This report has been prepared by Goldman Sachs International ("Goldman Sachs") for the period ending 31 December 2018 (the "Reporting Period") for the purposes of meeting Goldman Sachs’ regulatory obligations under Article 65(6) of Commission Delegated Regulation 2017/565 and Article 27(6) of Directive 2014/65/EU ("MiFID II") which requires Goldman Sachs to annually publish (i) the top five venues where it executed clients’ orders; and (ii) the top five firms to whom it transmitted or placed client orders for execution, in respect of each class of financial instruments noted below. This report also provides information on Goldman Sachs’ assessment of the quality of execution it obtained from these execution venues and firms (based on its internal monitoring), for each class of financial instruments. Goldman Sachs does not guarantee the correctness or completeness of the information in this report and shall not be responsible for or have any liability whatsoever for any loss or damage caused by errors, inaccuracies or omissions in connection with use or reliance on this information. Goldman Sachs reserve the right to amend, update or re-state the information contained in this report at any time.

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### Equities Shares & Depositary Receipts

<table>
<thead>
<tr>
<th>Class of Instrument</th>
<th>Notification if &lt;1 average trade per business day in the previous year</th>
<th>Top five execution venues ranked in terms of trading volumes (descending order)</th>
<th>Proportion of volume traded as a percentage of total in that class</th>
<th>Proportion of orders executed as a percentage of total in that class</th>
<th>Percentage of passive orders</th>
<th>Percentage of aggressive orders</th>
<th>Percentage of directed orders</th>
</tr>
</thead>
<tbody>
<tr>
<td>152800999X52X3481X528 - GOLDMAN SACHS INTERNATIONAL</td>
<td></td>
<td>58.81</td>
<td>10.65</td>
<td>0.47</td>
<td>9.19</td>
<td>0.72</td>
<td></td>
</tr>
<tr>
<td>XLON - LONDON STOCK EXCHANGE</td>
<td></td>
<td>10.94</td>
<td>9.05</td>
<td>54.18</td>
<td>35.24</td>
<td>0.13</td>
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</tr>
<tr>
<td>XSWX - SIX SWISS EXCHANGE</td>
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<td>6.74</td>
<td>7.16</td>
<td>50.89</td>
<td>35.34</td>
<td>0.79</td>
<td></td>
</tr>
<tr>
<td>XVTX - SIX SWISS EXCHANGE - BLUE CHIPS SEGMENT</td>
<td></td>
<td>3.97</td>
<td>9.81</td>
<td>70.18</td>
<td>14.97</td>
<td>0.14</td>
<td></td>
</tr>
<tr>
<td>CHIX - CBOE EUROPE - CXE ORDER BOOKS</td>
<td></td>
<td>2.13</td>
<td>3.81</td>
<td>41.66</td>
<td>58.34</td>
<td>1.12</td>
<td></td>
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<tr>
<td>378900CEE329BEA35C22 - INVESTEC SECURITIES (PTY) LTD</td>
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<td>49.08</td>
<td>21.11</td>
<td>N/A</td>
<td>N/A</td>
<td>0.06</td>
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</tr>
<tr>
<td>789000ZSYXQD4Y7YRG72 - AK YATIRIM MENKUL DEGERLER ANONIM SIRKETI</td>
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<td>29.14</td>
<td>52.05</td>
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<tr>
<td>784900WMD1RYUSGEUG82 - ISRAEL BROKERAGE AND INVESTMENTS - I.B.I LTD</td>
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<tr>
<td>2549004R68ZXQ6YYFI14 - NAVIGARE SECURITIES (PTY) LTD</td>
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<td>4.97</td>
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<td>213800LVTF637I5COY97 - LEGAE SECURITIES (PTY) LTD</td>
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<td>8.97</td>
<td>N/A</td>
<td>N/A</td>
<td>0.17</td>
<td></td>
</tr>
<tr>
<td>Class of Instrument</td>
<td>Notification if &lt;1 average trade per business day in the previous year</td>
<td>Top five execution venues ranked in terms of trading volumes (descending order)</td>
<td>Proportion of volume traded as a percentage of total in that class</td>
<td>Proportion of orders executed as a percentage of total in that class</td>
<td>Percentage of passive orders</td>
<td>Percentage of aggressive orders</td>
<td>Percentage of directed orders</td>
</tr>
<tr>
<td>---------------------</td>
<td>-------------------------------------------------</td>
<td>------------------------------------------</td>
<td>-------------------------------------------------</td>
<td>-------------------------------------------------</td>
<td>-----------------</td>
<td>-----------------</td>
<td>-----------------</td>
</tr>
<tr>
<td></td>
<td></td>
<td>W22LROWP2IHZNBB6K528 - GOLDMAN SACHS INTERNATIONAL</td>
<td>19.91</td>
<td>10.46</td>
<td>0.88</td>
<td>47.95</td>
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<tr>
<td></td>
<td></td>
<td>XLON - LONDON STOCK EXCHANGE</td>
<td>8.64</td>
<td>17.74</td>
<td>61.94</td>
<td>30.11</td>
<td>0.06</td>
</tr>
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<td></td>
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<td>XETA - XETRA - REGULIERTER MARKT</td>
<td>8.27</td>
<td>9.04</td>
<td>70.26</td>
<td>21.42</td>
<td>0.57</td>
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<td></td>
<td></td>
<td>CHX - CHCE EUROPE - CIE ORDER BOOKS</td>
<td>5.82</td>
<td>8.88</td>
<td>56.31</td>
<td>43.69</td>
<td>3.11</td>
</tr>
<tr>
<td></td>
<td></td>
<td>XVTX - SIX SWISS EXCHANGE - BLUE CHIPS SEGMENT</td>
<td>3.85</td>
<td>0.88</td>
<td>73.70</td>
<td>15.66</td>
<td>0.18</td>
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<td></td>
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<td>5493006QMFDDMYWIAM13 - BANCO SANTANDER, S.A.</td>
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<td>51.94</td>
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<td>N/A</td>
<td>0.61</td>
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<td></td>
<td>4BY1ZWG5DYMF1HP5KL86 - BANQUE LOMBARD ODIER &amp; CIE SA</td>
<td>18.80</td>
<td>4.28</td>
<td>N/A</td>
<td>N/A</td>
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<td>213800EEC95PRUCEUP63 - INVESTMENT TECHNOLOGY GROUP LIMITED</td>
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<td>N/A</td>
<td>N/A</td>
<td>0.03</td>
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<tr>
<td></td>
<td></td>
<td>63540061DPCBNMCGRY22 - J &amp; E DAVY</td>
<td>11.05</td>
<td>5.02</td>
<td>N/A</td>
<td>N/A</td>
<td>0.14</td>
</tr>
<tr>
<td></td>
<td></td>
<td>549300UYJKOXE3HB8L79 - WOOD &amp; COMPANY FINANCIAL SERVICES, A.S.</td>
<td>9.08</td>
<td>4.66</td>
<td>N/A</td>
<td>N/A</td>
<td>0.71</td>
</tr>
</tbody>
</table>
### Equities Shares & Depositary Receipts

#### Reporting Entity: GS
- **Type of Client:** Professional Client
- **Reporting Entity:** GS

#### Notification of Q2 average trade per business day in the previous year

<table>
<thead>
<tr>
<th>Top Five Execution Venues for a period of three terms of trading volumes (Benchmarking order)</th>
<th>Proportion of volume traded as a percentage of total in that class</th>
<th>Proportion of orders executed at an average percentage of total in that class</th>
<th>Percentage of passive orders</th>
<th>Percentage of aggressive orders</th>
<th>Percentage of directed orders</th>
</tr>
</thead>
<tbody>
<tr>
<td>NYSE - NEW YORK STOCK EXCHANGE</td>
<td>19.60</td>
<td>19.82</td>
<td>73.21</td>
<td>20.79</td>
<td>0.74</td>
</tr>
<tr>
<td>NASDAQ COMPUCOM</td>
<td>13.35</td>
<td>13.82</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Euronext Paris</td>
<td>11.84</td>
<td>11.90</td>
<td>N/A</td>
<td>N/A</td>
<td>0.28</td>
</tr>
<tr>
<td>SBI Japannext Co., Ltd.</td>
<td>9.64</td>
<td>9.66</td>
<td>N/A</td>
<td>N/A</td>
<td>0.17</td>
</tr>
<tr>
<td>Scivantage</td>
<td>7.59</td>
<td>7.59</td>
<td>N/A</td>
<td>N/A</td>
<td>0.00</td>
</tr>
</tbody>
</table>

1. **Topic 1:** An explanation of the relative importance the firm gave to the execution factors of price, costs, speed, likelihood of execution or any other consideration including qualitative factors when assessing the quality of execution:

   This qualitative commentary covers the activity of different divisions of Goldman Sachs International (GS), namely the Securities Division and the Private Wealth Management Division. Unless otherwise indicated, the responses provided below are relevant for GS regulated under both divisions as well as for GS Global Markets International (GMI) when regulated under both divisions. This qualitative commentary may be used and is expected to be used by GS and/or the relevant GS division. GS may use this qualitative commentary to assess the relative importance of execution factors. Where relevant, GS may refer to the qualitative commentary in its best execution summary. GS maintains internal procedures for the selection of Brokers, Trading Venues and other Execution Venues, both regulated and unregulated, which GS may use to execute orders on behalf of clients in certain financial instruments, including

   • SBI Japannext Co., Ltd.
   • Chi-X Global Holdings LLC
   • MIB Inter Connect Co., Ltd.
   • National Stock Exchange of India Limited
   • Turquoise Global Holdings Limited

2. **Topic 2:** A description of any close links, conflicts of interests, and common ownerships with respect to any execution venues used to execute orders:

   GS and persons connected with GS provide diversified financial services to a broad range of clients and counterparties and circumstances may arise in which GS may have a conflict of interest.

