

**GFXC Last Look Request for feedback – submissions received**

The Global Foreign Exchange Committee (GFXC) is today publishing the responses it received to its Request for Feedback on “last look” practices in the FX market. The GFXC had sought views from market participants about the FX Global Code’s guidance on trading in the last look window.

The submission window closed in late September and 33 submissions were received by the GFXC. The respondents were of various types and sizes, comprising market participants on both the buy- and sell-side, as well as those providing trading venues and other technology for the FX market. Several responses were submitted by industry associations or otherwise on behalf of multiple organisations. A small number of respondents requested their submissions be published on an anonymous basis.

The GFXC will meet in London on 14 November to discuss the submissions and agree on the path forward. A response paper will be published by the GFXC before the end of 2017.

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ACI Financial Markets Association



**Question 1** *As noted above, the Code states that “During the last look window, trading activity that utilises the information from the Client’s trade request, including any related hedging activity, is likely inconsistent with good market practice because it may signal to other Market Participants the Client’s trading intent, skewing market prices against the Client, which (1) is not likely to benefit the Client...” Do you agree or disagree? Are there specific situations where this trading activity benefits the Client? In those situations is such trading activity related to the validity or price checks that the Code states as the purpose for last look? Please provide reasons for each response.*

- **We agree that trading activity that utilises information from the trade request is inconsistent with good market practice. Furthermore we consider that such activity, when undertaken by market participants acting as principals as defined in Principle 8 of the GCC, is inconsistent with good market practice and thus the word “likely” should be removed.**

**In order to provide clarification we consider that the Code should state : “During the last look window, trading activity, undertaken by market participants acting as principals as defined in Principle 8 of the Global Code of Conduct, that utilises the information from the Client’s trade request, including any related hedging activity, is inconsistent with good market practice because it may signal to other Market Participants the Client’s trading intent, skewing market prices against the Client.**

- **Other than circumstantial evidence that the ability of market participants to employ Last Look techniques leads to tighter market pricing,(albeit pricing that results in more frequent trade rejection), we can find no firm evidence or specific situations where there is any likely benefit to Clients from trading activity by market participants in the Last look window.**

**Question 2** *Based on your response to Question 1, do you consider that the language set out in the Code on this activity should be modified (for example, should it be strengthened further or provide further detail as to what may or may not constitute good practice)? Please provide reasons.*

- **We consider that the language as set out in the Code on this activity should be modified and strengthened, and provide further detail of what constitutes good practice.**

- We would propose that the language set out in the Code should be strengthened by the addition of the following:  
*“There is a legitimate use of “Last Look” as it pertains to rejection of a stale quote and thus a failed match, the checking of Credit, Permission, Risk and Liquidity exposure as well as System and Message integrity, along with price latency. All other uses of Last Look, including the delaying of acceptance of a trade by a market participant in relation to price, are potentially open to inappropriate behaviour and are discouraged, unless adequate safeguards to detect any form of abuse against the Client or the market exist; nor should any attempt be made to take advantage of the other market participant’s intentions.*
- We propose further clarification in the role being played as a principal or agent (as defined in Principle 8 and which may need a third role) by a market participant in our response to Question 1. This is because there is a current use of “last look”, as defined above, enabling a market participant to quote another market participant with the intention of mitigating taking any market risk, to ensure an appropriately applied mark- up is earned. The trade is then booked as a principal. Use of this mechanism exposes the recipient market participant to the last look practices of the ultimate provider of the liquidity and not that of the counterparty. When deploying this type of “automated deal and cover” execution to ensure no market risk is taken, market participants need to manage their relationship by documenting their role as a riskless principal with any price improvements passed back to the client. We believe a further Example would be helpful clearly showing that if the role is that of a principal to the trade it must be accepted prior to being covered. When acting in a riskless principal role “last look” does not apply, given the change in the relationship, and the order is accepted as a market order on a best endeavour basis and any price improvements are passed back to the client.

## GLOBAL FOREIGN EXCHANGE COMMITTEE

Anonymous 1

9th September 2017

RE: GFXC Request for Feedback on Last Look practices in the Foreign Exchange Market

Dear Sir or Madam,

I am grateful for the opportunity to comment on the topic of pre-hedging in the last look window, which I consider to be the single largest obstacle to restoring public faith in FX markets.

### **Background**

I am writing pseudonymously as I do not have my employer's authorization to contribute but believe it important to share my views.

Like most families, a good portion of my family's income is tied up in pensions, which are managed by asset managers. It is from the perspective of these asset managers, who trade large quantities of FX and place trade requests subject to last look, that I write.

### **Question 1**

I agree that trading in the last look window is inconsistent with best market practice because it disadvantages the client. I wish to address two points : transparency and pre-hedging in times of market stress.

### ***Transparency***

Where asset managers are trading on disclosed liquidity i.e. with known counterparties it is possible - albeit effortful - for a motivated consumer to determine who pre-hedges in the last look window by requesting and carefully reading each legal disclosure. Certain bank disclosures are still vague and catch-all enough that this approach would not work but many others are improving in this regard.

However, on anonymous venues that permit market makers to use last look, it is simply impossible to determine if or when this is occurring. There are no disclosures to read from market makers since they are anonymous. The venues themselves are unable to determine which market makers use pre-hedging as the activity is likely to occur across several venues and they can only see their own.

It is frankly impossible for an asset manager (realistically for anyone who is not a specialized market making firm) to detect that their orders are being pre-hedged because they do not have the expertise or cross-venue market data to do so. Requiring them to do so would likely require an ongoing investment of several million dollars per asset manager. Because it is unlikely that pre-hedging costs a given asset manager more than a million dollars per year they are stuck: it is like settling a lousy court case because doing so is cheaper than the legal fees associated with defending it successfully.

Clearly this lack of transparency as to whether orders are being pre-hedged on anonymous venues damages faith in the FX markets.

***Pre-hedging in times of market stress***

Almost the only argument I have heard in favor of pre-hedging in the last look window is that it allows market makers to provide quotes in volatile markets when they would otherwise withdraw.

Although the folks who have made this argument are often well intentioned it is patently wrong.

Such a method of risk-free trading is called 'agency' execution and certainly it can offer benefits to the clients. However there are several key distinctions between 'agency' and pre-hedging in the last look window.

Firstly, it should be clear to clients what is happening with their orders. They should be clearly advised that they are or may be using an 'agency' service at times so they can choose to send orders in full knowledge of this rather than believing that they are trading with a 'principal'.

Anonymous venues should have a duty to obtain and proactively share this disclosure at the LP level for clients on their venue.

Secondly, when acting as risk-free 'agent' the liquidity provider should pass on the exact fills it obtains to the client. Otherwise the client is (unknowingly) writing them an option at precisely the most expensive time to do so (high volatility). For example, let us imagine an order is received to buy at 50 and in the following 100ms the market gyrates from 10 to 90. If the 'agent' places buy orders at 30 and obtains a fill, it should be obliged to pass that 30 fill (net of agreed commission) to the client, rather than filling them at their original rate of 50. If this is not the case and the 'agent' can pocket the difference, he is not incentivized to do the right thing for the client and will simply leave low orders which, if unfilled, cost the client but not the 'agent' and which, if filled, profit the 'agent' but not the client.

Thirdly, the service fees in 'agency' execution are transparently communicated to the client and agreed upfront. In the case of a 'principal' market maker who turns to an 'agency' like model in times of market stress, the cost is unobservable to the client and purely opportunistically determined.

**Question 2**

Based on the above, I believe the language below should be updated and strengthened.

***During the last look window, trading activity that utilises the information from the Client's trade request, including any related hedging activity, is likely inconsistent with good market practice because it may signal to other Market Participants the Client's trading intent, skewing market prices against the Client, which (1) is not likely to benefit the Client...***

I would update as follows.

***During the last look window, trading activity that utilises the information from the Client's trade request, including any related hedging activity, is inconsistent with good market practice because it may signal to other Market Participants the Client's trading intent, skewing market prices against the Client, which (1) is not likely to benefit the Client.***

## GLOBAL FOREIGN EXCHANGE COMMITTEE

If there is reluctance to remove the “likely” then I would add a sentence to specifically address disclosure and behavior expected when temporarily acting as agent.

***During the last look window, trading activity that utilises the information from the Client’s trade request, including any related hedging activity, is likely inconsistent with good market practice because it may signal to other Market Participants the Client’s trading intent, skewing market prices against the Client, which (1) is not likely to benefit the Client... If, during certain conditions, a Market Participant may switch from principal execution to risk-free agency execution it must disclose that clearly to Clients - even when interacting via anonymous venues - and must comply with Principle 9, ensuring that fees and commissions are clearly set out in advance and any price-improvements obtained in relation to the hedging of the Client’s order are passed onto the Client.***

I would like to thank the Committee for its time and hope the points above will be recognised. In a time of low faith in FX markets, pre-hedging in the last look window is a lightening rod for continued cynicism and lack of public trust. Therefore clearly reflecting that it is not considered best market practice would do the entire industry - both sell and buy-side - a great service and help it move on.

Best regards,

Jane Doe

Anonymous 2

**Feedback of [ANONYMOUS]**

**in Response to the GFXC's Request for Comments on**

**Last Look Practices in the Foreign Exchange Market**

Question 1

As noted above, the Code states that *"During the last look window, trading activity that utilises the information from the Client's trade request, including any related hedging activity, is likely inconsistent with good market practice because it may signal to other Market Participants the Client's trading intent, skewing market prices against the Client, which (1) is not likely to benefit the Client..."* Do you agree or disagree?

Are there specific situations where this trading activity benefits the Client? In those situations is such trading activity related to the validity or price checks that the Code states as the purpose for last look? Please provide reasons for each response.

**Answer 1**

**It is generally accepted in the FX Industry that in certain situations engaging in hedging or trading activity related to the information within a Client's trade request during the last look window can be to the benefit of the client. However, performing such activities without the prior intentions to accept the trade, or deliberately utilizing such information in a way that is not aimed at benefitting the Client, is not consistent with good market practice.**

**Performing hedging activity based on Client's trade request information may allow a market maker to accept the trade request where it may otherwise have been rejected and leave a client with potential market risk (a point made in Principle 17).**

**However, if undertaken without proper consideration of its effects, hedging activity during the last look window may at times (depending on market conditions and liquidity) cause market impact which could be to the detriment of the Client's execution. There are varying degrees of market impact that differing hedging behaviors can cause. The benefit to the client of increasing the likelihood that their initial trade request will be accepted must be weighed against the potential cost to the client of information leakage into the market.**

**Given the FX Market place is very fragmented, it is possible that market makers may source from, or place liquidity on, venues that directly or indirectly compete with the Client's liquidity during the last look window. Thus, this hedging activity during the last look window may not always materialise as a benefit to the Client, and proving it does on average is very difficult. A dealer's disclosure, regular discussions with the Client and provision of relevant illustrative analytics about its trading practices is encouraged and typical of current market good practices.**

**Examples of such hedging behaviors that may benefit the client are:**

- **Skewing prices to aid hedging. Based on current market conditions a market maker can show a bid/offer of 8/10 with a Client's trade request to buy at 10. This information of interest is then used to skew the market maker's bid to other clients up to 9 during the last look window. The market maker is now inside the market, and so their bid is more likely to be hit. Therefore they can be more assured of accepting the client at 10, even if**



there is a price movement against the market maker (which may otherwise have precluded trade acceptance), and more likely to make their hedge at 9, which could reduce market impact further. Proving that the action of the market maker moving their bid neither signaled the Client's intent to the market nor caused, directly or indirectly, any adverse market move is difficult due to a complex and immeasurable chain of events.

- Selection of hedging pools. Through market impact analysis, market makers can design specific pools of liquidity providers that exhibit very low market impact. By judiciously hedging the Client's interest into these pools, the client's execution would be subject to diminished market impact while the market maker has hedged their risk. This could give rise to an increased rate of acceptance of clients' offers to trade.

Market makers should openly disclose the use of such hedging strategies, and be ready upon request to share illustrative analysis about the same. They should also ascertain that their clients both understand the potential risks and benefits of, and agree to be subject to, those strategies, and agree to their use prior to implementation. Further, such hedging strategies should also be subject to internal compliance and controls to aid transparency and bolster the intention to benefit the Client.

Principles 19 and 20 (use of client information) would still be met by ensuring (a) (through increased controls) that there is no dissemination of client information beyond those with a valid need to know (Principle 19) and (b) (through the use of well-designed trading strategy and client consent) that flow of client information into the wider market is restricted (Principle 20).

It is important to note that as a principal market maker managing positions within a portfolio formed of many counterparties with competing interests, as well as their own interest, an entity may transact prior to or during the last look window independently of the original Client's trade request. These activities can impact the prices offered to clients and the liquidity available at those levels thus potentially affecting the market maker's ability to accept the original Client's request after the last look window. In addition, it may not always be clear when these trading activities are completely independent of a client's request, even when that is the case.

#### Question 2

Based on your response to Question 1, do you consider that the language set out in the Code on this activity should be modified (for example, should it be strengthened further or provide further detail as to what may or may not constitute good practice)? Please provide reasons.

#### Answer 2

- The phrase "likely inconsistent with good market practice" is not accurately descriptive of the true situation given the arguments presented above; therefore a more suitable term to use might be "likely inconsistent with good market practice where the intent is to reject the Client's trade". This formulation, we believe, better recognizes the

**potential to benefit clients.**

- **Furthermore, the phrase “skewing market prices against the Client” is not apt, given that it is one of many possible market reactions to a poorly designed or poorly executed hedging strategy.**
- **There should also be language incorporated in Principle 17 stating that a client may stipulate that information arising from their requests to trade may be used to pre-hedge those requests.**

**As has been laid out above, we feel that with proper disclosure and transparency Principle 17 can be upheld in situations where Client information is utilized. In order for this to be accomplished, a Client would have to state that they agree to such use of their information.**

- **Finally, the Client segment that would most likely agree to this pre-hedging activity by their market makers would comprise sophisticated Clients with stringent execution requirements and hence would be a group that would understand the strategy’s risks and benefits and be in a position to accept the potential of a better execution and fill rates based on that understanding. Principle 17 should therefore incorporate terms leaving this as an option.**

Anonymous 3

Part 1 –

Hi,

In regards to question 1, we do see possibilities where the client could benefit from pre-hedging activity, but due to the complexities of the topic, we simply do not employ these tactics. Even if a bank were able to prove 9 out of 10 times (this would be very hard to prove) that the activity benefitted the client, the one time it did not would be very difficult to explain.

For question 2, I can only suggest that the language is strengthened that if a bank does employ pre-hedging in the last look window utilizing the information, then the bank should disclose the practice and explain to the customer how this was beneficial. This would also allow customers to choose if they find it beneficial or not.

Regards  
[ANONYMOUS]

Part 2 -

Hi,

Please treat this communication as a supplement to my initial feedback. I have also been instructed by my management to request that all of my feedback representing [ANONYMOUS] is anonymized or not shared with the general public.

Principle 17 states:

*Last look is a practice utilised in Electronic Trading Activities whereby a Market Participant receiving a trade request has a final opportunity to accept or reject the request against its quoted price. Market Participants receiving trade requests that utilise the last look window should have in place governance and controls around its design and use, consistent with disclosed terms. This may include appropriate management and compliance oversight.*

Any system that processes a deal will take some time to do so by the nature of computers. Time will be taken to send a message and to decode the message to the point where the trading logic can start. Trading logic will then reject trades for the following reason:

- Credit may not be available for the trade
- The liquidity for the trade may have been consumed by another trade that arrived before the market maker had an opportunity to refresh the price – exactly the same as on a Central Limit Order Book where one can miss to hit a bid or lift an offer

- A price update may have crossed on the wire with the trade request because it is impossible to send messages at infinite speed

We note that these events can take place on a so called firm market or Central Limit Order Book, and that participants do often fail to hit bids or lift offers when trading on CLOBs.

There are many views in the market place as to the definition of the "Last Look Window". Any processing of a trade will take some time depending on the implementation of credit check systems and deal processing logic. However market makers introduce a deliberate hold time, meaning a deliberate pause in the processing of a trade, which is often known as the "Hold Time". This Hold Time is a deliberate pause of processing of a trade by putting it into a hold queue where it sits for a small period of time (the Hold Time). This is to check the price is still available at the end of the Hold Time, either to avoid participating in a large trade that has been split into child tickets and is causing undue market impact, or to protect against slowness in the market maker's view of the market relative to that of the client. It follows the Hold Time should not be introduced when trades are known to be Full Amount.

We feel that Principle 17 should be about use of a deliberate Hold Time and not be conflated with normal processing time and conformance checking necessary to deal with trade requests.

Kind regards  
[ANONYMOUS]

## GLOBAL FOREIGN EXCHANGE COMMITTEE

Anonymous 4

Global Foreign Exchange Committee  
(GFXC)  
By pdf to:  
[lastlookfeedback@globalfx.org](mailto:lastlookfeedback@globalfx.org)

Dear Sirs,

We refer to your request for feedback on Last Look practices in the Foreign Exchange Market dated 25 May 2017 as it relates to potential future updates to the FX Global Code (Code). We welcome the opportunity to contribute to this consultation.

In relation to your questions on principle 17 on the code we note that we remain of the view that properly controlled trading activity in the last look window which utilises information from the Client's trade request is consistent with good market practice and may benefit the client. Examples of this kind of activity are set out in the Annex to this letter.

Nevertheless, with a view to industry consensus, we supported the current version of principle 17. We would not support amendments to principle 17 which suggested such activity would never benefit the client as that is not factually correct. Further, we are concerned that any amendment of the carefully crafted compromise text for principle 17 could call into question other legitimate business practices such as the use of customer trade requests in price formation in a manner otherwise consistent with the principles of the Code.

Once again, we thank you for the opportunity to comment.

Yours faithfully

ANNEX

Examples of appropriate electronic pre-hedging activity

*In each of these examples a market participant which is a liquidity provider (LP) executes trading activity in the last look window which utilises information from the Client's trade request.*

**Scenario 1**

A LP took such an approach and always arranged for the relevant client to be filled and modified its final price based on benefits derived from such hedging activity. In such circumstances this activity could be a benefit, or simply be neutral, to such a client.

**Common Initial Facts for Scenarios 2 and 3**

*A LP shows the following price stack to a client*

<i>Offer</i>	<i>22 for 5 million</i>	<i>LP baseline liquidity</i>
<i>Bid</i>	<i>20 for 5 million</i>	<i>LP baseline liquidity</i>

*A trade request comes in from the client to sell 5 million at 20*

**Scenario 2**

On receipt of the trade request, the primary market moves down to 18/22 and LP revises prices to 19/21 which, in absence of other events, will lead to a reject of the incoming trade request.

The LP observes an ECN is still showing a bid at 20. LP attempts to sell 5 million on ECN bid, and will accept the trade request if successful.

Note that pre-hedging in this example increases the chances of an accept for the client as it indirectly accesses the ECN quicker than it could otherwise. The alternative would be LP rejects at end of the price check period, the client receives a reject and then attempts to hit the ECN directly.

**Scenario 3**

The market is not moving. LP accepts a trade request and removes consumed liquidity on the bid for it to slowly regenerate. In the absence of anything else, the client would see

<i>Offer</i>	<i>22 for 5 million</i>	<i>LP baseline liquidity</i>
<i>Bid</i>	<i>19 for 5 million</i>	<i>LP baseline liquidity</i>

But LP observes primary market liquidity at 19.5/22.5 and on that basis shows out the following stack instead:

<i>Offer</i>	<i>22 for 5 million</i>	<i>LP baseline liquidity</i>
<i>Bid</i>	<i>19.5 for 5 million</i>	<i>reflect primary market liquidity</i>
<i>Bid</i>	<i>19 for 5 million</i>	<i>LP baseline liquidity</i>

Client immediately sends another trade request to sell at 19.5. LP pre-hedges on primary market and fills the client if successful.

**Scenario 4 (Local liquidity provider)**

A local LP with strong franchise in USDMXN liquidity is asked by a client to offer liquidity in a MXN cross, e.g. ZARMXN. Local LP is unwilling to run risk in ZAR but to service the client it will offer ZARMXN liquidity by:

- (a) consuming USDZAR prices from a third party provider (e.g. a broker platform, a large global LP, etc);
- (b) combining the USDZAR “third party” liquidity with its own natural interest in USDMXN to produce liquidity in the ZARMXN cross; and

## GLOBAL FOREIGN EXCHANGE COMMITTEE

- (c) on a client trade request in ZARMXN, a pre-requisite for filling it would be a successful hedge of the USDZAR leg, i.e. the trade acceptance of the cross is dependent on the success of a pre-hedge in one of the legs.

Anonymous 5

September 25, 2017

Via E-mail: [lastlookfeedback@globalfx.org](mailto:lastlookfeedback@globalfx.org)

Global Foreign Exchange Committee c/o GFXC Secretariat

Re: GFXC Request for Feedback on Last Look practices in the Foreign Exchange Market

Question 1

“During the last look window, trading activity that utilizes the information from the Client’s trade request, including any related hedging activity, is likely inconsistent with good market practice because it may signal to other Market Participants the Client’s trading intent, skewing market prices against the Client, which (1) is not likely to benefit the Client...” Do you agree or disagree? Are there specific situations where this trading activity benefits the Client? In those situations is such trading activity related to the validity or price checks that the Code states as the purpose for last look?

