

Self-Match Prevention

Functionality Overview

September 2024

Draft

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Glossary

| Term | Definition |
|--|---|
| Aggressor Order | The newer (younger) order that has been entered into the orderbook that will match a passive order. |
| Beneficial Owner | The underlying owner of the product. |
| Booking Purpose Only Transaction (BPOT) | A transaction (which is not a Trade) that is conducted on-market by a NZX Participant who acts on both sides of the transaction. |
| Cancel Passive | Functionality that removes the passive order and retains the aggressor order from the orderbook when a beneficial owner match occurs. |
| Continuous Trading | Normal trading in the NZX Market(s) where buy and sell orders may match. Does not include pre-open, pre-close, adjust or enquiry sessions. |
| Cash Markets | NZX Main Board (NZSX) & NZX Debt Board (NZDX). |
| Derivatives Market | NZX Derivatives Market |
| CSN | Common Shareholder Number. It is a number which is used to uniquely identify a beneficial owner across all share registries. |
| Entity | Underlying beneficial holder of an NZX listed product. |
| Nasdaq ME | NZX's Trading System that maintains the state of the market, manages order books, matches orders, calculates market statistics and performs all transactional tasks. |
| NCBO | The execution of a trade on, or reported to, market which result in No Change of Beneficial Ownership |
| NZX Central | Central Limit Order Book in the Trading System in which Bid and Offer prices and quantities are disclosed in real-time. |
| NZX Dark | The undisclosed orderbook in which NZX Dark Orders for Securities quoted on the NZSX may be entered into the Trading System. |
| Passive Order | An order which is currently resting in NZX Central. |
| SMP Action | Order field that is used to determine the action to be applied if a beneficial owner match occurs. |
| SMP Key | A Participant generated unique key used to identify the beneficial owner of the order. |
| Undisclosed orders (Hidden orders) | An order type where only a certain quantity is disclosed to the market. As the order is matched the displayed quantity is unchanged, unless the balance falls below \$100,000, at which time the order becomes fully visible. |
| Wash Trades | The execution of a trade on, or reported to, market which result in No Change of Beneficial Ownership. |

1. Overview & Purpose

The self-match prevention (SMP) functionality allows NZX Trading Participants to prevent matching of orders placed by their firm for accounts with common underlying ownership.

The benefits of SMP include:

- NZX Trading Participants are assisted through exchange technology to manage their obligations with relation to NCBO trades
 - Increased market integrity
 - Reduction in Surveillance/Participant Compliance inquiries of Participants
 - Resolves technical challenges faced by market makers

SMP is an **optional opt-in** service that is applicable to both the Cash Markets and the Derivatives Market. When enabled, SMP is applicable to both NZX Central and NZX Dark.

NZX offers two types of SMP functionality they are

- Cancel Passive, and
- Booking Purpose Only Transaction (BPOT)

Cancel Passive

Where Cancel Passive has been chosen for two opposing Orders belonging to the same entity that would otherwise match in the Trading System, the following occurs:

- The passive (older) order is withdrawn from the order book
- The aggressor (new) order remains in the order book and may match against other passive orders
- Cancel Passive is operational during the Normal Trading Session (continuous trading) only, never during auctions.
- The only exception to this behaviour is within NZX Dark, where if a Cancel Passive self-match has been identified orders are not withdrawn, see section 'NZX Dark Behaviour'.
- Cancel Passive SMP is not available for the Fonterra Shareholders' Market.

Booking Purpose Only Transactions (BPOT)

Where BPOT has been chosen for an Approved BPOT Client for two opposing Orders belonging to the same entity that would otherwise match in the Trading System, both the passive and aggressing Order will match and then immediately be withdrawn from the Trading System and a BPOT will arise.

- BPOT will only be visible to NZX and the Participant who placed the relevant Orders. BPOT will not be published down any public market data feeds.

- BPOT will not register as a “trade”, meaning they will be non-price setting and their volume will not register in the day’s trading volume for that stock.
- BPOT are not eligible to be novated and cleared and settled through the Clearing House, and a ‘non-settled’ trade notification will be displayed in the BaNCS system.
- BPOT behaviour is the same across both NZX Central and NZX Dark.
- BPOT is operational during the Normal Trading Session (continuous trading) and during auctions.
- BPOT is not available for the Derivatives Markets or Fonterra Shareholders’ Market.