3. **Topic 3:** A description of any specific arrangements with any execution venues regarding payments made or received, discounts, rebates or non-monetary benefits received;

   The Private Wealth Management Division and the Securities Division review a variety of execution performance metrics, including

   • Class of Instrument
   • Notification if <1 average trade per business day in the previous year

4. **Topic 4:** An explanation of the factors that led to a change in the list of execution venues listed in the firm’s execution policy, if such a change occurred:

   GS maintains internal procedures for the selection of Brokers, Trading Venues and other Execution Venues, both regulated and unregulated, which GS may use to execute orders on behalf of clients in certain financial instruments, including

   • MIB Inter Connect Co., Ltd.
   • National Stock Exchange of India Limited
   • Turquoise Global Holdings Limited

#### Reporting Entity: GS
- **Type of Client:** Professional Client
- **Reporting Entity:** GS

#### Notification of Q4 average trade per business day in the previous year

<table>
<thead>
<tr>
<th>Top Five Brokers Report</th>
<th>Proportion of volume traded as a percentage of total in that class</th>
<th>Proportion of orders executed at an average percentage of total in that class</th>
<th>Percentage of passive orders</th>
<th>Percentage of aggressive orders</th>
<th>Percentage of directed orders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barclays Capital, Inc.</td>
<td>25.60</td>
<td>25.60</td>
<td>N/A</td>
<td>N/A</td>
<td>0.17</td>
</tr>
<tr>
<td>BNP Paribas</td>
<td>18.42</td>
<td>18.42</td>
<td>N/A</td>
<td>N/A</td>
<td>0.17</td>
</tr>
<tr>
<td>Credit Suisse</td>
<td>15.39</td>
<td>15.39</td>
<td>N/A</td>
<td>N/A</td>
<td>0.17</td>
</tr>
<tr>
<td>Deutsche Bank AG</td>
<td>13.60</td>
<td>13.60</td>
<td>N/A</td>
<td>N/A</td>
<td>0.17</td>
</tr>
<tr>
<td>Goldman Sachs International</td>
<td>11.84</td>
<td>11.84</td>
<td>N/A</td>
<td>N/A</td>
<td>0.17</td>
</tr>
</tbody>
</table>

5. **Topic 5:** An explanation of the factors that led to a change in the list of execution venues listed in the firm’s execution policy, if such a change occurred:

   GS provides a variety of execution performance metrics, including

   • Percentage of directed orders
   • Percentage of passive orders

As part of our periodic evaluation of execution venues, GS reviews a variety of execution performance metrics, including

   • Not applicable.
   • 103x-213
   • 103x-139
   • 103x-109
   • 103x-50
   • 103x24
   • 103x113
   • 103x143
   • 103x262
   • 103x292
   • 103x336
   • 103x381
   • 103x470
   • 103x500
   • 103x589
   • 103x738
   • 103x871

### Systematic Intermediaries

- Jane S. St, Tower, Virtu, XTX, Hudson, Citadel Europe
- MTIV (segregated and collective investment funds):
  - Aqua, First North Auction on Demand, Nordic Growth Market, (IG-Point, Liquidate
  - Primary Markets: Tradeweb (Saudi Stock Exchange)
1. Topic 1: an explanation of the relative importance the firm gave to the execution factors of price, costs, speed, likelihood of execution or any other consideration including qualitative factors when assessing the quality of execution:

GS executes orders for professional clients of the Securities Division and the Private Wealth Management Division where the approach to order execution is consistent. GS also executes orders for eligible counterparties, however under applicable law and regulation GS is not obliged to provide the best execution when it executes orders on behalf of eligible counterparties.

2. Topic 2: an explanation of whether other criteria were given precedence over immediate price and cost when executing retail client orders and how these other criteria were instrumental in delivering the best possible result in terms of the total consideration to the client;

Not applicable.

3. Topic 3: an explanation of how the investment firm has used any data or tools relating to the quality of execution, including any data published under RTS 27

GS has in place post-execution supervisory monitoring procedures which use market data, where it is available, to assess relevant client transactions. Where appropriate market data is not available other criteria are used to review relevant client transactions for monitoring purposes. This monitoring is undertaken on a systematic basis via best execution monitoring systems or, where required, on a manual basis in accordance with internal monitoring policies and procedures. As part of its overall best execution monitoring framework and on-going assessment of execution venues utilised, GS may also take account of information published under RTS 27 by those execution venues (if applicable) alongside data sources used as part of its systematic best execution monitoring arrangements.

4. Topic 4: an explanation of whether other criteria were given precedence over immediate price and cost when executing retail client orders and how these other criteria were instrumental in delivering the best possible result in terms of the total consideration to the client;

Not applicable.

5. Topic 5: an explanation of how order execution differs according to client categorisation, where the firm treats categories of clients differently and where it may affect the order execution arrangements:

GS executes orders for professional clients of the Securities Division and the Private Wealth Management Division where the approach to order execution is consistent. GS also executes orders for eligible counterparties, however under applicable law and regulation GS is not obliged to provide the best execution when it executes orders on behalf of eligible counterparties.

6. Topic 6: an explanation of whether other criteria were given precedence over immediate price and cost when executing retail client orders and how these other criteria were instrumental in delivering the best possible result in terms of the total consideration to the client;

Not applicable.

7. Topic 7: an explanation of how the investment firm has used data or tools relating to the quality of execution, including any data published under RTS 27

GS has in place post-execution supervisory monitoring procedures which use market data, where it is available, to assess relevant client transactions. Where appropriate market data is not available other criteria are used to review relevant client transactions for monitoring purposes. This monitoring is undertaken on a systematic basis via best execution monitoring systems or, where required, on a manual basis in accordance with internal monitoring policies and procedures. As part of its overall best execution monitoring framework and on-going assessment of execution venues utilised, GS may also take account of information published under RTS 27 by those execution venues (if applicable) alongside data sources used as part of its systematic best execution monitoring arrangements.

8. Topic 8: an explanation of how the investment firm has used output of a consolidated tape provider established under Article 65 of Directive 2014/65/EU.

N/A
Debt instruments: [1] Bonds

1. Topic 1: an explanation of the relative importance the firm gave to the execution factors of price, costs, speed, likelihood of execution or any other consideration including qualitative factors when assessing the quality of execution:

This qualitative commentary covers the activity of different divisions of Goldman Sachs International (GS), namely the Securities Division and the Private Wealth Management Division. Unless otherwise indicated, the responses provided below are relevant for both divisions and for which references are made to the Securities Division or the Private Wealth Management Division specifically. For further information on each division’s best execution arrangements please refer to the relevant summaries which are available at: http://www.goldmansacs.com/disclosures/mifid/.

These instruments are typically traded on a request for quote basis, including where clients approach us for a quote or are responding to our unsolicited price/indications of interest through electronic platforms where we predominantly act in a principal capacity and the client ultimately decides whether to proceed with the transaction based upon the price provided by us or those of other liquidity providers from whom it has sourced quotes. Generally we would not expect clients to be legitimately relying on us to provide best execution and therefore our best execution obligations for these instruments are likely to apply in more limited circumstances than for other asset classes.

The Private Wealth Management Division operates an "open architecture" model for executing all fixed income trades where the GS Securities Division is one of the possible execution venues. Where the open architecture platform does not support a certain product or an order is subject to specific instructions the Private Wealth Management Division can trade through the GS Securities Division.

To the extent we determine we do owe a best execution obligation and subject to any specific instructions, GS will generally give the highest priority to:

• For Securities Division, net price. The remaining execution factors, to the extent relevant, are generally given equal ranking.

• For professional clients of the Private Wealth Management Division, net consideration.

2. Topic 2: a description of any close links, conflicts of interests, and common ownerships with respect to any execution venues used to execute orders;

Goldman Sachs Group entities may have (i) minor, non-controlling ownership stakes in companies which operate on our execution venues and/or (ii) be founding consortia members of execution venues for which it has revenue share arrangements, which GS may use to execute orders on behalf of clients or to respond to clients' requests for quotes in certain financial instruments, including:

• Tradeweb LLC
• Bloomberg
• Markit Inc.

Our decision to route orders to, or respond to clients’ request for quotes on, a particular execution venue is determined, as applicable, by whether execution on such venues allows us to satisfy our best execution obligations and/or to interact with clients, and is not influenced by any such ownership or revenue share arrangements.

For further details on the execution venues used by the Securities Division and its conflicts of interest policy, please refer to the Securities Division’s best execution summary which is available at: http://www.goldmansacs.com/disclosures/mifid/.

The Private Wealth Management Division operates an "open architecture" order execution platform for executing all fixed income trades unless the open architecture platform does not support a certain product or an order is subject to specific instructions.

For further details on the execution venues used by the Private Wealth Management Division and its conflicts of interest policy, please refer to Private Wealth Management Division’s best execution summary which is available at: http://www.goldmansacs.com/disclosures/mifid/.

3. Topic 3: a description of any specific arrangements with any execution venues regarding payments made or received, discounts, rebates or non-monetary benefits received:

Some execution venues may offer differing fee plans to trading members depending on the volume and notehouse of a trading activity on the venue as well as fee discounts depending on average volume of trading undertaken. Such arrangements apply equally to all trading members who satisfy the relevant criteria under the execution venues rules. Information on such arrangements is publicly available on the relevant execution venues website. Our decision to route orders to a particular venue for execution is determined by whether execution on such venues allows us to satisfy our best execution obligations and is not influenced by any such fee structures or volume discounts.

This is not applicable to the Private Wealth Management Division's open architecture order execution platform.

4. Topic 4: an explanation of the factors that led to a change in the list of execution venues listed in the firm's execution policy, if such a change occurred:

We have reviewed our execution venues list for this asset class to remove those execution venues that are not used for the execution of client orders. Please note GS may use selected brokers venues, OTHs, SEFs, and other platforms as part of its hedging and price discovery processes.

5. Topic 5: an explanation of how order execution differs according to client categorisation, where the firm treats categories of clients differently and where it may affect the order execution arrangements;

The Private Wealth Management Division generally gives the highest priority to total consideration for professional clients which is consistent with the Private Wealth Management Division's approach to execution with its retail clients.

GS also executes orders for eligible counterparties, however under applicable law and regulation GS is not obliged to provide best execution when it executes orders on behalf of eligible counterparties.

6. Topic 6: an explanation of whether other criteria were given precedence over immediate price and cost when executing retail client orders and how these other criteria were instrumental in delivering the best possible result in terms of the total consideration to the client;

Not applicable.

7. Topic 7: an explanation of how the investment firm has used any data or tools relating to the quality of execution, including any data published under RTS 27:

GS has in place post execution supervisory monitoring procedures which use market data, where it is available, to assess relevant client transactions. Where appropriate market data is not available other criteria are used to review relevant client transactions for monitoring purposes. This monitoring is undertaken on a systematic basis via best execution monitoring systems or, where required, on a manual basis in accordance with internal monitoring policies and procedures. As part of its overall best execution monitoring framework and on-going assessment of execution venues utilized, GS may also take account of information published under RTS 27 by those execution venues (if applicable) alongside data sources used as part of its systematic best execution monitoring arrangements.

8. Topic 8: an explanation of how the investment firm has used output of a consolidated tape provider established under Article 60 of Directive 2014/65/EU.

N/A
Debt instruments: [i] Money markets instruments

1. Topic 1: an explanation of the relative importance the firm gave to the execution factors of price, costs, speed, likelihood of execution or any other consideration including qualitative factors when assessing the quality of execution:

This qualitative commentary covers the activity of both divisions, namely the Securities Division and the Private Wealth Management Division. Unless otherwise indicated, the responses provided below are relevant for both divisions and are applicable when reference is made to either the Securities Division or the Private Wealth Management Division specifically. For further information on execution arrangements for each division, please refer to the relevant summaries which are available at http://www.goldmansachs.com/disclosures/mifid/.

These instruments are typically priced on a request for quote basis, including where clients approach us for a quote or are responding to our unsolicited prices/indicators of interest through electronic platforms where we predominantly act in a principal capacity and the client ultimately decides whether to proceed with the transaction based upon the price provided by us and/or those of other liquidity providers from whom we have sourced quotes. Generally we would not expect clients to be legibly relying on us to provide best execution and therefore our best execution obligations for these instruments are likely to apply in more limited circumstances than for other asset classes.