Response to Question 1

Because the FX markets are dynamic, determining whether hedging during the last look window benefits a Client will depend on many facts and circumstances, including for example, the currencies involved, time of day, general and specific market conditions, type of order, order size, end user routing capabilities and methodologies, and type of market where the trade takes place. **As a result, the Code should meet the needs of the full spectrum of Clients under a full range of circumstances within the FX market and thus should permit flexibility in pricing solutions, including the ability to hedge in the last look window where a professional market participant has received clear disclosures regarding such activity.**

A blanket prohibition of hedging activity during the last look window, however, would adversely impact a significant number of Clients over time. For example, a Client that has limited technology or connectivity may wish to use a liquidity provider that has access to substantially greater sources of liquidity plus its own inventory. It is likely that in a number of situations, the inventory of the provider might not be enough to satisfy the request of the Client and the risk appetite of the liquidity provider could be constrained by either its own capital or other risk parameters. Allowing hedging during the last look window would increase the probability of a full fill to the Client rather than a partial fill, or worse, no fill at all.

In appropriate circumstances, with clear disclosures, having the ability to hedge during the last look window also allows the liquidity provider to provide generally tighter pricing for a large segment of end liquidity consumers, specifically those that tend have a higher toxicity profile. We believe one can express the relative costs/benefits of pre-hedging during the last look window as follows:

$$(\text{Probability of fill on hedge in LL window LP's price}) \times (\text{Hedge in LL window LP's price}) + (1 - \text{Probability of fill on hedge in LL window LP's price}) \times (\text{expectation of fill price upon retry post reject})$$

Clients should be given the right to assess these two alternatives and select which they consider to be in their best interest. The cost/benefit of hedging in the last look window will vary widely



between highly liquid currencies and those that are illiquid; it will also vary throughout the liquidity cycle of the trading day. The likelihood of getting filled on the price that is hedged in the last look window and the slippage of having to retry will dictate whether the Client is better off trading with a provider that does or does not hedge in the last look window.

In stating that hedging in the last look window is inconsistent with good practice, the current draft of the Code reflects a one dimensional view of the FX market and, as a result, would remove freedom of choice and pricing solutions for a substantial subset of participants that may require access to additional sources of liquidity. Moreover, it could indirectly diminish market liquidity further by causing liquidity providers to suffer significant losses when Clients engage in aggregated sweeping of liquidity. By attempting to prohibit this practice, the Code ultimately attempts to dictate how Clients may choose to receive liquidity, which goes well beyond the mandate of what is supposed to be a set of principle based guidelines.

**Whether pre-hedging during the last look window is likely to harm Clients is ultimately a question that can be addressed by rigorous analysis of statistical data.** The Code should not attempt to decide this question based on a poll of market participants, each of which has their own unique business mix and economic incentives.

### Conclusion

The FX market and its participants are diverse and accordingly require diverse methods to meet various Clients' needs. Prohibiting hedging during the last look window will not just harm individual Clients.

Rather, it is likely to meaningfully reduce liquidity in volatile markets.

The fundamental problem with the formulation of the current Code – with or without the word “likely”

– is that it omits the concept of informed decision making by Clients. Transparency is appropriate here because there are many circumstances in which market participants have reasonably concluded that they are better served by liquidity providers who pre-hedge during the last look period. Accordingly, and in response to Question 2, the principle should be reworded as follows:

Hedging activity during the last look window is appropriate only: (1) with respect to orders sent to a liquidity provider, (2) by a professional market participant, (3) after receipt of clear disclosures that the liquidity provider may engage in hedging activity during the last look window.

Before going beyond this type of disclosure requirement, the Market Practice Group should ask opponents of pre-hedging to submit a rigorous analysis of statistical data to back up their claims that pre-hedging likely harms Clients under all circumstances. In the absence of any such data, the Committee should give market participants the freedom to make their own informed choices on this important issue.

Respectfully

submitted,

An FX Dealer

Anonymous 6

Source: [http://www.globalfx.org/docs/consultation\\_process.pdf](http://www.globalfx.org/docs/consultation_process.pdf)

**Name and respondent type:**

Anonymous

Whether the respondent, or its members, provides prices subject to last look, or not

YES

Whether the respondent, or its members, is a client that places trade requests subject to last look, or not

YES

**Question 1/ As noted above, the Code states that “During the last look window, trading activity that utilises**

**the information from the Client’s trade request, including any related hedging activity, is likely inconsistent with good market practice because it may signal to other Market Participants the Client’s trading intent,**

**skewing market prices against the Client, which (1) is not likely to benefit the Client...” Do you agree or disagree? Are there specific situations where this trading activity benefits the Client? In those situations is such trading activity related to the validity or price checks that the Code states as the purpose for last look? Please provide reasons for each response.**

We agree it’s likely inconsistent.

We can see 2 very specific situations where pre-hedging could be a relevant feature:

When a market maker is striving for a 0% rejection rate on a constant manner, equivalent to a non-last look price. In this case, where pre-hedging could be used, lastlook control would only apply in such cases to avoid significant market disruption or technical issue at the market maker side.

When a client agrees with that behavior in order to get a higher fill ratio. This would apply mainly for some clients such as HFT or arbitragers, and if the market maker can offer a better fill ratio by using this behavior. In addition, in such cases, this pre-hedging feature should be transparently agreed by both parties beforehand.

**Question 2/ Based on your response to Question 1, do you consider that the language set out in the Code on this activity should be modified (for example, should it be strengthened further or provide further detail as to what may or may not constitute good practice)? Please provide reasons**

We believe the current wording is adequate.

We believe also an additional wording could be added regarding situations on Electronic Platforms (ECN, B to C platforms...) where many prices are aggregated. In such marketplaces, a feature should warn market makers when their prices are off-market (eg: crossing the market mid). The ePlatform, having the whole data at each tick, have the ability to build a protection on off-market prices, and could setup a rule that is transparent for both the taker and the maker. This will be profitable to both the market maker (being hit less often on a wrong price) and the price taker (being less rejected) and will likely decrease the lastlook usage.

Or otherwise the brokers could limit the maximum number of providers, in order to reduce the odds of saving a stale price on Top Of Book. It will help to reduce the rejection rate for customers in the Multi-Dealer- Platforms.

## GLOBAL FOREIGN EXCHANGE COMMITTEE

Bank of America Merrill Lynch

To: Global Foreign Exchange Committee

From: Bank of America Merrill Lynch

19th September 2017

**Below is our feedback in response to the GFXC request for feedback on last look practices in the FX market. Bank of America Merrill Lynch provides prices and trade requests subject to last look.**

*Market Participants employing last look should be transparent regarding its use and provide appropriate disclosures to Clients.*

**Last look is a practice utilised in Electronic Trading Activities whereby a Market Participant receiving a trade request has a final opportunity to accept or reject the request against its quoted price. Market Participants receiving trade requests that utilise the last look window should have in place governance and controls around its design and use, consistent with disclosed terms. This may include appropriate management and compliance oversight.**

**A Market Participant should be transparent regarding its last look practices in order for the Client to understand and to be able to make an informed decision as to the manner in which last look is applied to their trading. The Market Participant should disclose, at a minimum, explanations regarding whether,**

**and if so how, changes to price in either direction may impact the decision to accept or reject the trade, the expected or typical period of time for making that decision, and more broadly the purpose for using last look .**

**If utilised, last look should be a risk control mechanism used in order to verify validity and/or price .The validity check should be intended to confirm that the transaction details contained in the request to trade are appropriate from an operational perspective and there is sufficient available credit to enter into the transaction contemplated by the trade request. The price check should be intended to confirm whether the price at which the trade request was made remains consistent with the current price that would be available to the Client.**

**In the context of last look, the Market Participant has sole discretion, based upon the validity and price check processes, over whether the Client's trade request is accepted or not, leaving the Client with potential market risk in the event the trade request is not accepted. Accordingly, and consistent with related principles in the Global Code:**

- **Last look should not be used for purposes of information gathering with no intention to accept the Client's request to trade.**
- **Confidential Information arises at the point the Market Participant receives a trade request at the start of the last look window, and use of such Confidential Information should be consistent with Principles 19 and 20 on Information Sharing.**
- **During the last look window, ~~trading activity that utilises the use of~~ information from the Client's trade request for pricing or hedging purposes, ~~including any related hedging activity,~~ is likely inconsistent with good market practice because it may signal to other Market Participants the Client's trading intent, skewing market prices against the Client, ~~which (1) is not likely to benefit the client, and, (2) in the event that the Market Participant rejects the Client's request to trade, constitutes use of Confidential Information in a manner not specified by the Client.~~**
- **Last look should be symmetrically applied to provide equal protection from trading on non-current market prices to both the Client and the Market Participant receiving the request.**
- **Hold time, if any, used in last look Client trade request evaluation should be consistently applied, regardless of whether the Client request is accepted or rejected.**

**It is good practice for Market Participants to be available to engage in a dialogue with Clients regarding how their trade requests have been handled, including the appropriate treatment of information associated with those orders. Such dialogue could include metrics that facilitate transparency around the pricing and execution of the Client's trade requests and assist a Client in evaluating the handling of its trade requests in order to evaluate whether the execution methodology continues to meet its needs over time.**

Barclays Bank

Response to the GFXC Request for Feedback on Last Look practices in the Foreign Exchange Market

**Respondent Information:**

- **Name and respondent type:** Barclays Bank PLC (acting as a liquidity provider and a price taker)
- **Does the respondent, or its members, provide prices subject to last look, or not?** Yes, Barclays provides liquidity in the electronic spot FX trading market which is subject to Last Look; please refer to our publicly available disclosure on Last Look (<http://www.barx.com/last-look-disclosure.html>)
- **Is the respondent, or its members, a client that places trade requests subject to last look, or not?**  
Yes, as part of its trading activity Barclays places trade requests which are subjected to Last Look.

**Responses to Core Questions for Feedback:**

Principle 17 of the Code states that *“During the last look window, trading activity that utilises the information from the Client’s trade request, including any related hedging activity, is likely inconsistent with good market practice because it may signal to other Market Participants the Client’s trading intent, skewing market prices against the Client, which (1) is not likely to benefit the Client, and (2) in the event that the Market Participant rejects the Client’s request to trade, constitutes use of Confidential Information in a manner not specified by the Client”.*

When providing feedback to the questions below respondents should use the terminology for last look that is used in the Code or indicate how their use of such terminology differs. If a respondent uses different terminology to that used in the Code they should also provide an explanation of why they have chosen to do so. In answering the below questions, respondents may wish to refer to the purpose of last look, as described in the Code and as understood in the FX market, and the availability of statistical analysis or metrics which support the respondent’s view.

**Question 1:** As noted above, the Code states that *“During the last look window, trading activity that utilises the information from the Client’s trade request, including any related hedging activity, is likely inconsistent with good market practice because it may signal to other Market Participants the Client’s trading intent, skewing market prices against the Client, which (1) is not likely to benefit the Client...”* Do you agree or disagree? Are there specific situations where this trading activity benefits the Client? In those situations is such trading activity related to the validity or price checks that the Code states as the purpose for last look? Please provide reasons for each response.

**Response to Question 1:**

- We agree with the statement that any trading (or hedging) activity that takes place in the Last Look window and utilises any information associated with a Client’s trade request prior to the acceptance of such trade request is inconsistent with good market practice and not likely to benefit the client. Even if not specifically designed to disadvantage the Client / liquidity consumer submitting a trade request, trading or hedging activity in the last look window that utilises the information from that Client’s trade request creates a clear conflict of interest between the Market Participant (the liquidity provider) and its Client (the liquidity consumer).
- In Barclays’ view, until a Client’s trade request has been accepted, any use of the

information associated with the Client's intent to trade to influence pricing or hedging activity by the Market Participant could disadvantage the Client with respect to that particular trade intention, such as by signaling the Client's intent to trade or consuming liquidity available to the Client in the event of a prior trade rejection. Hence we believe that if a Market Participant may yet reject or has rejected a trade request, knowledge of the Client's intent to trade should not influence the Market Participant's pricing or hedging activity.

- Barclays does not utilise any information associated with a trade request to influence any pricing or hedging activity undertaken by Barclays prior to the acceptance of the trade request. Further, if a trade request is rejected, whether as a result of Last Look or otherwise, no information associated with the trade request is used to influence any pricing or hedging activity subsequently undertaken by Barclays. This is explicitly stated in our publicly available disclosure on Last Look (<http://www.barx.com/last-look-disclosure.html>).
- Although we appreciate that this is a wider point, we would like to re-iterate that Barclays views the Last Look check purely as a price (and not a validity test); validity tests are required to be undertaken in connection with trade requests irrespective of whether a price check is applied to those trade requests (or not).

**Question 2:** Based on your response to Question 1, do you consider that the language set out in the Code on this activity should be modified (for example, should it be strengthened further or provide further detail as to what may or may not constitute good practice)? Please provide reasons.

**Response to Question 2:**

- We do consider that the language currently set out in the Code should be modified; specifically we consider that the language would benefit from the following amendments and clarifications:
  - (i) The language should clearly specify that trading (and hedging) activity in the last look window which utilises the information from the Client's trade request is inconsistent (as opposed to likely inconsistent) with good market practice, and should clearly flag this as a conflict of interest.
  - (ii) The language which currently reads "During the last look window, ..." should be amended to "Until a Client's trade request has been accepted, ...". This strengthens the existing language to clearly include the use of information associated with a Client's intent to trade in the event that a trade has been rejected, notwithstanding the Market Participant's intention to accept the Client's request to trade.
  - (iii) The language should clarify that Last Look is a price check, as opposed to a price and validity check. The current language which specifies that "If utilised, last look should be a risk control mechanism used in order to verify validity and/or price" is confusing in that it could be read to imply that (a) where Last Look is not applied, validity verification checks are not performed (which surely is not the intention of the language) or (b) validity verification checks would still fall within the definition of Last Look even without a price check component being applicable.

## GLOBAL FOREIGN EXCHANGE COMMITTEE

- (iv) The requirements for governance, controls, transparency and disclosure regarding a Market Participant's Last Look practices should specifically capture (and impose the same obligations on) ECNs (i.e. third party platforms / external venues through which liquidity streamed by Market Participants may be accessed). Specifically, ECNs should be required to provide details / disclosure on the Last Look practices (if any) employed by the liquidity providers / Market Participants forming part of the ECN liquidity pool. Without such disclosures / transparency requirements imposed on ECNs there is, in our view, a gap in the Last Look transparency framework which the Code seeks to promote.
  
- (v) The language which currently reads “ (2) *in the event that the Market Participant rejects the Client's request to trade* , constitutes use of Confidential Information in a manner not specified by the Client” is misleading, as it suggests that use of Confidential Information in a manner not specified by the Client is permissible in the event a Client's request to trade is not rejected by the Market Participant. The principles and protections which are applicable to the treatment of Confidential Information should apply independently of whether a trade request is accepted or rejected. As such, we recommend that the language highlighted in yellow should be deleted.

BestX Ltd



**Response to Global Code of Conduct Consultation on Last Look practices in the Global Foreign Exchange Market**

*Question 1. As noted above, the Code states that “During the last look window, trading activity that utilises the information from the Client’s trade request, including any related hedging activity, is likely inconsistent with good market practice because it may signal to other Market Participants the Client’s trading intent, skewing market prices against the Client, which (1) is not likely to benefit the Client...” Do you agree or disagree? Are there specific situations where this trading activity benefits the Client? In those situations is such trading activity related to the validity or price checks that the Code states as the purpose for last look? Please provide reasons for each response.*

BestX disagrees with this statement. The issue of whether Last Look is an acceptable practice should be divorced from the separate issue of whether any trading activity occurs in the Last Look window. There may be valid reasons for Last Look conceptually, including credit checks, technology latency etc although it is difficult to imagine scenarios where trading activity using the information from the Client’s trade request can be defined as good market practice. If members of the FX market are able to demonstrate that this is the case, then perhaps the onus should be on such a market participant to independently verify that any such trading activity was not detrimental to the price that the Client ultimately receives.

*Question 2. Based on your response to Question 1, do you consider that the language set out in the Code on this activity should be modified (for example, should it be strengthened further or provide further detail as to what may or may not constitute good practice)? Please provide reasons*

Yes, BestX believes the language should be modified to reflect the view that best practice is not to perform any trading activity in the Last Look window using the specific information from a Client’s trade request. If it is impossible to acquire sufficient consensus around such language, then it should be expanded to say that if a participant is to perform such trading activity then, upon request, it has to be in a position to independently verify that such activity was not detrimental to the Client. This should also include the subject of symmetric vs asymmetric Last Look, in that any participants utilising asymmetry should also be prepared to independently demonstrate that it was either at the choice of the Client, or that it did not produce a detrimental result. In addition, BestX believes that the language should be further expanded to require those market participants who conduct Last Look to disclose exactly what parameters they deploy. The parameters should be standardised and agreed at the Global FX Committee to allow Clients to compare and contrast liquidity providers on a level playing field. It is the view of BestX that transparency, measurement and ultimately choice by the Client, should be the core philosophy adopted by the Code. If Clients are able to compare liquidity streams in a consistent fashion, and they are labelled and measured transparently, then deciding to trade using Last Look providers becomes a matter of choice.

Respondent: BestX Ltd, independent technology provider of best execution analytics. BestX does not provide prices at all, or places trade requests.



BNP Paribas

BNP Paribas Global Markets' Submission to the Last Look Consultation for the FX Global Code

**Question 1: As noted above, the Code states that “During the last look window, trading activity that utilises the information from the Client’s trade request, including any related hedging activity, is likely inconsistent with good market practice because it may signal to other Market Participants the Client’s trading intent, skewing market prices against the Client, which (1) is not likely to benefit the Client...” Do you agree or disagree? Are there specific situations where this trading activity benefits the Client? In those situations is such trading activity related to the validity or price checks that the Code states as the purpose for last look? Please provide reasons for each response.**

It is important to isolate and clearly define the poor behavior from which the Code is trying to shield Market Participants. In our view – there are two clear conflicts of interest which the Code should aim to address: i) the fact that a client’s request to trade may be signaled to other market participants which brings with it the risk that market prices are in turn skewed against the client and ii) the possibility that activity in the last look window is used to the clear benefit of the liquidity provider and, by extension therefore, to the clear detriment of the client. Specifically what we are referring to in this second conflict is the scenario whereby a market participant uses the Client’s request to trade to reposition their own book without any intention to fulfil the client’s request to trade. While both of these conflicts are problematic and need to be addressed, the degree to which they are problematic is materially different: the first is a risk that should absolutely be disclosed to the Client, but the Client should be left to decide whether they are comfortable assuming that risk or not. The second conflict, however, should be prohibited by the Code given that it is in direct contravention of the tenets of the Code and is clearly designed to disadvantage the Client.

Let us begin by dealing with the first of these two conflicts. For certain (perhaps smaller) market participants and indeed for certain clients who have a more restricted counterparty panel for whatever reason, we feel that there is a valid operating model whereby pre-hedging in the last look window may occur for legitimate reasons. For such a model to be robust and have integrity, it is essential that the objective of any such pre-hedging activity be solely to fulfill a client’s request to transact. The market participant in question should be forbidden from pre-hedging for any other reason. Such an operating model might be referred to more commonly as a “back-to-back” execution model whereby the market participant will only fulfill a client’s request to transact if they are able to cover the risk associated with that specific transaction beforehand. Under such a model, both parties to the potential transaction must fulfill a certain set of important criteria:

- The Market Participant should disclose to the client that:
  - The process of pre-hedging the client trade request may signal to other market participants the client’s trading intent
  - The Market Participant cannot benefit by pre-hedging a request to trade and subsequently not fill the client i.e. they cannot take principal market risk
  - This activity is consequently undertaken on a “market riskless principal” – or “riskless principal” for short - basis given that they assume credit risk but no market risk
  
- The Client should be mindful of, and comfortable with, the fact that they:
  - Bear the full market risk should a trade request be rejected
  - Their interest may be signaled to other market participants under this model

The market participant providing liquidity in this “riskless principal” capacity can of course provide the client with additional assurance by instituting monitoring of trade request rejection rates from its external liquidity providers to ensure they are within acceptable tolerance thresholds. This gives both the market participant and the client reasonable comfort that external liquidity providers are also applying Last Look in a way which is consistent with the principles of the Code.

Let us now turn to the second conflict of interest - the scenario whereby a market participant uses the



Client's request to trade to reposition their own book without subsequently filling, or indeed without any intention whatsoever to fulfil, the client's request to trade. Such activity clearly represents an abuse of the Client's request to transact, but is a situation which can only exist if the market participant is acting in a principal capacity whereby they bear both credit risk and market risk. If they are pre-hedging with the sole intention of fulfilling the client's request to transact as noted above, and thereby operate in a "riskless principal" capacity, the conflict of interest is resolved at source. Therefore, to our mind, this second conflict of interest relates purely to the capacity in which a market participant is operating and can be fully addressed if pre-hedging in the last look window in a principal capacity (with both credit risk and market risk assumed) is forbidden.