2. Activation of Self-Match Prevention

SMP is available by default for all NZX Trading Participants but will only come into effect if the SMP Key and SMP Action fields are filled.

NZX has published a SMP Practice Note which can be found [here](#) on nzx.com.

The fees relating to SMP can be found in the [NZX Trading & Advising Fee Schedule](#).

SMP Eligibility

All Trading Participants and their end clients are eligible to use Cancel Passive SMP functionality. BPOT, however, is only available for:

- approved Participants when Acting as Principal, and
- approved Institutional Clients from jurisdictions that NZX recognizes as a Recognised BPOT Jurisdiction.

A list of the recognised jurisdictions are listed in section 3.3 of the Participant Procedures and available [here](#) on nzx.com.

Approved BPOT Clients

Where a Participant wishes to make BPOT available for an Institutional Client or Principal Account it will need to provide NZX with the following information in the ‘BPOT Approved Client Request Form’:

- the name of the Institutional Client or Principal Account and,
- the jurisdiction in which the relevant Institutional Client is domiciled and confirmation that it is from a Recognised BPOT Jurisdiction

The BPOT Approved Client Request must be completed and submitted by:

- a Managing Principal or Compliance Manager (as defined in the Participant Rules);
- or a Responsible Executive or Compliance Manager (as defined in the Derivatives Market Rules); or

- a delegate of the Compliance Manager authorised to make such submissions within the Participant Portal.

NZ RegCo has complete discretion to determine whether to accept an Institutional Client as an Approved BPOT Client.

Further information about BPOT approvals can be found in the SMP Practice Note which can be found [here](#) on nzx.com.

3. SMP Key & SMP Action

The SMP function checks each entity value as below to determine if there is a change in beneficial ownership. Trading Participants will be able to enable SMP through the addition of a unique SMP Key on each order that will identify the 'entity' to which SMP should apply.

Should a Participant elect to use SMP, the Participant will allocate an SMP Key to each of their clients for whom they wish SMP to apply. All orders for each of these clients will carry this allocated SMP key. This SMP key will ensure the relevant SMP action will occur. If the SMP Keys differ, a Trade will occur.

Users can specify a SMP Action (Cancel Passive or BPOT) for a client (SMP for all clients, and BPOT for approved clients) and this will be used to determine the action that occurs.

SMP Activation Workflow

- Both orders belong to the same Trading Participant
- The Trading Participant has SMP enabled
- Both orders have the same SMP Key
- Both orders have the same SMP Action specified
 - C – Cancel Passive
 - B – BPOT
 - If the field is left blank or does not match on both orders a Trade will occur.