We have revised our execution venues list for this asset class to remove those execution venues that are not used for the execution of client orders. Please note GS may use selected brokers venues, OTFs, SEFs, and other platforms as part of its hedging and risk management activities.

Some execution venues may offer differing fee plans to trading members depending on the volume and nature/type of a trading activity on the venue as well as fee discounts depending on average volume of trading undertaken. Such arrangements apply equally to all trading members who satisfy the relevant criteria under the execution venue rules. Information on such arrangements is publicly available on the relevant execution venues website. Our decision to route orders to a particular venue for execution is determined by whether execution on such venues allows us to satisfy our best execution obligations and is not influenced by any such fee structures or volume discounts.

This qualitative commentary covers the activity of different divisions of Goldman Sachs International (GS), namely the Securities Division and the Private Wealth Management Division. Unless otherwise indicated, the responses provided below are relevant for both divisions and are applicable when reference is made to either the Securities Division or the Private Wealth Management Division specifically. For further information on execution arrangements for each division, please refer to the relevant summaries which are available at http://www.goldmansachs.com/disclosures/mifid/.

2. Topic 2: a description of any close links, conflicts of interests, and common ownerships with respect to any execution venues used to execute orders;

Goldman Sachs Group entities may have (i) minor, non-controlling ownership stakes in companies which operate or own execution venues and/or; (ii) be founding consortia members of execution venues for which it has revenue share arrangements, which GS may use to execute orders on behalf of clients or to respond to clients' requests for quotes in certain financial instruments, including

- Tradeweb LLC
- Bloomberg
- Markit

Our decision to route orders to, or respond to clients' requests for quotes on, a particular execution venue is determined, as applicable, by whether execution on such venues allows us to satisfy our best execution obligations or as necessary to interact with clients and is not influenced by any such ownership or revenue share arrangements.

For further details on the execution venues used by the Securities Division and its conflicts of interest policy, please refer to the Securities Division’s best execution summary which is available at http://www.goldmansachs.com/disclosures/mifid/.

The Securities Division utilizes different execution venues to execute client orders. The Private Wealth Management Division operates an “open architecture” model for executing all fixed income trades where the GS Securities Division is one of the possible execution venues. Where the open architecture platform does not support a certain product or an order is subject to specific instructions. Where this is the case, Private Wealth Management can trade through the GS Securities Division.

For further details on the execution venues used by the Private Wealth Management Division and its conflicts of interest policy, please refer to Private Wealth Management Division’s best execution summary which is available at http://www.goldmansachs.com/disclosures/mifid/.

3. Topic 3: a description of any specific arrangements with any execution venues regarding payments made or received, discounts, rebates or non-monetary benefits received.

Some execution venues may offer differing fee plans to trading members depending on the volume and nature/type of a trading activity on the venue as well as fee discounts depending on average volume of trading undertaken. Such arrangements apply equally to all trading members who satisfy the relevant criteria under the execution venue rules. Information on such arrangements is publicly available on the relevant execution venues website. Our decision to route orders to a particular venue for execution is determined by whether execution on such venues allows us to satisfy our best execution obligations and is not influenced by any such fee structures or volume discounts.

This is not applicable to the Private Wealth Management Division’s open architecture order execution platform.

4. Topic 4: an explanation of the factors that led to a change in the list of execution venues listed in the firm’s execution policy, if such a change occurred;

We have reviewed our execution venues list for this asset class to remove those execution venues that are not used for the execution of client orders. Please note GS may use selected brokers venues, OTFs, SEFs, and other platforms as part of its hedging and risk management activities.

5. Topic 5: an explanation of how order execution differs according to client categorisation, where the firm treats categories of clients differently and where it may affect the order execution arrangements;

The Private Wealth Management Division generally gives the highest priority to total consideration for professional clients which is consistent with the Private Wealth Management Division’s approach to execution with its retail clients.

6. Topic 6: an explanation of whether other criteria were given precedence over immediate price and cost when executing retail client orders and how those other criteria were instrumental in determining the best possible result in terms of the total consideration to the client;

Not applicable.

7. Topic 7: an explanation of how the investment firm has used any data or tools relating to the quality of execution, including any data published under RTS 27

GS has in place post-execution supervisory monitoring procedures which use market data, where it is available, to assess relevant client transactions. Where appropriate market data is not available other criteria are used to review relevant client transactions for monitoring purposes. This monitoring is undertaken on a systematic basis via best execution monitoring systems or, where required, on a manual basis in accordance with internal monitoring policies and procedures. As part of its overall client execution monitoring framework and on-going assessment of execution venues utilized, GS may also take account of information published under RTS 27 for those execution venues (if applicable) alongside data sources used as part of its systematic best execution monitoring arrangements.

8. Topic 8: where applicable, an explanation of how the investment firm has used output of a consolidated tape provider established under Article 65 of Directive 2014/65/EU.

N/A
1. Topic 1: an explanation of the relative importance the firm gave to the execution factors of price, costs, speed, likelihood of execution or any other consideration including qualitative factors when assessing the quality of execution:

These instruments are typically traded only on the execution venue of their listing and therefore client orders in the instrument will determine the execution venue. Application of best execution is therefore limited to liquidity available on the relevant execution venue for the instrument.

When assessing the relative importance given to execution factors where Goldman Sachs International ("GS") has determined it has a best execution obligation in respect of an order GS will take into account the following criteria for determining the relative importance of the execution factors in the circumstances:

- the characteristics of the client including the regulatory categorisation of the client;
- the characteristics of the relevant order;
- the characteristics of financial instruments that are the subject of the relevant order; and
- the characteristics of the execution venue to which that relevant order can be directed.

Subject to any specific instructions, taking into account the relevant criteria above, the ranking of execution factors would typically be as follows:

- price
- speed of execution.

The remaining execution factors, to the extent applicable, are generally given equal ranking.

It should also be noted that where we provide direct market access arrangements to an execution venue, or where a client calibrates the parameters of an execution algorithm or otherwise provides specific instructions in relation to a trade, our relative prioritisation of execution factors would be limited to those elements of the execution not covered by the client’s specific instructions or, in the case of direct market access arrangements, not within the client’s control.

For further information on GS’ best execution arrangements please refer to the relevant summaries which are available at: http://www.goldmansachs.com/disclosures/mifid/.

2. Topic 2: a description of any close links, conflicts of interests, and common ownerships with respect to any execution venues used to execute orders;

GS and persons connected with GS provide diversified financial services to a broad range of clients and counterparties and circumstances may arise in which GS may have a conflict of interest.

For further details on the execution venues used by GS and its conflicts of interest policy, please refer to its best execution summary which is available at: http://www.goldmansachs.com/disclosures/mifid/.

3. Topic 3: a description of any specific arrangements with any execution venues regarding payments made or received, discounts, rebates or non-monetary benefits received;

Some execution venues may offer differing fee plans to trading members depending on the volume and nature/type of a trading activity on the venue as well as fee discounts depending on average volume of trading undertaken. Such arrangements apply equally to all trading members who satisfy the relevant criteria under the execution venue rules. Information on such arrangements is publically available on the relevant execution venues website. Our decision to route orders to a particular venue for execution is determined by whether execution on such venues allows us to satisfy our best execution obligations and is not influenced by any such fee structures or volume discounts.

4. Topic 4: an explanation of the factors that led to a change in the list of execution venues listed in the firm’s execution policy, if such a change occurred;

We have not changed any execution venues for this asset class during the reporting period.

5. Topic 5: an explanation of how order execution differs according to client categorisation, where the firm treats categories of clients differently and where it may affect the order execution arrangements;

The Securities Division of GS only executes orders for professional clients and eligible counterparties. Under applicable law and regulation GS is not obliged to provide best execution when it executes orders on behalf of eligible counterparties. The Private Wealth Management Division does not have clients for which it executes orders in this asset class.

6. Topic 6: an explanation of whether other criteria were given precedence over immediate price and cost when executing retail client orders and how these other criteria were instrumental in delivering the best possible result in terms of the total consideration to the client;

Not applicable.

7. Topic 7: an explanation of how the investment firm has used any data or tools relating to the quality of execution, including any data published under RTS 27;

GS has in place post execution supervisory monitoring procedures which use market data, where it is available, to assess relevant client transactions. Where appropriate market data is not available other criteria are used to review relevant client transactions for monitoring purposes. This monitoring is undertaken on a systematic basis via best execution monitoring systems. As part of its overall best execution monitoring framework and on-going assessment of execution venues utilised, GS may also take account of information published under RTS 27 by those execution venues (if applicable) alongside data sourced used as part of its systematic best execution monitoring arrangements.

8. Topic 8: an explanation of how the investment firm has used output of a consolidated tape provider established under Article 65 of Directive 2014/65/EU.
Interest rates derivatives: (ii) Swaps, forwards, and other interest rate derivatives

# Topic 1:
An explanation of the relative importance the firm gave to the execution factors of price, costs, speed, likelihood of execution on any other consideration including qualitative factors when assessing the quality of execution.

This qualitative commentary covers the activity of all divisions of Goldman Sachs International (GS), namely the Securities Division and the Private Wealth Management Division. Unless otherwise indicated, the responses provided below are relevant for both divisions, save for when references are made to Securities Division or to the Private Wealth Management Division specifically. For further information on each division’s best execution arrangements please refer to the relevant summaries which are available at: [http://www.goldmansachs.com/disclosures/mhfe/](http://www.goldmansachs.com/disclosures/mhfe/)

These instruments are typically traded on a request for quote basis, including where clients approach us for a quote or are responding to our own request prices where we predominantly act in a principal capacity and the client ultimately decides whether to proceed with the transaction based upon the price provided by us and those of other liquidity providers from whom it has sourced quotes. Generally we would not expect clients to be legimtely relying on us to provide best execution and therefore our best execution obligations for these instruments are likely to apply in more limited circumstances than for other asset classes.

To the extent we determine we do owe best execution and, subject to any specific instructions, GS will generally give the highest priority to net price. Other execution factors, to the extent relevant, are generally given equal ranking.

# Topic 2:
A description of any close links, conflicts of interests, and common ownerships with respect to any execution venues used to execute orders;

GS and persons connected with GS provide diversified financial services to a broad range of clients and counterparties and circumstances may arise in which GS may have a conflict of interest.

Goldman Sachs Group entities may have (i) minor, non-controlling ownership stakes in companies which operate or own execution venues and/or (ii) be founding consortia members of execution venues for which it has revenue share arrangements, which GS may use to execute orders on behalf of clients or to respond to clients’ requests for quotes in certain financial instruments, including:

- Tradeweb LLC
- Bloomberg
- Markethawes

Our decision to route orders to, or respond to clients’ request for quotes on, a particular execution venue is determined, as applicable, by whether execution on such venues allows us to satisfy our best execution obligations or as necessary to interact with clients and is not influenced by any such ownership or revenue share arrangements.