**Question 2: Based on your response to Question 1, do you consider that the language set out in the Code on this activity should be modified (for example, should it be strengthened further or provide further detail as to what may or may not constitute good practice)? Please provide reasons.**

Based on our answer to the above question, we would welcome two specific improvements to the existing language in the Code.

1. We would welcome more specific reference to the fact that pre-hedging in the Last Look window, when undertaken **in a principal capacity (whereby both credit risk and market risk are assumed)**, is where the fundamental and most problematic conflict of interest arises. Consequently, we would suggest an amendment to the third bullet point in Principle 17 along the following lines:

*Current wording:*

*"During the last look window, trading activity that utilises the information from the Client's trade request, including any related hedging activity, is likely inconsistent with good market practice because it may signal to other Market Participants the Client's trading intent, skewing market prices against the Client, which (1) is not likely to benefit the Client, and (2) in the event that the Market Participant rejects the Client's request to trade, constitutes use of Confidential Information in a manner not specified by the Client."*

*Proposed wording:*

*"Trading activity during the last look window that utilises the information from the Client's trade request for any purpose other than to fulfill the client's request to trade, constitutes use of Confidential Information in a manner not specified by the Client and will not benefit the Client. Consequently trading activity in the last look window, when undertaken **in a principal capacity (whereby both credit risk and market risk are assumed)**, is inconsistent with good market practice and should be prohibited"*

While our proposed wording shortens the existing text, we feel – as noted above - that the point about whether the client's trading intent is signaled to other market participants is a matter for the client to decide (assuming, of course, it is adequately pre-disclosed), and that the risks of so doing should be measured by the client against the merits of receiving liquidity in this fashion in the first place.

2. Furthermore, we feel there is merit in revisiting the wording in Principle 8 ("*Market Participants should be clear about the capacities in which they act*") to allow for the scenario whereby market participants act as Principal when providing liquidity to another market participant or counterparty, without assuming market risk. We were strong advocates to the MPG in Phase I of including the notion of "riskless principal", and our position on this point remains the same.

China Foreign Exchange Committee

## **Consolidated Feedback on Last Look Practices – Responses from Market Participants in China’s FX Market**

According to the requirements of the Global Foreign Exchange Committee (GFXC) request for feedback on Last Look practices, i.e., Principle 17 in the FX Global Code (Global Code), the China Foreign Exchange Committee (CFXC) consulted 29 market makers and takers in China’s interbank FX market, and 14 of them have offered feedback (please refer to the attached list). The feedback is consolidated as below.

### **I. Use of Last Look**

Currently, trades in China’s interbank FX market are conducted via the multi-bank electronic trading platform of China Foreign Exchange Trade System (CFETS). Under the RFQ model, takers request quotes from makers. After the prices offered by makers are accepted by takers, makers may employ Last Look practices in special circumstances stipulated by CFETS, consistent with the principle in the Global Code where Last Look should be a risk control mechanism. Some of the consulted institutions have indeed provided prices subject to Last Look<sup>1</sup> or placed trade requests subject to Last Look as a client.

### **II. Attitude towards Last Look Practices**

The consulted institutions generally agree with the principle on Last Look in the Global Code that (1) if utilized, Last Look should be a risk control mechanism used under certain conditions, for example, used to verify validity and/or price; (2) a Market Participant should have fair and transparent rules on Last Look practices in order for Clients to understand the manner in which Last Look is applied to their trading; and (3) during the Last Look window, the Client information should not be used for inappropriate purposes or be used against the Client.

### **III. Feedback on Principle 17**

The GFXC particularly invites feedback on the language of Principle 17 in the Global Code, i.e. “During the last look window, trading activity that utilizes the information from the Client’s trade request, including any related hedging activity, is likely inconsistent with good market practice because it may signal to other Market Participants the Client’s trading intent, skewing market prices against the Client,

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<sup>1</sup> Some institutions have employed Last Look in single-bank platforms.

which (1) is not likely to benefit the Client, and (2) in the event that the Market Participant rejects the Client's request to trade, constitutes use of Confidential Information in a manner not specified by the Client."

### 1. Feedback on the language modification of Principle 17

One of the consulted institutions, HSBC Bank (China), recommends that the word "likely" be removed from the following to provide appropriate clarity to all participants in the market that such pre-hedging is inconsistent with good market practice:

"During the last look window, trading activity that utilises the information from the Client's trade request, including any related hedging activity, is ~~likely~~ inconsistent with good market practice..."

### 2. Feedback on whether Principle 17 should be more detailed

With regard to the above statement in Principle 17, that is, how to provide guidance on trading activities that utilize Client information during the Last Look window, respondents differ in opinions on whether the statement should be principle-based or more specified:

- a) Some institutions recommend that further specification be avoided. Bank of China agrees that Last Look should be a risk control mechanism and that activities during the Last Look window should comply with applicable internal and external rules to ensure fair treatment of both parties. However, an attempt to clearly define activities during the Last Look window will be faced with challenges since the activities are hardly enumerable and the definition may hardly keep up with the fast-changing market environment.
- b) According to some institutions, more specific guidelines may be provided. The Bank of Tokyo-Mitsubishi UFJ (China) suggests that examples may be offered to illustrate good market practices. Industrial and Commercial Bank of China recommends that specific guidance be provided on whether trading activities during the Last Look window constitute the use of Client information for arbitrage or hedging.

Annex. List of Respondents

Annex.

<b>List of Respondents</b>			
<b>RMB/FX Spot, Forward and Swap Market Makers</b>		<b>Buy-Side (City Commercial Banks, Rural Commercial Banks, Finance Companies, Securities Brokers, etc.)</b>	
<b>No.</b>	<b>Respondent</b>	<b>No.</b>	<b>Respondent</b>
1	Industrial and Commercial Bank of China	1	China Zheshang Bank
2	Bank of China	2	Bank of Jiangsu
3	China Citic Bank	3	Shengjing Bank
4	China Guangfa Bank	4	Shanghai Rural Commercial Bank
5	Ping An Bank	5	China Petroleum Finance
6	Industrial Bank		
7	Shanghai Pudong Development Bank		
8	HSBC Bank (China)		
9	Bank of Tokyo-Mitsubishi UFJ (China)		

Citadel



September 21,

2017 GFXC

Secretariat  
Global Foreign Exchange Committee

**Re: GFXC Request for Feedback on Last Look Practices in the FX Market**

Dear Sirs:

Citadel LLC<sup>1</sup> (“Citadel”) appreciates the opportunity to provide feedback to the Global Foreign Exchange Committee (the “GFXC”) in response to the consultation on “last look” practices in the foreign exchange market. Citadel is a significant participant in global financial markets, with our hedge funds managing in excess of \$26 billion in investment capital and our separate Citadel Securities business a leading market maker across the FX, equities, and fixed income asset classes. We support the objectives of the FX Global Code, published in May 2017, and the mission of the GFXC to continue to refine and enhance the FX Global Code.

Citadel believes that realizing the FX Global Code’s objective of robust, fair, liquid, open and transparent foreign exchange markets requires a transition to fully firm pricing and the elimination of “last look” practices. Fully firm pricing in the foreign exchange markets will improve execution quality, investor confidence, market transparency, and transaction cost analysis. By contrast, in today’s markets, “last look” practices yield indicative (vs. fully firm) price levels that may not be executable. This distorts current assessments of actual market pricing and liquidity and impairs efforts to accurately assess transaction costs. These adverse impacts are most pronounced during times of market volatility.

We believe that policymakers and regulators can and should lead an orderly market-wide transition away from “last look”. Innovation has removed many of the justifications that have been offered for the continued use of “last look” and liquidity providers today can effectively manage risk across both trading venues and bilateral off-venue trading. We urge the GFXC to consider how a full-phase out of “last look” could be structured, including the appropriate amount of time for market participants to modify workflows and measures to ensure that a level playing field is maintained at all times as this transition occurs.

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<sup>1</sup> Citadel is a global financial firm built around world-class talent, sound risk management, and innovative market-leading technology. For more than a quarter of a century, Citadel’s hedge funds and capital markets platforms have delivered meaningful and measurable results to top-tier investors and clients around the world. Citadel operates in all major asset classes and financial markets, with offices in the world’s leading financial centers, including Chicago, New York, San Francisco, Boston, London, Hong Kong, and Shanghai.



In the interim, we recommend that the GFXC further clarify the definition of “Client” in the FX Global Code. In particular, the current definition of Client does not appear to contemplate the different modes of execution that are employed in the foreign exchange market, including disclosed trading and anonymous order books. This additional clarification will assist market participants in further evaluating the FX Global Code’s impact on the use of “last look.”

We appreciate the opportunity to provide comments on the FX Global Code to the GFXC. Please feel free to call the undersigned at (646) 403-8235 with any questions regarding these comments.

Respectfully,

/s/ Stephen John Berger  
Managing Director, Government & Regulatory Policy

## GLOBAL FOREIGN EXCHANGE COMMITTEE

DRW Holdings

September 21, 2017

Via E-mail (lastlookfeedback@globalfxc.org)

Global Foreign Exchange Committee  
c/o GFXC Secretariat

**Re: GFXC Request for Feedback on Last Look practices in the Foreign Exchange Market**

To Whom It May Concern:

The undersigned firms<sup>1</sup> appreciate the opportunity to express our views on the Global Foreign Exchange Committee's ("GFXC") request for feedback ("Request") regarding Last Look practices in the Foreign Exchange market.

The undersigned firms trade our own capital in global exchange-traded and OTC Foreign Exchange markets. We engage in manual, automated, and hybrid methods of trading and are active in a variety of foreign exchange products including spot, futures, and options. We are a critical source of liquidity in these markets, allowing participants of these markets to manage their business risk to enter and exit positions efficiently. We do not provide prices subject to Last Look, but we do place trade requests that are subject to Last Look.

As active participants in Global FX markets we have a vested interest in their health. We believe that open access, fairness and transparency, without introducing significant complexity, are the cornerstones of a well-functioning marketplace. With that in mind, we applaud the work being done by the GFXC to introduce best practices for Global FX markets ("the FX Global Code" or "the Code") and welcome the opportunity to lend our expertise to that effort.

As GFXC highlighted in its Request, we believe that any trading activity that utilizes information gleaned from a Client's trade request is inconsistent with good market practices. While we appreciate that the Code identified behaviors that should and should not be allowed in connection with Last Look, we are concerned that without a regulatory body tasked with policing such activity it is ripe for abuse. Last Look provides a small subset of Market Participants with an asymmetric advantage while, at the same time, increasing the complexity and reducing the transparency of today's FX markets. We believe that the practice of Last Look, and its variations, are proliferating to the detriment of the market. The Code's current acceptance of the use of Last Look will only reinforce this trend. Rather than providing a safe harbor for Last Look, GFXC should work towards prohibiting its use.

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<sup>1</sup> These firms include: DRW Holdings, LLC; Eagle Seven, LLC; Geneva Trading USA, LLC; Optiver US, LLC

### **Utilizing Trade Requests to Inform Trading Activity**

We agree with the Code's assertion that the use of information obtained from a Client's trade request for the purposes of trading activity, including any related hedging activity, is inconsistent with good market practices. The Code was right to identify that such practices could "signal to other Market Participants the Client's trading intent, skewing market prices against the Client which (1) is not likely to benefit the Client..."

We struggle to think of a situation where permitting such practices would be beneficial to the Client or the market as a whole. As active liquidity providers in various asset classes we appreciate the importance of managing risk, including hedging activities. In limited instances in wholesale markets we have supported the concept of "anticipatory hedging" as an important risk management tool, however those instances do not include the option to back away from or reject the Client's trade. It seems to us by allowing the practice of Last Look and trying to manage the risks of abuse, the Code is facilitating the transfer of risk from the Market Participant to the Client. Any practice that increases risk and has negative impacts on a Client, regardless of how likely the negative impact may be, should be prohibited and the Code's language should be updated to reflect this.

### **Detrimental Aspects of Last Look**

Any well-functioning marketplace should strive to be open, fair, transparent, and minimally complex. Last Look fails to meet any of those goals.

Last Look provides the Market Participant an exploitable, asymmetric advantage over other market participants. Despite any efforts by GFXC or best-practices outlined in the Code, as long as Last Look is permitted it could be used by Market Participants at the detriment to Clients. For instance, Last Look could be used to condition trade consummation on a Market Participant's ability to pre-emptively hedge or to proactively enter into beneficial positions for their own account ahead of trade consummation.

Further, the use of Last Look shifts the displayed market from executable firm quotes to merely indicative quotes that do not represent the true liquidity of the market. As long as a trade request may be canceled prior to trade consummation the true liquidity of the market is less than the displayed liquidity. In other words, Last Look dramatically decreases the transparency of the FX market. As a result, Clients need to introduce undue complexity into their risk management and trading processes to account for this phantom liquidity and non-deterministic behavior during trade execution. We do not believe that the perceived risk management benefits of Last Look even if used as prescribed in the Code, outweigh these observable costs to Clients.

### **Unintended Proliferation of Last Look**

Of particular concern to the undersigned firms is the proliferation of Last Look and Last-Look-like functionality in the FX marketplace. We believe while attempting to limit the acceptable use of Last Look, the Code has instead provided quasi-support for the practice which in turn has led to the proliferation of such functionality. To codify a practice that potentially harms a Client is a step in the wrong direction.

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<sup>2</sup> [http://www.globalfxc.org/docs/fx\\_global.pdf](http://www.globalfxc.org/docs/fx_global.pdf)



We have seen several examples of FX platforms implementing trade matching models that, while not called Last Look, provide a functionally similar asymmetric advantage to the Market Participant at the expense of the Client. One such mechanism is commonly referred to as a “Latency Floor”. FX platforms with a Latency Floor arbitrarily delay the processing of an already received Client trade request and, in some cases, randomize the processing of requests received during the same time window. Latency Floors are commonly coupled with functionality that allows resting orders to be immediately cancelled by the matching engine, thereby prioritizing the cancel ahead of the Client trade request even if the cancel is received subsequent to the receipt of the Client trade request. In practice, this, and other delayed matching models, may be abused in the same manner as Last Look and should be similarly prohibited.

For example, assume a Market Participant is resting a two-sided quote. A Client determines that they want to buy the resting offer and submits a trade request to the FX platform. At this point, Latency Floor functionality delays the processing of the trade request for some period of time. During this delay the Market Participant is afforded the opportunity to obtain additional market information and determine if its resting quote is likely to be filled once the delayed orders are processed by the matching engine. In the event the Market Participant believes they are at risk of having a resting quote filled they can attempt to preemptively hedge the fill prior to receiving the fill acknowledgement thus impacting the market to the detriment to their Client. The Market Participant may also leverage their asymmetric ability to cancel resting quotes without a delay to avoid being filled by a delayed order in the event they failed to capture their desired preemptive hedge or they no longer wish to transact at their currently quoted price.

For all of these reasons including the risk of proliferation, rather than continuing to work to limit its use, we encourage the GFXC to consider taking steps to prohibit the use of Last Look, as well as any other mechanism that asymmetrically delays the matching of order requests. In doing so the GFXC will help transition the Global FX markets to a more open, fair, transparent, and less complex model which will increase participant confidence and the overall Client experience.

\* \* \* \*

The undersigned firms appreciate the opportunity to provide comments to the GFXC regarding the use of Last Look in Global FX markets. We look forward to continuing this dialogue in the future.

Sincerely,

DRW Holdings, LLC

By: /s/ Donald R. Wilson, Jr., CEO

Eagle Seven, LLC

By: /s/ Stuart Shalowitz, General Counsel

Geneva Trading USA, LLC

By: /s/ Rob Creamer, CEO

Optiver US, LLC

By: /s/ Sebastiaan Koeling, CEO

Global Foreign Exchange Committee  
By email: [lastlookfeedback@globalfx.org](mailto:lastlookfeedback@globalfx.org)

Amsterdam, 21 September 2017

Subject: GFXC Request for Feedback on Last Look practices in the Foreign Exchange Market

Dear sir, madam,

We are pleased to respond to your Request for Feedback on Last

Look practices in the Foreign Exchange Market. In respect of Question

1:

We strongly believe that utilising 'last look' for other reasons than logistics (credit check) and genuine risk management unjustly disadvantages less sophisticated participants. This, importantly, creates a negative perception of the market structure as it damages public trust in the FX market as a whole. Where last look is abused it is tantamount to front-running an order. Even when used for 'hedging' purposes, last look entails an unfair information asymmetry which must not be exploited by anyone, in particular not by (much) more powerful market participants.

Our biggest concern is that there is no transparency in relevant markets. Since liquidity providers are anonymous there is no disclosure of their identities and practices. Even the platforms themselves have no way to know, so the market at large is left in the dark. This offers inherent incentives for unfair behaviour - and somebody will likely get hurt. 99% of the participants on such platforms are less sophisticated than market makers. They are unable to detect activity that is detrimental to their position or market quality as a whole. It

deteriorates market quality for less sophisticated participants and affects the end-client (who has to pick up the bill for this kind of behaviour while often remaining unaware of such practices, let alone being able to address this structural disadvantage).

If market makers wish to provide risk-free trading services to their

clients, e.g. when trading in fast markets, they can do so by trading in their capacity as an 'agency' provider. If they choose to act as an agent, they should: (a) disclose their capacity and intentions in a transaction upfront, including disclosing any fees and associated costs; and (b) guarantee best execution on such orders in order for the end-user to be better off than they currently are, e.g. by passing on price improvements or through other means.

Permitting last look may allow unfair treatment of less sophisticated clients by more sophisticated market makers, even in agency roles. Gaining an edge in a transaction must be driven by skill, capacity or other features of such market participant, not a design failure in the market structure. Rather, last look - other than strictly used for logistics and genuine risk management - exploits discriminatory, unnecessary, and unjustified features of the marketplace which are invariably stacked against less sophisticated participants. We are a strong proponent of fair, transparent and orderly markets and would like to see such unfair practices banned as soon as possible.

In respect of Question 2:

An important correction would be to remove the word "*likely*" from current wording in order to clarify that exploiting the market structure through last look cannot reasonably be justified.

Kind regards,

Diederik Dorst  
Global Head of Legal and Compliance

Foreign Exchange Professionals Association



September 20, 2017

Global Foreign Exchange Committee  
Secretariat  
*Sent via e-mail: lastlookfeedback@globalfxc.org*

RE: Request for Feedback on Last Look Practices in the Foreign Exchange Market

Dear GFXC Secretariat,

The Foreign Exchange Professionals Association (FXPA)<sup>1</sup> appreciates the opportunity to provide feedback to the Global Foreign Exchange Committee (GFXC) on the “last look” practices in the foreign exchange (FX) market, and particularly on Principle 17 of the FX Global Code.<sup>2</sup>

The FXPA’s activities focus on educating US and international legislators, regulators and central banks, the news media, and the general public, as well as coordinating with multinational organizations and trade bodies.

**Principle 17 of the FX Global Code**

The Global Code language regarding hedging activity during the “last look” window notes that “the trading activity that utilizes the information from the Client’s trade request, including any related hedging activity, is *likely* inconsistent with good market practice.”<sup>3</sup> The GFXC adds that such language addresses concerns that hedging activity during the “last look” window could be to the Client’s detriment.

The FXPA believes that deleting the word “likely” from the above-mentioned language would have the effect of creating a more categorical statement that hedging during the window is inconsistent with good market practice. Indeed, the FXPA notes that there could be instances where pre-hedging during the “last look” window would be acceptable. Moreover, we agree

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<sup>1</sup> The FXPA represents the collective interests of professional FX industry participants, including buy-side, exchanges and clearing houses, trading platforms, technology companies, banks and non-bank market participants, among others, to advance a sound, liquid, transparent and competitive global currency market to policymakers and the marketplace through education, research and advocacy. The following comments do not represent the specific individual opinion of any one particular member. For more information, please see [www.fxpa.org](http://www.fxpa.org).

<sup>2</sup> GFXC, *Request for Feedback on Last Look Practices in the Foreign Exchange Market* (May 25, 2017), [https://www.globalfxc.org/docs/consultation\\_process.pdf](https://www.globalfxc.org/docs/consultation_process.pdf).

<sup>3</sup> *Id.* [emphasis added].

Feedback on Last Look Practices in FX Market  
GFXC Secretariat  
Page 2 of 2

with the concept of the current language effectively creating a presumption that the activity could disadvantage the Client, while not categorically “outlawing” it.

Understanding that the “likely” language effectively creates a presumption, it follows that the presumption can be rebutted. Thus, we believe it would be up to the dealer to rebut, to its Client’s satisfaction, the presumption that their hedging of the Client’s orders during the “last look” window is harming the Client.

We recommend that the GFXC consider including additional language in Principle 17 which clarifies that: (a) there is an existing presumption that a dealer’s trading activity that uses information from its Client’s trade request could negatively impact its Client, (b) such presumption may be rebutted by the dealer, and (c) the Client, in seeking such rebuttal, may request information from the dealer in order to make the determination of whether its activity is actually harming it.

