nature and extent of your risk exposure. You should also be satisfied that the leveraged or inverse ETFs transaction is appropriate for you in light of your circumstances and financial condition. ETFs and ETNs that are linked to commodity futures do not offer direct exposure to the commodity's spot price, and may perform differently than the spot price for the commodity itself. Performance differential can be magnified if a specific condition persists in the market for a commodity that creates a disparity between near-term future prices and long-term future prices and may lead to unexpected performance results. Other factors, such as roll yield, transaction costs, management fees, and taxes may cause deviation in performance between the spot price of a commodity and commodity futures. You should not assume that an ETF or ETN that is linked to commodity futures will provide an effective hedge because of a negative correlation with equities or other asset classes. You should always be aware of the general risks associated with investing in the commodities market and the futures market before investing in an ETF or ETN that is linked to commodity futures. **Conflict of Interest Disclosure:** We are a full-service, integrated investment banking, investment management, and brokerage firm. The professionals who prepared this material are paid in part based on the profitability of The Goldman Sachs Group, Inc., which includes earnings from the firm's trading, capital markets, investment banking and other business. They, along with other salespeople, traders, and other professionals may provide oral or written market commentary or trading strategies to our clients that reflect opinions that are contrary to the opinions expressed herein or the opinions expressed in research reports issued by our Research Departments, and our proprietary trading and investing businesses may make investment decisions that are inconsistent with the views expressed herein. In addition, the professionals who prepared this material may also produce material for, and from time to time, may advise or otherwise be part of our trading desks that trade as principal in the securities mentioned in this material. This material is therefore not independent from our proprietary interests, which may conflict with your interests. We and our affiliates, officers, directors, and employees, including persons involved in the preparation or issuance of this material, may from time to time have "long" or "short" positions in, act as principal in, and buy or sell the securities or derivatives (including options) thereof in, and act as market maker or specialist in, and serve as a director of, companies mentioned in this material. In addition, we may have served as manager or co manager of a public offering of securities by any such company within the past three years. **System Response and Access Times: Algorithmic Models:** System response and access times for direct market access and algorithmic trading may vary due to market conditions, system performance and other factors. Goldman Sachs' algorithmic models derive pricing and trading estimates based on historical volume patterns, real-time market data and parameters selected by the algorithmic user. The ability of Goldman Sachs' algorithmic models to achieve the performance described in these materials can be impacted by significant changes in market conditions such as increased volatility, price dislocations, material market events or news or trading halts. In addition, systems or communications failures may impact Goldman Sachs' ability to access the markets and, consequently, the performance of the algorithmic models. Factors such as order quantity, liquidity, spread size and the parameters selected by the algorithmic user may impact the performance results. **Not a Fiduciary:** To the extent this material is provided to an employee benefit plan or account subject to the Employee Retirement Income Security Act of 1974 or Section 4975 of the Internal Revenue Code, this material is provided solely on the basis that it will not constitute investment advice and will not form a primary basis for any person's or plan's investment decisions, and nothing in this material will result in Goldman Sachs becoming a fiduciary or advisor with respect to any person or plan. To the extent this material is provided to any other recipient, this material is provided solely on the basis that the recipient has the capability to independently evaluate investment risk and is exercising independent judgment in evaluating investment decisions in that its investment decisions will be based on its own independent assessment of the opportunities and risks presented by a potential investment, market factors and other investment considerations. **Not a Municipal Advisor:** Except in circumstances where Goldman Sachs expressly agrees otherwise, Goldman Sachs is not acting as a municipal advisor and the opinions or views contained herein are not intended to be, and do not constitute, advice, including within the meaning of Section 15B of the Securities Exchange Act of 1934. **Legal Entities Disseminating this Material:** This material is disseminated in Australia by Goldman Sachs Australia Pty Ltd (ABN 21 006 797 897); in Canada by Goldman, Sachs & Co. (or when expressly noted as such, by Goldman Sachs Execution & Clearing, L.P.) and by Goldman Sachs Administration Services (Canada) Co.; in Hong Kong by Goldman Sachs (Asia) L.L.C.; in Japan by Goldman Sachs Japan Co., Ltd.; in the Republic of Korea by Goldman Sachs (Asia) L.L.C., Seoul Branch; in New Zealand by Goldman Sachs New Zealand Limited; in Singapore by Goldman Sachs (Singapore) Pte. (Company Number: 198602165W); in India by Goldman Sachs (India) Securities Private Limited, Mumbai Branch; in Ireland by Goldman Sachs Bank (Europe) Public Limited Company; in Europe by Goldman Sachs International (unless stated otherwise); in France by Goldman Sachs Paris Inc. et Cie and/or Goldman Sachs International; in Germany by Goldman Sachs International and/or Goldman Sachs AG; in the Cayman Islands by Goldman Sachs (Cayman) Trust, Limited; in Brazil by Goldman Sachs do Brasil Banco Múltiplo S.A.; and in the United States of America by Goldman, Sachs & Co. (or when expressly noted as such, by Goldman Sachs Execution & Clearing, L.P.) (both of which are members of FINRA, NYSE and SIPC) and by Goldman Sachs Bank USA. You may obtain information about SIPC, including the SIPC brochure, by contacting SIPC (website: <http://www.sipc.org/>; phone: 202-371-8300). Goldman Sachs International, which is authorized and regulated by the Financial Services Authority, has approved this material in connection with its distribution in the United Kingdom and European Union. Unless governing law permits otherwise, you must contact a Goldman Sachs entity in your home jurisdiction if you want to use our services in effecting a transaction in the securities mentioned in this material. This material is not for distribution to retail clients, as that term is defined under The European Union Markets in Financial Instruments Directive (2004/39/EC) and any investments, including derivatives, mentioned in this material will not be made available by us to any such retail client. When this document is disseminated in Australia by Goldman, Sachs & Co. ("GSCo"), this document, and any access to it, is intended only for a person that has first satisfied Goldman Sachs that: the person is a Sophisticated or Professional Investor for the purposes of section 708 of the Corporations Act of Australia; and the person is a wholesale client for the purpose of section 761G of the Corporations Act of Australia. To the extent that GSCo is providing a financial service in Australia, GSCo is exempt from the requirement to hold an Australian financial services licence for the financial services it provides in Australia. GSCo is authorized and regulated by the U.S. Securities and Exchange Commission under US laws, which differ from Australian laws. When this document is disseminated in New Zealand by Goldman, Sachs & Co., this document, and any access to it, is intended only for a person that has first satisfied Goldman Sachs that the person is someone: whose principal business is the investment of money or who, in the course of and for the purposes of their business, habitually invests money; or to whom an offer of the interests may be made in circumstances that do not constitute an offer to the public for the purposes of section 3 (excluding section 3(2)(a)(iia)) or section 5(2CB) of the Securities Act 1978 (NZ). No offer to acquire the interests is being made to you in this document. Any offer will only be made in circumstances where disclosure is not required under the Securities Act 1978 (NZ), the Securities Regulations 1983 (NZ) or the Securities Regulations 2009 (NZ).