



BILLING OF HIGH FREQUENCY TRADING
(HFT) USERS WITH ORDER TO TRADE RATIO
(OTR) METHOD

INFORMATION NOTE

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Purpose:

This information note is prepared to explain the details about the fixed charge on excess order activity for high frequency traders, on a user basis, and that users being exempt from order modification/cancellation fees.

Order to Trade Ratio (OTR):

OTR refers to number of orders placed/modified/cancelled over number of executed transactions of the HFT user. OTR is used as the parameter of which excess usage charges for HFT users are set upon. With this method that is aimed for charging the HFT users depending on their system consumptions, the conventional model of order modification/cancellation fees will no longer be applied to HFT users. On the other hand, there will be no change on the transaction fees.

HFT Users:

HFT users are defined in the BISTECH PTRM/Pre-Trade Risk Management Application Procedures and Principles document dated 05/05/2016 and numbered 02.UUE.02 as follows:

“Automated users that have the potential to transmit orders and realize transactions in capital markets in high speeds and in large numbers via advanced technological tools and/or computerized algorithmic order generating/transmitting systems. In order for a user to be considered an HFT user, the automated systems that generate orders on behalf of that user must be located in the colocation center of Borsa İstanbul, and that user must be provided with a specific user code by the Exchange.”

Accordingly,

- HFT users will be provided a specific user to separate the user’s activities from regular client orders, upon application. It is obligatory to have a discrete user for each HFT based order transmission algorithm.
- Users transmitting orders from colocation via Ouch protocol are regarded as HFT users and will be subject to OTR.
- OTR is calculated on a user basis. In cases where a member has more than one of this type of user, their details will be shown in consequent lines in that member’s exchange fee report.

OTR Based Excess Usage Fee for HFT Users:

Users defined by the Exchange as HFT users are exempt from conventional order cancellation/modification fees, instead they will be subject to this application that is based on order to trade ratio and aims to charge excess usage.

In cases where the number of orders placed, modified or cancelled over number of trades exceed the ratio of 15:1, a fee of 0.03 TL is to be charged per each order placed/modified/cancelled in excess. Calculations will be made daily, and fee will be accrued along with the Exchange fees on a monthly basis. There will be no change in the transaction fees for these users.

Calculation Details of OTR:

Rules regarding the order:

- Each order entry by the HFT users is included in the calculation (i.e. added to the nominator of the ratio).
- Order cancellation, price worsening and/or quantity decreasing that is made within the 10 seconds of entry or the last modification of the order are included in the calculation. Order cancellation, price worsening and/or quantity decreasing that are made after the 10 seconds are not included in the calculation. Mass quote entry/modification/cancellation are not included in the calculation.
- Price enhancing, quantity increasing changes on the order are not included in the calculation, even if they are made within 10 seconds.
- All orders inactivated because of the “cancel on disconnect” preference are included in the calculation
- Fill and kill (FaK) orders are included in the calculation as a new order. However, the cancellation of unfulfilled FaK orders, or unfulfilled parts of FaK orders are not included as cancellation. On the other hand, modifications or cancellations made on a FaK order already on book in call auctions (opening, closing, mid-day single price and circuit breaker) are included in the calculation.
- Orders cancelled by the Exchange or the system (expired orders, orders that do not fulfill the up-tick rule etc.) are not included in the calculation.
- When an order placed by an HFT user is modified/cancelled by another user of the same participant, these modifications/cancellations are handled with the conventional order cancellation/modification fees, but not included in the OTR calculation. For instance, if a TW user cancels an order placed by a FIXHFT user, this order is displayed in the conventional order modification/cancellation report of the participant and charged with the conventional method. It is not included in the OTR calculation, because the cancellation in this case is made by the TW user but not the HFT user.
- In cases where orders of the HFT user are cancelled by the participant’s BISTECH Pre-Trade Risk Management (PTRM) user through “mass cancel” function, all of the cancelled orders are included in the OTR calculation.
- Each part of an iceberg (reserve) order becoming visible (displayed quantity) is regarded as a new order and is included in the OTR calculation.
- Modifications made on the total quantity of an iceberg order are not included in the calculation. Order cancellation, price worsening and/or quantity decreasing made on the displayed quantity (within 10 seconds) are included in the OTR calculation.

Rules regarding the trade:

- Trades with value smaller than 50 TL are not included in the calculation (i.e. they are not added to the denominator of the ratio). For instance, if an order is matched partially in 6 different transactions with values 40, 49, 50, 51, 200 and 250 TL, denominator (number of trades) of the calculation will be 4.

- In cases where the HFT user places, modifies, cancels orders but does not have a trade (i.e. when the ratio is X/0), the ratio is regarded unfulfilled, and thus each order activity is charged with 0.03 TL fee.
- Trades where the same HFT user is both the buyer and the seller, i.e. the internally crossed trades on a user basis, are not included in the calculation.

Calculation Examples:

Order count in a day (A)	Trades with value over 50 TL (B)	OTR	Order number within the range (15 x B)	Number of excess orders (A-C)	OTR cost for the day- TL (D x 0,03TL)
			(C)	(D)	
10,000	1,000	10	15,000	-	-
20,000	2,500	8	37,500	-	-
50,000	3,000	16.67	45,000	5,000	150.00
100,000	5,000	20	75,000	25,000	750.00
150,000	10,000	15	150,000	-	-
180,000	10,000	18	150,000	30,000	900.00
200,000	7,500	26.66	112,500	87,500	2,625.00