### **Proposed Language**

Reflecting the recommendations outlined above, the FXPA proposes the following change to the language under consideration:

**During the last look window, trading activity that utilizes the information from the Client’s trade request, including any related hedging activity, is likely inconsistent with good market practice because it may signal to other Market Participants the Client’s trading intent, skewing market prices against the Client, which (1) is not likely to benefit the Client, and (2) in the event that the Market Participant rejects the Client’s request to trade, constitutes use of Confidential Information in a manner not specified by the Client. A Market Participant should be prepared to provide data and other information to the Clients in order to enable the Clients to make a risk determination as to whether the Market Participant’s trading activities during the last look window actually benefits the Clients.**

\* \* \*

Should the GFXC wish to discuss these comments further, please contact the undersigned at [chairman@fxpa.org](mailto:chairman@fxpa.org).

Sincerely yours,



Chip Lowry  
Chairman

HSBC



20 September 2017

## HSBC's response to GFXC's *Request for Feedback on Last Look practices in the Foreign Exchange Market*

Name and respondent type; **HSBC Holdings Plc**

Whether the respondent, or its members, provides prices subject to last look, or not:  
**Yes (Global Markets)**

Whether the respondent, or its members, is a client that places trade requests subject to last look, or not:  
**Yes (Private Banking and Asset Management)**

### **Question 1**

*As noted above, the Code states that "During the last look window, trading activity that utilises the information from the Client's trade request, including any related hedging activity, is likely inconsistent with good market practice because it may signal to other Market Participants the Client's trading intent, skewing market prices against the Client, which (1) is not likely to benefit the Client..." Do you agree or disagree? Are there specific situations where this trading activity benefits the Client? In those situations is such trading activity related to the validity or price checks that the Code states as the purpose for last look? Please provide reasons for each response.*

#### **HSBC response to Question 1:**

HSBC agrees that trading activity that utilises the information from the Client's trade request which are subsequently not accepted, including any related hedging activity, is inconsistent with good market practice.  
HSBC performs the trade validation independently from the risk management activities.

### **Question 2**

*Based on your response to Question 1, do you consider that the language set out in the Code on this activity should be modified (for example, should it be strengthened further or provide further detail as to what may or may not constitute good practice)? Please provide reasons.*

#### **HSBC response to Question 2**

Given our response to Question 1 above, HSBC recommends that the work "likely" be removed from the following to provide appropriate clarity to all participants in the market that such pre-hedging is inconsistent with good market practice: "During the last look window, trading activity that utilises the information from the Client's trade request, including any related hedging activity, is ~~likely~~ inconsistent with good market practice..."

Investment Association

THE  
INVESTMENT  
ASSOCIATION  
INVESTMENT MATTERS

GFXC Secretariat  
Global Foreign Exchange Committee  
[lastlookfeedback@globalfxc.org](mailto:lastlookfeedback@globalfxc.org)

**The Investment Association**

Camomile Court, 23 Camomile Street,  
London, EC3A 7LL

T +44 20 7831 0898  
E [enquiries@theia.org](mailto:enquiries@theia.org)  
W [theinvestmentassociation.org](http://theinvestmentassociation.org)  
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**Date: 21 September 2017**

Dear GFXC Secretariat,

**RE: GFXC Request for Feedback on Last Look practices in the Foreign Exchange Market**

The Investment Association ('the IA') represents UK investment managers and has over 200 members who manage more than £5.7 trillion of behalf of clients in the UK and around the world.

The IA is keen to ensure that FX markets are fair and effective, which ultimately benefits our members and their end clients, and helps investment managers to maximise their contribution to economic growth.

To this end we welcome the opportunity to respond to the Global Foreign Exchange Committee's request for feedback on Last Look practices in FX markets.

The practice of Last Look – whereby a Market Participant receiving a trade request has a final opportunity to accept or reject the request against its quoted price – has received considerable industry and press attention in recent months.

Last Look may have valid applications in order to protect Market Participants from taking on too much risk. Investors also note that not "Last Looking" is not necessarily an indication of good behaviour or quality of execution in and of itself. For example, some HFTs (or banks) could use pools which have no Last Look to rapidly manage their risk ahead of less speedy market participants. Such behaviour could potentially create more market impact than otherwise.

Nonetheless, the IA considers that in certain circumstances the use of Last Look is inconsistent with good market practice. In particular, it considers the practice of pre-hedging during the Last Look window to be unacceptable.

Pre-hedging during the Last Look window may signal to other Market Participants the client's trading intent, skewing market prices against the client. The IA has yet to see evidence that this practice ever leads to price improvement for the client and in the event that the Market Participant ends up rejecting the client's trade it constitutes improper use of client information.

We therefore believe that the language set out in the Code should be strengthened as follows:  
*"During the last look window, trading activity that utilises the information from the Client's trade request, including any related hedging activity, is likely inconsistent with good market practice..."*

## GLOBAL FOREIGN EXCHANGE COMMITTEE

In addition we consider that Market Participants should make direct statements to their clients indicating that they do not take part in pre-hedging activities during the pre-hedging window. Such a statement could take the following format:

*"Where last look applies, [the market participant and if applicable any subsidiary] is not active in the market during the last look window in relation to your trade request. Further, if your trade request is rejected, [the market participant and if applicable any subsidiary] is not active in the market after the last look window in relation to your rejected trade request. [The market participant and if applicable any subsidiary] is only active in the market in relation to your trade request after it has been accepted.*

We would also encourage the Global FX Committee to establish a clearer definition of Last Look as a whole. There remains some confusion within the industry as to what exactly constitutes Last Look. For example, it would be good for the Committee to establish clarity as to whether Last Looking refers simply to rejection rates, or also to longer holding times. In addition, as credit facilitation is key to the operation of the FX market, we would welcome clarity as to whether rejections on the basis of credit should be classified as Last Look, or whether the term should simply apply to rejections based on price movements.

We would like to re-iterate that the IA is fully supportive of the FX Global Code and the work of the Global FX Committee, and welcomes further discussion of any of the points raised in our response.

Yours sincerely,



**Galina Dimitrova**

**Director – Investments and Capital Markets**



LMAX Exchange



**Date: September 20, 2017**

**To: Global Foreign Exchange Committee ('GFXC')**

Cc: FXWG Chairman Guy  
Debelle MPG chairman  
David Puth  
GFXC Workstream Leads, Chris Salmon and Simon Potter

**Feedback on Last Look practices in the Foreign Exchange Market from LMAX Exchange**

**Information about the respondent:**

LMAX Exchange is authorised and regulated by the FCA as a Multilateral Trading Facility (MTF). LMAX Exchange operates a central limit order book (CLOB) with streaming, no 'last look' liquidity only supplied by institutional market makers, banks and non-banks.

Trading on LMAX Exchange is governed by the [LMAX Exchange Rulebook](#) which does not permit 'pre-hedging' and 'last look' practices, thus ensuring fully transparent and fair execution for all its clients and market makers.

LMAX Exchange is known in the FX industry for its long-held conviction that the 'last look' practice is open to abuse and it should not exist in a transparent, fair FX marketplace.

[www.lmax.com](http://www.lmax.com)

*Response to Specific Consultation Questions:*

[As the first market participant to commit to the FX Global Code](#), LMAX Exchange welcomes the opportunity to provide feedback on Last Look practices in the Foreign Exchange Market.

Though the FX Global Code is a positive starting point for restoring trust in the FX industry and creating globally consistent guidance, LMAX Exchange doesn't believe that the Code goes far enough on restricting or banning the potential market abuse that can result from the use of 'pre-hedging' and 'last look', in its wording of Principle 17.

**Questions: Principle 17 of the Code states that *"During the last look window, trading activity that utilises the information from the Client's trade request, including any related hedging activity, is likely inconsistent with good market practice because it may signal to other Market Participants the Client's trading intent, skewing market prices against the Client, which (1) is not likely to benefit the Client, and (2) in the event that the Market Participant rejects the Client's request to trade, constitutes use of Confidential Information in a manner not specified by the Client"*.**

LMAX Exchange agrees that any trading activity, utilising the Client's order information, during the 'Last Look' window does not benefit the client and at the very least, constitutes use of confidential information in a manner not specified by the client. Furthermore, we are not aware of any situation or scenario where pre-hedging during the 'Last Look' window can be beneficial to the client or where clients benefit from skewed market prices against their orders, caused by information leakage during the 'Last look' window.



The current wording in Principle 17 effectively legitimises pre-hedging, which could stand accused as front-running during the 'Last Look' window. Legitimate working of a client order will be indistinguishable from unethical front-running for pure profit-making utilising privileged Client's order information. Front-running is considered 'unethical practice' in capital markets, defined as 'unethical practice whereby someone with advance knowledge of a specific market order in, say, shares, bonds or a currency from a client steps in ahead and buys for their own account. When the client's usually much larger order is executed and drives up the price, the private purchase can be sold at a profit'.

Thus, if front-running is acknowledged as 'unethical' across all asset classes, why isn't there a stronger stance in the Global Code on pre-hedging activity during the 'last look' window?

Thus, as a direct response to the consultation questions, LMAX Exchange recommends removing 'likely' from 'likely inconsistent with good market practice' in the wording of Principle 17, referring to 'any hedging activity during the last look window utilising the information from the Client's trade request'.

Longer-term, LMAX Exchange believes that the Code should ban 'last look' at least on anonymous multi-dealer trading venues; it can be argued that the practice may still have its place in the disclosed bi-lateral trading relationships (i.e., bank to specific client), if both counterparties prefer to trade with 'last look'. Banning 'last look' will avoid any potential for market abuse, that has already been evidenced by recent scandals and legal investigations for the misuse of 'last look' by some of the most reputable, global financial institutions. LMAX Exchange believes that the need for 'last look' has become obsolete; the technological advancements and availability of real-time streaming market data, enabling instantaneous price checks, have entirely eliminated the need for 'last look' as a risk management tool. The practice of 'last look' that doesn't exist in any other asset class, erodes trust in FX trading at the time when the industry needs to reinstate much-needed transparency and fairness in FX markets.

#### *LMAX Exchange viewpoint on the practice of 'last look':*

##### **1) Advances in trading technology have replaced the need for 'last look' with more superior risk management tools:**

The practice of 'last look' is a legacy business solution to an historic technology problem. As is the case now, market makers reasonably wanted to protect themselves against sudden fluctuations in the market (as described in Principle 17 of the FX Global Code of Conduct<sup>1</sup>) when they didn't have robust technology to stream prices without introducing enormous amounts of new market risk into their businesses. At the time, the obvious patch for the shortcoming in technology and the continued desire to responsibly manage risk while at the same time increase the breadth of the business' market making reach, was to introduce what is now known as 'last look'. Today, the same financial institutions have invested greatly in people, technology platforms, and electronic trading is no longer a small offshoot of a bank's core FX business it is the core FX business. This attraction of resources and advances in technology platforms across the marketplace, also calls for the evolution of market standards and best practices.

Our view is clear at LMAX Exchange. We can process over one hundred million orders per day, cancel and replace orders in sub-one-hundred microseconds, perform seven million real time risk calculations per second, and conduct pre-trade credit checks instantaneously. Technology has moved on dramatically, and the same needs and rationalisations for 'last look' are no longer the same.

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<sup>1</sup> Principle 17, p.21 '*..last look is a risk control mechanism used in order to verify validity and/or price. The validity check should be intended to confirm that the transaction details contained in the request to trade are appropriate from an operational perspective and there is sufficient available credit to enter into the transaction contemplated by the trade request. The price check should be intended to confirm whether the price at which the trade request was made remains consistent with the current price that would be available to the Client'*



In today's environment, we feel it creates an uneven playing field biased against clients, whether they are cognisant of it or not, and equally as important, against financial institutions who are trying to create a new market order with greater transparency and equality, yet are forced to compete with those who are not yet willing or mandated to do so. It can be a very daunting task if not every market participant operates to the same level of standards.

LMAX Exchange is not a proponent of 'last look' for numerous reasons, including the possible abuses and optionality that it introduces into pricing. LMAX Exchange, along with a small handful of other venues, is demonstrable proof that trading without 'last look' is a wholly viable option for both market makers and the clients who take their liquidity. Moreover, by doing so, these participants disassociate or distance themselves from a practice which is open to abuse, while at the same time improving both the transparency and quality of execution in the market place. This is not a transition that takes place overnight, but sooner, rather than later, market participants will have to accept the mature, transparent nature of the foreign exchange market and its place and status with other mature asset classes and their markets and realise the practice of 'last look' is no longer defensible.

**2) 'Last look' creates a disorderly market and liquidity mirage in the anonymous multi-dealer execution environment:**

Though LMAX Exchange believes the need to use 'last look' has become obsolete, it can be argued that the practice may still have its place in the disclosed bi-lateral trading relationships (i.e., bank to specific client), if both counterparties prefer to trade with 'last look'.

The situation is different on anonymous multi-dealer platforms, where clients are trading on anonymous quotes streaming from multiple LPs, each using 'last look' according to their own discretion. Furthermore, 'last look' on multi-dealer platforms allows LPs to quote more venues than they are willing to fill, causing a liquidity mirage and increased fragmentation, in turn leading to disorderly markets.

**3) The 'last look' practice significantly diminishes the trader's control over execution quality and costs, thus creating opportunities for market abuse and undermining any regulatory initiatives aiming to impose stricter controls over execution factors:**

Discretion over the LP's use of 'last look' and its consequences on the trade execution quality have been evidenced in our recent white paper ['TCA and fair execution. The metrics that the FX industry must use'](#). The paper, containing the analysis of the independent data set of over 7 million trades (both firm and 'last look' liquidity), revealed the significant level of discretion used by 'last look' liquidity providers regarding:

- The length of 'last look' window or discretionary hold time before order execution – constituting one of the most significant hidden trading costs (e.g., 100 milli-seconds of hold time can cost the client up to \$25/million<sup>2</sup>)

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<sup>2</sup> ['TCA and fair execution. The metrics that the FX industry must use'](#), Part II - Quantifying the cost of hold time, p.60-63



- The bias in passing the underlying market behaviour on limit-orders to clients – our analysis demonstrated that clients trading on ‘last look’ liquidity were not getting the full price improvement, costing them up to \$40/million<sup>3</sup> in unrealised value from price improvement

Such discretion highlights the potential for market abuse of ‘last look’ – for detailed analysis, please refer to Appendix I, containing selected chapters from the LMAX Exchange white paper [‘TCA and fair execution. The metrics that the FX industry must use’](#).

Furthermore, the level of discretion that LPs have over the order during the ‘last look’ window makes it impossible for trading institutions to have sufficient control over execution quality, in turn undermining any regulatory efforts that impose stricter levels of responsibility on traders for achieving best execution.

To this extent, we believe that in the context of ‘last look’ liquidity MiFID II best execution standards are unattainable for the buy-side. Only when trading on firm liquidity, the buy-side participants are able to ‘take all sufficient steps’ to obtain best possible results for execution factors such as price, costs, speed, likelihood of execution and settlement, size and nature of the trade<sup>4</sup>.

**4) Ongoing scandals and investigations related to the abuse of ‘last look’ provide further evidence that the practice is misused and in turn deters trust in the FX marketplace:**

Asymmetrical application of ‘last look’, failure to pass fully and transparently price improvement to clients as well as consistent use of pre-hedging during ‘last look’ window are examples of ‘last look’ abuse in the recent scandals and ongoing investigations:

- Barclays Bank fined \$150m for abuse of ‘Last Look’ by the NYDFS (November 2015)
- Legal claim by NFA brought against FXCM and Effex Capital (February 2017)
- Legal claims filed by Alpari (US) against 6 banks for abuse of ‘Last Look’ (July 2017)

**5) Not banning or taking a stricter stance on ‘last look’ diminishes the Code’s intentions:**

The Code’s intentions are stated as follows: *‘to promote a robust, fair, liquid, open, and appropriately transparent market in which a diverse set of Market Participants, supported by resilient infrastructure, are able to confidently and effectively transact at competitive prices that reflect available market information and in a manner that conforms to acceptable standards of behaviour’*.

Our view is that robustness of the market is diminished by ‘last look’ and the discretionary nature of the duration of ‘last look window’; fairness is impaired by not banning pre-hedging during the ‘last look’ window and not requiring Market Participants to pass on price improvement to Clients; liquidity of the market is affected by liquidity mirage and fragmentation, enabled by ‘last look’; openness is deterred by Market Participants having sole discretion over the use of controversial practices.

- **The use of ‘last look’ at a sole discretion of a Market Participant creates conflict of interest with the Client and takes away from the Client control over execution quality and trading costs.**

<sup>3</sup> [‘TCA and fair execution. The metrics that the FX industry must use’](#), Part II - Quantifying the value of price improvement, p.50-55

<sup>4</sup> MiFID II Best Execution obligation



The Code rightfully states that during the 'last look' window the Client is left with 'potential' market risk in the event the trade request is not accepted'. Since this is a substantial risk, the Code needs to elaborate on the benefits for the Client to trade with 'last look' and make it obligatory for the Market Participant to pass on all the benefits that may arise from 'last look' execution to the Client. To this extent, the Code needs to raise awareness of different types of liquidity available, firm and 'last look', and provide examples and guidance to help Clients make informed choices when selecting the appropriate liquidity for their trading strategies.

- ***Standardised application of price improvement vs price slippage to Client limit orders needs to be enforced on 'last look' liquidity.***

The Code needs to take a strong stance that Market Participants are required to pass full price improvement, resulting from market fluctuations during 'last look' window to the Client, in the same way as they treat price slippage. By not giving full price improvement on a 'last look' stream, though fully disclosed, the Market Participant is disadvantaging the client, which contravenes Principle 8.

- ***Monitoring and enforcing 'correct use' of information from the Client's trade request during the 'last look' window is close to impossible on multi-dealer platforms.***

Information about the Client's order, in advance of 100% execution, is valuable and open to abuse. Even if the information is not used for hedging activity, it can be used for future pricing by Market Participants (i.e., determining, spreads, fill ratios, hold time).

Principle 17 proposes, as a good market practice, that Market Participants engage in a dialogue regarding the handling of their trade requests with Clients. This proposal is constructive and relatively easy to implement and enforce in bi-lateral disclosed trading relationships. Unfortunately, on multi-dealer platforms where Clients are trading on 'last look' liquidity streaming from many different LPs (each with different disclosures about the use of 'last look') and where information is passed around in milliseconds / or even micro seconds, it becomes very difficult, if not impossible, for Clients to monitor whether their trade requests are treated in accordance with disclosures and confidentiality.

Furthermore, the encouragement of the dialogue between the Client and the Market Participant is too reliant on the following assumptions about the FX marketplace:

- Lack of conflict of interest between Market Participants and the Clients;
- Open access for every Client, whether big or small, to have the same dialogue with every Market Participant, who may be pricing their orders;
- Full awareness and understanding by Clients of all available execution alternatives and the associated trading costs for each alternative.

Unfortunately, the FX marketplace doesn't operate in accordance with the above assumptions:

- Until Market Participants are required to pass full price improvement, when using 'last look', to the Client, the inherent conflict of interest exists between the two parties;
- Unless there is standardisation of the use of 'last look' by LPs for each specific multi-dealer venue, it's impossible for all clients to have similar information access to LPs' disclosures and to have the same access to each LP to discuss individual disclosures;
- Finally, in the context of the OTC-traded FX marketplace that operates without centralised pricing benchmarks, the only way clients can make informed choices about the liquidity source for their execution strategy is to conduct FX



Transaction Cost Analysis (TCA). Compared to equities, FX TCA methodology is still in its infancy  
 - it doesn't address differences between execution costs on firm vs 'last look' liquidity and it hasn't reached sufficiently wide adoption by the marketplace to become a useful blueprint for Clients in their dialogue with Market Participants.

Effectively, Principle 17 places the complete responsibility on the Client for understanding 'last look' and 'pre-hedging' related disclosures (driven by the sole discretion of the Market Participant), without removing the conflict of interest between the two parties and without equipping the Client with capabilities and tools to have an informed dialogue with the Market Participant. As a result, Principle 17 reinstates sole control over execution with Market Participants and doesn't contribute to levelling out the playing field between Market Participants and the Clients.

#### *Detailed Recommendations:*

##### **Short-term:**

- Remove **'likely'** from **'likely inconsistent with good market practice'** in the wording of Principle 17, referring to 'any hedging activity during the last look window utilising the information from the Client's trade request;
- Remove discretion from Market Participants on how they treat price changes, resulting from market fluctuations during 'last look' window, and require them to pass the full price improvement on limit orders to Clients, in exactly the same way price slippage is treated;
- Raise the level of awareness of execution alternatives for the Clients and promote a standard set of metrics that Clients can use to calculate total trading costs for each alternative. For this, the FX TCA methodology needs to be developed to capture a comprehensive set of metrics that measures execution quality across both firm and 'last look' liquidity. The development of such FX TCA methodology needs to be an industry-wide initiative, intended to equip Client with the ability to make informed choices and have dialogues with Market Participants about the use of 'last look' on a level playing field. LMAX Exchange has made some headway in developing FX TCA methodology able to capture the nuances both liquidity pools (*see the latest TCA white paper*). LMAX Exchange would welcome cooperation from industry participants to develop the methodology further and would be happy to contribute to any industry-wide activity targeted at educating the marketplace about execution alternatives.