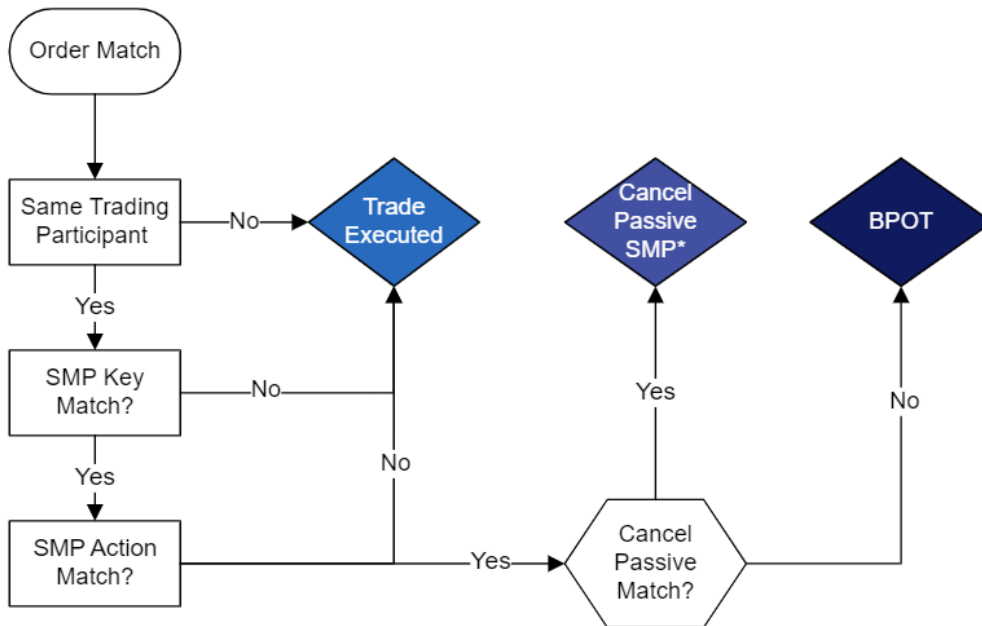
NZX Derivatives Market

- Cancel Passive is not effective in relation to an Order for a calendar spread that creates a system generated implied order which can match with an Order for an outright futures contract or vice versa. If Cancel Passive is selected in these circumstances a Trade will occur. Please refer to the [Trading Conduct Guidance Note](#) which outlines treatment of NCBO's arising from implied orders.
- BPOT is not available for the Derivatives Market.

Fonterra Shareholders Market

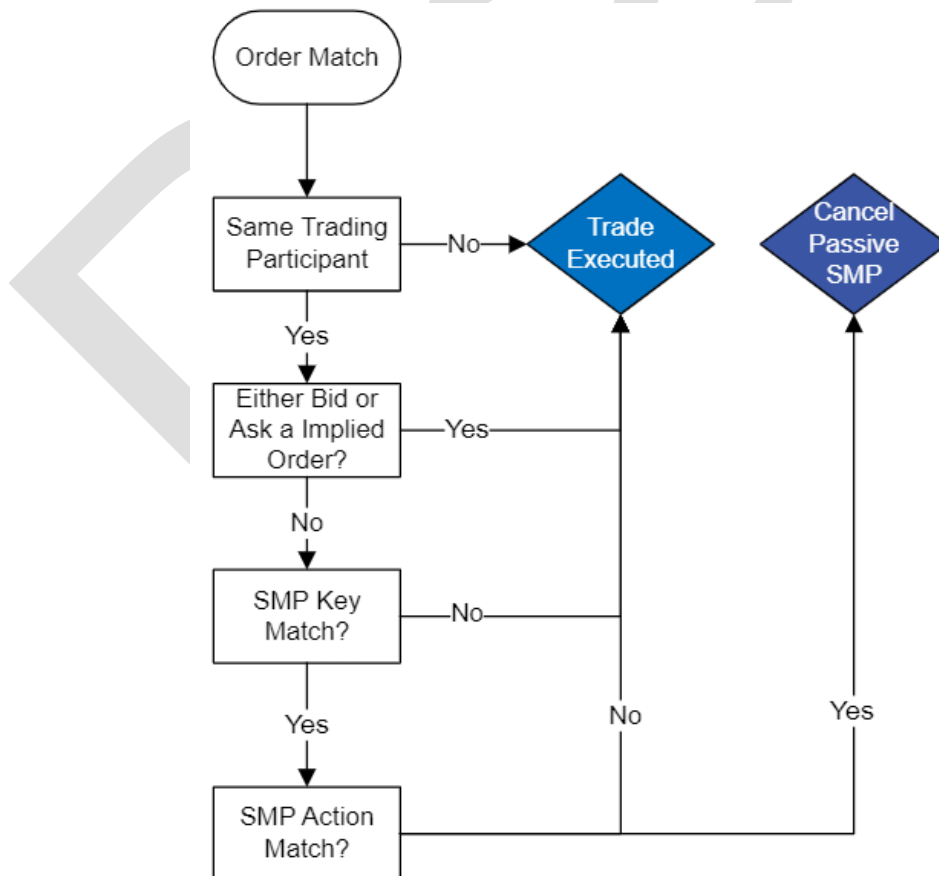
- No SMP functionality (Cancel Passive or BPOT) is available on the Fonterra Shareholders' Market.

Self-Match Prevention - Cash Market



**Cancel Passive SMP behaviour differs between NZX Central and NZX Dark, refer to section 4 for further details.*

Self-Match Prevention - Derivatives Market



4. Self-Match Prevention - Behaviour

NZX Central Behaviour

Cancel Passive Behaviour

Once it is established that a match between two orders should be prevented, the following occurs:

- The passive (older) order is withdrawn from the order book
- The aggressor (new) order remains in the order book and may match against other orders
- Undisclosed orders will be completely withdrawn.

