Self-Match Prevention

▶ Functionality Overview

Table of contents ▼

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.
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).
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 a 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.
NZX CENTRAL	Central limit order book.
NZX DARK	Midpoint order book – *note this product is not currently available.*
Passive Order	An order which is currently resting in the order book.
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 continually refreshed to display the full disclosed quantity, unless the balance falls below $100,000, at which time the order becomes fully visible.
Wash Trades	A buy and sell order is executed and results in no change in beneficial ownership.
Whitelist	A list of NZX Trading Participant entities who are excluded from any self-match prevention checks.

Overview & purpose ▼

The self-match prevention (SMP) service allows NZX Trading Participants to prevent matching of orders placed by their firm for accounts with common underlying ownership. This is a commonly used system across mature markets globally, and will ensure the continued development of a fair, orderly and transparent market.

The benefits of SMP include:

- NZX Trading Participants are assisted through exchange technology to manage their obligations with relation to wash 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 (Equity and Debt) Market and the Derivatives Market, however it is not available for the Fonterra Shareholders Market. SMP is operational during the Regular Trading Session (continuous trading) only, never during auctions, and checks will only be applied to orders within the same NZX Trading Participant.

When enabled, SMP is applicable for both NZX CENTRAL and NZX DARK.

Entity ▼

The SMP function checks each entity value as below to determine if there is a change in beneficial ownership. An entity is one of the following, depending on if the order is placed in the Cash or Derivatives Market.

Cash Market Entity

The entity is one of the following depending on:

- Client CSN
    - Retail orders
    - Only CSN's starting with 3 are eligible for SMP checks.
    - CSN's starting with 2 (for nominees) will be allowed to match.
- Broker Reference (wholesale orders)
- Account Type
    - Orders entered as Principal (P) or Market Maker (M) will not be allowed to match against each other.

If a potential self-match has been identified the passive (resting) order will be withdrawn and the aggressive (new) order will remain in the order book.

The only exception to this behaviour is within NZX DARK, where if a self-match has been identified, orders are not withdrawn, see section 'NZX DARK Behaviour' for more information.

Derivatives Market Entity

The entity is one of the following depending on:

- Broker Reference
- Account Type
  - o Orders entered as Principal (P) or Market Maker (M) will not be allowed to match against each other. The passive (resting) order will be withdrawn.

If a potential self-match has been identified the passive (resting) order will be withdrawn and the aggressive (new) order will remain in the orderbook.

Entity whitelist ▼

An entity whitelist is a list of Participant clients who are excluded from any SMP checks. Participants who wish to utilise SMP can specify a whitelist of entity types for each board group/market segment, this is outlined further in Appendix A.

The NZX Trading System will automatically load Participant provided whitelists at the start of each trading day. Trading Participants should note that they are wholly responsible for the population of their whitelist. Whitelists are not able to be initiated, replaced or removed intraday, however NZX has the ability to disable SMP at the Participant level at any time upon request from Participants.

Activation of Self-Match Prevention ▼

SMP can be enabled by a Trading Participant by completing the 'Self-Match Prevention Service Request' within the NZX Participant Portal. This may include both a request to start / stop the SMP service. Access to the NZX Participant Portal is restricted to NZX Participant Compliance Managers and Compliance Officers.

All information relating to SMP including links to the Participants Portal, SMP Fees and the SMP Practice Note can be found here.

SMP functionality is activated when the following conditions are met:

- The Participant has SMP enabled;
- The order book is in Continuous Trading;
- The trader(s) entering the orders belong to the same Participant.

The rules for identifying a self-match are then checked based on the market (Cash or Derivatives).

Self-Match Prevention Checks - Cash Market

Cash Market rules for self-match are applied to look at the below criteria:

- Client CSN
    - Typically, retail orders
    - Only CSNs starting with 3 are eligible for SMP checks
- Broker Reference
    - Wholesale orders
- Account Type
    - Orders entered as Principal (P) or Market Maker (M) will not be allowed to match against each other.