##### **Longer-term:**

- LMAX Exchange believes that once 'pre-hedging' is forbidden during the 'last look' window and Market Participants have to pass full price improvement to Clients, the practice of 'last look' will cease to exist by itself, as in today's electronic FX marketplace which operates in micro-seconds, Market Participants have much more superior risk management tools than 'last look';
- However, if the conflicts of interest between Market Participants and Clients, inherent in current wording of Principle 17, are not addressed, it would be a far more efficient use of industry/regulatory resource to ban 'last look'. Eliminating potential for abuse whilst insuring fair and transparent treatment is to not allow either 'pre-hedging' or 'last look'.





## APPENDIX I

In the latest white paper [TCA and fair execution. The metrics that the FX industry must use](#), LMAX Exchange analysed execution quality on firm vs last look liquidity, using the independent Third Party Aggregator data from over 7 million trades (sent to 7 'last look' and firm LPs) during 2016. Among other findings, the analysis revealed discretionary nature used by 'last look' liquidity providers in passing on price improvement and the duration of hold time or 'last look' window applied to the orders. Such discretion highlights potential for market abuse of 'last look', below are the extracts from the white paper related to Price Variation and Hold time analyses.

### **PRICE VARIATION - SLIPPAGE AND PRICE IMPROVEMENT**

*(p.23 in the full [LMAX Exchange TCA and fair execution white paper](#))*

Price variation is a trader's view of the difference between a desired or expected price and the actual execution price achieved by an order. While attention is often focused on slippage (i.e. execution at a worse than expected price) when using market orders we should expect to experience both slippage and improvement. Traders using price constrained orders (limit or PQ) may have been conditioned to expect neither; limit orders cannot slip and many traders do not even consider measuring price improvement.

Measurement of slippage or improvement requires information which may only be available in the trader's own logs. We cannot rely on orders to carry the price which prompted the decision to trade – market orders do not carry a price at all and the price on a limit order is not necessarily the same value as the decision price – making this metric potentially both opaque and highly subjective. However, the order placement behaviour of the TPA is far more predictable, allowing us to measure the impact of price variation consistently and objectively across LPs.

When the TPA receives a customer order, it waits until the market data it receives from the LPs indicates that the order can be filled, meeting all price or size criteria specified. Once suitable market conditions are identified the TPA selects one or more LPs, captures the current best price on the relevant side of the market and sends some or all of the order to the selected LPs for execution as a 'leg'. We have calculated slippage or price improvement per leg by looking at the difference between the logged market price at the time the decision to trade was made and the actual fill price received. This approach removes much of the individual variation from the data, treating the TPA as a single customer trading with each of the LPs and requesting the current price available for immediate execution.

We have excluded numbers from infrequently traded currency pairs (any instrument with less than 100,000 trades over the 12 month period of the data set). The remaining sample set consists of trades in EURUSD, GBPUSD, USDJPY, AUDUSD, GBPJPY, USDCAD, EURJPY, EURGBP, NZDUSD, USDCHF, EURCHF, EURAUD, AUDJPY and AUDCAD, which together represent 91% of all successful trades.

We have reported slippage and improvement using the FX conventions of 'pips', i.e. the 4th decimal place of the price other than for currency pairs priced in JPY where the 2nd decimal place is used. This introduces some comparability issues across currency pairs and over time, for example 1 pip GBPUSD is a smaller proportional slippage than 1 pip AUDUSD, and a 1st January GBPUSD pip is a smaller proportional slippage than a 1st November GBPUSD pip due to the depreciation of GBP over the year. However as all pip values fall within a range close to 0.01% of traded price (between 0.006% and 0.016% at the extremes) we have erred on the side of using familiar units over something abstract but more mathematically accurate such as basis points.

### Market orders

Table 6 shows the proportion of market orders receiving fills where prices showed slippage, were as expected or showed improvement.

Venue	Slippage	As expected	Improvement	Ratio of slippage to improvement
Bank 3	0.00%	100.00%	0.00%	0
Non Bank 2	1.14%	98.18%	0.68%	1.68
Non Bank 1	19.40%	70.04%	10.56%	1.84
LMAX Exchange	4.36%	93.54%	2.10%	2.08
Non Bank 3	0.64%	99.15%	0.21%	3.05
Bank 2	3.47%	95.65%	0.88%	3.94
Bank 1	7.16%	92.15%	0.69%	10.38

**Table 6: TPA market order price variation statistics**

Chart 1 shows the percentage of orders that experienced slippage or improvement at 0.1 pip intervals. Negative numbers indicate slippage (a worse price than expected) while positive numbers indicate price improvement (a better price than expected).

In addition to the skew and shape of the distribution, it is important to note the scale is limited to +/- 5 pips for illustrative purposes. In many cases the maximum improvement observed is less than 5 pips (denoted by the green marker) whereas the maximum slippage observed is in most cases more than 5 pips away from the zero point (indicated by the red marker). In the TPA data, only LMAX Exchange exceeds 5 pips of price improvement.

The price variation of market orders falls into two distinct categories. There are those venues which show both slippage and improvement at an approximately 2:1 ratio and those for which the slippage is dominant with little or no price improvement.

As LMAX Exchange operates a firm central limit order book offering best execution in price-time priority, we might expect a more neutral result. The skew towards slippage suggests that behaviour in this data set is linked to market direction, demonstrating a propensity towards buying in a rising market and selling in a falling market. This leads to a natural bias towards slippage and away from improvement. If we take LMAX Exchange behaviour as an approximation of the pure market, then this ratio becomes an interesting metric for market order price variation. This allows us to distinguish between those venues which are passing the underlying market price behaviour straight through to the customer against those which show a higher bias towards slippage.



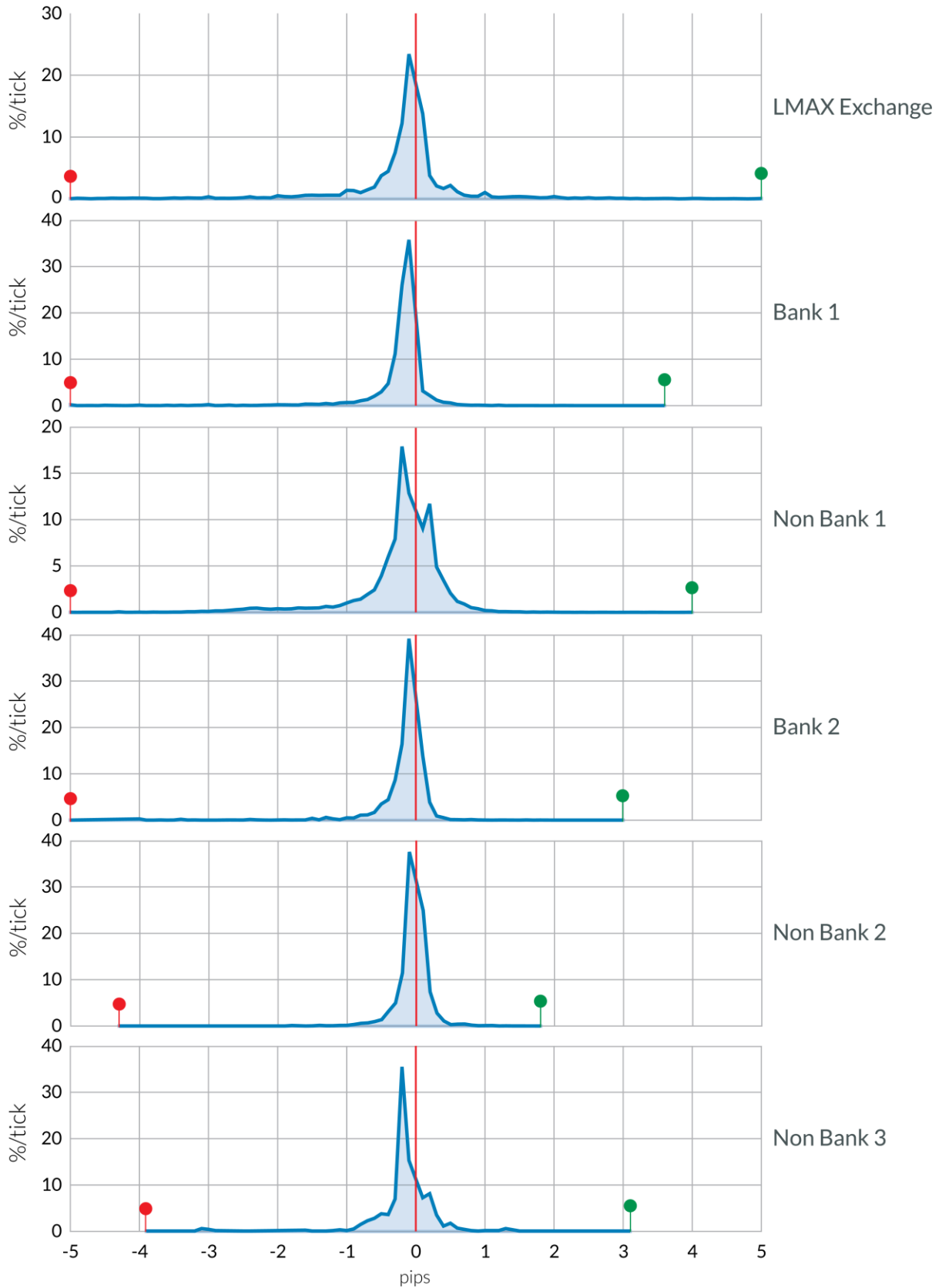


Chart 1: Market order slippage by venue



**Limit/PQ orders**

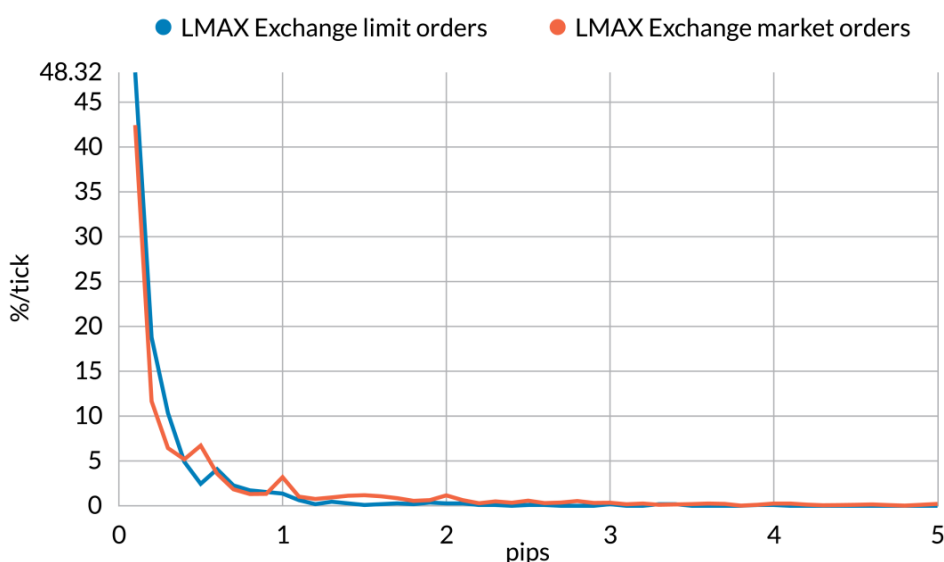
The situation for order types with price constraints is more interesting. These order types prohibit slippage, and the TPA sets its limit price to the same value it uses as a reference level to calculate slippage or improvement for market orders, so naively we might expect that the price variation for such orders would have a similar incidence and distribution to the price improvement side of the market order charts shown above.

With the exception of LMAX Exchange, this is not the case. Table 7 shows the proportion of limit or PQ orders receiving price improvement by venue, alongside the market order price improvement from the same venue for comparison.

Venue	Order type	Improvement	Market order improvement
LMAX Exchange	Limit	6.358%	2.10%
Bank 1	PQ	0.001%	0.69%
Non Bank 2	PQ	0.000%	0.68%
Non Bank 3	Limit	0.000%	0.21%
Non Bank 1	Limit	0.000%	10.56%
Bank 2	PQ	0.000%	0.88%
Bank 3	Limit	0.000%	0.00%

**Table 7: TPA limit/PQ order price improvement statistics**

Only LMAX Exchange exhibits a significant level of price improvement for limit orders. Improvement is either negligible or entirely absent for limit orders executed on all other venues. As a further illustration of the mechanism driving limit order price improvement, chart 2 shows the distribution of the level of improvement received by both limit and market orders on LMAX Exchange, showing the percentage of orders that received improvement at 0.1 pip intervals



**Chart 2: Price improvement for LMAX Exchange market and limit orders**

The consistent distribution of price improvement observed for both order types is a key characteristic of firm liquidity. Limit prices only constrain the worst execution price for an order. When better prices are available, limit and market orders behave identically.



In contrast, the very different price improvement behaviour observed for market and limit orders on last look liquidity demonstrates a fundamentally different approach to filling limit orders in which LPs exercise their option to fill almost every order at its limit price, even though the evidence of fills on market orders indicates that a better price should be available for some proportion of the time.

### **HOLD TIME AND EXECUTION LATENCY**

(p.29 in the full [LMAX Exchange TCA and fair execution white paper](#))

Execution latency is the time taken between an order being transmitted from the trader's system and the receipt of a response. Hold time is the commonly used name for discretionary latency where the execution of an inbound order from a trader is deliberately delayed pending a decision to fill or reject by the liquidity provider's systems. This period of time is also referred to as the last look window.

Hold time/discretionary latency is just one component of execution latency, so we must first look at other causes of latency before we can assign hold times to each venue in order to compare this aspect of the execution quality of last look and firm liquidity. We will divide execution latency into the following components:

**Systematic.** The time required to complete the necessary operations to execute the trade, including network round trip time, transit through any pre-trade risk control system, matching engine cycle time and any other systematic delay applied across all customers of the LP;

**Tail.** Each cause of systematic latency will also have a characteristic jitter with causes at network, operating system or application level. In addition, platform capacity constraints ranging from microbursts to sustained higher traffic rates during market announcements can lead to queueing and congestion giving a familiar long tail latency distribution;

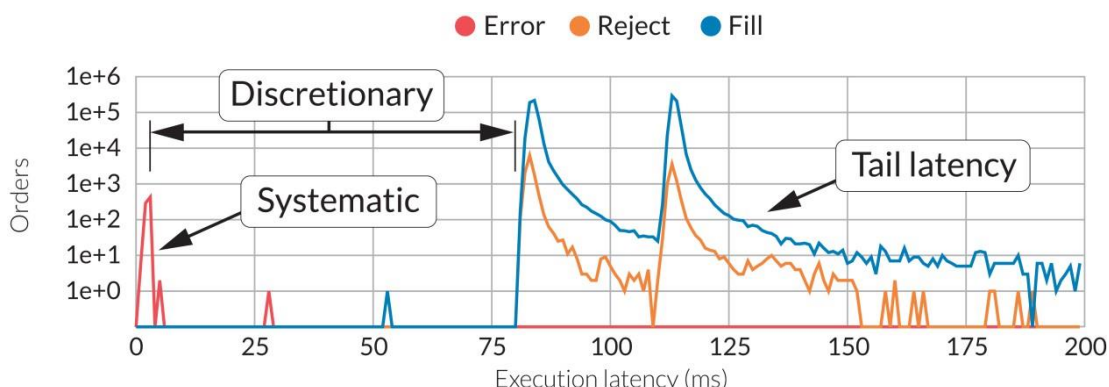
**Discretionary.** Any time added where the order is held prior to executing a trade. LPs may apply or vary hold time based on their assessment of a customer's market impact, the current market conditions or their own appetite to trade in a given direction.

Each of these components is subject to variation over time. Systematic latencies may be affected by hardware or software upgrades which may change the LP's latency profile. Tail latencies may likewise be affected by capacity upgrades or constraints. Lastly hold time may be adjusted by LPs in response to a change in market conditions, strategy, policy or simply based on developing insight into a customer's trading behaviour.

While we are primarily concerned with discretionary latency in the direct comparison of firm and last look liquidity, information regarding the non-discretionary causes of latency is also valuable in its own right, as this can be used to make order routing decisions as well as for TCA purposes. For example, if the latency of a particular LP degrades badly during busy times, this information may be used to augment best price or volume criteria in selecting an execution venue.

Chart 3 shows the execution times for rejects and fills for a particularly interesting last look LP in the TPA data set providing a clear example of each of these different types of latency.

The execution time is recorded to the nearest millisecond and the frequency of occurrence is shown on a logarithmic scale. The chart spans the whole year of 2016.



**Chart 3: Detailed execution times for Bank 3**

An analysis of this kind would normally use supplemental information gathered by the trading infrastructure to determine some parts of the systematic latency. For example the base network latency can be estimated by using session level FIX messages – heartbeats or test requests – which are typically processed at the edge of the LP’s trading platform. Unfortunately that level of data was not available to us in the TPA data set, and we were then forced to determine the systematic latency from the execution time profiles available. Fortunately there are some markers in the data that can help us.

For the LP in chart 3, there is an interesting pattern in that fills and non-error rejects indicate that the minimum response time is around 81-82ms. However, when we looked at rejects due to errors – as defined earlier – a response time of 2-3ms is evident. 99.7% of these errors were caused by a reject at the pre-trade risk control level, rather than a programming or FIX session level error. This is then an error from within the platform – not an immediate reject at the edge.

With the moderate assumption that the next logical step within the platform would be matching the order against available liquidity, we can then assign a systematic latency of at least 2-3ms. The discretionary latency or hold time would then be 80ms for this LP. It is unlikely that an order would transit the network and pre-trade risk control systems within 3ms and then take a further 80ms to be placed unless there was a hold time in play.

The execution latencies for all of 2016 for each LP in our set are shown in chart 4 (below), which plots the millisecond latencies for fills, errors and rejects against the number of orders experiencing that level of latency. There are several features which stand out and bear further investigation:

- Histograms for the same class of event (e.g. fills) which display multiple peaks in the latency histogram;
- LPs where the peaks for fills, errors and rejects occur at different modal latencies;
- Long tails to execution latency distributions.

Our first task is to investigate each of the features above so that we can determine a characteristic systematic latency and hold time for each LP. We will investigate the first 200 ms of latency in detail. In some cases the latency distributions extend beyond this, however, latencies much beyond 200ms are usually a very small proportion of trades and our goal here is to derive the base characteristics of hold time for each LP.

Defining the systematic latency as being the mode of the first peak in the execution time histogram (whether from fills, rejects or errors) and the hold times as being the difference between the systematic latency and the mode of the second peak, we can produce the following table of systematic latencies and hold times. Rejects and fills are examined separately as their latency histograms may differ as in the example above.

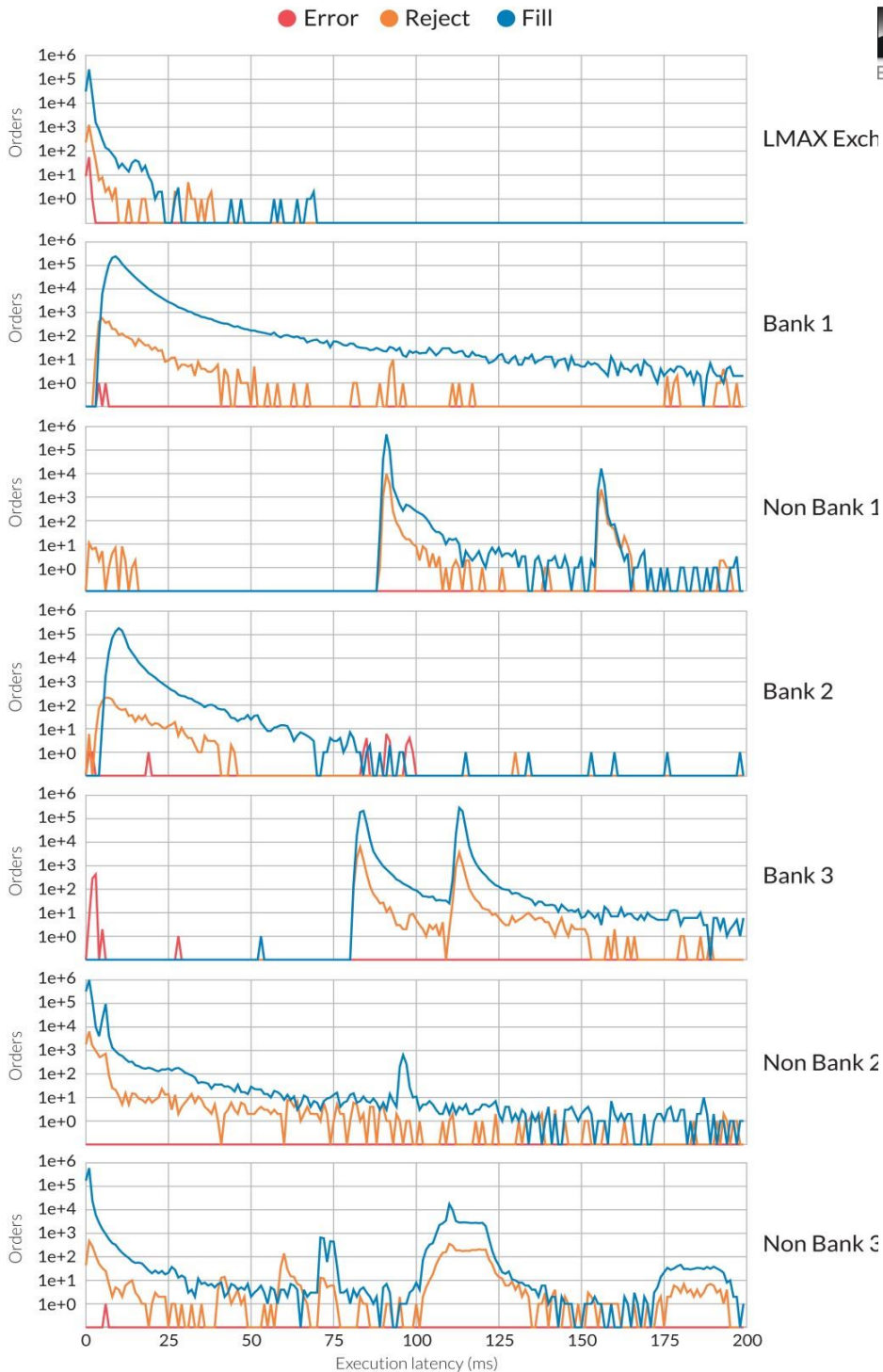


Venue	Systematic (ms)	Fill hold time (ms)	Reject hold time (ms)
LMAX Exchange	1	0	0
Bank 1	4	5	1
Non Bank 1	1	90	90
Bank 2	1	9	5
Bank 3	4	80	79
Non Bank 2	1	0	0
Non Bank 3	1	0	0

**Table 9: First glance modal hold times by LP**

A quick comparison of table 9, which attributes very similar latency profiles to Non Bank 2, Non Bank 3 and LMAX Exchange, and chart 4 (p. 32), which shows a very different visual signature for each, indicates that our initial scorecard is not telling the whole story.