BPOT Behaviour

Once it is established that a match between two orders should be prevented, the following occurs:

- Both orders are withdrawn from the order book
- The executing broker will receive a transaction report via the NZX Trading System that the Participant can use to identify a BPOT and manage any additional requirements.
- BPOT will only be visible to NZX and the Participant who placed the relevant Orders.
- BPOT will not register as a “trade”, meaning they will be non-price setting and their volume will not register in the day’s trading volume for that stock. They will not be published to any public market data feeds.
- BPOT will be identifiable by the Trading Participants Clearing Participant in BaNCS via a non-settled trade notification and are not eligible to be novated and cleared and settled through the Clearing House.

NZX Dark Behaviour

Cancel Passive Behaviour

Once it is established that a match between two orders should be prevented, the following occurs:

- Orders in NZX Dark are not withdrawn and they continue to sit in NZX Dark but will not match against each other.
- In the case of sweep orders, these are forwarded to NZX Central and are then subject to the SMP rules as they apply to NZX Central.

BPOT Behaviour

BPOT behaviour is the same across NZX Central and NZX Dark.

5. SMP Messaging

The following messages indicate identification of SMP functionality. Please note that this list is intended as a guide only and is not an exhaustive list. For full technical details please refer to the Native FIX or BaNCS Cash Market message specifications documents.

Native FIX - Parties Component Block

The Parties component is used to provide identifiers for parties involved in the transaction (e.g. firm, trader, Exchange, etc.).

Beneficiary (PartyRole = 32) – For SMP Key - used in Self Match Prevention

- Up to 10 characters long
- Not amendable
- Not validated.

Nasdaq Extension (PartyRole = 92) – For SMP Action

- One character ('C' = Cancel Passive, 'B' = BPO Transaction, 'N' = None)
- Unlike SMP Key, Action is amendable

Native FIX - Trade Capture Report [AE]

The Trade Capture report is used for:

- Reporting negotiated deals for Clearing and Drop Copy for Firms involved in the trade
- Entering off-market trades by parties (negotiated deals).

| Tag | FieldName | Required | Details | Format |
|-----|-----------|----------|-------------|--------|
| 828 | TrdType | N | 1007 = BPOT | Int |

MT518 – Post Trade Message

| Status | Tag | Qualifier | Generic Field Name | Content/Options | Detailed Field Name | Field# |
|--------|-----|-----------|--------------------|---------------------|---|--------|
| O | 22a | TTCO | Indicator | 22F::TTCO/XNZE/BPOT | BPOT | 18 |
| M | 22F | SETS | Indicator | 22F::SETS//NSET | The trade is not being settled by BaNCS | 48 |

6. Appendices

Appendix A - NZX Board Group

| Board Group | Description | Cancel Passive | BPOT |
|-------------|--|----------------|------|
| NZX | Cash Markets: NZSX & NZDX | Y | Y |
| EQDERIV | Equity Derivatives: Index Futures & Equity Options | Y* | N |
| FSM | Fonterra Shareholders Market | N | N |

*Cancel Passive is not available for a calendar spread that creates a system generated implied order.

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Appendix B –Examples

Example A – Cancel Passive SMP

Resting Orderbook

| Participant | Time | Bid Size | Bid | Ask | Ask Size | Time | Participant |
|--|-------|----------|--------|--------|----------|-------|--|
| Participant B SMP Key: ABC SMP Action: C | 13:10 | 100 | \$9:90 | \$9:92 | 100 | 13:15 | Participant A SMP Key: 123 SMP Action: C |
| - | - | - | - | \$9:94 | 100 | 13:11 | Participant C SMP Key: XYZ SMP Action: B |

Order Activity

- At 13:20 Participant A enters a buy order at a price of \$9.92 for a quantity of 100

| Participant | Time | Bid Size | Bid | Ask | Ask Size | Time | Participant |
|--|-------|----------|--------|--------|----------|-------|--|
| Participant A SMP Key: 123 SMP Action: C | 13:20 | 100 | \$9:92 | \$9:92 | 100 | 13:15 | Participant A SMP Key: 123 SMP Action: C |
| Participant B SMP Key: ABC SMP Action: C | 13:10 | 100 | \$9:90 | \$9:94 | 100 | 13:11 | Participant C SMP Key: XYZ SMP Action: B |