Note that if any one of the self-match criteria above is met then the orders are prevented from matching, and the resting (passive) order will be withdrawn.
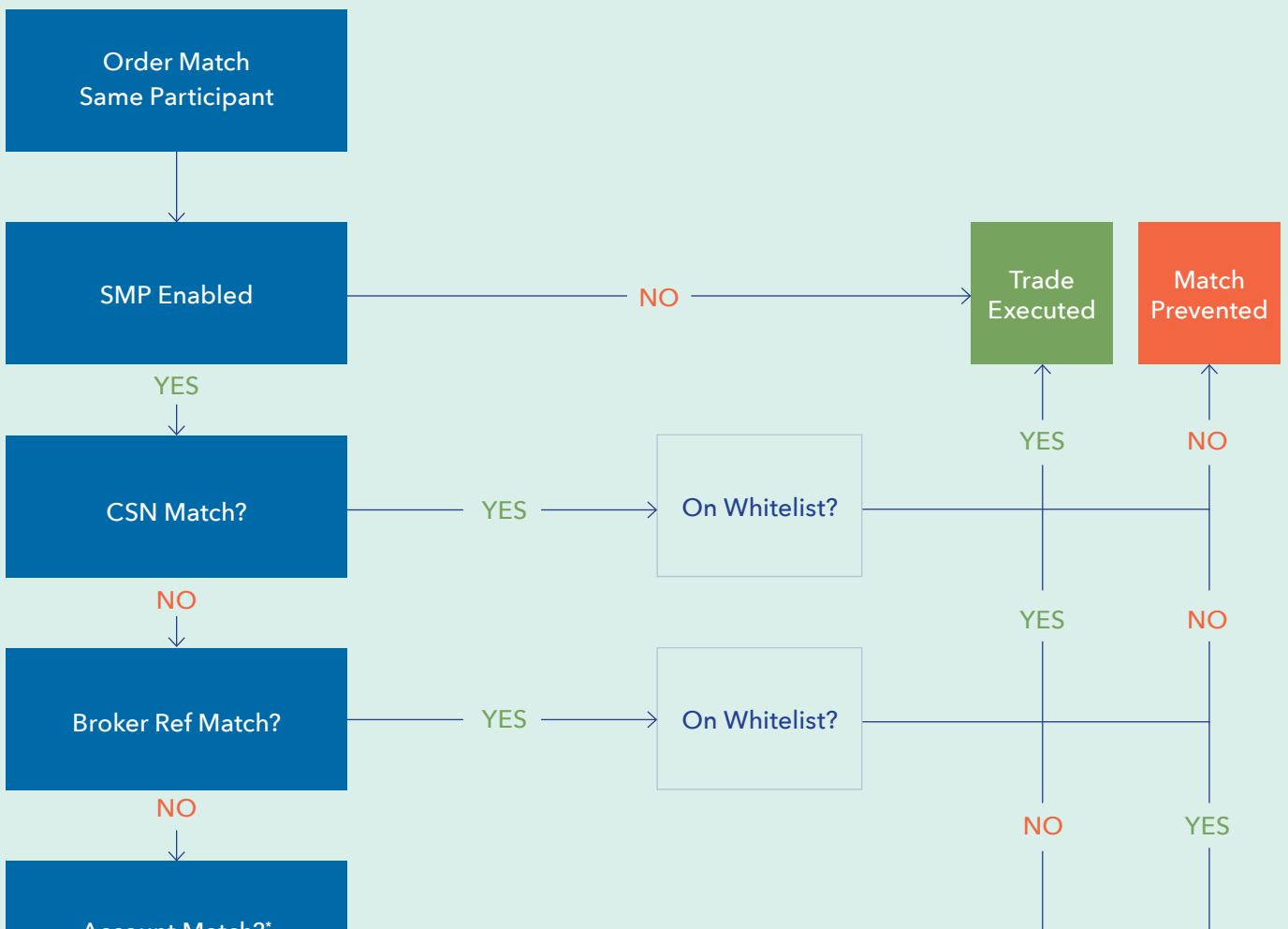
*The following account types are not allowed to match each other:
- P to P
- M to M
- P to M
- M to P

