

# Enhanced RPI: Complementary Order Type to Retail Price Improvement on BYX

## What is the Enhanced Retail Price Improvement Program on BYX?

A new Enhanced Retail Price Improvement (ERPI) order allows liquidity providers to place a limit order on the Cboe BYX Equities Exchange (BYX) while also offering additional price improvement within a pre-set range. Liquidity providers will benefit from improved priority queue position and increased fill rates against retail-attested orders.

### Key Benefits

Liquidity Providers			Retail Member Organizations	
Exclusive Interaction with Retail Flow On-Exchange	Reduced Fee	Increased Fill Rates	Additional Price Improvement	Enhanced Rebate
Liquidity providers could experience reduced adverse selection risk while trading non-displayed on a regulated market with minimal to no information leakage.	Liquidity-providing orders that interact with Retail-Attested Orders and provide price improvement benefit from a reduction from the base remove fee.	ERPI orders can receive higher price priority over orders and increase fill rates by offering greater price improvement over other resting orders up to their specified step up range.	Retail Member Organizations can receive greater price improvement in \$0.001 increments in addition to price improvement gained from executing against other hidden liquidity.	Retail Member Organizations benefit from ER-PI through price improvement and beneficial economics.

### How does Enhanced Retail Price Improvement work?

An ERPI order allows a liquidity provider to post a limit order to the Exchange which has the ability to “step up” its price within a defined Step-Up Range to gain price priority. Price priority occurs when the ERPI order offers greater price improvement than higher-ranked resting orders on the same side of the BYX Book, enabling execution priority against an incoming Retail Order seeking liquidity. ERPI orders will not step up ahead of another ERPI order.

ERPI complements the existing RPI order type, differing in that it allows Members to define a Step-Up Range in addition to its limit price that will only be used when needed to gain queue priority. If the ERPI order’s Step-Up Range permits additional price improvement beyond the highest-ranked resting order, the ERPI order will receive price priority over that order. For securities priced at or above \$1.00, the ERPI order must step up to at least the next half-cent midpoint or next full cent. For securities priced below \$1.00, the ERPI order must step up to the next minimum price increment.



## Examples

### Example 1: Enhanced RPI Steps Up ½ Cent

- **NBBO:** \$10.00 x \$10.05 (Midpoint=\$10.025)
- **Order 1:** Buy 100 @ \$10.02 - Hidden
- **Order 2:** Buy 100 @ \$10.01 - ERPI, Step-Up=\$0.02 (\$10.03)
- **Order 3:** Sell 100 @ \$10.00 - Retail Remover
- **Result:** Order 2 (ERPI Order) executes against Order 3 (Retail Remover) at \$10.025 (1/2 cent better than Order 1). Order 2 (ERPI Order) has price priority over Order 1 (Hidden Order). Order 3 (Retail Remove Order) receives an additional \$0.005 of price improvement by executing with Order 2.

### Example 2: Enhanced RPI Steps Up 1 Cent

- **NBBO:** \$10.00 x \$10.06 (Midpoint=\$10.03)
- **Order 1:** Buy 100 @ \$10.02 - Hidden
- **Order 2:** Buy 100 @ \$10.01 - ERPI, Step-Up=\$0.02 (\$10.03)
- **Order 3:** Sell 100 @ \$10.00 - Retail Remover
- **Result:** Order 2 (ERPI Order) executes against Order 3 (Retail Remover) at \$10.03 (1 cent better than Order 1). Order 2 (ERPI Order) has price priority over Order 1 (Hidden Order). Order 3 (Retail Remove Order) receives an additional \$0.01 of price improvement by executing with Order 2.

## More Information

### WEB

[Retail Price Improvement](#)

### INSIGHTS

[Retail Price Improvement Provides Unique Opportunities for Retail Investors and Liquidity Providers](#) (cboe.com)

### TECHNICAL RESOURCES

- [Cboe U.S. Equities Trade Desk Notice](#)
- [Cboe Titanium U.S. Equities FIX Specification](#)
- [Cboe Titanium U.S. Equities BOE Specification](#)
- [Cboe Titanium U.S. Equities BOEv3 Specification](#)

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