For further details on the execution venues used by the Securities Division and its conflicts of interest policy, please refer to the Securities Division’s best execution summary which is available at: [http://www.goldmansachs.com/disclosures/mhfe/](http://www.goldmansachs.com/disclosures/mhfe/)

# Topic 3:
A description of any specific arrangements with any execution venues regarding payments made or received, discounts, rebates or non-monetary benefits received.

Some execution venues may offer differing fee plans to trading members depending on the volume andnature/capital activity on the venue as well as fee discounts depending on average volume of trading undertaken. Such arrangements apply equally to all trading members who satisfy the relevant criteria under the execution venues rules. Information on such arrangements is publicly available on the relevant execution venues website. Our decision to route orders to a particular venue for execution is determined by whether execution on such venues allows us to satisfy our best execution obligations and is not influenced by any such fee structures or volume discounts.

# Topic 4:
An explanation of the factors that led to a change in the list of execution venues listed in the firm’s execution policy, if such a change occurred.

We have reviewed our execution venues list for this asset class to remove those execution venues that are not used for the execution of client orders. Please note GS may use selected brokers venues, OTFs, SEFs, and other platforms as part of its hedging and price discovery process.

# Topic 5:
An explanation of how order execution differs according to customer categorisation, where the firm treats categories of clients differently and where it may affect the order execution arrangements;

GS executes orders for the Securities Division and the Private Wealth Management Division where the approach to order execution is consistent. GS also executes orders for eligible counterparties, however under applicable law and regulation GS is not obliged to provide best execution when it executes orders on behalf of eligible counterparties.

# Topic 6:
An explanation of whether other criteria were given precedence over immediate price and cost when executing retail client orders and how these other criteria were instrumental in delivering the best possible result in terms of the total consideration to the client;

Not applicable.

# Topic 7:
An explanation of how the investment firm has used any data or tools relating to the quality of execution, including any data published under RTS 27.

GS has in place post execution supervisory monitoring procedures which use market data, where it is available, to assess relevant client transactions. Where appropriate market data is not available other criteria are used to review relevant client transactions for monitoring purposes. This monitoring is undertaken on a systematic basis via best execution monitoring systems or, where required, on a manual basis in accordance with internal monitoring policies and procedures. As part of its overall best execution monitoring framework and ongoing assessment of execution venues utilized, GS may also take account of information published under RTS 27 by those execution venues (if applicable) alongside data sources used as part of its systematic best execution monitoring arrangements.

# Topic 8:
Where applicable, an explanation of how the investment firm has used output of a consolidated tape provider established under Article 63 of Directive 2014/65/EU.

N/A
<table>
<thead>
<tr>
<th>Class of Instrument</th>
<th>Notification if &lt;1 average trade per business day in the previous year</th>
<th>Top five execution venues ranked in terms of trading volumes (descending order)</th>
<th>Proportion of volume traded as a percentage of total in that class</th>
<th>Proportion of orders executed as a percentage of total in that class</th>
<th>Percentage of passive orders</th>
<th>Percentage of aggressive orders</th>
<th>Percentage of directed orders</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
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Goldman Sachs International does not trade credit related futures or options that are admitted to trading on trading venues with clients.
This qualitative commentary covers the activity of different divisions of Goldman Sachs International (GS), namely the Securities Division and the Private Wealth Management Division. Unless otherwise indicated, the responses provided below are relevant for both divisions save for when references are made to Securities Division or to the Private Wealth Management Division specifically. For further information on each division’s best execution arrangements please refer to the relevant summaries which are available at: [http://www.goldmansachs.com/disclosures/mifid/](http://www.goldmansachs.com/disclosures/mifid/).

These instruments are typically traded on a request for quote basis, including where clients approach us for a quote or are responding to our unsolicited prices where we predominantly act in a principal capacity and the client ultimately decides whether to proceed with the transaction based upon the price provided by us and those of other liquidity providers from whom it has sourced quotes. Generally we would not expect clients to be legitimately relying on us to provide best execution and therefore our best execution obligations for these instruments are likely to apply in more limited circumstances than that for other asset classes.

To the extent we determine we do owe best execution and, subject to any specific instructions, GS will generally give the highest priority to net price. Other execution factors, to the extent relevant, are generally given equal ranking.

**Table 1:** An explanation of the relative importance the firm gave to the execution factors of price, costs, speed, likelihood of execution or any other consideration including qualitative factors when assessing the quality of execution:

<table>
<thead>
<tr>
<th>Factor</th>
<th>Importance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price</td>
<td>52.15</td>
</tr>
<tr>
<td>Costs</td>
<td>N/A</td>
</tr>
<tr>
<td>Speed</td>
<td>N/A</td>
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<tr>
<td>Likelihood of execution</td>
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<tr>
<td>Qualitative factors</td>
<td>10.51</td>
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GS and persons connected with GS provide diversified financial services to a broad range of clients and counterparties and circumstances may arise in which GS may have a conflict of interest.

Goldman Sachs Group entities may have (i) minor, non-controlling ownership stakes in companies which operate or own execution venues and/or; (ii) be founding consortia members of execution venues for which it has revenue share arrangements, which GS may use to execute orders on behalf of clients or to respond to clients’ requests for quotes in certain financial instruments, including:

- Tradeweb LLC
- Bloomberg
- MarketAxess
- Bloomberg

Our decision to route orders to, or respond to clients’ request for quotes on, a particular execution venue is determined, as applicable, by whether execution on such venues allows us to satisfy our best execution obligations or as necessary to interact with clients and is not influenced by any such ownership or revenue share arrangements.

For further details on the execution venues used by the Securities Division and its conflicts of interest policy, please refer to the Securities Division’s best execution summary which is available at: [http://www.goldmansachs.com/disclosures/mifid/](http://www.goldmansachs.com/disclosures/mifid/).

**Topic 1:** An explanation of the factors that led to a change in the list of execution venues listed in the firm’s execution policy, if such a change occurred:

We have revised our execution venues list for this asset class to remove those execution venues that are not used for the execution of clients’ orders. Please note GS may use selected brokers venues, OTFs, SEFs, and other platforms as part of its hedging and price discovery process.

**Topic 2:** An explanation of how orderexecution differs according to client categorisation, where the firm treats categories of clients differently and where it may affect the order execution arrangements:

GS only executes orders for professional clients and eligible counterparties in these financial instruments. Under applicable law and regulation GS is not obliged to provide best execution when it executes orders on behalf of eligible counterparties.

**Topic 3:** An explanation of the relative importance the firm gave to the execution factors of price, costs, speed, likelihood of execution or any other consideration including qualitative factors when assessing the quality of execution:

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**Topic 2:** An explanation of how order execution differs according to client categorisation, where the firm treats categories of clients differently and where it may affect the order execution arrangements:

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GS and persons connected with GS provide diversified financial services to a broad range of clients and counterparties and circumstances may arise in which GS may have a conflict of interest.

Goldman Sachs Group entities may have (i) minor, non-controlling ownership stakes in companies which operate or own execution venues and/or; (ii) be founding consortia members of execution venues for which it has revenue share arrangements, which GS may use to execute orders on behalf of clients or to respond to clients’ requests for quotes in certain financial instruments, including:

- Tradeweb LLC
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For further details on the execution venues used by the Securities Division and its conflicts of interest policy, please refer to the Securities Division’s best execution summary which is available at: [http://www.goldmansachs.com/disclosures/mifid/](http://www.goldmansachs.com/disclosures/mifid/).

**Topic 1:** An explanation of the factors that led to a change in the list of execution venues listed in the firm’s execution policy, if such a change occurred:

We have revised our execution venues list for this asset class to remove those execution venues that are not used for the execution of clients’ orders. Please note GS may use selected brokers venues, OTFs, SEFs, and other platforms as part of its hedging and price discovery process.

**Topic 2:** An explanation of how order execution differs according to client categorisation, where the firm treats categories of clients differently and where it may affect the order execution arrangements:

GS only executes orders for professional clients and eligible counterparties in these financial instruments. Under applicable law and regulation GS is not obliged to provide best execution when it executes orders on behalf of eligible counterparties.

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### Goldman Sachs International does not trade currency related futures or options that are admitted to trading on trading venues with clients
Currency derivatives: (ii) Swaps, forwards, and other currency derivatives

1. Topic 1: an explanation of the relative importance the firm gave to the execution factors of price, costs, speed, likelihood of execution or any other consideration including qualitative factors when assessing the quality of execution:

This qualitative commentary covers the activity of different divisions of Goldman Sachs International (GS), namely the Securities Division and the Private Wealth Management Division. Unless otherwise indicated, the responses provided below are relevant for both divisions as may arise in which GS may have a conflict of interest.

Goldman Sachs Group entities may have (i) minor, non-controlling ownership stakes in companies which operate or own execution venues and/or; (ii) be founding consortia members of execution venues for which it has revenue share arrangements, which GS may use to execute orders on behalf of clients or to respond to clients' requests for quotes in certain financial instruments, including:

- Tradeweb LLC
- Bloomberg
- Markit/Tradeweb

Our decision to route orders to, or respond to clients' request for quotes on, a particular execution venue is determined, as applicable, by whether execution on such venues allows us to satisfy our best execution obligations or as necessary to interact with clients and is not influenced by any such ownership or revenue share arrangements.

For further details on the execution venues used by the Securities Division and its conflicts of interest policy, please refer to the Securities Division’s best execution summary which is available at: http://www.goldmansachs.com/disclosures/mifid/

2. Topic 2: a description of any close links, conflicts of interests, and common ownership with respect to any execution venues used to execute orders;

GS and persons connected with GS provide diversified financial services to a broad range of clients and counterparties and circumstances may arise in which GS may have a conflict of interest.

3. Topic 3: a description of any specific arrangements with any execution venues relating to payments made or received, discounts, rebates or non-monetary benefits received:

Some execution venues may offer differing fee plans to trading members depending on the volume and nature/type of a trading activity on the venue as well as fee discounts depending on average volume of trading undertaken. Such arrangements apply equally to all trading members who satisfy the relevant criteria under the execution venues rules. Information on such arrangements is publicly available on the relevant execution venues website. Our decision to route orders to a particular venue for execution is determined by whether such arrangements allow us to satisfy our best execution obligations and is not influenced by any such fee structures or volume discounts.

4. Topic 4: an explanation of the factors that led to a change in the list of execution venues listed in the firm’s execution policy, if such a change occurred:

We have reviewed our execution venues list for this asset class to remove those execution venues that are not used for the execution of client orders. Please note GS may use selected brokers venues, OTFs, SEFs, and other platforms as part of its hedging and price discovery processes.

5. Topic 5: an explanation of how order execution differs according to client categorisation, where the firm treats categories of clients differently and where it may affect the order execution arrangements;

GS only executes orders for professional clients and eligible counterparties in these financial instruments. Under applicable law and regulation GS is not obliged to provide best execution when it executes orders on behalf of eligible counterparties.

6. Topic 6: an explanation of whether other criteria were given precedence over immediate price and cost when executing retail client orders and how these other criteria were instrumental in defining the best possible result in terms of the total consideration to the client; Not applicable.

