

SIGMA X Australia FAQs

Prepared by Goldman Sachs Electronic Trading. In evaluating this material, you should know that it may have been previously provided to other clients, or affiliate or firm trading desks, who may have already acted on it. This material is not advice with respect to any security transaction or strategy and is not a product of Global Investment Research.

1. What is SIGMA X Australia?

SIGMA X Australia is a non-displayed alternative liquidity pool which is owned and operated by Goldman Sachs Australia Pty Ltd.

2. What code is used to identify the crossing system SIGMA X Australia?

3611

3. When did Goldman Sachs Australia Pty Ltd begin operating this crossing system?

SIGMA X Australia began operating in January 2010.

4. What types of financial products are traded on SIGMA X Australia?

Only equity market products may be crossed in SIGMA X Australia.

5. Who is eligible for access to SIGMA X Australia?

SIGMA X Australia offers equal access to a broad range of participants from offshore and domestic sources, including retail investors, institutional long-only investors, hedge funds and broker-dealer clients. Additional liquidity is sourced from our equity-linked trading businesses.

SIGMA X Australia does not contain any Liquidity Provider, Market Making or High-Frequency Trading activity.

Access to SIGMA X Australia is uniform across all clients. Access to SIGMA X Australia is made available only through the Goldman Sachs suite of algorithms via IRESS or FIX.

6. Does your platform route orders out of SIGMA X Australia to any other external liquidity source?

Orders posted to SIGMA X Australia are not routed to any other external venue.

7. Does SIGMA X Australia connect to any other broker crossing systems?

SIGMA X Australia connects to ITG Australia Ltd's ("ITG") POSIT Marketplace aggregation algorithm, as well as Instinet Australia Pty Ltd's ("Instinet") Nighthawk aggregation algorithm.

ITG operates a dark pool aggregation system which allows orders to be sent into SIGMA X Australia. Instinet also operates a dark pool aggregation system which allows orders to be sent into SIGMA X Australia.

SIGMA X Australia will only receive orders from the ITG and Instinet dark pool aggregation systems and will not transmit outbound orders. SIGMA X Australia does not connect to ITG's crossing system POSIT[®] or Instinet's crossing system BLX[®] directly.

8. What is the crossing system code used by the other broker crossing system?

The crossing system code for ITG's crossing system is 3451.
The crossing system code for Instinet's crossing system is 2171.

9. Can I choose whether my orders are executed against those from an external crossing system?

Yes, although ITG's POSIT Marketplace is not a "crossing system", users of SIGMA X Australia have the option to opt in or out of any flow received from this aggregation algorithm. Instinet's Nighthawk is also not a "crossing system", users of SIGMA X Australia have the option to opt in or out of any flow received from this aggregation algorithm.

10. Does SIGMA X Australia allow indications of interest (IOIs)? If so, is it an opt-in or opt-out process?

SIGMA X Australia does not send outbound IOIs.

11. Is SIGMA X Australia a dark pool that only matches trades anonymously, without information leakage? Or will information regarding my orders be conveyed to potential liquidity providers?

The matching process for SIGMA X Australia is completely anonymous and will not disseminate any pre-trade information externally. Information about customer orders is not conveyed to any external party or liquidity provider.

12. Does SIGMA X Australia match within the spread or at the spread?

SIGMA X Australia provides price improvement on every execution. All trades are executed at the midpoint of the current national best bid-offer (NBBO) spread at the time of matching.

13. How will my orders interact with internal Goldman Sachs orders in terms of priority?

All orders are matched on a strict price and time priority basis, irrespective of their source. Other parameters including limit price and minimum executable quantity may affect the eligibility of an order to participate in the cross despite having time priority. The matching process does not distinguish between principal and agency orders.

14. Are SIGMA X trades exchange reported?

In line with ASIC Market Integrity Rules, all crossing trades must be reported to the exchange at the time they are executed. These trades appear real-time in the public trade feed.

15. What changes have been made to these disclosures?

2013-11-08: Initial public disclosure document made available

2014-01-10: SIGMA X Australia now connects to ITG's POSIT Marketplace ("PMP") aggregation algorithm. ITG's crossing system code is identified along with the disclosure for opting in and opting out of this aggregated flow.

2014-02-06: This public disclosure document is updated as at 2014-06-02 to clarify that users of SIGMA X Australia may opt in or out of any flow received from external crossing system operators. There is no change to the operation of SIGMA X Australia as a result of this update to the disclosure document.

2014-11-13: This public disclosure document is updated as at 2014-11-13 to clarify that SIGMA X Australia does not connect to ITG's POSIT[®] crossing system (identifier 3451) but receives incoming orders from ITG's POSIT Marketplace ("PMP") aggregation algorithm. As such the aggregation algorithm itself does not have a crossing system identifier and the reference to any

connection to ITG's crossing system has been removed. There is no change to the operation of SIGMA X Australia or the interaction of order flow as a result of this update to the disclosure document.

2014-12-16: Re-added the crossing system identifier 3451 to question 8 and amended the wording of question 5 slightly to clarify that there is no liquidity provider, market making or high frequency trading activity in SIGMA X Australia. No change to the operation of SIGMA X Australia as a result of this update to the disclosure document.

2015-06-09: Added reference to an incoming connection from Instinet's aggregation algorithm Nighthawk and also added Instinet's crossing system identifier 2171. There is no change to the operation of SIGMA X Australia as a result of this update to the disclosure document.

Non-Reliance and Risk Disclosure: This message is not the product of the Global Investment Research Department or Fixed Income Research. It is not a research report and is not intended as such. 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. The Goldman Sachs Group, Inc., its affiliates and its subsidiaries (collectively, "we", "our", "us" or "Goldman Sachs") 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 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. 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://theocc.com/publications/risks/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. To the extent this communication contains information pertaining to U.S. registered ETFs or ETNs, consider the investment objectives, risks, and charges and expenses of the ETFs and ETNs carefully before investing. If you have any questions about whether you are eligible to enter into or are concerned about the risks relating to these transactions, please contact your sales representative. 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 any foreign exchange products, convertible bonds or derivatives, mentioned in this material will not be made available by us to any such retail client. 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.

Goldman Sachs is 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. 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. This material is therefore not independent from our proprietary interests, which may conflict with your interests. Goldman Sachs, its 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.

Legal Entities Disseminating this Material: This material is disseminated in Australia by Goldman Sachs Australia Pty Limited; in Canada by Goldman Sachs Canada Inc. regarding Canadian equities and by Goldman, Sachs & Co. and/or Goldman Sachs Execution & Clearing, L.P. (all other materials); 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 Singapore by Goldman Sachs (Singapore) Pte. (Company Number: 198602165W); in India by Goldman Sachs (India) Securities Private Limited, Mumbai Branch; 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 & Co. oHG; in Brazil by Goldman Sachs do Brasil Banco Múltiplo S.A.; and in the United States of America by Goldman Sachs Execution & Clearing, L.P. (or when expressly noted as such, by Goldman, Sachs & Co.) (both of which are members FINRA, NYSE and SIPC). 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.

© 2015, The Goldman Sachs Group, Inc. All rights reserved. No part of this material may be (i) copied, photocopied or duplicated in any form by any means or (ii) redistributed without our prior written consent.