Below are relevant extracts related to the analysis of use of Price Variation and Hold Time.



**Chart 4: Execution times by venue for 2016**

The multiple peaks and wide variation in the tail distribution of the latency histograms displayed by last look LPs require further investigation, and are suggestive of arbitrary changes to discretionary latency which, by definition, do not occur on firm liquidity.



## APPENDIX II

Examples of law suits related to abuse of 'last look'

Barclays Bank fined \$150m for abuse of Last Look by the NYDFS <a href="http://www.dfs.ny.gov/about/press/pr1511181.htm">http://www.dfs.ny.gov/about/press/pr1511181.htm</a>	Nov'15
Legal claim by NFA brought against FXCM and Effex Capital <a href="https://www.nfa.futures.org/BasicNet/Case.aspx?entityid=0308179&amp;case=17BCC00001&amp;contrib=NFA">https://www.nfa.futures.org/BasicNet/Case.aspx?entityid=0308179&amp;case=17BCC00001&amp;contrib=NFA</a>	Feb'17
Legal claims filed by Alpari (US) against 6 banks for abuse of 'Last Look' <a href="http://www.profit-loss.com/articles/news/banks/six-banks-face-lawsuits-over-last-look">http://www.profit-loss.com/articles/news/banks/six-banks-face-lawsuits-over-last-look</a>	Filed in Jul'17

Mizuho Bank

Mizuho Bank Tokyo's comment for "GFXC Request for Feedback on Last Look practices in the Foreign Exchange Market"

*Question 1*

*As noted above, the Code states that "During the last look window, trading activity that utilises the information from the Client's trade request, including any related hedging activity, is likely inconsistent with good market practice because it may signal to other Market Participants the Client's trading intent, skewing market prices against the Client, which (1) is not likely to benefit the Client..." Do you agree or disagree? Are there specific situations where this trading activity benefits the Client? In those situations is such trading activity related to the validity or price checks that the Code states as the purpose for last look? Please provide reasons for each response.*

Response 1

We acknowledge and concur on the stated premise, however we feel some reservations should be taken into considerations for smaller bank organisations facing non-professional small/medium tier clients.

These small banks FX businesses, which characteristically have elemental FX infrastructures with clients trading in limited size and frequency, depend entirely on their respective external liquidity in order to cover their own clients' trades, and thus should be allowed to be regarded as or at least recognized as 'not inconsistent'. These small bank organisations actively pre-hedge their expected positions during their last look windows and accept or reject their clients' order according to the result of their pre-hedging activity. These small-middle tier clients access such localized FX service via small banks is an essential parameter to their business needs and growth.

On the other hand, we also believe activities with intention of front running or pre-hedging in order to move the market to generate an advantage should be recognized as inconsistent with good market practice.

Question 2

*Based on your response to Question 1, do you consider that the language set out in the Code on this activity should be modified (for example, should it be strengthened further or provide further detail as to what may or may not constitute good practice)? Please provide reasons.*



Response 2

We hereby request GFXC to include the above stated concerns recognizing such small bank strategy as 'not inconsistent' and activities such as front running or pushing the market as 'inconsistent'.

National Australia Bank

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**FW: Last look comments from NAB [SEC=UNCLASSIFIED]**

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**From :** Matthew BOGE <BOGEM@rba.gov.au> Fri, 22 Sep, 2017 01:45 AM  
**Subject :** FW: Last look comments from NAB  
[SEC=UNCLASSIFIED]  
**To :** lastlookfeedback@globalfx.org

Submitting on behalf of NAB.

**Matthew Boge** | Secretary | Australian Foreign Exchange Committee  
RESERVE BANK OF AUSTRALIA | 65 Martin Place, Sydney NSW 2000 p: +61  
2 9551 8420 | w: [www.rba.gov.au](http://www.rba.gov.au)

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**From:** Mark E Lawler [mailto:Mark.Lawler@nab.com.au]  
**Sent:** Thursday, 21 September 2017 8:38 PM  
**To:** BOGE, Matthew  
**Subject:** Fwd: Last look comments from NAB

Matt,

Here is NAB's response on the issue of Last Look.

Regards

Mark L

**From:** Mark McCall  
<[Mark.McCall@nab.com.au](mailto:Mark.McCall@nab.com.au)> **Date:** 21  
September 2017 at 7:41:14 pm AEST  
**To:** Mark E Lawler  
<[Mark.Lawler@nab.com.au](mailto:Mark.Lawler@nab.com.au)>  
**Subject: Last look comments  
from NAB**

Here are some comments on last look from the NAB perspective:

Last look in electronic pricing is an important protection measure that allows more participants to provide liquidity in the market, and is a counter-measure to an escalating arms race in price dissemination speed. We recognise that it can be abused though, and support that market bodies provide clearer guidance on its acceptable utilisation and oversight to prevent such abuse.

As a liquidity provider we strive to maximise the acceptance rates on customer requests to deals, but balance that against working within

acceptable risk parameters to limit the cost of system latency and toxic flow. Within our electronic pricing it is applied in line with these principles:

- a) Symmetrical tolerance parameters – requests are evaluated based on equivalent criteria in either the maker or takers favour
- b) Zero hold time by default – the price check is based on an immediate evaluation for vast majority of clients. For a small subset of clients where consistent negative flow has been observed, extra iterations of checks can be added (less than 100ms in total). This approach is designed for a ‘fast fail’ if there is a rejection, in order to minimise the opportunity cost to the requester.
- c) No hedging during the last look window – this is enforced through fundamental system design

By adhering to these principles, we believe we are acting in the fair interest of customers whilst maintaining controls that address the significant risk of latency arbitrage. Specifically we see long hold times as being an abuse since it offers a free option to the maker, and similarly trading on the request information whilst the acceptance is pending (aka pre-hedging). Preventing these practices will make a fairer and more reliable market.

In general, when making a price feed on a venue without last look, throttling of price updates would need to be reduced or removed, and market data loads are generally much higher. Hence a move towards firm liquidity only, would likely expand the already huge peak data loads on participants trading systems, to the detriment of non-algorithmic takers and generally raising the noise level in the market.

Within acceptable criteria, last look is an important structural protection in the FX market that prevents the escalation of a latency arms races which would otherwise force out smaller makers through the attrition of constant adverse selection from latency arbitrage. This would reduce liquidity and widen spreads, with increased reliance on a smaller concentration of makers. Reliable, ultra-low latency systems are expensive to build and operate, and a barrier to entry for participants that want to make markets, potentially aiming at niches of regional focus, or targeting specific relationship customers that have a more passive trading profile where the customer already enjoys very high acceptance rates and is not detrimentally affected by last look. The protection of last look to

counter the potential adverse selection from network /system / venue latencies is important in a market with such significant competitive pressure and spread compression.

Regards

Mark McCall  
Head of eTrading  
Fixed Income, Currencies & Commodities Corporate & Institutional Banking

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Email: [mark.mccall@nab.com.au](mailto:mark.mccall@nab.com.au)

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NatWest Markets

## GFXC Request for Feedback on Last Look practices in the Foreign Exchange Market

24 August 2017

### NatWest Markets

#### Question 1

The Code states that “During the last look window, trading activity that utilises the information from the Client’s trade request, including any related hedging activity, is likely inconsistent with good market practice because it may signal to other Market Participants the Client’s trading intent, skewing market prices against the Client, which (1) is not likely to benefit the Client...” Do you agree or disagree? Are there specific situations where this trading activity benefits the Client? In those situations is such trading activity related to the validity or price checks that the Code states as the purpose for last look? Please provide reasons for each response.

#### Question 1 Response

NatWest Markets agrees that during the last look window, any trading activity that utilises the information from the Client’s trade request, including any related hedging activity, is likely inconsistent with good market practice. The last look window should only be used as a risk control mechanism in order to validate the pending request to trade. Only once the trade is accepted should the market maker engage in hedging activity related to the trade. This includes skewing its prices and actively hedging in the market. This is so as to minimise any impact in the market by releasing any information prior to accepting the deal, and also to prevent market makers from only accepting requests to trade where the market maker is able to hedge at an immediate profit.

#### Question 2

Based on your response to Question 1, do you consider that the language set out in the Code on this activity should be modified (for example, should it be strengthened further or provide further detail as to what may or may not constitute good practice)? Please provide reasons.

#### Question 2 Response

NatWest Markets believes the wording on last look principles within the Global FX Code of Conduct needs to be strengthened. Our suggested rewording below:

*‘Last look is a practice utilised in Electronic Trading Activities whereby a Market Participant receiving a trade request has the responsibility to accept or reject the request against its quoted price. Market Participants receiving trade requests that utilise the last look window should have in place governance and controls around its design and use, consistent with disclosed terms. This should include appropriate management and compliance oversight.*

*A Market Participant should be transparent regarding its last look practices in order for the Client to understand and to be able to make an informed decision as to the manner in which last look is applied to their trading. The Market Participant should disclose, at a minimum, explanations regarding whether, and if so how, changes to price in either direction may impact the decision to accept or reject the trade, the expected or typical period of time for making that decision, and more broadly the purpose for using last look.*

*If utilised, last look should be a risk control mechanism used in order to verify validity and/or price. The validity check should be intended to confirm that the transaction details contained in the request to trade are appropriate from an operational perspective and there is sufficient available credit to enter into the transaction contemplated by the trade request. The price check should be intended to confirm whether the price at which*

*the trade request was made remains consistent with the current price that would be available to the Client.*

*In the context of last look, the Market Participant has sole discretion, based upon the validity and price check processes, over whether the Client's trade request is accepted or not, leaving the Client with potential market risk in the event the trade request is not accepted. Accordingly, and consistent with related principles in the Global Code:*

- Last look should not be used for purposes of information gathering with no intention to accept the Client's request to trade.*
- Confidential Information arises at the point the Market Participant receives a trade request at the start of the last look window, and use of such Confidential Information should be consistent with Principles 19 and 20 on Information Sharing.*
- During the last look window, trading activity that utilises the information from the Client's trade request, including any related hedging activity, is unacceptable market practice because it is likely to signal to other Market Participants the Client's trading intent, skewing market prices against the Client, which (1) is not likely to benefit the Client, and (2) in the event that the Market Participant rejects the Client's request to trade, constitutes use of Confidential Information in a manner not specified by the Client.*

*Market Participants should engage in a dialogue with Clients regarding how their trade requests have been handled, including the appropriate treatment of information associated with those orders. Such dialogue could include metrics that facilitate transparency around the pricing and execution of the Client's trade requests and assist a Client in evaluating the handling of its trade requests in order to evaluate whether the execution methodology continues to meet its needs over time.'*

NatWest Markets also suggests wording added to the FX Global Code of Conduct on the expected duration/time period necessary to manage market risk appropriately. The length of the last look window should be based purely on the ability for the market maker to control its risk. It should be of an appropriate and justifiable length based on objective criteria. It should also be subject to management and compliance oversight. The length of the window should be transparent to the client.

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*If you wish to discuss any of the consultation responses set out in this paper, please email [marketsregulation@natwestmarkets.com](mailto:marketsregulation@natwestmarkets.com)*

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ParFX

In response to the GFXC Request for Feedback on Last Look practices in the Foreign Exchange Market.

From Roger Rutherford COO

20 Sep. 17

ParFX (A Tradition group company)

ParFX is a wholesale Spot FX matching **platform provider**

We do not permit the provision of last-look liquidity on the ParFX platform. Our technology manages the matching elements on a firm liquidity basis, first in, first out.

With regard to question one: Agree

With regard to question two: the simple removal of the word "likely"

Regards

Roger Rutherford

Chief Operating Officer



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E-mail: [roger.rutherford@tradition.com](mailto:roger.rutherford@tradition.com) [www.parfx.com](http://www.parfx.com) A Tradition Group Company

RBC Capital Markets



12 September 2017

### **Last Look Consultation Response**

RBC Capital Markets<sup>1</sup> (hereafter “**RBCCM**”) welcomes the opportunity to comment on trading practices in the Last Look Window (as defined below). As co-leads of the Electronic Working Group that assisted with the drafting of the relevant principles set out in the FX Global Code (the “**Code**”), we are keen to provide further assistance.

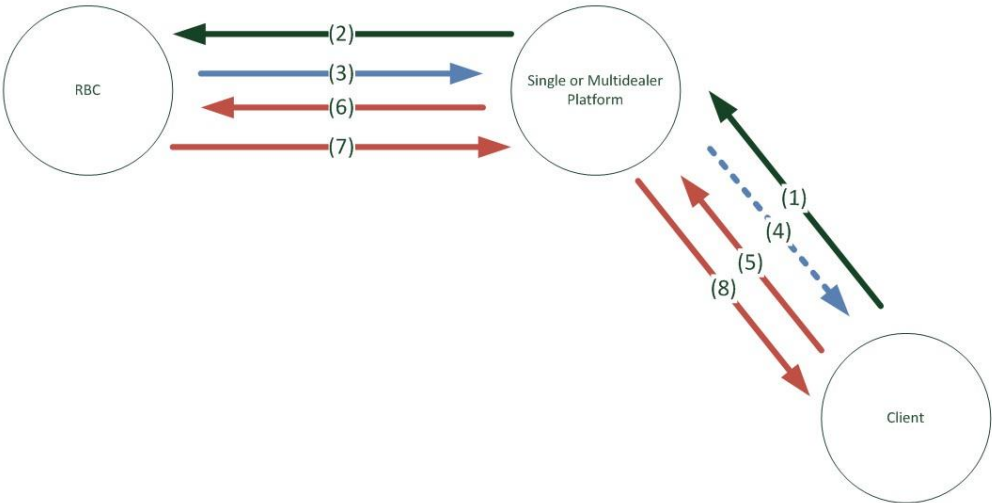
### **Background**

RBCCM is a sell side Market Participant. RBCCM applies a last look trade acceptance process to certain electronic trades when acting in a principal market making capacity. RBCCM may also place trade requests into ECN markets that are subject to last look checks.

When acting in a principal market making capacity in the FX markets, unless otherwise agreed with a Client, RBCCM will apply “symmetrical last look” to electronic trading. “Symmetrical last look” refers to circumstances where Client trade requests are rejected if the requested rate is outside of the deal acceptance parameter threshold, regardless of whether the rate is positive or negative to RBCCM. Clients have the option (upon their prior written consent) to opt-out of “symmetrical last look” and have “asymmetrical last look” applied to their trading. “Asymmetrical last look” refers to circumstances where Client trade requests are rejected if the requested rate is outside the deal acceptance parameter threshold and is negative to RBCCM. If the client trade request is outside of the deal acceptance parameter threshold and is positive to RBCCM, then the deal would still be accepted.

This workflow describes the process for an electronic trade, including the Last Look Window.





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<sup>1</sup> RBCCM is the global brand name for the capital markets business of Royal Bank of Canada and certain of its subsidiaries.

- 1) A Client requests a quote, or price stream from a sell-side market participant via a single dealer platform (“Platform”) or via a third party platform or API.
- 2) Sell-side market participant receives request.
- 3) Sell-side market participant responds with a stream of rates.
- 4) Indicative rates are sent to the Client. Rates are necessarily indicative as they represent the levels at which the sell-side market participant would be willing to trade the full amount now. Some Platforms throttle rates back to Clients and/or rates are subject to latencies that sell-side market participants cannot manage.
- 5) Client issues a firm request to trade.
- 6) Sell-side market participant receives the firm request to trade.
- 7) Sell-side market participant responds either accepting or rejecting the firm request to trade.
- 8) Client receives trade response.

The “**Last Look Window**” occurs between points six and seven on the above workflow.

As Principle 17 of the Code states, the purpose of last look is to “be a risk control mechanism used in order to verify validity and/or price”. This price protection is necessary as it avoids Market Participants (as defined in the Code) being forced to trade on latent rates. This benefits Clients as it allows Market Participants to provide enhanced liquidity at narrower spreads, knowing they will not be compelled to trade on a stale rate or have to accept trading behaviour designed to exploit latencies.

On this basis, and in accordance with Principle 17 of the Code, RBCCM applies three forms of check during the Last Look Window – credit, validity and price. If all checks are passed then the trade is accepted. If any check is failed the trade will be rejected.

### Question 1

Principle 17 of the Code states the last look price check is “...intended to confirm whether the price at which the trade request was made remains consistent with the current price that would be available to the Client”. RBCCM believe that this definition represents the full and appropriate extent of the price check. Any further trade validation that takes place should be considered wholly distinct of the price check and, if permitted, should be clearly disclosed to the Client.

RBCCM are unaware of any evidence which proves that pre-hedging of a Client’s electronic firm request to trade during the Last Look Window by a market-making firm is of overall benefit to the Client. During the drafting of this section of the Code, no compelling evidence of such Client benefit was presented.

In order to be consistent with the above, RBCCM FX electronic trading activities do not include systemic programming designed to utilize Confidential Information (as defined in the Code) in order to trade during the Last Look Window. RBCCM believes that pre-hedging activity specific to the last

look price check is incompatible with the other principles in the Code and could lead to sub-optimal client outcomes.

RBCCM note however that it is important to distinguish between pre-hedging in the Last Look Window and the legitimate act of pre-hedging the risk associated with an anticipated order (i.e. not initiated during the Last Look Window), which is designed to benefit the Client as per Principle 11 of the Code. Any legitimate pre-hedging of a Client transaction should be wholly independent of the last look price check process.

## Question 2

RBCCM believe that the wording of the third bullet of Principal 17 of the Code (page 21) should be changed to state:

*“Electronic Trading Activities should not be designed to utilize Confidential Information (including, for the avoidance of doubt, information from the Client’s trade request) to trade, or attempt to trade during the last look window as it may signal to other Market Participants the Client’s trading intent, skewing market prices against the Client, which (1) is not likely to benefit the Client, and (2) in the event that the Market Participant rejects the Client’s request to trade, constitutes use of Confidential Information in a manner not specified by the Client. Any legitimate Pre-Hedging that takes place should be executed in accordance with Principle 11.”*

Standard Chartered

To: Global Foreign Exchange Committee ("GFXC")

14 September 2017

Dear Sirs

**Re: GFXC Request for Feedback on Last Look practices in the Foreign Exchange Market**

Standard Chartered Bank ("SCB") endorses and strongly supports the publication of the Code and welcomes this initiative to strengthen the integrity of the FX market.

**Question 1: The Code states that "During the last look window, trading activity that utilises the information from the Client's trade request, including any related hedging activity, is likely inconsistent with good market practice because it may signal to other Market Participants the Client's trading intent, skewing market prices against the Client, which (1) is not likely to benefit the Client..." Do you agree or disagree? Are there specific situations where this trading activity benefits the Client? In those situations is such trading activity related to the validity or price checks that the Code states as the purpose for last look? Please provide reasons for each response.**

SCB believe that any trading activity (including skewing) that utilises information from the Client's trade request should only be performed in good faith that a transaction will be consummated. Any failure to execute after trading activity should be rare and only on the basis of technical limitations, e.g. unanticipated network delays.