7. Topic 7: an explanation of how the investment firm has used any data or tools relating to the quality of execution, including any data published under RTS 27:

GS has in place post execution supervisory monitoring procedures which use market data, where it is available, to assess relevant client transactions. Where appropriate market data is not available other criteria are used to review relevant client transactions for monitoring purposes. This monitoring is undertaken on a systematic basis via best execution monitoring systems or, where required, on a manual basis in accordance with internal monitoring policies and procedures. As part of its overall best execution monitoring framework and ongoing assessment of execution venues utilized, GS may also take account of information published under RTS 27 by those execution venues (if applicable) alongside data sources used as part of its systematic best execution monitoring arrangements.

8. Topic 8: where applicable, an explanation of how the investment firm has used output of a consolidated tape provider established under Article 63 of Directive 2014/65/EU: N/A.
**Structured Finance Instruments**

**Revealing Entity: GS**

**GS Firm Street Report**

Type of Client: Professional Client

**Reporting Entity: GS**

### Topic 1: an explanation of the relative importance the firm gave to the execution factors of price, costs, speed, likelihood of execution or any other consideration including qualitative factors when assessing the quality of execution:

This qualitative commentary covers the activity of different divisions of Goldman Sachs International (GS), namely the Securities Division and the Private Wealth Management Division. Unless otherwise indicated, the responses provided below are relevant for both divisions save for when references are made to Securities Division or to the Private Wealth Management Division specifically. For further information on each division’s best execution arrangements please refer to the relevant summaries which are available at: [http://www.goldmansachs.com/disclosures/mifid/](http://www.goldmansachs.com/disclosures/mifid/)

These instruments are typically traded on a request for quote and via a Best Wished in Competition basis, including where clients approach us for a quote or are responding to our streamed prices where we predominantly act in a principal capacity and the client ultimately decides whether to proceed with the transaction based upon the price provided by us and those of other liquidity providers from whom it has sourced quotes. Generally we would not expect clients to be legitimately relying on us to provide best execution and therefore our best execution obligations for these instruments are likely to apply in more limited circumstances than that for other asset classes.

To the extent we determine we do owe best execution and, subject to any specific instructions, GS will generally give the highest priority to net price. Other execution factors, to the extent relevant, are generally given equal ranking.

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### Topic 4: an explanation of the factors that led to a change in the list of execution venues listed in the firm’s execution policy, if such a change occurred;

We have revised our execution venues list for this asset class to remove those execution venues that are not used for the execution of client orders. Please note GS may use selected brokers venues, OTFs, SEFs, and other platforms as part of its hedging and price discovery process.

### Topic 5: an explanation of how order execution differs according to client categorisation, where the firm treats categories of clients differently and where it may affect the order execution arrangements;

GS only executes orders for professional clients and eligible counterparties in these financial instruments. Under applicable law and regulation GS is not obliged to provide best execution when it executes orders on behalf of eligible counterparties.

### Topic 6: an explanation of whether other criteria were given precedence over immediate price and cost when executing retail client orders and how these other criteria were instrumental in delivering the best possible result in terms of the total consideration to the client:

Not Applicable.

### Topic 7: an explanation of how the investment firm has used any data or tools relating to the quality of execution, including any data published under RTS 27

GS has in place post trade supervisory monitoring procedures which use market data, where it is available, to assess relevant client transactions. Where appropriate market data is not available other criteria are used to review relevant client transactions for monitoring purposes. This monitoring is undertaken on a systematic basis via best execution monitoring systems. As part of its overall best execution-monitoring framework and on-going assessment of execution venues utilized, GS may take account of information published under RTS 27 by these execution venues (if applicable) alongside data sources used as part of its systematic best execution monitoring arrangements.

### Topic 8: an explanation of how the investment firm has used output of a consolidated tape provider established under Article 60 of Directive 2014/65/EU.

N/A
**Equity Derivatives: (i) Options and Futures admitted to trading on a trading venue**

**1. Topic 1:** An explanation of the relative importance the firm gave to the execution factors of price, costs, speed, likelihood of execution or any other consideration including qualitative factors when assessing the quality of execution:

This commentary questionnaire covers the entirety of different divisions of Goldman Sachs International (GS), namely the Securities Division and the Private Wealth Management Division. Unless otherwise indicated, the responses provided below are relevant for both divisions. Where references are made to Securities Division or to the Private Wealth Management Division specifically, for further information on each division’s best execution arrangements please refer to the relevant summaries which are available at: http://www.goldmansachs.com/disclosures/mifid/.

These instruments are typically traded only on the execution venue of their listing and therefore client orders in the instrument will determine the execution venue. Application of best execution is therefore limited to liquidity available on the relevant execution venue for the instrument.

When assessing the relative importance given to those execution factors that are applicable where GS has determined that it owns a best execution obligation for a relevant order, GS will take into account the following criteria for determining the relative importance of the execution factors in the circumstances:

- the characteristics of the client including the regulatory categorisation of the client;
- the characteristics of the relevant order;
- the characteristics of financial instruments that are the subject of the relevant order; and
- the characteristics of the execution venue to which that relevant order can be directed.

Subject to any specific instructions, taking into account the relevant criteria above, the ranking of execution factors would typically be as follows:

- price
- speed of execution.

The remaining execution factors, to the extent applicable, are generally given equal ranking.

It should also be noted that where we provide direct market access arrangements to an execution venue, or where a client specifies the parameters of an execution algorithm or otherwise provides specific instructions in relation to a trade or an order via a particular execution channel, our relative prioritisation of execution factors would be limited to those elements of the execution not covered by the client’s specific instructions or, in the case of direct market access arrangements, not within the client’s control.

For further information on GS’ best execution arrangements please refer to the relevant summaries which are available at: http://www.goldmansachs.com/disclosures/mifid/.

**2. Topic 2:** A description of any close links, conflicts of interests, and common ownerships with respect to any execution venues used to execute orders;

GS and persons connected with GS provide diversified financial services to a broad range of clients and counterparties and circumstances may arise in which GS may have a conflict of interest.

For further details on the execution venues used by the Securities Division and its conflicts of interest policy, please refer to the Securities Division’s best execution summary which is available at: http://www.goldmansachs.com/disclosures/mifid/.

Private Wealth Management Division executes these financial instruments via the Securities Division, and where appropriate, other GS affiliates. The Private Wealth Management Division has determined that it can consistently achieve the best results for its clients using a single execution venue. For further details on the execution venues used by the Securities Division please refer to the Securities Division’s best execution summary which is available via the link above.

For further details on the execution venues used by the Private Wealth Management Division and its conflicts of interest policy, please refer to Private Wealth Management Division’s best execution summary which is available at: http://www.goldmansachs.com/disclosures/mifid/.

**3. Topic 3:** A description of any specific arrangements with any execution venues regarding payments made or received, discounts, rebates or non-monetary benefits received.

Some execution venues may offer differing fee plans to trading members depending on the volume and nature/shape of a trading activity on the venue as well as fee discounts depending on average volume of trading undertaken. Such arrangements apply equally to all trading members who satisfy the relevant criteria under the execution venue rules. Information on such arrangements is publicly available on the relevant execution venue website. Our decision to route orders to a particular venue for execution is determined by whether execution on such venues allows us to satisfy our best execution obligations and is not influenced by any such fee structures or volume discounts.

**4. Topic 4:** An explanation of the factors that led to a change in the list of execution venues used by the firm’s execution policy, if such a change occurred;

We have not changed any execution venues for this asset class during the reporting period.

**5. Topic 5:** An explanation of how order execution differs according to client categorisation, where the firm treats categories of clients differently and where it may affect the order execution arrangements;

GS executes orders for professional clients of the Securities Division and the Private Wealth Management Division when the approach to order execution is consistent. GS also executes orders for eligible counterparties, however under applicable law and regulation GS is not obliged to provide best execution when it executes orders on behalf of eligible counterparties.

**6. Topic 6:** An explanation of whether other criteria were given precedence over immediate price and cost when executing retail client orders and how these other criteria were instrumental in delivering the best possible result in terms of the total consideration to the client;

Not applicable.

**7. Topic 7:** An explanation of how the investment firm has used any data or tools relating to the quality of execution, including any data published under RTS 27;

GS has in place post-execution supervisory monitoring procedures which use market data, where it is available, to assess client transactions against relevant market prices and benchmarks. For products with no observable external market data other criteria are used to benchmark client transactions for monitoring purposes. This monitoring is undertaken on a systematic basis via best execution monitoring systems or, where required, on a randomized basis in accordance with internal monitoring policies and procedures. As part of its overall best execution monitoring framework and ongoing assessment of execution venues utilized, GS may also take into account of information published under RTS 27 by those execution venues (if applicable) alongside data sources used as part of its systematic best execution monitoring arrangements.

**8. Topic 8:** Where applicable, an explanation of how the investment firm has used output of a consolidated tape provider established under Article 60 of Directive 2014/65/EU.

N/A
Equity Derivatives: (ii) Swaps and other equity derivatives

1. Topic 1: an explanation of the relative importance the firm gave to the execution factors of price, costs, speed, likelihood of execution or any other consideration including qualitative factors when assessing the quality of execution:

This qualitative commentary covers the activity of different divisions of Goldman Sachs International (GS), namely the Securities Division and the Private Wealth Management Division. Unless otherwise indicated, the responses provided below are relevant for both divisions, given that the majority of business is conducted by the Securities Division. For further information on each division’s best execution arrangements please refer to the relevant summaries which are available at: http://www.goldmansachs.com/disclosures/mifid/.

These instruments are typically traded on a request for quote basis, including where clients approach us for a quote or are responding to our resourced quotes where we predominantly act in a principal capacity and the client ultimately decides whether to proceed with the transaction based upon the price provided by us and those of other liquidity providers from whom it has sourced quotes. Generally we would not expect clients to be legitimately relying on us to provide best execution and therefore our best execution obligations for these instruments are likely to apply in more limited circumstances than that for other asset classes.

To the extent we determine we do owe best execution and, subject to any specific instructions, GS will generally give the highest priority to net price. Other execution factors, to the extent relevant, are generally given equal ranking.

2. Topic 2: a description of any close links, conflicts of interests, and common ownerships with respect to any execution venues used to execute orders:

Goldman Sachs Group entities may have (i) minor, non-controlling ownership stakes in companies which operate or own execution venues and/or; (ii) be founding consortia members of execution venues for which it has revenue share arrangements, which GS may use to execute orders on behalf of clients or to respond to clients’ requests for quotes on certain financial instruments, including:

• Tradeweb LLC

Our decision to route orders to, or respond to clients’ requests for quotes on, a particular execution venue is determined, as applicable, by whether execution on such venues allows us to satisfy our best execution obligations or as necessary to interact with clients and is not influenced by any such ownership or revenue share arrangements.

For further details on the execution venues used by the Securities Division and its conflicts of interest policy, please refer to the Securities Division’s best execution summary which is available at: http://www.goldmansachs.com/disclosures/mifid/.