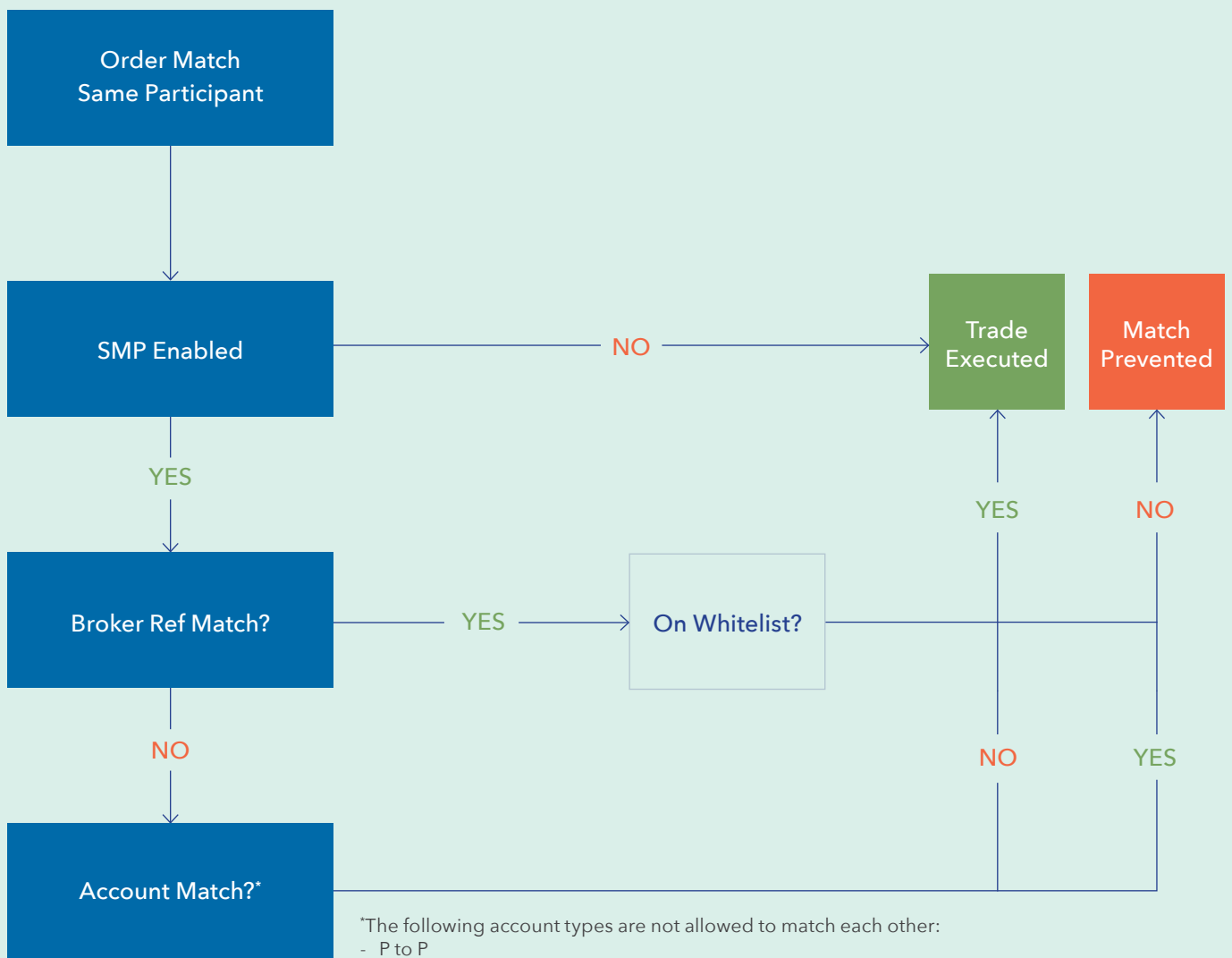# Self-Match Prevention Checks - Derivatives Market

Derivatives Market rules for self-match are applied to look at the following criteria:

- Broker Reference
- Account Type
  - o Orders entered as Principal (P) or Market Maker (M) will not be allowed to match against each other.