If the code were to define last look window similarly to the below:

*The last look window is from the time of first receipt of an order in the Market Participant's network until the time that the last validation specific to the parameters of the order has been completed. Any further delay in the communication of a trade affirmation / rejection to the Client, and / or change in determination from affirmation to rejection must be solely due to technical limitations. Market Participants should make reasonable efforts to minimise such delays and incidences of change in determination.*

Then we do not believe any change is required to the statement:

*During the last look window, trading activity that utilises the information from the Client's trade request, including any related hedging activity, is likely inconsistent with good market practice because it may signal to other Market Participants the Client's trading intent, skewing market prices against the Client, which (1) is not likely to benefit the Client...*

If the definition did not have some language around technical issues / limitations then SCB believes this would likely not be workable and / or be detrimental to the client in the longer term.

Taken to the extreme, it may delay any hedging / risk mitigation activity until a client has confirmed back that they have received an execution report.

**Question 2 : Based on your response to Question 1, do you consider that the language set out in the Code on this activity should be modified (for example, should it be strengthened further or provide further detail as to what may or may not constitute good practice)? Please provide**

**reasons.**

In relation to Question 2, SCB has two points:

- a. the code currently fails to define 'last look window', we believe it should, and,
- b. the code does not explicitly preclude making trading decisions on the basis of a rejected trade request (though it may well be a natural conclusion), we think it should do this explicitly in the text or by way of an example.

SCB would like to thank the opportunity to comment on Principle 17. Please do not hesitate to contact us if you would like to discuss further.

Yours faithfully

**Standard Chartered Bank**

Geoff Kot

Co Head of FX Cash

State Street

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## Re Last Look Feedback

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From : Chris Freeman <cfreeman@statestreet.com> Mon, 18 Sep, 2017 05:23 PM

**Subject : Re Last Look Feedback**

To : lastlookfeedback@globalfx.org

Cc : FXCGSecretariat@ecb.europa.eu, roswitha hutter  
<roswitha.hutter@ecb.europa.eu> Information Classification: II Confidential

Tobias

I list below the feedback from State Street:

Q1: When State Street considered the question of whether there were circumstances in which trading during the last look window utilising information from the client's trade request, we could not identify any circumstance where this would be expected to be in the client's interest and so we do not recognize the need for the word "likely". Furthermore we would note that adjusting prices provided to other market participants may also signal the Client's trading intent and so this also should be considered inconsistent with good market practice, alongside trading.

Q2: State Street considers that the language in the paragraph should be strengthened as during the last look window the Market Participant is in a privileged position with regard to the Confidential Information it has access to. As such, it should not act in a manner that would be expected to be contrary to the client's interest. Furthermore this responsibility pertains regardless of whether the request is ultimately fulfilled or rejected. State Street would therefore recommend amending this paragraph as follows:

*During the last look window, trading activity that utilises the information from the Client's request, including any related hedging or pricing activity, is likely inconsistent with good market practice because it may signal to other Market Participants the Client's trading intent, skewing market prices against the Client, which (1) is not likely to benefit the Client, and (2) in the event that the Market Participant rejects the Client's request to trade, constitutes use Confidential Information in a manner not specified by the Client.*

We would also note that last look practices take place on anonymous trading venues such as Hotspot, Fastmatch, Currenex, Gain. Intrinsic to the design of this market structure is the requirement that the liquidity

taker and maker do not know each other's identity and therefore are not in a position to "engage in a dialogue" on this topic. We have identified 3 practical solutions to ensuring that such anonymous trading can continue in a manner consistent with Principle 17:

1. The trading venue could require liquidity providers (LPs) to meet a standard set of criteria regarding last look that would be also published to liquidity takers (eg: maximum hold time, symmetry, maximum rate tolerance)
2. The trading venue could maintain a register of LPs who certify their adherence to the Global Code and then allow liquidity takers to select whether or not they wish to trade with non-compliant LPs.
3. The trading venue itself could implement the Last Look function (to the LP's specification). This then removes the opportunity for the LP to benefit from any information during the Last Look window. Fastmatch have already implemented this capability.

Regards

Chris Freeman

Chris freeman

**SSGM FX TRADING. SMD Head of Trading**

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TD Securities

**GFXC Request for Feedback on Last Look practices in the Foreign Exchange Market**

Michael Twaits, TD Securities, Member of CFEC

TD provides electronic liquidity to its clients by streaming indicative prices across various electronic trading channels. When a client receives TD's indicative price and submits a request to trade, TD is not obligated to accept the trade request, and may, at its sole discretion, accept or reject the trade request. Prior to accepting the trade request TD applies a number of pre-trade controls including a control which is referred to as "Last Look".

TD is a client that places trade requests subject to last look.

**Question 1:**

*As noted above, the Code states that "During the last look window, trading activity that utilises the information from the Client's trade request, including any related hedging activity, is likely inconsistent with good market practice because it may signal to other Market Participants the Client's trading intent, skewing market prices against the Client, which (1) is not likely to benefit the Client..."*

**Do you agree or disagree?**

Agree

**Are there specific situations where this trading activity benefits the Client?**

No. Last Look is a mechanism used by TD to check whether the difference between the price of the client's trade request and the market, fall within TD's price tolerance level. If the client requested price falls outside of TD's tolerance threshold the trade will be rejected. If the client requested price falls within TD's tolerance threshold the trade will be accepted. The check is performed symmetrically, which means that identical rejection logic is applied for price movements in either direction. Last look settings may vary based on client and electronic trading channel. Any information associated with a "Last Look" rejected trade has no impact on TD's subsequent pricing or hedging activities.

**In those situations is such trading activity related to the validity or price checks that the Code states as the purpose for last look?**

N/A

**Question 2:**

**Based on your response to Question 1, do you consider that the language set out in the Code on this activity should be modified (for example, should it be strengthened further or provide further detail as to what may or may not constitute good practice)?**

No modification required. TD uses last look to minimize the likelihood of a client executing trades at stale prices that are not reflective of where the market is trading. Technical issues, latency, as well as a number of other factors can cause a client to send a trade request with a stale price.



Thomson Reuters

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**GFXC Request for Feedback on Last Look practices in the Foreign Exchange Market**

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**From :** neill penney

<neill.penney@thomsonreuters.com>

**Subject :** GFXC Request for Feedback on Last Look practices in the Foreign Exchange Market

**To :** Grigoria Christodoulou

<Grigoria.Christodoulou@bankofengland.co.uk>, Chris Cox <Chris.Cox@bankofengland.co.uk>, dputh@cls-bank.com

**Cc :** lastlookfeedback@globalfx.org

Thu, 21 Sep, 2017 07:58 PM

Adding lastlookfeedback@globalfx.org

On 21 Sep 2017, at 18:30, Penney, Neill M. (Financial & Risk)

<[neill.penney@thomsonreuters.com](mailto:neill.penney@thomsonreuters.com)> wrote:

Hello Grigoria, Chris, and David,

Good to see you all yesterday. Please find below feedback from Thomson Reuters on Principle 17.

With best regards

Neill.

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Dear GFXC Secretariat,

Thomson Reuters appreciates the opportunity to provide feedback to the Global Foreign Exchange Committee on Principle 17 of the FX Global Code.

Thomson Reuters is uniquely qualified to comment on this principle. Thomson Reuters provides the FX market with an electronic trade engine product called ET, short for "Electronic Trading". ET is used by over 200 banks worldwide to make electronic prices to over 25,000 of their customers each month. If we also include telephone trades where ET provides the bank's sales person with the bank's price, over 100,000 end users of FX are electronically priced and hedged worldwide using ET.

A critical part of the functionality of ET is "cover and deal" hedging. Approximately 40-50% of ET banks, most of whom are outside of the top tiers of the world's global banks, use the "cover and deal" model for some or all of their FX trading. Thomson Reuters believes that this functionality is important to the effective functioning of the FX market and therefore asks that the committee consider including it as a named exception within Principle 17.

The “cover and deal” use-case will likely be familiar to the Committee, but a brief description follows. An end-user of FX asks its bank, here known as the relationship bank, for an FX price. In our scenario, the relationship bank does not wish to act as a market maker for that particular trade at that particular time, but instead prefers to obtain the necessary liquidity from another bank and provide it to its customer without taking market risk itself. The relationship bank may have several reasons for wishing to do this, ranging from a general decision to operate all trading in this manner, to a trade-by-trade decision based on currency pair, size, time of day, market conditions, customer behavior, and so forth. To further set the scene, suppose that the relationship bank is a smaller bank, handling only a low volume of FX trades that does not justify them operating a sophisticated market making desk. And in turn, consider that the end user is a low volume customer who has a trading relationship only with that bank.

The relationship bank does not create its FX price itself but instead relies on a panel of larger banks that are providing it with liquidity, here known as provider banks. Based on prices available from its provider banks, the relationship bank will quote a price to the end user.

When the end user accepts the relationship bank’s quote, the last look process begins for the relationship bank. Before accepting the end user’s offer to deal, the relationship bank will attempt to hedge the end user’s trade with one of the provider banks. If it can do so, it will accept the end user’s offer to deal. If not, it will reject the end user’s offer to deal. The workflow is therefore to cover and then deal.

In technical terms, this is hedging during the last look window by the relationship bank. However, if the relationship bank is trading in accordance with the principles in the FX Global Code, the relationship bank will not have carried out any trading activity during the last look window other than the hedging activity which is required in order to complete the end user’s trade. There is therefore no conflict of interest between the end user and the relationship bank.

This “liquidity outsourcing” model is an economically rational way for relationship banks to continue to provide FX to their customers even though they do not have the volume of business that would justify the operation of a sophisticated market making desk. It also enables end users to benefit from the competitive pricing offered by the most advanced provider banks, banks that they could not access directly for FX trading because they do not have trading relationships with these banks (and neither do they have the potential high volumes that would make them attractive customers to larger FX trading businesses).

Were this workflow to be declared not good practice, these banks would need to switch from “cover and deal” to the alternative, “deal and then cover”. In this workflow, the relationship bank would first accept the end user’s offer to deal, and would then attempt to hedge its position in the market with its provider banks. If the market moved immediately following the relationship bank’s acceptance of the end user’s offer to deal, the relationship bank would have a market exposure which it would need to manage. To account for this market risk, the relationship bank would need to charge a wider bid-ask spread to its end user, which would result in a worse outcome for the client. By contrast, the “cover and deal” model is more efficient because the market risk is handled by the

provider bank, which has the technology, scale, and business appetite to handle more efficiently.

A key additional point is that other principles in the FX Global Code (especially those on ethics, governance of order management, and markup disclosure) together provide assurance that the relationship bank is operating the “cover and deal” model with the end user’s interests at heart.

To conclude, we believe that if “cover and deal” is precluded as a best practice, the effect would be a material reduction in the liquidity of the FX market available outside the top tiers. We therefore see an industry-wide benefit in identifying this workflow as an exception within Principle 17. Not only is the workflow consistent with good practice, but supporting it eliminates a likely impediment to FX Code of Conduct adoption by smaller banks.

We thank you for your attention to this use case, and would be happy to discuss further.

Kind regards,

Neill Penney  
Managing Director, Global Head of Trading  
Thomson Reuters

Email: [neill.penney@tr.com](mailto:neill.penney@tr.com)  
Phone: +44 (0)20 7542 2506  
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Transparency Task Force



Response to Request For Feedback on last look

Global FX Committee

20th September 2017

Respondant : Transparency Task Force Authors :

Xavier Porterfield, CFA, Guy Hopkins

The authors of this feedback can be reached at [xavier.porterfield@newchangeFX.com](mailto:xavier.porterfield@newchangeFX.com)

and [guy.hopkins@fairxchange.co.uk](mailto:guy.hopkins@fairxchange.co.uk)

About the Transparency Task Force

The Transparency Task Force (TTF) is a campaigning community, dedicated to driving up levels of transparency in financial services, right around the world. It believes that higher levels of transparency are a pre-requisite for fairer, safer and more efficient markets that will deliver better value for money and better outcomes to the consumer.

Furthermore, because of the correlation between transparency, truthfulness and trustworthiness, the TTF expects its work to improve the reputation of the financial services sector.

The TTF seeks to operate in a collaborative, collegiate and consensus-building way; focusing on solutions, not blame. It has over 160 volunteers organised into teams. Each team is working on separate campaign initiatives.

The Request for Feedback reads:

Principle 17 of the Code states that “During the last look window, trading activity that utilises the information from the Client’s trade request, including any related hedging activity, is likely inconsistent with good market practice because it may signal to other Market Participants the Client’s trading intent, skewing market prices against the Client, which (1) is not likely to benefit the Client, and (2) in the event that the Market Participant rejects the Client’s request to trade, constitutes use of Confidential Information in a manner not specified by the Client”.

Question 1. The Global FX Code states that “During the last look window, trading activity that utilises the information from the Client’s trade request, including any related hedging activity, is likely inconsistent with good market practice because it may signal to other Market Participants the Client’s trading intent, skewing market prices against the Client, which (1) is not likely to benefit the Client...” Do you agree or disagree? Are there specific situations where this trading activity benefits the Client? In those situations is such trading activity related to the validity or price checks that the Code states as the purpose for last look? Please provide reasons for each response.

Transparency Task Force Answer.

A shorter paraphrase of the question above might be, is pre-hedging activity while a trade is being held in a hold window fair and consistent with the standards of the code?

The Transparency Task Force answer is No.

The Transparency Task Force advocates for transparency on how customer orders are handled. We agree with the assumption that trading activity during the hold window is effectively using customer information, and in the event the deal is rejected, is a misuse of client information. The information leakage from trading in the hold window on trades that are subsequently rejected is (highly) likely to disadvantage the customer.

In the question, the Request for Feedback seeks further clarification:

“ Are there specific situations where this trading activity benefits the Client? In those situations is such trading activity related to the validity or price checks that the Code states as the purpose for last look?”

If a Liquidity Provider (LP) is able to pre-hedge in the last look window and ultimately then honours the original quoted price on the customer's held order, there may be situations where this increases their willingness to accept trades from that client. All else being equal this would increase the client's fill ratio, reducing the number of retries. This could *conceivably* benefit the client. However it presumes that the LP is not attempting to internalise any of the risk, indeed it is an explicit externalisation of the client's flow. Externalisation would be expected to increase market impact, which would adversely affect the client if they had more risk to execute in following orders. It would be necessary to weigh up the benefit of increased fill ratio against the potentially higher market impact; something which would vary from case to case and would be hard to tell a priori. On the other hand, if the LP was simply internalising the client flow, rejecting the client trade would be on the grounds that the rate had moved unfavourably against the LP.

That being said, pre hedging in the Last Look window and then rejecting the client's trade is not likely to benefit the client. There is likely to have been some market impact and the client necessarily has to try to trade again, at a rate that is likely to be disadvantageous.

Question 2 Based on your response to Question 1, do you consider that the language set out in the Code on this activity should be modified (for example, should it be strengthened further or provide further detail as to what may or may not constitute good practice)? Please provide reasons.

We would argue that the language of the code should be strengthened. The existence of last look increases the level of information asymmetry in the market. The practise of last look was originally intended as a means for LPs (banks) to protect themselves against trading with better informed (read faster) traders. Applying last look asymmetrically can be used as a screen to allow market makers to selectively accept trades that are favourable to their trading book.

On the other hand the potential advantages of symmetrical last look, rejecting trades that are unfavourable

to the client, are likely to be diminished by the LP's hedging activity during the hold window. In order to buy, a client needs to find a market maker will to sell. In order to hedge a sell order, the market maker must buy. Pre hedging means buying ahead of the client, to meet their buy order.

Symmetric last look, absent pre-hedging activity in the hold window is likely to offer potential advantage to the client. The LP will have rejected an order than was beyond some tolerance limit and unfavourable to the client at the end of the hold window. This gives the client an opportunity to trade at a rate that has moved in their favour.

However, it is important to separate symmetric last look from the pre-hedging activity. Allowing a client the opportunity to place their order at a more favourable rate is clearly beneficial to client.

However, this benefit may be diminished by pre-hedging activity during the hold window. Because LP and client together take two opposite sides to a trade, the LP's pre-hedging must always be in the same direction of the client, diminishing positive price slippage, and increasing negative price slippage.

### Additional Comments

The Global Code seeks to improve behaviours in the market, to provide market participants with a template of best practice. We vigorously support this endeavour. However, there are areas of activity which the code has not addressed, which in our view, still represent a clear obstacle to fair, free and transparent market practice. We would like to highlight 2 areas that warrant your continued attention.

#### 1. Standards on mixed principle and agent roles.

The UK Government's The Fair and Effective Markets Review (Fair and Effective Markets Review. June 2015 final report, Chapter 4, Paragraph 33, page 55) called for the global code to "set standards for the treatment of clients and counter-parties. This section of the code should address issues such as the prevention and management of conflicts of interest, especially concerning mixed principal and agent roles". This ambiguity is particularly evident in custodial FX trading, where custodians are able to trade as principle against the interest of the funds whose assets they hold in trust.

#### 2. Standards surrounding Time Stamping.

One of the aims of Mifid II, and PRIIPS ( for retail investors) is to improve cost transparency, to promote the comparability of funds. As John Bogle noted, the magic of compounding returns is overpowered by the tyranny of compounding costs. But without accurate time stamps transaction costs can be shrouded. Cost shrouding is a deliberate attempt to obfuscate the true cost of execution by booking trades at arbitrary times of the day, usually with a view to maximise dealer profits at client expense.

See Russell Research (It's time for more choice in FX, 2004, 2010) Record Currency Management (2011) Olser, Savaser, Nguyen (2012)

Time stamping of trades, when correctly applied, can act an an important safeguard against cost shrouding. More importantly, a failure to record accurate time stamps should be inconsistent with best practice.

There should be timestamps on everything

Ends.



UBS

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**GFXC Request for Feedback on Last Look practices in the Foreign Exchange Market**

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**From :** christopher purves <christopher.purves@ubs.com>

**Subject :** GFXC Request for Feedback on Last Look practices in the Foreign Exchange Market

**To :** lastlookfeedback@globalfx.org

**Cc :** terence filewych <terence.filewych@ubs.com>, george athanasopoulos <george.athanasopoulos@ubs.com>, robert kalachik <robert.kalachik@ubs.com>

Mon, 25 Sep, 2017 09:47 PM

2 attachments 

25 September 2017

Global Foreign Exchange Committee  
[lastlookfeedback@globalfx.org](mailto:lastlookfeedback@globalfx.org)

Ladies and Gentlemen:

**Re: GFXC Request for Feedback on Last Look practices in the Foreign Exchange Market (the “Feedback Request”)**

The subject Feedback Request sets forth two key questions. These questions are reproduced below for convenient reference.

- Question 1** As noted above, the Code states that “During the last look window, trading activity that utilises the information from the Client’s trade request, including any related hedging activity, is likely inconsistent with good market practice because it may signal to other Market Participants the Client’s trading intent, skewing market prices against the Client, which (1) is not likely to benefit the Client...” Do you agree or disagree? Are there specific situations where this trading activity benefits the Client? In those situations is such trading activity related to the validity or price checks that the Code states as the purpose for last look? Please provide reasons for each response.
- Question 2** Based on your response to Question 1, do you consider that the language set out in the Code on this activity should be modified (for example, should it be strengthened further or provide further detail as to what may or may not constitute good practice)? Please provide reasons.

UBS is pleased to provide feedback on these questions.

**Response to Question 1**

We agree with the statement that trading activity that utilises information from a client’s trade request during the last look window may have the effect of signaling trading activity in the particular currency pair in the trade request.

The resulting signaling, particularly when any such activity is on a “lit” market, could have the effect of moving market prices in the subject currency pair or related currency pairs. The resulting market movement generally does not benefit the client - particularly in circumstances where the client is staging the execution of a currency position via multiple successive orders.

**Response to Question 2**

Consider amending the phrase “*the Client’s trading intent*” to “*trading intent in the subject currency pair*”.

Best regards,  
**UBS INVESTMENT BANK**  
*a business division of UBS AG*

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Question 1: In what cases the UBS may be liable for the loss of the information that is the subject of the communication? Please provide reasons for each response.  
Answer 1: UBS may be liable for the loss of the information that is the subject of the communication if it has not taken all reasonable steps to ensure that the information is accurate, complete and up to date. UBS may also be liable for the loss of the information if it has not taken all reasonable steps to ensure that the information is not misused or disclosed to unauthorized persons. UBS may also be liable for the loss of the information if it has not taken all reasonable steps to ensure that the information is not lost or destroyed.

Question 2: In what cases the UBS may be liable for the loss of the information that is the subject of the communication? Please provide reasons for each response.  
Answer 2: UBS may be liable for the loss of the information that is the subject of the communication if it has not taken all reasonable steps to ensure that the information is accurate, complete and up to date. UBS may also be liable for the loss of the information if it has not taken all reasonable steps to ensure that the information is not misused or disclosed to unauthorized persons. UBS may also be liable for the loss of the information if it has not taken all reasonable steps to ensure that the information is not lost or destroyed.

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Vanguard

09/21/2017

Andrew  
Maack, CFA  
Global Head  
of FX Trading  
Vanguard

Vanguard's orders are subject to "last look" via electronic trading venues and dealers.

Question 1:

As noted above, the Code states that *"During the last look window, trading activity that utilises the information from the Client's trade request, including any related hedging activity, is likely inconsistent with good market practice because it may signal to other Market Participants the Client's trading intent, skewing market prices against the Client, which (1) is not likely to benefit the Client..."* Do you agree or disagree? Are there specific situations where this trading activity benefits the Client? In those situations is such trading activity related to the validity or price checks that the Code states as the purpose for last look? Please provide reasons for each response.