3. Topic 3: a description of any specific arrangements with any execution venues regarding payments made or received, discounts, rebates or non-monetary benefits received:

GS and persons connected with GS provide diversified financial services to a broad range of clients and counterparties and circumstances may arise in which GS may have a conflict of interest.

Some Execution Venues may offer differing fee plans to trading members depending on the volume and nature/type of a trading activity on the venue as well as fee discounts depending on average volume of trading undertaken. Such arrangements apply equally to all trading members who satisfy the relevant criteria under the Execution Venues rules. Information on such arrangements is publicly available on the relevant Execution Venues website. Our decision to route orders to a particular venue for execution for this asset class is typically driven by the listing of the product the client wishes to trade, and is not influenced by any such fee structures or revenue share arrangements.

4. Topic 4: an explanation of the factors that led to a change in the list of execution venues listed in the firm’s execution policy, if such a change occurred:

We have revised our execution venues list for this asset class to remove those execution venues that are not used for the execution of client orders. Please note GS may use selected brokers venues, OTFs, SEFs, and other platforms as part of its hedging and price discovery process.

5. Topic 5: an explanation of how order execution differs according to client categorisation, where the firm treats categories of clients differently and where it may affect the order execution arrangements:

GS executes orders for professional clients of the Securities Division and the Private Wealth Management Division where the order to approach execution is consistent. GS also executes orders for eligible counterparties, however under applicable law and regulation GS is not obliged to provide best execution when it executes orders on behalf of eligible counterparties.

6. Topic 6: an explanation of whether other criteria were given precedence over immediate price and cost when executing client orders and how these other criteria were instrumental in delivering the best possible result in terms of the total consideration to the client:

Not applicable.

7. Topic 7: an explanation of how the investment firm has used any data or tools relating to the quality of execution, including any data published under RTS 27:

GS has in place post-execution supervisory monitoring procedures which use market data, where it is available, to assess relevant client transactions. Where appropriate market data is not available other criteria are used to review relevant client transactions for monitoring purposes. This monitoring is undertaken on a systematic basis via best execution monitoring systems or, where required, on a manual basis in accordance with internal monitoring policies and procedures. As part of its overall best execution monitoring framework and ongoing assessment of execution venues utilized, GS may also take account of information published under RTS 27 by those execution venues (if applicable) alongside data sources used as part of its systematic best execution monitoring arrangements.

8. Topic 8: an explanation of how the investment firm has used output of a consolidated tape provider established under Article 65 of Directive 2014/65/EU:

N/A.
Securitized Derivatives: (i) Warrants and Certificate Derivatives

1. Topic 1: an explanation of the relative importance the firm gave to the execution factors of price, costs, speed, likelihood of execution or any other consideration including qualitative factors when assessing the quality of execution:

This qualitative commentary covers the activity of different divisions of Goldman Sachs International (GS), namely the Securities Division and the Private Wealth Management Division. Unless otherwise indicated, the responses provided below are relevant for each division for when references are made to Securities Division or to the Private Wealth Management Division specifically. For further information on each division’s best execution arrangements please refer to the relevant summaries which are available at: http://www.goldmansachs.com/disclosures/mifid/

These instruments are typically traded on a request for quote and via a Bid Wanted in Competition basis, including where clients approach us for a quote or are responding to our streamed prices where we predominantly act in a principal capacity and the client ultimately decides whether to proceed with the transaction based upon the price provided by us and those of other liquidity providers from whom it has sourced quotes. Generally we would not expect clients to be legitimately relying on us to provide best execution and therefore our best execution obligations for these instruments are likely to apply in more limited circumstances than that for other asset classes.

To the extent we determine we do owe best execution and, subject to any specific instructions, GS will generally give the highest priority to net price. Other execution factors, to the extent relevant, are generally given equal ranking.

2. Topic 2: a description of any close links, conflicts of interests, and common ownerships with respect to any execution venues used to execute orders;

GS and persons connected to GS provide diversified financial services to a broad range of clients and counterparties and circumstances may arise in which GS may have a conflict of interest.

For further details on the execution venues used by GS and its conflicts of interest policy, please refer to its best execution summary which is available at: http://www.goldmansachs.com/disclosures/mifid/

3. Topic 3: a description of any specific arrangements with any execution venues regarding payments made or received, discounts, rebates or non-monetary benefits received;

Some execution venues may offer differing fee plans to trading members depending on the volume and nature/type of a trading activity on the venue as well as fee discounts depending on average volume of trading undertaken. Such arrangements apply equally to all trading members who satisfy the relevant criteria under the execution venue’s rules. Information on such arrangements is publicly available on the relevant execution venues’ websites. Our decision to route orders to a particular venue for execution is determined by whether execution on such venues allows us to satisfy our best execution obligations and is not influenced by any such fee structures or volume discounts.

This is not applicable to the Private Wealth Management Division’s open architecture order execution platform.

4. Topic 4: an explanation of the factors that led to a change in the list of execution venues listed in the firm’s execution policy, if such a change occurred;

We have removed execution venues that are not used for the execution of client orders. Please note GS uses selected brokers venues, OTFs, SEFs, and other hedging platforms as part of our execution hedging and price discovery process.

5. Topic 5: an explanation of how order execution differs according to client categorisation, where the firm treats categories of clients differently and where it may affect the order execution arrangements;

GS executes orders for professional clients of the Securities Division and the Private Wealth Management Division when the approach to order execution is consistent. GS also executes orders for eligible counterparties, however under applicable law and regulation GS is not obliged to provide best execution when it executes orders on behalf of eligible counterparties.

6. Topic 6: an explanation of whether other criteria were given precedence over immediate price and cost when executing retail client orders and how these other criteria were instrumental in delivering the best possible result in terms of the total consideration to the client;

Not applicable.

7. Topic 7: an explanation of how the investment firm has used any data or tools relating to the quality of execution, including any data published under RTS 27;

GS has in place post-execution supervisory monitoring procedures which use market data, where it is available, to assess client transactions against relevant market prices and benchmarks. For products with no observable external market data other criteria are used to benchmark client transactions for monitoring purposes. This monitoring is undertaken on a systematic basis via best execution monitoring systems or, where required, on a manual basis in accordance with internal monitoring policies and procedures. As part of its overall best execution monitoring framework and on-going assessment of execution venues utilised, GS may also take account of information published under RTS 27 by those execution venues (if applicable) alongside data sources used as part of its systematic best execution monitoring arrangements.

8. Topic 8: where applicable, an explanation of how the investment firm has used output of a consolidated tape provider established under Article 63 of Directive 2014/65/EU:

N/A


<table>
<thead>
<tr>
<th>Class of Instrument</th>
<th>Notification if &lt;1 average trade per business day in the previous year</th>
<th>Top five execution venues ranked in terms of trading volumes (descending order)</th>
<th>Proportion of volume traded as a percentage of total in that class</th>
<th>Proportion of orders executed as a percentage of total in that class</th>
<th>Percentage of passive orders</th>
<th>Percentage of aggressive orders</th>
<th>Percentage of directed orders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seguritized Derivatives: (ii) Other securitized derivatives</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Goldman Sachs International does not execute client orders in Other Securitized Derivatives.</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Commodities derivatives and emission allowances Derivatives: (i) Options and Futures admitted to trading on a trading venue

1. Topic 1: an explanation of the relative importance the firm gave to the execution factors of price, costs, speed, likelihood of execution or any other consideration including qualitative factors when assessing the quality of execution:

These instruments are typically traded only on the execution venue of their listing and therefore client orders in the instrument will determine the execution venue. Application of best execution is therefore limited to liquidity available on the relevant execution venue for the instrument.

When assessing the relative importance given to those execution factors that are applicable where Goldman Sachs International (GS) has determined that it has a best execution obligation for a relevant order, GS will take into account the following criteria for determining the relative importance of the execution factors in the circumstances:

- the characteristics of the client including the regulatory categorisation of the client;
- the characteristics of the relevant order;
- the characteristics of the client including the regulatory categorisation of the client;
- the characteristics of financial instruments that are the subject of the relevant order; and
- the characteristics of the execution venue to which that relevant order can be directed.

Subject to any specific instructions, taking into account the relevant criteria above, the ranking of execution factors would typically be as follows:

- price
- speed of execution.

The remaining execution factors, to the extent applicable, are generally given equal ranking.

It should also be noted that where we provide direct market access arrangements to an execution venue, or where a client calibrates the parameters of an execution algorithm or otherwise provides specific instructions in relation to a trade or all trades via a particular execution channel, our relative prioritisation of execution factors would be limited to those elements of the execution not covered by the client’s specific instructions or, in the case of direct market access arrangements, not within the client’s control.

For further information on GS’ best execution arrangements please refer to the relevant summaries which are available at: http://www.goldmansachs.com/disclosures/mifid/.

2. Topic 2: a description of any close links, conflicts of interests, and common ownerships with respect to any execution venues used to execute orders:

GS and persons connected with GS provide diversified financial services to a broad range of clients and counterparties and circumstances may arise in which GS may have a conflict of interest.

GS is a member of the Goldman Sachs group of companies. The Securities Division of GS may execute transactions in certain asset classes with or through affiliated entities. Execution quality received from affiliated entities is subject to the same monitoring and assessment applied to third party entities and execution venues utilised by GS for execution of client orders.

Goldman Sachs Group entities may have (i) minor, non-controlling ownership stakes in companies which operate or own execution venues and/or (ii) be founding consortia members of execution venues for which it has revenue share arrangements, which GS may use to execute orders on behalf of clients in certain financial instruments, including:

- LME Holdings Limited
- Nasdaq AB
- National Commodities & Derivatives Exchange Ltd.
- New York Shipping Exchange (NYSHX)

Our decision to route orders to a particular venue or execution is determined by whether execution on such venues allows us to satisfy our best execution obligations and is not influenced by any such ownership or revenue share arrangements.

For further details on the execution venues used by the Securities Division and its conflicts of interest policy, please refer to the Securities Division’s best execution summary which is available at: http://www.goldmansachs.com/disclosures/mifid/.

3. Topic 3: a description of any specific arrangements with any execution venues regarding payments made or received, discounts, rebates or non-monetary benefits received:

Some execution venues may offer differing fee plans to trading members depending on the volume and nature/type of a trading activity on the venue as well as fee discounts depending on average volume of trading undertaken. Such arrangements apply equally to all trading members who satisfy the relevant criteria under the execution venues rules. Information on such arrangements is publicly available on the relevant execution venues website. Our decision to route orders to a particular venue for execution is determined by whether execution on such venues allows us to satisfy our best execution obligations and is not influenced by any such fee structures or volume discounts.

4. Topic 4: an explanation of the factors that led to a change in the list of execution venues listed in the firm’s execution policy, if such a change occurred:

We have not changed any execution venues for this asset class during the reporting period.