Note that if any one of the above self-match criteria is met then the orders are prevented from matching and the resting (passive) order will be withdrawn.

```
┌──────────────────┐
│ Order Match      │
│ Same Participant │
└──────────────────┘
         │
         ▼
┌──────────────────┐         NO                    ┌──────────────┐  ┌──────────────┐
│ SMP Enabled      │──────────────────────────────▶│ Trade        │  │ Match        │
└──────────────────┘                               │ Executed     │  │ Prevented    │
         │                                          └──────────────┘  └──────────────┘
        YES                                               ▲                  ▲
         │                                               YES                 NO
         ▼                                                │                  │
┌──────────────────┐         YES    ┌──────────────┐      │                  │
│ Broker Ref Match?│───────────────▶│ On Whitelist?│──────┘                  │
└──────────────────┘                └──────────────┘                         │
         │                                 │          NO            YES       │
        NO                                 └──────────────────────────────────┘
         │
         ▼
┌──────────────────┐
│ Account Match?*  │
└──────────────────┘
```

*The following account types are not allowed to match each other:
- P to P
- M to M
- P to M
- M to P

Self-Match Prevention - Behaviour ▼

NZX CENTRAL 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 passive orders
- Undisclosed orders will be withdrawn completely, not just the visible quantity

NZX DARK Behaviour

Orders that fail the SMP checks in NZX DARK are not withdrawn. 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.

Appendices ▼

Appendix A - NZX Board Group

Board Group	Description
NZX	Cash Markets: NZSX & NZDX
COMM	Commodity Derivatives: Dairy Futures, Dairy Options, Dairy Strategies
EQDERIV	Equity Derivatives: Index Futures & Equity Options
FSM	Fonterra Shareholders Market: **SMP does not apply to the FSM board**

Appendix B - Cash Market Example Table

PARTICIPANT A: Order 1			PARTICIPANT A: Order 2			WHITELIST	Result
Account Type	Broker Ref	CSN	Account Type	Broker Ref	CSN	Whitelist	Description
R	N/A	330123123	R	N/A	330123123	330123123	Trade Allowed
R	N/A	330123123	R	N/A	330123123	No	Trade Prevented - Self-cross
R	N/A	330123123	R	N/A	330234234	N/A	Trade Allowed
R	N/A	220123123	R	N/A	220123123	N/A	Trade Allowed
R	N/A	M	R	N/A	M	N/A	Trade Allowed
W	*empty*	N/A	W	*empty*	N/A	N/A	Trade Prevented - Self-cross
W	*empty*	N/A	W	ABC	N/A	N/A	Trade Allowed
W	ABC	N/A	W	ABC	N/A	Broker Ref	Trade Allowed
W	ABC	N/A	W	ABC	N/A	No	Trade Prevented - Self-cross
W	ABC	N/A	W	XYZ	N/A	N/A	Trade Allowed
P	N/A	N/A	P	N/A	N/A	N/A	Trade Prevented - Self-cross
M	N/A	N/A	M	N/A	N/A	N/A	Trade Prevented - Self-cross
P	N/A	N/A	M	N/A	N/A	N/A	Trade Prevented - Self-cross
M	N/A	N/A	P	N/A	N/A	N/A	Trade Prevented - Self-cross

Appendix C - Derivatives Market Examples

Example 1

Order Criteria

- SMP Enabled
- Same Broker Reference
- Broker Reference not on whitelist

Dealer enters:

- Buy F19 (board: D-FUT)
- Sell F19 G19 (board: D-STGY)
    - o Implied Buy G19 is generated
- Enters Sell G19 (board: D-FUT)

Result

- The trade match will be allowed, as no two orders were entered into the same orderbook.

Example 2

Order Criteria

- SMP Enabled
- Same Broker Reference
- Broker Reference not on whitelist

Dealer enters:

- Sell F19G19 (board: D-STGY)
- Buy F19G19 (board: D-STGY)

Result

- Match will not be allowed and the passive order (sell F19G19) will be withdrawn, as the two orders were entered on the same orderbook.