Expected Result

- Participant A has two orders in the book that match
- SMP Key (123) and SMP action (C) both match
- Passive (resting) order is removed and new (aggressor) order remains in the book

| Participant | Time | Bid Size | Bid | Ask | Ask Size | Time | Participant |
|--|-------|----------|--------|--------|----------|-------|--|
| Participant A SMP Key: 123 SMP Action: C | 13:20 | 100 | \$9:92 | \$9:94 | 100 | 13:11 | Participant C SMP Key: XYZ SMP Action: B |
| Participant B SMP Key: ABC SMP Action: C | 13:10 | 100 | \$9:90 | - | - | - | - |

Example B – SMP Key Does Not Match

Resting Orderbook

| Participant | Time | Bid Size | Bid | Ask | Ask Size | Time | Participant |
|--|-------|----------|--------|--------|----------|-------|--|
| Participant B <i>SMP Key: ABC</i> <i>SMP Action: C</i> | 13:10 | 100 | \$9:90 | \$9:92 | 100 | 13:15 | Participant A <i>SMP Key: 123</i> <i>SMP Action: C</i> |
| - | - | - | - | \$9:94 | 100 | 13:11 | Participant C <i>SMP Key: XYZ</i> <i>SMP Action: B</i> |

Order Activity

- At 13:20 Participant A enters a buy order at a price of \$9.92 for a quantity of 100

| Participant | Time | Bid Size | Bid | Ask | Ask Size | Time | Participant |
|--|-------|----------|--------|--------|----------|-------|--|
| Participant A <i>SMP Key: 456</i> <i>SMP Action: C</i> | 13:20 | 100 | \$9:92 | \$9:92 | 100 | 13:15 | Participant A <i>SMP Key: 123</i> <i>SMP Action: C</i> |
| Participant B <i>SMP Key: ABC</i> <i>SMP Action: C</i> | 13:10 | 100 | \$9:90 | \$9:94 | 100 | 13:11 | Participant C <i>SMP Key: XYZ</i> <i>SMP Action: B</i> |

Expected Result

- Participant A has two orders in the book that match
- SMP Key (456/123) do not match
- Both orders match and a trade occurs (100 @ \$9:92)

| Participant | Time | Bid Size | Bid | Ask | Ask Size | Time | Participant |
|--|-------|----------|--------|--------|----------|-------|--|
| Participant B <i>SMP Key: ABC</i> <i>SMP Action: C</i> | 13:10 | 100 | \$9:90 | \$9:94 | 100 | 13:11 | Participant C <i>SMP Key: XYZ</i> <i>SMP Action: B</i> |

Example C – BPOT

Resting Orderbook

| Participant | Time | Bid Size | Bid | Ask | Ask Size | Time | Participant |
|--|-------|----------|--------|--------|----------|-------|--|
| Participant B <i>SMP Key: ABC</i> <i>SMP Action: C</i> | 13:10 | 100 | \$9:90 | \$9:92 | 100 | 13:15 | Participant A <i>SMP Key: 123</i> <i>SMP Action: B</i> |
| - | - | - | - | \$9:94 | 100 | 13:11 | Participant C <i>SMP Key: XYZ</i> <i>SMP Action: B</i> |

Order Activity

- At 13:20 Participant A enters a buy order at a price of \$9.92 for a quantity of 100

| Participant | Time | Bid Size | Bid | Ask | Ask Size | Time | Participant |
|--|-------|----------|--------|--------|----------|-------|--|
| Participant A <i>SMP Key: 123</i> <i>SMP Action: B</i> | 13:20 | 100 | \$9:92 | \$9:92 | 100 | 13:15 | Participant A <i>SMP Key: 123</i> <i>SMP Action: B</i> |
| Participant B <i>SMP Key: ABC</i> <i>SMP Action: C</i> | 13:10 | 100 | \$9:90 | \$9:94 | 100 | 13:11 | Participant C <i>SMP Key: XYZ</i> <i>SMP Action: B</i> |

Expected Result

- Participant A has two orders in the book that match
- SMP Key (123) and SMP action (B) both match
- Both orders are removed and a BPOT occurs.

| Participant | Time | Bid Size | Bid | Ask | Ask Size | Time | Participant |
|--|-------|----------|--------|--------|----------|-------|--|
| Participant B <i>SMP Key: ABC</i> <i>SMP Action: C</i> | 13:10 | 100 | \$9:90 | \$9:94 | 100 | 13:11 | Participant C <i>SMP Key: XYZ</i> <i>SMP Action: B</i> |