5. Topic 5: an explanation of how order execution differs according to client categorisation, where the firm treats categories of clients differently and where it may affect the order execution arrangements:

GS executes orders for professional clients of the Securities Division and the Private Wealth Management Division where the approach to order execution is consistent. GS also executes orders for eligible counterparties, however under applicable law and regulation GS is not obliged to provide best execution when it executes orders on behalf of eligible counterparties.

6. Topic 6: an explanation of whether other criteria were given precedence over immediate price and cost when executing retail client orders and how these other criteria were instrumental in delivering the best possible result in terms of the total consideration to the client:

Not applicable.

7. Topic 7: an explanation of how the investment firm has used any data or tools relating to the quality of execution, including any data published under RTS 27

GS has in place post-execution supervisory monitoring procedures which use market data, where it is available, to assess relevant client transactions. Where appropriate market data is not available other criteria are used to review relevant client transactions for monitoring purposes. This monitoring is undertaken on a systematic basis via best execution monitoring systems or, where required, on a manual basis in accordance with internal monitoring policies and procedures. As part of its overall best execution monitoring framework and ongoing assessment of execution venues utilised, GS may also take account of information published under RTS 27 by those execution venues (if applicable) alongside data sources used as part of its systematic best execution monitoring arrangements.

8. Topic 8: where applicable, an explanation of how the investment firm has used output of a consolidated tape provider established under Article 60 of Directive 2014/65/EU.

N/A
Commodities derivatives and emission allowances

Derivatives: (iii) Other commodities derivatives and emission allowances derivatives

Reporting Entity: GSI
Type of Client: Professional Client
Reporting Entity: GSI

Notification if <1 average trade per business day in the previous year

<table>
<thead>
<tr>
<th>Top five execution venues ranked in terms of trading volumes (descending order)</th>
<th>Percentage of volume traded as a percentage of total in that class</th>
<th>Percentage of orders executed as a percentage of total in that class</th>
<th>Percentage of passive orders</th>
<th>Percentage of aggressive orders</th>
<th>Percentage of directed orders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reporting Entity: GSI</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

1. Topic 1: an explanation of the relative importance the firm gave to the execution factors of price, costs, speed, likelihood of execution or any other consideration including qualitative factors when assessing the quality of execution:

This qualitative commentary covers the activity of different divisions of Goldman Sachs International (GS), namely the Securities Division and the Private Wealth Management Division. Unless otherwise indicated, the responses provided below are relevant for both divisions unless where references are made to the Securities Division or the Private Wealth Management Division specifically. For further information on each division’s best execution arrangements please refer to the relevant summaries which are available at: http://www.goldmansachs.com/disclosures/mifid/.

These instruments are typically traded on a request for quote basis, including where clients approach us for a quote or are responding to our unsolicited prices/indications of interest through electronic platforms where we predominantly act in a principal capacity and the client ultimately decides whether to proceed with the transaction based upon the price provided by us or those of other liquidity providers from whom we have sourced quotes. Generally we would not expect clients to be legitimately relying on us to provide best execution and therefore our best execution obligations for these instruments are likely to apply in more limited circumstances than for other asset classes.

The Private Wealth Management Division operates an “open architecture” model for executing all fixed income trades where the GS Securities Division is one of the possible execution venues. Where the open architecture platform does not support a certain product or an order is subject to specific instructions the Private Wealth Management Division can trade through the Securities Division.

To the extent we determine we do owe a best execution obligation and subject to any specific instructions, GS will generally give the highest priority to:

• For Securities Division, net price. The remaining execution factors, to the extent relevant, are generally given equal ranking.

For professional clients of the Private Wealth Management Division, total consideration.

2. Topic 2: a description of any close links, conflicts of interests, and common ownership with respect to any execution venues used to execute orders;

GS and persons connected with GS provide diversified financial services to a broad range of clients and counterparties and circumstances may give rise in which GS may have a conflict of interest.

Goldman Sachs Group entities may have (i) minor, non-controlling ownership stakes in companies which operate or own execution venues and/or (ii) being founding members of execution venues for which it has revenue share arrangements, which GS may use to execute orders on behalf of clients or respond to clients’ requests for quotes in certain financial instruments, including:

• Tradeweb LLC
• Bloomberg
• Markit/Dealogic

Our decision to route orders to or respond to clients’ request for quotes on, a particular execution venue is determined, as applicable, by whether execution on such venues allows us to satisfy our best execution obligations or as necessary to interact with clients and is not influenced by any such ownership or revenue share arrangements.

For further details on the execution venues used by the Securities Division and its conflicts of interest policy, please refer to the Securities Division’s best execution summary which is available at: http://www.goldmansachs.com/disclosures/mifid/.

The Private Wealth Management Division operates an “open architecture” model for executing all fixed income trades unless the open architecture platform does not support a certain product or an order is subject to specific instructions.

Where this is the case, Private Wealth Management can trade through the GSI Securities Division.

For further details on the execution venues used by the Private Wealth Management Division and its conflicts of interest policy, please refer to Private Wealth Management Division’s best execution summary which is available at: http://www.goldmansachs.com/disclosures/mifid/.

3. Topic 3: a description of any specific arrangements with any execution venues regarding payments made or received, discounts, rebates or non-monetary benefits received.

Some execution venues may offer differing fee plans to trading members depending on the volume and nature/type of a trading activity on the venue as well as fee discounts depending on average volume of trading undertaken. Such arrangements apply equally to all trading members who satisfy the relevant criteria under the execution venues rules. Information on such arrangements is publicly available on the relevant execution venues websites. Our decision to route orders to a particular venue for execution is determined whether execution on such venues allows us to satisfy our best execution obligations and is not influenced by any such fee structures or volume discounts.

This is not applicable to the Private Wealth Management Division’s open architecture model.

4. Topic 4: an explanation of the factors that led to a change in the list of execution venues listed in the firm’s execution policy, if such a change occurred;

We have revised our execution venues list for this asset class to remove those execution venues that are not used for the execution of client orders. Please note GS may use selected brokers venues, OTFS, SEFs, and other platforms as part of its hedging and price discovery process.

5. Topic 5: an explanation of how order execution differs according to client categorisation, where the firm treats categories of clients differently and where it may affect the order execution arrangements;

The Private Wealth Management Division generally gives the highest priority to total consideration for professional clients which is consistent with the Private Wealth Management Division’s approach to execution with its retail clients. GS also executes orders for eligible counterparties, however under applicable law and regulation GS is not obliged to provide best execution when it executes orders on behalf of eligible counterparties.

6. Topic 6: an explanation of whether other criteria were given precedence over immediate price and cost when executing retail client orders and how these other criteria were instrumental in determining the best possible result in terms of the total consideration to the client;

Not applicable.

7. Topic 7: an explanation of how the investment firm has used any data or tools relating to the quality of execution, including any data published under RTE 27;

GS has in place post-execution supervisory monitoring procedures which use market data, where it is available, to assess relevant client transactions. Where appropriate market data is not available other criteria are used to review relevant client transactions for monitoring purposes. This monitoring is undertaken on a systematic basis via best execution monitoring systems or, where required, on a manual basis in accordance with internal monitoring policies and procedures. As part of its overall best execution monitoring framework and on-going assessment of execution venues utilized, GS may also take account of information published under RTE 27 by those execution venues (if applicable) alongside data sources used as part of its systematic best execution decision making arrangements.

8. Topic 8: where applicable, an explanation of how the investment firm has used output of a consolidated tape provider established under Article 65 of Directive 2014/65/EU.
### Topic 1: An explanation of the relative importance the firm gave to the execution factors of price, costs, speed, likelihood of execution or any other consideration including qualitative factors when assessing the quality of execution:

This qualitative commentary covers the activity of different divisions of Goldman Sachs International (GS), namely the Securities Division and the Private Wealth Management Division. Unless otherwise indicated, the responses provided below are relevant for both divisions where appropriate.

GS has in place post execution supervisory monitoring procedures which use market data, where it is available, to assess client transactions. Where appropriate market data is not available other criteria are used to review relevant client transactions for the extent we determine we do owe best execution and, subject to any specific instructions, GS will generally give the highest priority to net price. Other execution factors, to the extent relevant, are generally given equal ranking.

### Topic 2: A description of any close links, conflicts of interests, and common ownerships with respect to any execution venues used to execute orders;

Not applicable.

### Topic 3: A description of any specific arrangements with any execution venues regarding payments made or received, discounts, rebates or non-monetary benefits received;

Not applicable.

### Topic 4: An explanation of the factors that led to a change in the list of execution venues listed in the firm's execution policy, if such a change occurred;

Not applicable as GS is the only execution venue.

### Topic 5: An explanation of how the factors that led to a change in the list of execution venues listed in the firm's execution policy, if such a change occurred;

Not applicable as GS is the only execution venue.

### Topic 6: An explanation of whether other criteria were given precedence over immediate price and cost when executing retail client orders and how these other criteria were instrumental in delivering the best possible result in terms of the total consideration to the client;

Not applicable.

### Topic 7: An explanation of how the investment firm has used any data or tools relating to the quality of execution, including any data published under RTS 27;

GS has in place post execution supervisory monitoring procedures which use market data, where it is available, to assess relevant client transactions. Where appropriate market data is not available other criteria are used to review relevant client transactions for monitoring purposes. This monitoring is undertaken on a systematic basis via best execution monitoring systems or, where required, on a manual basis in accordance with internal monitoring policies and procedures. As part of its overall best execution monitoring framework and ongoing assessment of execution venues utilised, GS may also take account of information published under RTS 27 by those execution venues (if applicable) alongside data sources used as part of its systematic best execution monitoring arrangements.

### Topic 8: Where applicable, an explanation of how the investment firm has used output of a consolidated tape provider established under Article 65 of Directive 2014/65/EU.

N/A

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<table>
<thead>
<tr>
<th>Reporting Entity: GS</th>
<th>Contracts for Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Topic 1: an explanation of the relative importance the firm gave to the execution factors of price, costs, speed, likelihood of execution or any other consideration including qualitative factors when assessing the quality of execution:</td>
<td>N/A</td>
</tr>
<tr>
<td>Topic 2: a description of any close links, conflicts of interests, and common ownerships with respect to any execution venues used to execute orders;</td>
<td>N/A</td>
</tr>
<tr>
<td>Topic 3: a description of any specific arrangements with any execution venues regarding payments made or received, discounts, rebates or non-monetary benefits received;</td>
<td>N/A</td>
</tr>
<tr>
<td>Topic 4: an explanation of the factors that led to a change in the list of execution venues listed in the firm’s execution policy, if such a change occurred;</td>
<td>N/A</td>
</tr>
<tr>
<td>Topic 5: an explanation of how order execution differs according to client categorisation, where the firm treats categories of clients differently and where it may affect the order execution arrangements;</td>
<td>N/A</td>
</tr>
<tr>
<td>Topic 6: an explanation of whether other criteria were given precedence over immediate price and cost when executing retail client orders and how these other criteria were instrumental in delivering the best possible result in terms of the total consideration to the client;</td>
<td>N/A</td>
</tr>
<tr>
<td>Topic 7: an explanation of how the investment firm has used any data or tools relating to the quality of execution, including any data published under RTS 27</td>
<td>N/A</td>
</tr>
<tr>
<td>Topic 8: where applicable, an explanation of how the investment firm has used output of a consolidated tape provider established under Article 65 of Directive 2014/65/EU.</td>
<td>N/A</td>
</tr>
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</table>
GS has in place post execution supervisory monitoring procedures which use market data, where it is available, to assess whether an execution was executed on the relevant execution venue or in accordance with the client’s instructions. Where appropriate market data is not available other criteria are used to review relevant client transactions for the best possible result or to determine if there are other circumstances such that obtaining the best immediately available price may not be the best possible result for the client. In these cases, we will determine the relative priority of each execution factor on an order-by-order basis, where the order is executed manually, and by order type (e.g. iceberg, VWAP), where the order is executed using an algorithm.