Answer:

I agree with the statement above, *"During the last look window, trading activity that utilises the information from the Client's trade request, including any related hedging activity, is likely inconsistent with good market practice"*. However, the statement and the recommendation **does not** go far enough. Trading in front of a client's order after you are aware what side and direction the client is, is **front running** and should never be allowed under any circumstances.

Question 2:

Based on your response to Question 1, do you consider that the language set out in the Code on this activity should be modified (for example, should it be strengthened further or provide further detail as to what may or may not constitute good practice)? Please provide reasons.

Yes, the language set out in the Code should be modified to state *"During the last look window, trading activity that utilises the information from the Client's trade request, including any related hedging activity, is **not allowed under any circumstance.**"*

**The Global Foreign Exchange Committee should go further and re-exam the need for last look in the FX market. It is my belief that "last look" is no longer needed, it is a tool that allows potential manipulation and does not promote trust, integrity or transparency in FX markets.**

Andrew  
Maack, CFA  
Global Head  
of FX Trading  
Vanguard

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GFXC Secretariat  
Global Foreign Exchange Committee (“GFXC”)

13 September, 2017

Dear GFXC Secretariat,

As a price maker and price taker in the foreign exchange market, Westpac Banking Corporation has last look functionality for the purposes of credit checks, regulatory, integrity and latency checks. It does not use the concept of ‘hold time’.

In response to the **Request for Feedback on last look practices in the Foreign Exchange Market**

Question 1 As noted above, the Code states that *“During the last look window, trading activity that utilises the information from the Client’s trade request, including any related hedging activity, is likely inconsistent with good market practice because it may signal to other Market Participants the Client’s trading intent, skewing market prices against the Client, which (1) is not likely to benefit the Client...”* Do you agree or disagree? Are there specific situations where this trading activity benefits the Client? In those situations is such trading activity related to the validity or price checks that the Code states as the purpose for last look? Please provide reasons for each response.

We agree with the statement, however our recommendation is to exclude the word “likely” highlighted in the following sentence: *“During the last look window, trading activity that utilises the information from the Client’s trade request, including any related hedging activity, is likely inconsistent with good market practice because it may signal to other Market Participants the Client’s trading intent, skewing market prices against the Client, which (1) is not likely to benefit the Client...”*

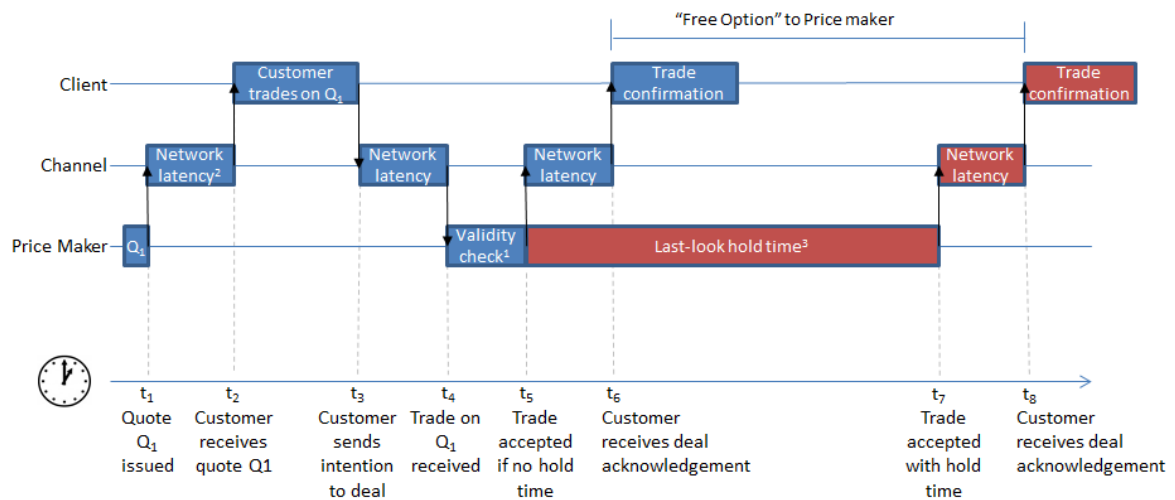
To facilitate electronic trades, “last look” for checking of credit, regulatory checks, integrity (i.e. dealing on the price that represents the correct price for that volume and date) and for genuine latency in dealing between price maker and client (including client ECN portals) needs to take place to ensure the robustness of the end to end process. “Hold times” as defined by adding a time buffer to understand if the trade will be profitable, is a practice we do not support. Hold times is an activity that does not benefit clients.

If price makers believe they need hold times to facilitate trading then there is the alternative option of widening the price. Currently hold times gives the price maker a ‘free-option’ that is to their benefit over the client and the rest of the market i.e. quote tighter, win the deal, reject if unprofitable rather than pricing appropriately and potentially not winning the deal in the first place to another price maker who does not have hold times but a better implied rate when rejection rates are taken into account.

If hold times are continued to be deemed acceptable, then trading activity during the hold time window should certainly be prohibited.



Last-look: No hold time versus hold time, not to scale



Notes:

- Validity check provides opportunity to check:
  - Channel latency (is  $Q_1$  latent – should client have seen a later quote)?
  - Trade matches  $Q_1$  (i.e. price, size, side, value-date)?
  - Client credit
  - Regulation and US person status
- Network latency is a function of distance between Price Maker and Client, plus throughput of ECN/Channel and network performance. Differs between market makers.
- Westpac has no Last-look hold time. Some counterparties have typical hold times of 200ms.

Question 2 Based on your response to Question 1, do you consider that the language set out in the Code on this activity should be modified (for example, should it be strengthened further or provide further detail as to what may or may not constitute good practice)? Please provide reasons.

No additions to above.

Yours sincerely,

**Graeme Edie**  
 Managing Director, eFICC  
 Financial Markets  
 Westpac Institutional Bank



XTX Markets

To: Global Foreign Exchange Committee ("GFXC")

7 August 2017

Dear Sirs

**RE: GFXC Request for Feedback on Last Look practices in the Foreign Exchange Market**

XTX Markets Limited ("**XTX**") endorses and strongly supports the publication of the Code and we welcome this initiative to strengthen the integrity of the FX market. XTX has been actively engaged in the development of the Global Code as members of the MPG, Bank of England Foreign Exchange Joint Standing Committee and the Australian Foreign Exchange Committee. As a major market participant 1 in the wholesale FX market, we intend to adhere to the Code and are also committed to promoting the Global Code to our counterparties, in support of the integrity and effectiveness of the FX market. XTX welcomes the opportunity to provide feedback on Principle 17 of the FX Global Code (the "**Code**").

We welcome the clarity and guidance provided by Principle 17 of the Code in relation to last look. However, in one respect, the Code does not go far enough: prohibiting trading activity in the last look window. Utilising information from a Client's trade request in this manner is extremely prejudicial to the Client. Even if a specific benefit of this practice could be identified, the potential for abuse and the conduct risks that could arise, far outweigh any perceived benefit. The conduct risks that could arise have been highlighted by the FCA<sup>2</sup> who have stated: "If FX spot were a regulated market we would consider a policy of pre-hedging and then rejecting client orders to be inconsistent with the regulatory obligations to avoid a conflict of interest with the client". A practice which regulators would prohibit in a regulated market should not be permitted in a Code whose objective is to promote and rebuild trust and transparency in the FX markets.

The language in Principle 17 should be amended to remove the word "likely" so it clearly states that such activity is "inconsistent with good market practice". We feel very strongly about this point; this is one of the most important topics of FX market structure that needs to be addressed. Making this amendment to clarify best practice would help restore much needed trust in the wider FX market and strengthen the Code.

### **The Terminology and use of "Last Look"**

Before the publication of the Code, "Last Look" lacked a common definition; although it is widely used in the FX market, it means different things to different people. This has led to confusion and controversy in the market as to its purpose and application. When discussing "Last Look" it is necessary to consider this in two separate parts: firstly, in a general sense, what is the practice of "Last Look"; secondly, what is the purpose of Last Look.

#### The practice of Last Look

The practice of "Last Look" is defined in the Code as a "practice utilised in Electronic Trading Activities whereby a Market Participant receiving a trade request has a final opportunity to accept or reject the request against its quoted price". The Code has defined the use of "Last Look" in relation to electronic trading activities only but the concept of having a final opportunity to accept/reject a request has been historically used - and is still used - in voice trading.

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<sup>1</sup> XTX is ranked as the second largest market maker in electronic spot FX in the 2017 Euromoney FX Rankings  
<sup>2</sup> Speech by Edwin Schooling Latter, Head of FX Markets Policy at the FCA, delivered on 30 November 2016 at FX Week Europe: <https://www.fca.org.uk/news/speeches/conduct-risk-fx-markets>



From a legal perspective, it is standard that the liquidity provider (or, in other words, the seller of the product) is the final determinant of the contract. Providing prices to a Client is an invitation to enter into a contract; the Client accepting or clicking a price is an offer from the Client to enter into a contract; and the liquidity provider then has the final right to accept or reject the offer to enter into the contract. If the liquidity provider accepts the offer (and only if) there is a binding contract/trade between the parties.

This is no different to purchasing goods in an online or physical shop. Display of goods for sale at specific prices is an invitation to enter into a contract. A customer clicking to purchase an item or taking a product to the cashier is an offer to enter into a contract. The seller of goods then has the final opportunity whether to accept the sale or not.

Therefore, the Code should recognise that the practice of "Last Look" is not unique to electronic trading nor even FX markets; it is an accepted practice, based on legal contractual formation, applicable to any situation where a person or entity is selling a product. The reason "Last Look" has become a conduct risk issue in relation to electronic trading is in relation to the *purpose* of last look.

### *The purpose of Last Look*

The purpose of "Last Look" is defined in the Code as a *"risk control mechanism used in order to verify validity and/or price...the validity check should be intended to confirm that the transaction details contained in the request to trade are appropriate from an operational perspective and there is available credit to enter into the transaction contemplated by the trade request. The price check should be intended to confirm whether the price at which the trade request was made remains consistent with the current price that would be available to the Client"*. This covers all potential checks that a liquidity provider may carry out before accepting or rejecting a trade request being (1) operational/sanity checks i.e. does the trade request contain any errors (the **"Operational Check"**); (2) credit checks i.e. does the liquidity provider have the credit/settlement/NOP limits to enter into the trade (the **"Credit Check"**); and (3) price check i.e. is the price at which the trade request is made within the liquidity provider's tolerance of difference with the liquidity provider's then current market price (the **"Price Check"**).

It is the application, and disclosure, of the Price Check which has raised conduct issues in the FX market. If a trade request fails an Operational Check (e.g. referencing an invalid date) or Credit Check (e.g. the transaction would result in breaching the Client's prescribed credit limit), then it is unlikely to be prejudicial to the Client that their request was declined. It is also understood by Clients that invalid trade requests or breach of credit limits would not be accepted by the liquidity provider; the parameters within which they can trade are clear from the outset. These checks are also applied, in the same manner, in a voice trading context.

How the Price Check is applied varies between liquidity providers but, in the simplest sense, the price at which the trade request is submitted is compared against the liquidity provider's then current market price. If the submitted price is outside a pre-determined price tolerance as against the current price, the trade request is rejected. This check can be applied symmetrically (trades can be rejected whether the price has moved against, or in favour of, the liquidity provider) or asymmetrically (trades can be rejected only where the price has moved against the liquidity provider or vice versa). The price check is typically applied after the trade request has been artificially held for a period of time (the **"Last Look Window"**).

The main rationale for the application of the Price Check and the Last Look Window is to protect the liquidity provider from transacting on stale prices. Due to the international nature of FX trading (the location of the principal FX matching engines are in London, New York and Tokyo), electronic trading is subject to certain inherent latencies in the offer/acceptance/rejection process and in the transmission of data. This could lead to delays between market price updates and a liquidity provider's price updates. Sophisticated and/or high frequency traders may seek to take advantage of the delay and

attempt to execute on a liquidity provider's prices before they have been updated to reflect the current market price. The Price Check and Last Look Window is also used to protect against Clients who "spray the market" i.e. the Client seeks to obtain a better price by breaking up and spreading portions of its total order volume across all its liquidity providers.

A liquidity provider would then be executing an apparently lower notional trade at a lower price than it would have had it been aware of the total size of the transaction.

Applying the Price Check allows the liquidity provider to check against the latest price and the application of the Last Look Window allows the market price to update to the latest price before the check is applied. Therefore, the purpose behind the use of the Price Check and the Last Look Window is due to issues inherent in electronic trading.

The conduct issues in relation to Last Look have arisen in relation to the Price Check and Last Look Window such as applying Last Look over broadly and not as a defensive mechanism, applying Last Look in a manner so that only unprofitable trades for the liquidity provider are being rejected and insufficient, or lack of, disclosure of the application of the Price Check<sup>3</sup> As a result, we believe that the definition in the Code as to the purpose of Last Look should refer to the Price Check only.

### *XTX's Application of Last Look – No Last Look Window / Zero Hold Time*

XTX does not apply a Last Look Window to trade requests received from disclosed counterparties. The Operational, Credit and Price Checks are applied as soon as we receive the trade request. We refer to this as "Zero Hold Time". The rationale for moving to this model is due to the increased speed of market data updates from the primary FX venues e.g. for the two most traded currencies in the world (EURUSD and USDJPY) the primary market (EBS) now updates every 5ms whilst other major venues such as CME, Hotspot, Fastmatch, LMAX and Currenex all offer real-time market data. Applying a Last Look Window of 100ms (which is typical) now allows a liquidity provider to see up to 20 price updates in EURUSD before deciding whether to accept the trade. Therefore, the initial rationale for imposing a Last Look Window (as described above) is increasingly unjustified. Conversely, the risk of potential conduct issues increases, as the ability to receive multiple price updates before applying the Price Check may indicate that the Last Look Window is being used as an option to reject unprofitable trades rather than as a defensive mechanism to prevent being hit on stale prices.

Question 1: The Code states that *"During the last look window, trading activity that utilises the information from the Client's trade request, including any related hedging activity, is likely inconsistent with good market practice because it may signal to other Market Participants the Client's trading intent, skewing market prices against the Client which (1) is not likely to benefit the Client and (2) in the event that the Market Participant rejects the Client's request to trade, constitutes use of Confidential Information in a manner not specified by the Client"*. Do you agree or disagree? Are there specific situations where this trading activity benefits the Client? In those situations is such trading activity related to the validity or price checks that the Code states as the purpose for last look? Please provide reasons for each response.

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<sup>3</sup> New York State Department of Financial Services in the matter of BNP Paribas S.A and BNP Paribas S.A. New York Branch (<http://www.dfs.ny.gov/about/ea/ea170524.pdf>). New York State Department of Financial Services in the matter of Barclays Bank PLC and Barclays Bank PLC New York Branch ([http://www.dfs.ny.gov/about/ea/ea\\_151117.pdf](http://www.dfs.ny.gov/about/ea/ea_151117.pdf))



We very strongly agree that trading activity in the Last Look Window that utilises information from the Client's trade request, including any related hedging activity, is inconsistent with good market practice and prejudicial to the Client. We cannot think of any specific situation, nor have we seen any practical example, in which a liquidity provider benefits its client by pre-hedging its trade requests.

As Principle 17 already recognises, pre-hedging a client's trade request means that the Client's trading intent is signaled to other Market Participants before the Client has executed its requested transaction. This has potentially negative effects if the transaction is rejected: The market price may move against the Client to such an extent that it causes the trade request to be rejected. The Client still needs to enter into the transaction but when it submits the trade request again, the price will have moved against it due to Market Participants having knowledge of the previous trade request; its confidential information has been leaked to other Market Participants which has a detrimental effect on the Client who is looking to trade with an entity which knows its trading intention. In the words of the FCA *"The client is left with an unfilled order, and needing to meet their needs in a market now less favourable than it would have been. That looks uncomfortably like the point where 'pre-hedging' turns into front running of a client order"*<sup>4</sup>.

We also believe that pre-hedging in the Last Look Window is open to abuse and can be used by liquidity providers (acting in a principal capacity) to obtain a risk-free profit. Using a hypothetical example, a liquidity provider streams prices in a currency pair of 10 (BID) 111 (OFFER), subject to a Last Look Window of 100 *ms*. Once the liquidity provider receives a "buy" trade request at 11, it can leave passive buy orders across every other venue available to it, starting at 10 and raising to 10.1 after 10 *ms*, 10.2 after 20 *ms*, 10.3 after 30 *ms* etc. If one of its passive bids is hit (e.g. a bid of 10.6), the liquidity provider will accept the liquidity consumer's trade request and make a profit of 0.4. If none of its passive bids are hit within the Last Look Window, it will reject the liquidity consumer's trade request.

This liquidity provider will only accept the liquidity consumer's trade request where it has made a profit. This allows it to stream artificially tight pricing to maximise trade requests they receive, as the requests will only be accepted if the liquidity provider can make a profit. If the trade request is rejected, as described above, the liquidity consumer is in a worse position as they will need to re-attempt to trade after the market impact has probabilistically caused the price to move against them.

Although the vast majority of disclosed liquidity providers have updated their disclosures and trading practices as a response to the industry's conduct issues and Client expectations around best market practice, there are major Market Participants who operate solely as liquidity providers on anonymous ECNs. This is where we see the greatest risk of this behaviour occurring.

We estimate that around \$130bio of spot FX is traded each day on anonymous ECNs that permit last look without specific policies or requirements on pre-hedging for market makers<sup>5</sup>.

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<sup>4</sup> Speech by Edwin Schooling Latter, Head of FX Markets Policy at the FCA, delivered on 30 November 2016 at FX Week Europe: <https://www.fca.org.uk/news/speeches/conduct-risk-fx-markets>

<sup>5</sup> One promising development that several ECNs have brought or are bringing to market is the concept of the Price Check technology being hosted by the venue itself. As with other asset classes, the neutral venue can perform the Price Check itself and determine a match. This practical solution eliminates the need for the liquidity provider to perform a Price Check itself and thus eliminates the potential conflicts of interest and risk of pre-hedging. However, liquidity providers who choose to pre-hedge will clearly not opt to use this mechanism and thus adoption must be driven by the ECNs themselves as a policy decision.

This represents just under 10% of overall market volumes<sup>6</sup>. On many ECNs, it is not uncommon to see liquidity providers with response times of 100 or 200ms which, in EURUSD or USDJPY, means the liquidity provider would receive up to 20-40 primary market price updates before the Price Check is applied. For some venues where anonymised reporting is made available to all liquidity providers, we observe that certain liquidity providers are quicker to fill than to reject – behaviour which could be consistent with the pre-hedging model described above and it is not unusual on some venues to observe liquidity providers with fill ratios consistently below 70% or even below 50%.

<sup>6</sup> BIS Survey April 2016 - [http://www.bis.org/statistics/d11\\_1.pdf](http://www.bis.org/statistics/d11_1.pdf)

**Question 2: Based on your response to Question 1, do you consider that the language set out in this Code on this activity should be modified (for example, should it be strengthened or provide further detail as to what may or may not constitute good practice)? Please provide reasons**

For the reasons described above, the potential for abuse and the conduct risks that can arise in relation to this activity, outweigh any potential benefit that other Market Participants may claim that Clients receive from it. The argument that is made by those in favour of pre-hedging is that it is intended to obtain a better price for the Client; those arguments lose any weight if there is not a guarantee that the transaction will always be executed at the displayed price. At the point of rejection, the liquidity provider -and the market - have knowledge of the Client's intention to trade. This begins to look like front-running and, more importantly, gives the appearance of front running, even if this was not the intention of the liquidity provider.

The objective of the Code is to restore trust in the FX markets; trust that has been broken due to the past conduct issues and regulatory fines that market participants have been subject to. It will be difficult for trust to be restored if a practice which potentially raises further conduct issues is not prohibited.

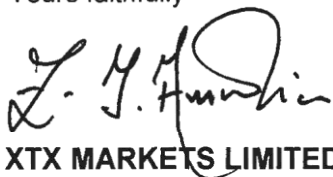
Therefore, we strongly believe that (1) the word "likely" should be removed from the language in Principle 17; and (2) it is conveyed in stronger terms that such activity would signal the Client's trading intent to other Market Participants, so that it reads as follows:

*During the last look window, trading activity that utilises the information from the Client's trade request, including any related hedging activity, is ~~likely~~ inconsistent with good market practice because it ~~may~~ is very likely to signal to other Market Participants the Client's trading intent, skewing market prices against the Client, which (1) is not likely to benefit the Client and (2) in the event that the Market Part rej the Client's request to trade, constitutes use of Confidential Information in a manner not specified by the Client.*

Thank you for the opportunity to comment on Principle 17. We fully support the important work of the Committee and believe that stronger wording will help clarify best market practice on this fundamentally important topic and help restore much needed trust to the wider FX markets.

Please do not hesitate to contact us if you would like to discuss further.

Yours faithfully



**XTX MARKETS LIMITED**

Zar Amroliya Co - CEO



**XTX Markets Limited**

Leconfield House, Curzon Street, London W1J 5JA

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