We have a degree of discretion in how to apply the different execution factors and this may result in a range of different permissible approaches to executing client orders. It should also be noted that where we provide direct market access arrangements to an execution venue, or where a client calibrates the parameters of an execution algorithm or otherwise provides specific instructions in relation to a trade or all trades via a particular execution channel, our relative prioritisation of execution factors would be limited to those elements of the execution not covered by the client’s specific instructions or, in the case of direct market access arrangements, not within the client’s control.

2. Topic 2: a description of any close links, conflicts of interests, and common ownership with respect to any execution venues used to execute orders;

GS and persons connected with GS provide diversified financial services to a broad range of clients and counterparties and circumstances may arise in which GS may have a conflict of interest.

GS has close links and/or common ownership with respect to the following entities:

SIGMA X MT – Goldman Sachs International is under common ownership with Goldman Sachs International Bank which operates SIGMA X MT, a multilateral trading facility for trading in European equity and equity-like instruments. SIGMA X MT is operated on an independent and segregated basis to other Goldman Sachs businesses. Goldman Sachs International is itself one of several trading participants on SIGMA X MT. For further information on SIGMA X MT please visit the SIGMA X MT website at http://gset.gs.com/sigmaxmtf/.

In addition, Goldman Sachs Group entities may have (i) minor, non-controlling ownership stakes in companies which operate or own execution venues and/or (ii) be founding consortia members of execution venues for which it has revenue share arrangements, which GS may use to execute orders on behalf of clients in certain financial instruments, including:

- BDS Holdings L.P.
- CHI Holdings, Inc.
- Citco Global Holdings LLC
- Turquoise Global Holdings Limited
- Tradeweb LLC

Our decision to route orders to a particular venue for execution is determined by whether execution on such venues allows us to satisfy our best execution obligations and is not influenced by any such ownership or revenue share arrangements.

For further details on the execution venues used by the Securities Division and its conflicts of interest policy, please refer to the Securities Division’s best execution summary which is available at: http://www.goldmansachs.com/disclosures/mifid/

1. Topic 1: an exploration of the relative importance the firm gave to the execution factors of price, costs, speed, likelihood of execution or any other consideration including qualitative factors when assessing the quality of execution:

This qualitative commentary covers the activity of different divisions of Goldman Sachs International (GS), namely the Securities Division and the Private Wealth Management Division. Unless otherwise indicated, the responses provided below are relevant for both divisions’ activity and references to the Securities Division or Private Wealth Management Division specifically. For further information on each division’s best execution arrangements please refer to the relevant summaries which are available at: http://www.goldmansachs.com/disclosures/mifid/.

When assessing the relative importance given to execution factors, where GS has determined that it has a best execution obligation in respect of relevant orders, GS will take into account the following criteria for determining the relative importance of the execution factors in the circumstances:

• the characteristics of the client including the regulatory categorization of the client;
• the characteristics of the relevant order;
• the characteristics of financial instruments that are the subject of the relevant order; and
• the characteristics of the execution venue to which that relevant order can be directed.

Subject to any specific instructions, taking into account the criteria above, GS will generally give the highest priority to net price. The remaining execution factors are generally given equal ranking.

Notwithstanding the above, we may prioritize one or more of the other execution factors if: (i) there is insufficient immediately available liquidity on the relevant execution venue to execute the relevant order in full; or (ii) where a client instructs us to work a relevant order for a period of time or by reference to a benchmark calculated over a period of time (such as VWAP); or (iii) we determine that there are other circumstances such that obtaining the best immediately available price may not be the best possible result for the client. In these cases, we will determine the relative priority of each execution factor on an order-by-order basis, where the order is executed manually, and by order type (e.g. iceberg, VWAP), where the order is executed using an algorithm.

We have a degree of discretion in how to apply the different execution factors and this may result in a range of different permissible approaches to executing client orders.

It should also be noted that where we provide direct market access arrangements to an execution venue, or where a client calibrates the parameters of an execution algorithm or otherwise provides specific instructions in relation to a trade or all trades via a particular execution channel, our relative prioritisation of execution factors would be limited to those elements of the execution not covered by the client’s specific instructions or, in the case of direct market access arrangements, not within the client’s control.

3. Topic 3: a description of any specific arrangements with execution venues regarding payments made or received, discounts, rebates or non-monetary benefits received;

Some execution venues may offer differing fee plans to trading members depending on the volume and nature/type of a trading activity on the venue as well as fee discounts depending on average volume of trading undertaken. Such arrangements apply equally to all trading members who satisfy the relevant criteria under the execution venues rules. Information on such arrangements is publicly available on the relevant execution venues website. Our decision to route orders to a particular venue for execution is determined by whether execution on such venues allows us to satisfy our best execution obligations and is not influenced by any such fee structures or volume discounts.

4. Topic 4: an explanation of the factors that led to a change in the list of execution venues listed in the firm’s execution policy, if such a change occurred;

GS maintains internal procedures for the selection of Brokers, Trading Venues and other Execution Venues, both at the stage of on-boarding and throughout the relationship, in order to satisfy ourselves that those selections enable us to obtain best execution on a consistent basis. These procedures include undertaking due diligence and periodic assessments of execution quality.

In response to evolving market structure and client demand GS frequently evaluates existing and new execution venues. GS has added a variety of new execution venues during the reporting period, more specifically systematic intermarket and MiFID I offering periodic auction and conditional order type functionality, including:

Systematic Intermediaries: Jane St, Tower, Virtu, Hudson, Citadel Europe
MiFIDs periodic and conditional order books (as applicable): Aquos, TIG Posting

As part of our periodic evaluation of execution venues GS reviews a variety of execution performance metrics, including admissible liquidity, fill rate, mark-outs and latency.

5. Topic 5: an explanation of how order execution differs according to client categorisation, where the firm treats categories of clients differently and where it may affect the order execution arrangements;

GS executes orders for professional clients of the Securities Division and the Private Wealth Management Division where the approach to order execution is consistent. GS also executes orders for eligible counterparties, however under applicable law and regulation GS is not obliged to provide best execution when it executes orders on behalf of eligible counterparties.

6. Topic 6: an explanation of whether other criteria were given precedence over immediate price and cost when executing retail client orders and how these other criteria were instrumental in delivering the best possible result in terms of the total consideration to the client;

Not applicable.
7. Topic 7: an explanation of how the investment firm has used any data or tools relating to the quality of execution, including any data published under RTS 27.

GS has in place post execution supervisory monitoring procedures which use market data, where it is available, to assess relevant client transactions. Where appropriate market data is not available other criteria are used to review relevant client transactions for monitoring purposes. This monitoring is undertaken on a systematic basis via best execution monitoring systems or, where required, on a manual basis in accordance with internal monitoring policies and procedures. As part of its overall best execution monitoring framework and on-going assessment of execution venues utilised, GS may also take account of information published under RTS 27 by those execution venues (if applicable) alongside data sources used as part of its systematic best execution monitoring arrangements.

8. Topic 8: where applicable, an explanation of how the investment firm has used output of a consolidated tape provider established under Article 65 of Directive 2014/65/EU.

N/A
**Class of Instrument**

<table>
<thead>
<tr>
<th>Notification if &lt;1 average trade per business day in the previous year</th>
<th>Reporting Entity: GSI</th>
</tr>
</thead>
</table>

**Top five execution venues ranked in terms of trading volumes (descending order)**

<table>
<thead>
<tr>
<th>Proportion of volume traded as a percentage of total in that class</th>
<th>Proportion of orders executed as a percentage of total in that class</th>
<th>Percentage of passive orders</th>
<th>Percentage of aggressive orders</th>
<th>Percentage of directed orders</th>
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</thead>
<tbody>
<tr>
<td>N/A</td>
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</table>

**Emission Allowances**

<table>
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<tr>
<th>Top five execution venues ranked in terms of trading volumes (descending order)</th>
<th>Proportion of volume traded as a percentage of total in that class</th>
<th>Proportion of orders executed as a percentage of total in that class</th>
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</tbody>
</table>

*Emission Allowances will be addressed under the MiFID II Commodities Derivatives and Emission Allowances Derivatives report*
### Other Instruments

**Top Five Venue Report**

**Type of Client:** Professional Client  
**Reporting Entity:** GSI

<table>
<thead>
<tr>
<th>Class of Instrument</th>
<th>Top five execution venues ranked in terms of trading volumes (descending order)</th>
<th>Proportion of volume traded as a percentage of total in that class</th>
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<td>N/A</td>
</tr>
</tbody>
</table>

The data within the report is inclusive of order execution in Equity, Interest Rate and Commodity Derivatives executed on non-EU trading venues by GS Affiliates or Brokers. Please cross refer to the relevant asset class specific sections of this report for applicable commentary.

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**Top Five Broker Report**

**Type of Client:** Professional Client  
**Reporting Entity:** GSI

<table>
<thead>
<tr>
<th>Class of Instrument</th>
<th>Top five execution venues ranked in terms of trading volumes (descending order)</th>
<th>Proportion of volume traded as a percentage of total in that class</th>
<th>Proportion of orders executed as a percentage of total in that class</th>
<th>Percentage of passive orders</th>
<th>Percentage of aggressive orders</th>
<th>Percentage of directed orders</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOR8UP27PHTHYVLBNG30 - GOLDMAN SACHS &amp; CO. LLC</td>
<td>87.88</td>
<td>68.10</td>
<td>N/A</td>
<td>N/A</td>
<td>0.00</td>
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<tr>
<td>549300GGFLRSTQ15VF10 - GOLDMAN SACHS AUSTRALIA PTY LTD</td>
<td>7.12</td>
<td>2.07</td>
<td>N/A</td>
<td>N/A</td>
<td>0.00</td>
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<tr>
<td>5493009FWOE6CQ1J5K28 - GOLDMAN SACHS (ASIA) SECURITIES LIMITED</td>
<td>1.91</td>
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<td>5NGPZ37H6T4XS5MO5N09 - GOLDMAN SACHS JAPAN CO., LTD.</td>
<td>1.32</td>
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<td>JAK0ZABYQXDI5R26CX11 - GOLDMAN SACHS FUTURES PTE LTD</td>
<td>0.88</td>
<td>11.89</td>
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</tbody>
</table>